

# California Fish and Game Commission Meeting Binder

## Part 2 (Items 17-32) & Executive Session



**February 21, 2020**  
**Sacramento**

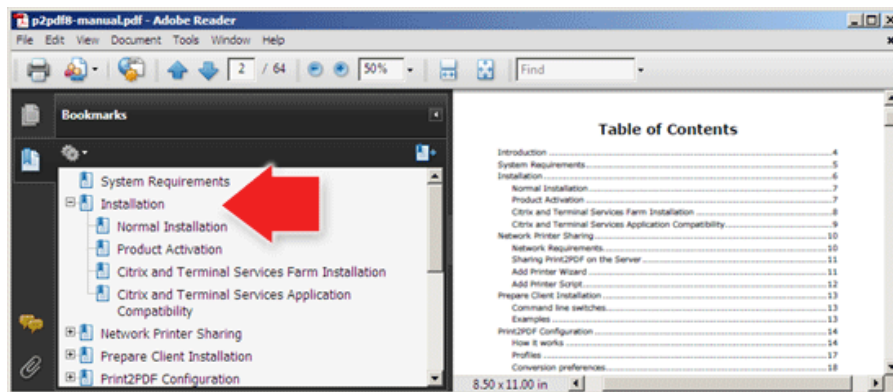
## EASY GUIDE TO USING THE BINDER

Note: We make every effort to ensure that documents we produce are compliant with Americans with Disabilities Act standards, pursuant to state and federal law; however, some materials included in our meeting binders that are produced by other organizations and members of the public may not be compliant.

1. Download and open the binder document using your Adobe Acrobat program/app.
2. If a bookmark panel does not automatically appear on either the top or left side of the screen, click/tap on the “bookmark symbol” located near the top left-hand corner.



3. To make adjustments to the view, use the Page Display option in the View tab. You should see something like:



4. We suggest leaving open the bookmark panel to help you move efficiently among the staff summaries and numerous supporting documents in the binder. It's helpful to think of these bookmarks as a table of contents that allows you to go to specific points in the binder without having to scroll through hundreds of pages.
5. You can resize the two panels by placing your cursor in the dark, vertical line located between the panels and using a long click /tap to move in either direction. ⇐||⇒
6. You may also adjust the sizing of the documents by adjusting the sizing preferences located on the Page Display icons found in the top toolbar or in the View tab.
7. Upon locating a staff summary for an agenda item, notice that you can obtain more information by clicking/tapping on any item underlined in blue.
8. Return to the staff summary by simply clicking/tapping on the item in the bookmark panel.
9. Do not hesitate to contact staff if you have any questions or would like assistance.



## OVERVIEW OF FISH AND GAME COMMISSION BUSINESS MEETINGS

- This year marks the beginning of the 150<sup>th</sup> year of operation of the California Fish and Game Commission in partnership with the California Department of Fish and Wildlife. Our goal is the preservation of our heritage and conservation of our natural resources through informed decision making. These meetings are vital in achieving that goal. In that spirit, we provide the following information to be as effective and efficient toward that end. Welcome and please let us know if you have any questions.
- We are operating under the Bagley-Keene Open Meeting Act and these proceedings are being recorded and broadcast via <https://videobookcase.com/>.
- In the unlikely event of an emergency, please note the location of the nearest emergency exits. Additionally, the restrooms are located \_\_\_\_\_.
- Items may be heard in any order pursuant to the determination of the Commission President.
- The amount of time for each agenda item may be adjusted based on time available and the number of speakers.
- Speaker cards need to be filled out **legibly** and turned in to the staff **before** we start the agenda item. Please make sure to list the agenda items you wish to speak to on the speaker card.
- We will be calling the names of several speakers at a time so please line up behind the speakers' podium when your name is called. If you are not in the room when your name is called you may forfeit your opportunity to speak on the item.
- When you speak, please state your name and any affiliation. Please be respectful. Disruptions from the audience will not be tolerated. Time is precious so please be concise.
- To receive meeting agendas and regulatory notices about those subjects of interest to you, please visit the Commission's website, [www.fgc.ca.gov](http://www.fgc.ca.gov), and sign up for our electronic mailing lists.
- All petitions for regulation change must be submitted in writing on the authorized petition form, FGC 1, Petition to the California Fish and Game Commission for Regulation Change, available at <https://fgc.ca.gov/Regulations/Petition-for-Regulation-Change>.
- **Reminder!** Please silence your mobile devices and computers to avoid interruptions.
- **Warning!** The use of a laser pointer by someone other than a speaker doing a presentation may result in arrest.

# INTRODUCTIONS FOR FISH AND GAME COMMISSION MEETINGS

## **Fish and Game Commission**

Eric Sklar	President (Saint Helena)
Jacque Hostler-Carmesin	Vice President (McKinleyville)
Russell Burns	Member (Napa)
Peter Silva	Member (Jamul)
Samantha Murray	Member (Del Mar)

## **Commission Staff**

Melissa Miller-Henson	Executive Director
Susan Ashcraft	Acting Deputy Executive Director
Mike Yaun	Legal Counsel
Elizabeth Pope	Acting Marine Advisor
Ari Cornman	Wildlife Advisor
Sherrie Fonbuena	Analyst
Craig Castleton	Analyst

## **California Department of Fish and Wildlife**

Chuck Bonham	Director
Wendy Bogdan	General Counsel
David Bess	Deputy Director and Chief, Law Enforcement Division
Stafford Lehr	Deputy Director, Wildlife and Fisheries Division
Clark Blanchard	Assistant Deputy Director, Office of Communications, Education and Outreach
Kari Lewis	Chief, Wildlife Branch
Kevin Shaffer	Chief, Fisheries Branch
Craig Shuman	Regional Manager, Marine Region

I would also like to acknowledge special guests who are present:  
*(i.e., elected officials, including tribal chairpersons, and other special guests)*

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**Commissioners**  
**Eric Sklar**, President

Saint Helena

**Jacque Hostler-Carmesin**, Vice President  
McKinleyville

**Russell E. Burns**, Member  
Napa

**Peter S. Silva**, Member  
Jamul

**Samantha Murray**, Member  
Del Mar

STATE OF CALIFORNIA  
Gavin Newsom, Governor

## Fish and Game Commission



**Melissa Miller-Henson**  
**Executive Director**  
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[www.fgc.ca.gov](http://www.fgc.ca.gov)

*Wildlife Heritage and Conservation*  
*Since 1870*

### **REVISED\* MEETING AGENDA** **February 21, 2020, 8:00 AM**

**Natural Resources Building – Auditorium, First Floor**  
**1416 Ninth Street, Sacramento, CA 95814**

*The meeting will be live streamed; visit [www.fgc.ca.gov](http://www.fgc.ca.gov) the day of the meeting.*

**\*This agenda is revised to add Item D(III) to Executive Session; add details to Item 12(A) concerning Executive Director's report; revise Item 22(C) to clarify the action related to the March 5, 2020 Wildlife Resources Committee meeting; and delete Item 17 concerning experimental fishing permits phase I, as no comments within the scope of the 15-day notice were received.**

**Note:** See important meeting deadlines and procedures at the end of the agenda. Unless otherwise indicated, the California Department of Fish and Wildlife is identified as Department. For 2020 when Commission meetings span two days, marine items will be heard on the first day and wildlife and inland fisheries items will be heard on the second day; administrative items will be divided as time permits.

**Invitation:** The Commission invites members of the public to join commissioners and staff for a falconry demonstration sponsored by the California Hawking Club on Thursday, February 20 at 3:00 p.m. The demonstration will be held at Conaway Ranch, 45332 County Road 25 in Woodland; refreshments will be available starting at 2:30 p.m. Members of the public are welcome and must provide their own transportation.

Call to order/roll call to establish quorum

**1. Consider approving agenda and order of items**

**2. Election of Commission president and vice president**

The commissioners annually elect one of their number as president and one as vice president, by a concurrent vote of at least three commissioners.  
(Pursuant to Section 102, Fish and Game Code)

**3. Committee assignments**

The Commission forms three committees from its membership, consisting of at least one commissioner: Marine Resources Committee, Tribal Committee and Wildlife Resources Committee. (Pursuant to sections 105, 106 and 106.5, Fish and Game Code)

**4. General public comment for items not on agenda**

Receive public comment regarding topics within the Commission's authority that are not included on the agenda.

Note: The Commission may not discuss or take action on any matter raised during this item, except to decide whether to place the matter on the agenda of a future meeting (sections 11125 and 11125.7(a), Government Code).

**CONSENT ITEMS**

**5. Pacific leatherback sea turtle**

- (A) Receive petition to list the Pacific leatherback sea turtle (*Dermochelys coriacea*) as an endangered species under the California Endangered Species Act (CESA) (Pursuant to Section 2074.6, Fish and Game Code)
- (B) Consider approving the Department's request for a 30-day extension to review the petition.  
(Pursuant to Section 2073.5, Fish and Game Code)

**6. Riparian brush rabbit**

Receive Department's five-year status review for riparian brush rabbit (*Sylvilagus bachmani riparius*), which is listed as an endangered species under CESA.  
(Pursuant to Section 2077, Fish and Game Code)

**7. Mountain lion**

Receive Department's 90-day evaluation report for the petition to list mountain lion (*Puma concolor*) as a threatened or endangered species under CESA.  
(Pursuant to Section 2073.5, Fish and Game Code)

**8. Shasta snow-wreath**

Receive Department's 90-day evaluation report for the petition to list Shasta snow-wreath (*Neviusia cliftonii*) as a threatened or endangered species under CESA.  
(Pursuant to Section 2073.5, Fish and Game Code)

**9. Foothill yellow-legged frog**

Consider ratifying findings for the listing decisions for foothill yellow-legged frog (*Rana boylei*) under CESA.  
(Pursuant to Section 2075.5, Fish and Game Code)

- (A) Decision to list the Southwest/South Coast, West/Central Coast, and East/Southern Sierra clades as endangered
- (B) Decision to list the Northeast/Northern Sierra and Feather River clades as threatened
- (C) Decision *not* to list the Northwest/North Coast clade

**10. Upper Klamath-Trinity spring Chinook salmon sport fishing emergency regulations (second 90-day extension)**

Consider adopting a second 90-day extension of the upper Klamath-Trinity spring Chinook salmon emergency regulations.

(Re-adopt subsection 7.50(b)(91.2), Title 14, CCR)

**11. Commission Designated Wild Trout Waters Policy**

Receive Department's recommendation and consider adopting proposed amendments to the Commission Designated Wild Trout Waters policy.

(Pursuant to Section 1727, Fish and Game Code)

**12. Executive director's report**

Receive an update from the executive director on staffing, legislation, and other information.

- (A) Staff report, including staff recruitment, sesquicentennial planning, website/document accessibility, California Law Revision Commission recommendation, delegations to staff, 2019 mountain lion necropsy report, and Dungeness Crab Task Force 2019 report
- (B) Legislative report
- (C) Report of lease termination by The Abalone Farm, Inc. for administrative kelp beds 204 and 207 following 30-day notice by the company, consistent with lease terms

**13. Department informational items**

The Department will highlight items of note since the last Commission meeting.

- (A) Director's report
- (B) Marine Region
  - I. Update on automatic conformance of recreational ocean salmon and Pacific halibut regulations to federal regulations, and outcomes of International Pacific Halibut Commission and Pacific Fishery Management Council activities
  - II. Update on Marine Life Management Act (MLMA) master plan implementation and completion of a draft prioritization list of invertebrate fisheries for more focused management
- (C) Wildlife and Fisheries Division, and Ecosystem Conservation Division
- (D) Law Enforcement Division

**14. Commission's annual tribal planning meeting**

Discuss and potentially approve March 18, 2020 annual tribal planning meeting agenda.

**15. Tribal Committee**

Discuss updates and recommendations from the January 17, 2020 committee meeting. Consider approving new topics to address at a future committee meeting.

- (A) Receive January 17, 2020 meeting summary and consider adopting recommendations
- (B) Work plan development
  - I. Update on work plan and draft timeline
  - II. Discuss and consider approving new topics

**16. Marine Resources Committee**

Discuss and consider approving draft agenda topics for the next committee meeting. Consider approving new topics to address at a future committee meeting.

- (A) Work plan development
  - I. Update on work plan and draft timeline
  - II. Discuss and consider approving new topics
- (B) Discuss and consider approving agenda topics for the March 17, 2020 meeting

**17. Recreational purple sea urchin emergency**

Discuss and consider adopting emergency regulations concerning recreational take of purple sea urchin at Caspar Cove, Mendocino County, to support recovery of kelp and species that depend on kelp.

(Amend Section 29.06, Title 14, CCR)

**18. Recreational Dungeness crab marine life protection measures**

Receive Department update on stakeholder outreach and provide direction regarding the Department's draft options for regulation change intended to provide additional whale and turtle protections in the recreational Dungeness crab fishery.

**19. Strategic planning**

Discuss and provide direction on potential revisions to the mission, vision and core values, receive and potentially adopt draft goals, and provide direction on a draft plan.

**20. Petitions for regulation change**

Consider requests submitted by members of the public to adopt, amend, or repeal a regulation.

(Pursuant to Section 662, Title 14, CCR)

- (A) Action on current petitions
  - I. Petition #2019-022: Increase shoreside possession limits to more than one daily recreational bag limit for multi-day fishing trips
  - II. Petition #2019-023 AM 1: Authorize hunting of ravens
  - III. Petition #2019-024 AM 1: Authorize hunting of blackbirds, cowbirds, grackles, crows, and magpies
  - IV. Petition #2019-025: Consider non-lethal beaver deterrence and listed species impacts prior to issuing depredation permits
  - V. Petition #2019-026: Reduce recreational trout bag limit for Caples Creek
- (B) Action on pending regulation petitions referred to staff or Department for review
  - I. Petition #2019-012: Prohibit hand operated water pumps for take of gaper and other clams
  - II. Petition #2019-014: Increase restrictions on recreational take of California grunion

**21. Non-regulatory requests from previous meetings**

Consider non-regulatory requests submitted by members of the public at previous meetings.

- (A) Action on non-regulatory requests
- (B) Action on pending non-regulatory requests referred to staff or the Department for review



**22. Wildlife Resources Committee**

Discuss updates and recommendations from the January 16, 2020 committee meeting. Consider approving new topics to address at a future committee meeting. Discuss and consider approving draft agenda topics for the next committee meeting.

- (A) Receive January 16, 2020 meeting summary and consider adopting recommendations
- (B) Work plan development
  - I. Update on work plan and draft timeline
  - II. Discuss and consider approving new topics
- (C) Discuss and confirm current agenda topic for the March 5, 2020 meeting

**23. Draft Delta Fisheries Management Policy and Striped Bass Policy**

Receive update on stakeholder discussions; discuss and consider adopting a Commission Delta Fisheries Management Policy and an amended Striped Bass Policy.

**24. Mammal hunting**

Discuss proposed changes to mammal hunting tag quotas and seasons regulations. (Amend sections 360, 361, 362, 364, and 364.1, Title 14, CCR)

**25. Waterfowl hunting (annual)**

Discuss proposed changes to waterfowl hunting regulations. (Amend sections 502 and 507, Title 14, CCR)

**26. Public use of Department lands**

Discuss proposed changes to wildlife areas and ecological reserves regulations. (Amend sections 550, 550.5, 551, 552, 630, and 702, Title 14, CCR)

**27. Central Valley sport fishing**

Discuss proposed changes to Central Valley sport fishing regulations. (Amend sections 2.35 and 7.00, and amend subsections 7.50(b)(5), (68), (124), and (156.5), Title 14, CCR)

**28. Klamath River Basin sport fishing**

Discuss proposed changes to Klamath River Basin sport fishing regulations. (Amend subsections 5.87(f) and 7.50(b)(91.1), Title 14, CCR)

**29. Upper Klamath-Trinity spring Chinook salmon sport fishing (certification of compliance)**

Discuss proposed implementation of a certificate of compliance for the upper Klamath-Trinity spring Chinook salmon emergency regulations. (Add subsection 7.50(b)(91.2), Title 14, CCR)

**30. Baker's larkspur**

Receive overview of the Department's five-year status review of Baker's larkspur (*Delphinium bakeri*), which is listed as an endangered species under CESA. (Pursuant to Section 2077, Fish and Game Code)

**31. Clara Hunt's milkvetch**

Consider and potentially act on the Department's five-year status review of Clara Hunt's milkvetch (*Astragalus claranus*), and consider recommendation and comments received to determine whether a change to the listing status from threatened to endangered under CESA may be warranted.

(Pursuant to sections 2074 and 2077, Fish and Game Code)

**32. Commission administrative items**

- (A) Next meeting – April 15-16, 2020 in Sacramento
- (B) Rulemaking timetable updates
- (C) New business

Adjourn

## **EXECUTIVE SESSION**

(Not Open to Public)

At a convenient time during the regular agenda of the meeting listed above, the Commission will recess from the public portion of the agenda and conduct a closed session on the agenda items below. The Commission is authorized to discuss these matters in a closed session pursuant to Government Code Section 11126, subdivisions (a)(1), (c)(3), and (e)(1), and Fish and Game Code Section 309. After closed session, the Commission will reconvene in public session, which may include announcements about actions taken during closed session.

- (A) Pending litigation to which the Commission is a Party
  - I. Dennis Sturgell v. California Department of Fish and Wildlife, and California Fish and Game Commission (revocation of Dungeness crab vessel permit No. CT0544-T1)
  - II. Public Interest Coalition v. California Fish and Game Commission (CEQA compliance during adoption of dog collar regulation)
  - III. Aaron Lance Newman v. California Fish and Game Commission (revocation of hunting and sport fishing privileges)
  - IV. Almond Alliance of California et al. v. California Fish and Game Commission and California Department of Fish and Wildlife (bumble bees California Endangered Species Act determination)
- (B) Possible litigation involving the Commission
- (C) Staffing
- (D) Deliberation and action on license and permit items
  - I. Consider the Proposed Decision in Agency Case No. 18ALJ04-FGC, the accusation filed against Keith Langman regarding revocation of a commercial fishing license, commercial trap permit, lobster operator permit, and southern rock crab trap permit.
  - II. Consider the appeal filed by Michael Anderson in Agency Case No. 19ALJ14-FGC regarding his request to renew his salmon vessel permit.
  - III. Consider the appeal filed by Douglas Dirkse in Agency Case No. 19ALJ16-FGC regarding his request to renew his salmon vessel permit.

## California Fish and Game Commission 2020 Meeting Schedule

**Note: As meeting dates and locations can change, please visit [www.fgc.ca.gov](http://www.fgc.ca.gov) for the most current list of meeting dates and locations.**

Meeting Date	Commission Meeting	Committee Meeting	Other Meetings
March 5		<b>Wildlife Resources*</b> Natural Resources Building Redwood Room 1416 Ninth Street, 14 <sup>th</sup> Floor Sacramento, CA 95814  (*Purpose of meeting is to discuss 2020 Simplification of Statewide Inland Fishing Regulations proposal)	
March 17		<b>Marine Resources</b> Justice Joseph A. Rattigan Building Conference Room 410 50 D Street, 4 <sup>th</sup> Floor Santa Rosa, CA 95404	
March 18			<b>Annual Tribal Planning</b>
April 15 - 16	Natural Resources Building Auditorium 1416 Ninth Street, 1 <sup>st</sup> Floor Sacramento, CA 95814		
May 14	<b>Teleconference</b> Arcata, Santa Rosa, Sacramento and San Diego		
May 14		<b>Wildlife Resources</b> Justice Joseph A. Rattigan Building Conference Room 410 50 D Street, 4 <sup>th</sup> Floor Santa Rosa, CA 95404	
June 24 - 25	Santa Ana area		
July 21		<b>Marine Resources</b> San Clemente area	
August 18		<b>Tribal</b> River Lodge Conference Center 1800 Riverwalk Drive Fortuna, CA 95540	

Meeting Date	Commission Meeting	Committee Meeting	Other Meetings
August 19 - 20	River Lodge Conference Center 1800 Riverwalk Drive Fortuna, CA 95540		
September 17		<b>Wildlife Resources</b> Natural Resources Building Redwood Room 1416 Ninth Street, 14 <sup>th</sup> Floor Sacramento, CA 95814	
October 14 - 15	Elihu M Harris Building Auditorium 1515 Clay Street Oakland, CA 94612		
November 9		<b>Tribal</b> Monterey area	
November 10		<b>Marine Resources</b> Monterey area	
December 9 - 10	San Diego area		

## OTHER 2020 MEETINGS OF INTEREST

### Association of Fish and Wildlife Agencies

- March 8-13, Omaha, NE
- September 13-16, Sacramento, CA

### Pacific Fishery Management Council

- March 3-9, Rohnert Park, CA
- April 3-10, Vancouver, WA
- June 11-18, San Diego, CA
- September 10-17, Spokane, WA
- November 13-20, Garden Grove, CA

### Pacific Flyway Council

- March 10 Omaha, NE
- August 28 (location TBD)

### Western Association of Fish and Wildlife Agencies

- July 9-14, Park City, UT

### Wildlife Conservation Board

- February 26, Sacramento, CA
- May 20, Sacramento, CA
- August 26, Sacramento, CA
- November 18, Sacramento, CA

## IMPORTANT COMMISSION MEETING PROCEDURES INFORMATION

### WELCOME TO A MEETING OF THE CALIFORNIA FISH AND GAME COMMISSION

This year marks the beginning of the 150th year of operation of the Commission in partnership with the California Department of Fish and Wildlife. Our goal is the preservation of our heritage and conservation of our natural resources through informed decision making; Commission meetings are vital in achieving that goal. In that spirit, we provide the following information to be as effective and efficient toward that end. Welcome and please let us know if you have any questions.

### PERSONS WITH DISABILITIES

Persons with disabilities needing reasonable accommodation to participate in public meetings or other Commission activities are invited to contact the Reasonable Accommodation Coordinator at (916) 651-1214. Requests for facility and/or meeting accessibility should be received at least 10 working days prior to the meeting to ensure the request can be accommodated.

### STAY INFORMED

To receive meeting agendas and regulatory notices about those subjects of interest to you, please visit the Commission's website, [www.fgc.ca.gov](http://www.fgc.ca.gov), to sign up on our electronic mailing lists.

### SUBMITTING WRITTEN COMMENTS

The public is encouraged to comment on any agenda item. Submit written comments by one of the following methods: E-mail to [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov); mail to California Fish and Game Commission, P.O. Box 944209, Sacramento, CA 94244-2090; delivery to California Fish and Game Commission, 1416 Ninth Street, Suite 1320, Sacramento, CA 95814; or hand-deliver to a Commission meeting. Materials provided to the Commission may be made available to the general public.

### COMMENT DEADLINES

The **Written Comment Deadline** for this meeting is **5:00 p.m. on February 9, 2020**. Written comments received at the Commission office by this deadline will be made available to Commissioners prior to the meeting.

The **Supplemental Comment Deadline** for this meeting is **noon on February 14, 2020 has been extended to 5:00 p.m. on Monday, February 17, 2020**. Comments received by this deadline will be made available to Commissioners at the meeting.

After these deadlines, written comments may be delivered in person to the meeting – Please bring **ten** (10) copies of written comments to the meeting.

### NON-REGULATORY REQUESTS

All non-regulatory requests will follow a two-meeting cycle to ensure proper review and thorough consideration of each item. All requests submitted by the **Supplemental Comment Deadline** (or heard during general public comment at the meeting) will be scheduled for receipt at this meeting, and scheduled for consideration at the next business meeting.



## PETITIONS FOR REGULATION CHANGE

Any person requesting that the Commission adopt, amend, or repeal a regulation must complete and submit form FGC 1, titled, "Petition to the California Fish and Game Commission for Regulation Change" (as required by Section 662, Title 14, CCR). The form is available at <https://fgc.ca.gov/Regulations/Petition-for-Regulation-Change>. To be received by the Commission at this meeting, petition forms must have been delivered by the **Supplemental Comment Deadline** (or delivered during general public comment at the meeting). Petitions received at this meeting will be scheduled for consideration at the next business meeting, unless the petition is rejected under staff review pursuant to subsection 662(b), Title 14, CCR.

## VISUAL PRESENTATIONS/MATERIALS

All electronic presentations must be submitted by the **Supplemental Comment Deadline** and approved by the Commission executive director before the meeting.

1. Electronic presentations must be provided by email to [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov).
2. All electronic formats must be Windows PC compatible.
3. It is recommended that a print copy of any electronic presentation be submitted in case of technical difficulties.
4. A data projector, laptop and presentation mouse will be available for use at the meeting.

## CONSENT CALENDAR

A summary of all items will be available for review at the meeting. Items on the consent calendar are generally non-controversial items for which no opposition has been received and will be voted upon under single action without discussion. Any item may be removed from the consent calendar by the Commission upon request of a Commissioner, the Department, or member of the public who wishes to speak to that item, to allow for discussion and separate action.

## LASER POINTERS

Laser pointers may only be used by a speaker during a presentation; use at any other time may result in arrest.

## SPEAKING AT THE MEETING

To speak on an agenda item, please complete a "Speaker Card" and give it to the designated staff member before the agenda item is announced. Cards will be available near the entrance of the meeting room. Only one speaker card is necessary for speaking to multiple items.

1. Speakers will be called in groups; please line up when your name is called.
2. When addressing the Commission, give your name and the name of any organization you represent, and provide your comments on the item under consideration.
3. If there are several speakers with the same concerns, please appoint a spokesperson and avoid repetitive testimony.
4. The presiding commissioner will allot between one and three minutes per speaker per agenda item, subject to the following exceptions:
  - a. The presiding commissioner may allow up to five minutes to an individual speaker if a minimum of three individuals who are present when the agenda item is called have ceded their time to the designated spokesperson, and the individuals ceding time forfeit their right to speak to the agenda item.
  - b. Individuals may receive advance approval for additional time to speak if requests for

additional time to speak are received by email or delivery to the Commission office by the Supplemental Comment Deadline. The president or designee will approve or deny the request no later than 5:00 p.m. two days prior to the meeting.

- c. An individual requiring an interpreter is entitled to at least twice the allotted time pursuant to Government Code Section 11125.7(c).
  - d. An individual may receive additional time to speak to an agenda item at the request of any commissioner.
5. If you are presenting handouts/written material to the Commission at the meeting, please provide **ten** (10) copies to the designated staff member just prior to speaking.

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**17. RECREATIONAL TAKE OF PURPLE SEA URCHIN EMERGENCY****Today's Item****Information** ☐**Action** ☒

Discuss and consider adopting emergency regulations concerning recreational take of purple sea urchin at Caspar Cove, Mendocino County.

**Summary of Previous/Future Actions**

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| • Adopted emergency regulations   | Apr 18-19, 2018; Ventura        |
| • Adopted regular rulemaking      | Feb 6, 2019; Sacramento         |
| • MRC vetting                     | Nov 5, 2019; MRC, Sacramento    |
| • <b>Today's adoption hearing</b> | <b>Feb 21, 2020; Sacramento</b> |

**Background**

Since 2014, FGC and DFW have been tracking a combination of environmental and biological stressors in the nearshore waters across northern California. The nearshore conditions have led to the near collapse of the bull kelp forest ecosystem and significant declines in the corresponding species that the kelp ecosystem supports, including red sea urchin and red abalone. Already weakened by environmental stressors and a severely limited kelp food source, an exploding purple sea urchin population has outcompeted red sea urchin and red abalone for the remaining kelp, ultimately leading to the widespread starvation and death of abalone and the collapse of both fisheries; recovery of these fisheries will not be possible without the eventual recovery of bull kelp forests and the return of sufficient food to support survival and reproduction.

In 2018, based on a DFW findings that volatile and adverse conditions on the north coast posed an emergency situation for resident abalone populations and the kelp forest ecosystem upon which they rely, FGC adopted emergency regulations to raise the daily bag limit for purple sea urchin from 35 individual urchin to 20 gallons per person, per day, taken only while skin-diving or SCUBA diving in state waters off Sonoma and Mendocino counties. Seen as part of a broader collaborative process, the regulation helped to facilitate citizen science efforts and initiate a coordinated approach to kelp ecosystem recovery on the north coast (Exhibit 1).

In Feb 2019, FGC adopted a regular rulemaking that further increased the daily recreational take limit of purple sea urchin to 40 gallons in the waters off Sonoma, Mendocino, and Humboldt counties (Exhibit 2). The intent of the higher 40 gallons limit was to promote the continued involvement of recreational divers in efforts to restore the severely-impacted kelp forest ecosystems in northern California, and contribute more greatly to reduction efforts without adversely affecting the long-term health of the purple sea urchin population.

DFW coordinated with divers to monitor recreational harvest events in 2018 and 2019. While some events were successful at moving large volumes of purple sea urchin, DFW has reported that recreational divers often found removing and transporting 40 gallons of urchin to shore to be unattainable, and that removing that volume put diver safety at risk due to regional ocean conditions. Environmental conditions have continued to deteriorate in northern California, and divers remain committed to testing alternative methods that might increase the expected

## STAFF SUMMARY FOR FEBRUARY 21, 2020

benefits to the kelp ecosystem and the species that rely upon it from removing larger amounts of purple urchin.

DFW is requesting that FGC take emergency action to amend Section 29.06 of Title 14 to temporarily remove the daily bag limit and expand authorized recreational take methods for purple sea urchin in a discrete geographic area in Mendocino County, specifically an area offshore of Caspar Headlands State Beach known as Caspar Cove (exhibits 3 and 4). The proposed regulations are intended to explore and evaluate whether intensified removals may promote the recovery of kelp and the associated species that it supports (Exhibit 3). Recreational take of purple sea urchin in Caspar Cove would be allowed only by hand or with manually operated handheld tools.

If adopted today, the new regulations are expected to take effect on or around Mar 2 and continue for 180 days, during which time DFW and partners intend to monitor and evaluate effectiveness by comparing ecosystem recovery in the recreational removal area to similar nearby areas with commercial take and/or no purple urchin removal efforts.

***California Environmental Quality Act (CEQA)***

DFW has determined that the proposed action falls within the statutory exemption under Public Resources Code Section 21080(b)(4) (Exhibit 5). The statutory exemption, which is repeated in Section 15359 of the CEQA guidelines, applies to actions necessary to prevent or mitigate an emergency. DFW has also determined that, under CEQA guidelines in Section 15061, the proposed action falls within categorical exemptions class 7 and 8 as related to agency actions to protect natural resources and the environment (exhibits 6 and 7); FGC staff agrees these exemptions are applicable.

As to the exceptions to categorical exemptions set forth in CEQA guidelines in Section 15300.2, including the prospect of unusual circumstances and related effects, FGC staff's review was guided by the Supreme Court of California's recent decision in *Berkeley Hillside Preservation v. City of Berkeley*. FGC staff has reviewed all of the available information possessed by FGC relevant to the issue and does not believe adopting the regulations poses any unusual circumstances that would constitute an exception to the categorical exemptions set forth above. Compared to the activities that fall within Class 7 and Class 8 generally, which include the given example of wildlife preservation activities such as the effort here, there is nothing unusual about the proposed regulations. In addition, even if there were unusual circumstances, no potentially significant effects on either project-specific or cumulative bases are expected.

In considering emergency action, FGC must determine the magnitude of potential harm, the existence of a crisis situation, the immediacy of the need, and whether the anticipation of harm has a basis firmer than simple speculation. All available information indicates that conditions in the kelp ecosystem have continued to decline and extraordinary measures must be taken immediately to help restore the important habitat for the benefit of a myriad species that rely upon it. DFW will provide an overview at the meeting (Exhibit 11).

**Significant Public Comments**

Ten commenters submitted emails to express support for the emergency action. Representative

## STAFF SUMMARY FOR FEBRUARY 21, 2020

emails are included as exhibits 8-10. In addition to supporting the emergency action, one commenter advocates for other measures to address the problem, including using drones, site selection by volunteers, and hiring unemployed commercial urchin divers for removal efforts.

### Recommendation

**FGC staff:** Adopt the proposed emergency action as recommended by DFW, recognizing the essential nature of DFW and partner monitoring of outcomes to help determine effectiveness of the strategy.

**DFW:** Temporarily remove the daily bag limit for recreational take of purple sea urchin in Caspar Cove, Mendocino County.

### Exhibits

1. [Staff summary from Apr 18-19, 2018 FGC meeting](#) (for background only)
2. [Staff summary from Feb 6, 2019 FGC meeting](#) (for background only)
3. [DFW memo transmitting proposed emergency statement](#), received Feb 10, 2020
4. [Draft emergency statement](#)
5. [DFW memo transmitting notice of exemption under CEQA](#), received Feb 10, 2020
6. [Draft CEQA notice of exemption](#)
7. [CEQA notice of exemption attachment](#)
8. [Email from Madeleine Russo](#), received Jan 31, 2020
9. [Email from Captain Dan Walsh](#), received Feb 5, 2020
10. [Email from Doug Jung](#), received Feb 9, 2020
11. [DFW presentation](#) (added Feb 18, 2020)

### Motion/Direction

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission determines, pursuant to Section 11346.1 of the Government Code, that an emergency situation exists and finds the proposed regulation is necessary to address the emergency.

The Commission further determines, based on the record, pursuant to sections 15061(a), 15307, and 15308 of Title 14, that the proposed action is exempt from the California Environmental Quality Act as an action necessary to prevent or mitigate an emergency and as an action to protect natural resources and the environment.

The Commission further determines, pursuant to Section 399 of the Fish and Game Code, that adopting this regulation is necessary for the immediate conservation, preservation, or protection of birds, mammals, fish, amphibians, or reptiles, including but not limited to their nests or eggs.

Therefore, the Commission adopts the emergency regulation to amend Section 29.06.

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**18. RECREATIONAL DUNGENESS CRAB AND MARINE LIFE PROTECTIONS****Today's Item****Information** ☐**Action** ☒

Receive DFW update on stakeholder outreach and provide direction on the DFW draft options for regulation changes intended to provide additional whale and turtle protections in the recreational Dungeness crab fishery.

**Summary of Previous/Future Actions**

- |                                                                          |                                 |
|--------------------------------------------------------------------------|---------------------------------|
| • FGC discussed entanglement settlement and referred to MRC              | Apr 17, 2019; Santa Monica      |
| • MRC discussed possible management measures for recreational fishery    | Jul 11, 2019; MRC, San Clemente |
| • FGC supported considering recreational measures per MRC recommendation | Aug 7-8, 2019; Sacramento       |
| • MRC discussed proposed recreational management measures                | Nov 5, 2019; MRC, Sacramento    |
| • FGC discussed proposed management measures referred by MRC             | Dec 11-12, 2019; Sacramento     |
| • <b>Today's discussion and direction for possible rulemaking</b>        | <b>Feb 21, 2020; Sacramento</b> |

**Background**

FGC has authority to regulate the recreational Dungeness crab fishery; authority over the commercial Dungeness crab fishery is held by both DFW and the California State Legislature.

In recent years, whale populations in California's waters have increased, leading to a greater risk of entanglement in deployed crab fishing gear and a drastic increase in the number of whale entanglements off the West Coast. DFW was sued, alleging potential violation of Section 9 of the federal Endangered Species Act for take of blue and humpback whales and leatherback sea turtles without a federal incidental take permit. A Mar 2019 settlement and a stipulation to stay the case, under condition of specific management actions in the commercial fishery, led FGC to initiate a discussion in Apr 2019 with FGC; the discussion focused on potential management implications for the recreational Dungeness crab fishery to reduce the risk of whale and sea turtle entanglement in recreational trap gear. FGC referred the topic to MRC (see Exhibit 1 for additional background).

Following MRC vetting of possible "common-sense" management measures for the recreational Dungeness crab fishery and FGC support for developing such measures, in Dec 2019 MRC recommended advancing a rulemaking to implement several measures proposed by DFW (establishing a trap limit, establishing a stamp validation program, enhanced gear marking, requiring a service interval, and providing in-season authority to DFW's director). FGC asked that DFW conduct additional outreach to help inform and define specific options within those management categories prior to requesting to go notice on a rulemaking.



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Based on FGC direction, DFW held three in-person workshops (Jan 6 in Sacramento, Jan 11 in Sausalito, and Jan 23 in Eureka) intended to solicit additional stakeholder input and inform a final proposal.

Today, DFW will report on the outcomes of the workshops and ongoing stakeholder discussions, and highlight resulting refinements DFW has made to the proposed management measures. DFW will also propose next steps for the process, including a revised timeline to allow for additional MRC vetting and a recommendation at MRC's Mar meeting (Exhibit 2).

### Significant Public Comments

1. An angling club expresses support for the objective to reduce entanglements and specifically supports: enhanced gear marking requirements, a ten-pot per angler limit, a 14-day service interval, a validation stamp (in theory), and retaining the current FGC authority structure over the recreational fishery rather than delegating to DFW. Additional comments on the benefits of removing derelict gear to reduce entanglements were also included (Exhibit 3).

### Recommendation

**FGC staff:** Re-refer subject to the Mar MRC meeting to discuss the specific options within the range of management measures proposed by DFW and to make a recommendation, and amend the rulemaking schedule for the recreational Dungeness crab fishery to commence with notice in Jun 2020.

**MRC:** Support DFW developing a suite of options to be analyzed for potential regulatory action that may include part or all of the management measures generally described at the Nov 5, 2019 MRC meeting.

**DFW:** Return the issue to MRC for discussion at its Mar meeting and a potential recommendation on proposed management measures for the recreational Dungeness crab fishery, with the intent to request authorization to publish notice in Jun 2020 for a suite of proposed regulations for the recreational Dungeness crab fishery.

### Exhibits

1. [Staff summary from Apr 17, 2019 FGC meeting, Agenda Item 25 \(for background only\)](#)
2. [DFW presentation](#)
3. [Email from Scott McBain, Humboldt Area Saltwater Anglers, received Dec 10, 2019](#)

### Motion/Direction

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission approves scheduling an additional discussion of potential management measures for the recreational Dungeness crab fishery for the March 2020 MRC meeting, and approves a change to the rulemaking schedule to consider notice in June 2020, discussion in August 2020, and adoption in October 2020.

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**19. STRATEGIC PLANNING****Today's Item****Information** ☐**Action** ☒

This is a standing agenda item as FGC develops a new strategic plan. Staff will provide an update on current progress and request input from commissioners.

**Summary of Previous/Future Actions**

- |                                                                          |                                 |
|--------------------------------------------------------------------------|---------------------------------|
| • Adopted mission, vision, and core values                               | Dec 12-13, 2018; Oceanside      |
| • Received updates on second phase                                       | Feb, Apr, Jun 2019; various     |
| • Discussed seven key survey questions with stakeholders during workshop | Aug 7-8, 2019; Sacramento       |
| • Discussed feedback from surveys and interviews                         | Dec 11-12, 2019; Sacramento     |
| • <b>Consider potential goals and provide direction on draft plan</b>    | <b>Feb 21, 2020; Sacramento</b> |

**Background**

In anticipation of FGC's upcoming 150-year anniversary in 2020, a strategic planning process was initiated in early 2018 (Exhibit 1 provides additional background). In the first of a three-phase process, FGC reassessed its mission and vision, and developed a set of core values, in concert with staff and stakeholders. Adopted in Dec 2018, the revised mission, vision, and new core values (Exhibit 2) are serving to guide a forward-thinking update to the strategic plan.

In summer 2019, staff initiated the second phase of the planning process, consisting primarily of data gathering and synthesis with staff, stakeholders and commissioners. An Aug 2019 FGC discussion was held in a workshop format so that commissioners, staff, and stakeholders could have a direct dialogue about several key questions related to FGC's performance and priorities (Exhibit 3). After the Aug discussion, approximately 14% of a randomly selected subset of FGC's mailing list members participated in an online survey designed to solicit broader input on key questions; compiled survey results are in Exhibit 4. As a more in-depth companion to the online survey, staff conducted interviews with 17 individuals, including commissioners and leadership from DFW, other agencies, non-governmental organizations and legislative staff. Questions were similar to those of the online survey, but also included questions about the new mission and vision statements. In Dec 2019, FGC discussed feedback received in the public survey and stakeholder interview results.

Staff has used the information gathered during the second phase to help guide development of draft goals to be considered by FGC as part of a strategic plan. Today, staff will introduce for FGC consideration input on potential goals and a refinement to the mission statement.

**Significant Public Comments (N/A)****Recommendation (N/A)**

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**Exhibits**

1. [Staff summary from Aug 22-23, 2018 FGC meeting, Agenda Item 17, Strategic Planning \(for background only\)](#)
2. [FGC mission, vision and core values, adopted Dec 13, 2018](#)
3. [Staff summary from Aug 7-8, 2019 FGC meeting, Agenda Item 15, Strategic Planning \(for background only\)](#)
4. [Staff summary of key themes and public survey responses](#) are found in the meeting materials for Agenda Item 11 of the Dec 11-12, 2019 meeting
5. [Examples of potential revised mission statement](#) (*Exhibit added Feb 21, 2020*)
6. [Draft proposed strategic plan outline](#) (*Exhibit added Feb 21, 2020*)

**Motion/Direction (N/A)**

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**20. PETITIONS FOR REGULATORY CHANGE****Today's Item****Information** ☐**Action** ☒

This is a standing agenda item for FGC to act on regulation petitions from the public that are marine in nature. For this meeting:

- (A) Action on current petitions received at the Dec 2019 meeting
- (B) Pending regulation petitions referred to DFW for review

**Summary of Previous/Future Actions**

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| (A)                                  |                                 |
| • FGC received petitions             | Dec 11-12, 2019; Sacramento     |
| • <b>Today's action on petitions</b> | <b>Feb 21, 2020; Sacramento</b> |
| (B)                                  |                                 |
| • FGC received petition #2019-012    | Jun 12-13, 2019; Redding        |
| • FGC received petition #2019-014    | Aug 7-8, 2019; Sacramento       |
| • Petition #2019-012 referred to DFW | Aug 7-8, 2019; Sacramento       |
| • Petition #2019-014 referred to DFW | Oct 9-10, 2019; Valley Center   |
| • <b>Today's action on petitions</b> | <b>Feb 21, 2020; Sacramento</b> |

**Background**

Pursuant to Section 662, any request for FGC to adopt, amend, or repeal a regulation must be submitted on form FGC 1, "Petition to the California Fish and Game Commission for Regulation Change." Petitions received at an FGC meeting are scheduled for consideration at the next business meeting under (A), unless the petition is rejected under 10-day staff review as prescribed in subsection 662(b). A petition may be (1) denied, (2) granted, or (3) referred to committee, staff or DFW for further evaluation or information-gathering. Referred petitions are scheduled for action under (B) once the evaluation is completed and a recommendation made.

- (A) ***Petitions for regulation change.*** Five petitions from Dec 2019 are scheduled for action:
- I. Petition #2019-022: *Increase shoreside possession limits to more than one daily recreational bag limit for multi-day fishing trips* (Exhibit A2)
  - II. Petition #2019-023 AM 1: *Authorize hunting of ravens* (Exhibit A3)
  - III. Petition #2019-024 AM 1: *Authorize hunting of blackbirds, cowbirds, grackles, crows, and magpies* (Exhibit A4)
  - IV. Petition #2019-025: *Consider non-lethal beaver deterrence and listed species impacts prior to issuing depredation permits* (Exhibit A5)
  - V. Petition #2019-026: *Reduce recreational trout bag limit for Caples Creek* (Exhibit A6)

Staff recommendations and rationales are provided in Exhibit A1.

- (B) ***Pending regulation petitions.*** This is an opportunity for staff to provide recommendation on petitions previously referred by FGC to staff, DFW, or committee for review.

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Two petitions previously referred to DFW are scheduled for action today. DFW has completed its review and prepared recommendations for the following:

- I. Petition #2019-012: *Prohibit hand operated water pumps for take of gaper and other clams* (Exhibit B2)
- II. Petition #2019-014: *Increase restrictions on recreational take of California grunion* (Exhibit B3)

Staff recommendations and rationales are provided in Exhibit B1. DFW's review and recommendations are provided in exhibits B4 and B5.

### Significant Public Comments

1. A commenter on petitions #2019-023 and #2019-024 laments the loss of birds over the past 20 years and notes the effects of the Tubbs Fire on birds (Exhibit A7).
2. A commenter writes in support of petition #2019-024, noting that the birds can be a nuisance, cowbirds are an invasive species, and allowing hunting may provide a source of game meat (Exhibit A8). Another commenter makes similar points with respect to ravens and petition #2019-023 (Exhibit A9).
3. A commenter on petition #2019-012 supports measures to curb clamming with pumps, and provides four options: prohibit the use of pumps, lower the daily bag limit, institute seasonal closures, or disallow the activity (Exhibit B6).

### Recommendation

**FGC staff:** Adopt the staff recommendations as reflected in exhibits A1 and B1. Approve DFW recommendation to refer subject matter of petition #2019-014 concerning California grunion to MRC.

**DFW:** Grant referred petition #2019-012 for consideration. Grant referred petition #2019-014, and refer the subject matter (California grunion) to the MRC for a DFW presentation and discussion in Jul 2020 on possible regulation changes for the recreational fishery.

### Exhibits

- A1. [Table of petitions for regulation change, updated Feb 14, 2020](#)
- A2. [Petition #2019-022, received Oct 21, 2019](#)
- A3. [Petition #2019-023 AM 1, received Nov 8, 2019](#)
- A4. [Petition #2019-024 AM 1, received Nov 8, 2019](#)
- A5. [Petition #2019-025, received Nov 15, 2019](#)
- A6. [Petition #2019-026, received Nov 22, 2019](#)
- A7. [Email from Jane, received Jan 30, 2020](#)
- A8. [Email from Kara Norris, received Feb 2, 2020](#)
- A9. [Email from Nathaniel Norris, received Feb 2, 2020](#)
- B1. [Table of referred petitions for regulation change, updated Feb 14, 2020](#)
- B2. [Petition #2019-012, received May 30, 2019](#)
- B3. [Petition #2019-014, received Jun 20, 2019](#)

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- B4. [DFW memo regarding review of petition #2019-012, received Jan 24, 2020](#)
- B5. [DFW memo regarding review of petition #2019-014, received Jan 9, 2020](#)
- B6. [Letter from Scott Miller, received Feb 8, 2020](#)

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission adopts the staff recommendations as reflected in exhibits A1 and B1 and refers California grunion recreational fishery management to the Marine Resources Committee for discussion at a future meeting.

**OR**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission adopts the staff recommendations as reflected in exhibit A1 and B1, except for petition(s) #\_\_\_\_\_ for which the action is \_\_\_\_\_, and refers California grunion recreational fishery management to the Marine Resources Committee for discussion at a future meeting.



## STAFF SUMMARY FOR FEBRUARY 21, 2020

**21. NON-REGULATORY REQUESTS****Today's Item****Information** ☐**Action** ☒

This is a standing agenda item for FGC to act on non-regulatory requests from the public.

**Summary of Previous/Future Actions**

- FGC received requests Dec 11-12, 2019; Sacramento
- **Today's potential action on requests Feb 21, 2020; Sacramento**

**Background**

FGC provides direction regarding requests from the public received by mail and email and during general public comment at the previous FGC meeting. Public requests for non-regulatory action follow a two-meeting cycle to ensure proper review and consideration.

- (A) **Non-regulatory requests.** Non-regulatory requests scheduled for consideration today were received at the Dec 2019 meeting in one of three ways: (1) submitted by the comment deadline and published as tables in the meeting binder, (2) submitted by the supplemental comment deadline and delivered at the meeting, or (3) received during public comment at the meeting.

Today, five non-regulatory requests received at the Dec 2019 meeting are scheduled for action. Exhibit A1 summarizes and contains staff recommendations for each request.

- (B) **Pending non-regulatory requests.** This item is an opportunity for staff to provide a recommendation on non-regulatory requests that were schedule for action at a previous meeting and referred by FGC to staff or DFW for further review.

There are no pending non-regulatory requests for today.

**Significant Public Comments (N/A)****Recommendation**

**FGC staff:** Adopt the staff recommendations as reflected in Exhibit A1.

**Exhibits**

1. [List of non-regulatory requests and staff recommendations for requests received through Dec 12, dated Jan 24, 2020](#)

**Motion/Direction**

- (A) Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission adopts the staff recommendations for action on the December 2019 non-regulatory requests.

**OR**

Moved by and by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission adopts the staff recommendations for action on the December 2019 non-regulatory requests, except for the item(s) \_\_\_\_\_ for which the action is \_\_\_\_\_.

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**22. WILDLIFE RESOURCES COMMITTEE (WRC)****Today's Item**Information ☐Action ☒

Receive summary from the Jan 16, 2020 WRC meeting and potentially approve WRC recommendation. Receive update on WRC work plan and timeline. Discuss and potentially approve new topics for WRC review. Discuss and confirm current agenda topic approved for the Mar 5, 2020 WRC meeting.

**Summary of Previous/Future Actions**

- |                                                                     |                                 |
|---------------------------------------------------------------------|---------------------------------|
| • Most recent WRC meeting                                           | Jan 16, 2020; WRC, Long Beach   |
| • <b>Today consider WRC recommendation and potential new topics</b> | <b>Feb 21, 2020; Sacramento</b> |
| • Next WRC meeting, added by FGC in Oct 2019                        | Mar 5, 2020; WRC, Sacramento    |
| • WRC meeting                                                       | May 14, 2020; WRC, Santa Rosa   |

**Background**

WRC works under FGC direction to set and accomplish its work plan (Exhibit 2).

**Meeting Summary**

WRC met on Jan 16, 2020 and covered the following topics:

- Update and discussion of simplification of statewide inland fishing regulations
- Update on bullfrogs and non-native turtle stakeholder engagement process

A written summary of the meeting is provided in Exhibit 1.

**WRC Recommendations**

Based on public comment and the meeting discussions, WRC has one recommendation for FGC consideration:

1. Add a discussion of urban coyote issues to a future FGC meeting agenda.

**Next Meeting**

The next WRC meeting is scheduled for Mar 5, 2020 in Sacramento. This meeting was added to the regular WRC meeting schedule by FGC in Oct 2019 for the sole purpose of WRC discussion and potential recommendation on the simplification of statewide inland fishing regulations.

**Significant Public Comments (N/A)****Recommendation**

**FGC staff:** Add a discussion on urban coyotes for the June 2020 FGC meeting in Santa Ana. No changes are recommended to the Mar 5, 2020 WRC agenda.

**WRC:** Schedule for a future FGC meeting a discussion on urban coyote issues.

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**Exhibits**

1. [WRC meeting summary for Jan 16, 2020](#)
2. [WRC work plan, updated Feb 11, 2020](#)

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission approves the recommendation from the January 16, 2020 Wildlife Resources Committee meeting and directs staff to schedule a discussion on urban coyotes for the June 2020 FGC meeting in Santa Ana.

**OR**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission approves the recommendation from the Jan 16, 2020 Wildlife Resources Committee meeting, except \_\_\_\_\_.

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**23. DRAFT DELTA FISHERIES MANAGEMENT POLICY AND STRIPED BASS POLICY****Today's Item****Information** ☐**Action** ☒

Discuss and consider adopting an FGC Delta Fisheries Management Policy and an amended FGC Striped Bass Policy.

**Summary of Previous/Future Actions**

- |                                                                                                |                                 |
|------------------------------------------------------------------------------------------------|---------------------------------|
| • Delta Fisheries Forum                                                                        | May 24, 2017                    |
| • WRC vetted draft policy                                                                      | Sep 2018 – May 2019             |
| • FGC accepted WRC recommendation to schedule policy for consideration                         | Jun 12-13, 2019; Redding        |
| • FGC discussed draft policy and postponed consideration to allow stakeholder discussions      | Aug 7-8, 2019; Sacramento       |
| • Received update on progress with stakeholder discussions                                     | Oct 9-10, 2019; Valley Center   |
| • Received update and discussed draft policy and revisions to striped bass policy              | Dec 11-12, 2019; Sacramento     |
| • <b>Today discuss and potentially adopt draft policy and revisions to striped bass policy</b> | <b>Feb 21, 2020; Sacramento</b> |

**Background**

An effort to review existing policy and potentially adopt a new policy concerning fisheries management in the Sacramento San-Joaquin Delta (Delta) has been underway since 2017. Throughout 2019, effort focused on WRC vetting and FGC discussion of a draft Delta Fisheries Management Policy. See Exhibit 1 for a more detailed background.

In Aug 2019, FGC received a revised draft Delta Fisheries Management Policy (Exhibit 2), vetted through the WRC, for discussion and potential adoption. Following extensive public comment, FGC directed staff to continue discussions with stakeholders and DFW regarding both the draft policy and potential changes to the existing FGC Striped Bass Policy (Exhibit 3).

Staff provided an update on progress at FGC's Oct 2019 meeting and FGC discussed the policies at its Dec 2019 meeting, where staff and stakeholders indicated support for the draft Delta policy in its current state as well as differences in potential revisions to the FGC Striped Bass Policy. Three options for a revised FGC Striped Bass Policy were presented (two stakeholder options and one staff option). FGC did not take any action; commissioners expressed a desire to act on both policies in tandem and directed staff to continue to work with stakeholders on revisions to the FGC Striped Bass Policy.

***Update on Striped Bass Policy Discussions***

As requested by FGC, in Jan 2020 FGC staff held a conference call with DFW and a broad group of stakeholders and organizations representing fishing and water interests to discuss the three policy options presented in Dec 2019. Discussion focused on the appropriateness of specifying a numeric population target within the policy; no collective solution was identified.

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The current FGC Striped Bass Policy, adopted in 1996, is shown in Exhibit 3. The three proposals for revisions—two from stakeholders and one from staff—are in exhibits 4-6, reflecting the results of stakeholder input over the course of the policy discussions. Some proposed changes are common to the three versions and others are unique, reflecting the ongoing differences in perspectives.

*Where There is Agreement*

1. In section II, all drafts add language about a robust recreational fishery or maintaining/increasing striped bass recreational angling opportunities. Staff believes the language is sufficiently similar.
2. Remove section III, the three million striped bass long-term goal. DFW's estimate of striped bass before declines started in the 1970s was between 1.5 and 1.9 million fish. Under the prior regime with striped bass stocking activities, the 1994 estimate was only 600,000 fish. A three million fish goal is likely not achievable by DFW in any realistic time frame nor under the current conditions in the Delta.
3. In section IV, remove pen rearing and artificial propagation of striped bass as recommended practices; past efforts using these methods were not successful in reversing declines, and conditions in the Delta have worsened since. Pen rearing is not a current DFW practice in inland waters.
4. In section IV, add activities that DFW is encouraged to undergo to support striped bass, including habitat improvement, controlling invasive aquatic vegetation, improving water quality, reducing striped bass loss, and monitoring the status/population of striped bass.

*Where There are Differences*

1. In section I, the language "stabilizing and restoring" striped bass is revised to "monitor and manage" in the staff draft and stakeholder draft 2. The language is retained in stakeholder draft 1; further, in that version, DFW is charged with restoring the striped bass population to a "growing" population, which imparts to DFW a responsibility to undertake active enhancement efforts. Staff believes that the State's limited resources, and DFW's in particular, should be focused primarily on species that are native, threatened, endangered or of greatest conservation need, without foreclosing options to stabilize and ultimately restore the striped bass fishery where compatible with these goals; many efforts can benefit both.
2. In section II, the short-term goal of 1.1 million striped bass is removed in the staff draft and stakeholder draft 2, and retained in stakeholder draft 1. Consistent with the proposed Delta fisheries policy, which is focused on balancing the needs of native, listed, and game species, staff believes a more appropriate policy for the Department's management of striped bass is "a healthy, self-sustaining striped bass population" and "a robust recreational fishery." The proposed language reflects the stated aims of recreational fishing interests in the Delta, with one part common to stakeholder draft 1 and the other stakeholder draft 2.

In stakeholder draft 2, the numeric target and fixed time frame are retained, though the short-term goal becomes the fundamental target instead of the current policy's three million; the goal is modified by consideration of available habitat. The language gives a

## STAFF SUMMARY FOR FEBRUARY 21, 2020

concrete, measurable goal for DFW to meet but, without a better understanding of the current state of the fishery and striped bass habitat, it is relatively unhelpful as the Delta has changed so significantly since the original policy was adopted. A numerical goal is one that will necessarily change over time and is best identified with other management goals and objectives that can be developed and adapted by DFW in concert with stakeholders as more information is gathered and as conditions and knowledge change.

3. In section II, the staff draft adds the last sentence, which includes “to develop appropriate goals and objectives to achieve these broad aims,” consistent with FGC’s Cooperation Policy. The sentence is intended to help ensure that applicable management goals and objectives, tiered to the guidance in the policy, will be developed in consultation with affected interests.

### **Next Steps**

FGC staff agrees with the stakeholders that striped bass is an economically significant and recreationally important fishery in the Delta, and also understands and supports the desire to identify a numeric target and specific strategies that will be used to ensure a robust recreational fishery. Where staff does not agree is that having a numeric target in a public policy will lead to anything different from what has occurred over the last 25 years with the existing numeric targets.

Policies provide guidelines for how FGC and DFW operate, and their eventual success or failure is contingent upon the relationship between the two organizations, the management processes that convert such policies into action, and the relationships with other organizations and stakeholders that help create success or failure. To be successful, policies must be realistic and attainable, standards not met by the current striped bass policy. DFW has indicated a willingness to work with stakeholders to discuss those actions that will benefit striped bass, such as specific goals, objectives and projects, understanding that activities may be targeted to listed species where DFW has resources available (DFW does not currently receive funding for work specific to striped bass). However, many projects DFW implements or funds to help restore the Delta ecosystem is of benefit to striped bass.

Today, FGC is being asked to adopt the draft FGC Delta Fisheries Management Policy as amended by staff and to adopt revisions to the FGC Striped Bass Policy. Staff also recognizes that FGC may not be prepared to adopt the new policy and/or make revisions to the striped bass policy, and stands ready to implement any direction or actions.

### **Significant Public Comments**

1. Dr. Peter Moyle states that striped bass can be a surrogate for the overall health of the Delta and that regulations should not be aimed at reducing its population (Exhibit 7).
2. The Delta Protection Commission supports language from stakeholder draft 1, a goal of 1.1 million striped bass, the inclusion of support for interagency research efforts, and studies on the relationship between striped bass and listed species. It urges adoption of the Delta Fisheries Management Policy (Exhibit 8).
3. A property owner’s association supports a measurable target and the “restore and enhance” language; it asks FGC to support local businesses in the Delta (Exhibit 9).

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4. A coalition of angling associations, sporting groups, and scientists express their view that a numeric target is important for the policy. They also urge retention of "restore and enhance" instead of "monitor and manage" (Exhibit 10).
5. A fishing association supports a numeric target of 1 million and notes that other policies which do not have numeric goals have management plans; it requests an assessment of striped bass before making changes to the policy. It questions statements made by FGC staff (Exhibit 11).
6. An individual supports a numeric goal of 1 million striped bass, urges population assessments, questions "credible science" of the policy, and asks that FGC consider the economic impacts of its decisions (Exhibit 12).
7. Over 50 emails in support of striped bass; the various concerns and criticisms from the public are generally identified in exhibits 7-12.

**Recommendation**

**FGC staff:** Adopt the draft Delta Fisheries Management Policy as presented today and approve the staff draft of proposed revisions to the FGC Striped Bass Policy.

**Exhibits**

1. [Staff summary from Aug 7-8, 2019 FGC meeting](#) (for background only)
2. [Draft Delta Fisheries Management Policy](#), updated Feb 14, 2020
3. [FGC's Striped Bass Policy](#), adopted Apr 5, 1996
4. [Stakeholder draft 1](#) for a revised striped bass policy
5. [Stakeholder draft 2](#) for a revised striped bass policy
6. [Staff Draft](#) for a revised Striped Bass Policy
7. [Letter from Dr. Peter Moyle](#), Center for Watershed Sciences, received Dec 9, 2019
8. [Letter from the Delta Protection Commission](#), received Jan 16, 2020
9. [Letter from the Long Island Property Owner's Association](#), received Feb 6, 2020
10. [Letter from a coalition of angling and sporting associations and scientists](#), received Feb 7, 2020
11. [Letter from James Cox, California Striped Bass Association](#), received Feb 7, 2020
12. [Letter from Roger Mammon](#), received Feb 7, 2020

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission adopts the draft Delta Fisheries Management Policy and approves the staff draft version of proposed revisions to the California Fish and Game Commission Striped Bass Policy.

**OR**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission adopts the draft Delta Fisheries Management Policy and approves the \_\_\_\_\_ draft version revisions to the California Fish and Game Commission Striped Bass Policy, with the following changes: \_\_\_\_\_.

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**24. MAMMAL HUNTING****Today's Item****Information** ☒**Action** ☐

Discuss proposed changes to mammal hunting tag quotas and seasons regulations.

**Summary of Previous/Future Actions**

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| • WRC vetting                       | Sep 10, 2019; WRC, Santa Rosa   |
| • Notice hearing                    | Dec 11-12, 2019; Sacramento     |
| • <b>Today's discussion hearing</b> | <b>Feb 21, 2020; Sacramento</b> |
| • Adoption hearing                  | Apr 15-16, 2020; Sacramento     |

**Background**

Proposed changes to the hunting regulations for various big game mammals are combined for concurrent action under a single rulemaking package. In addition to changes to season dates to account for the annual calendar shift and other minor changes, DFW proposes adjustments to deer tags, bighorn sheep tags, and elk tags and seasons.

There are no changes to the proposals vetted at the Sep WRC meeting and approved at the notice hearing in Dec 2019. Proposed tag ranges are reflected in the initial statements of reasons (ISORs) and included in exhibits 1 through 5. Final tag numbers within the ranges noticed and supported by existing environmental documents will be selected prior to the proposed adoption date of Apr 16, 2020.

It is anticipated final tag quotas should fall within the pre-approved California Environmental Quality Act (CEQA) ranges resulting in addenda to the CEQA document for deer hunting (State Clearing House ([SCH](#)) [2007012091](#)); bighorn sheep hunting ([SCH 2018112036](#)), and the supplemental environmental document for elk hunting ([SCH 2018112037](#)); these addenda will be presented as exhibits for the Apr 16, 2020 meeting.

**Significant Public Comments (N/A)****Recommendation (N/A)****Exhibits**

1. [Deer: additional hunts ISOR](#)
2. [Archery deer hunting ISOR](#)
3. [Nelson bighorn sheep ISOR](#)
4. [Elk ISOR](#)
5. [SHARE elk hunts ISOR](#)

**Motion/Direction (N/A)**



## STAFF SUMMARY FOR FEBRUARY 21, 2020

**25. WATERFOWL HUNTING (ANNUAL)****Today's Item****Information** ☒**Action** ☐

Discuss proposed changes to waterfowl hunting regulations.

**Summary of Previous/Future Actions**

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| • WRC vetting                       | Sep 10, 2019; WRC, Santa Rosa   |
| • Notice hearing                    | Dec 11-12, 2019; Sacramento     |
| • <b>Today's discussion hearing</b> | <b>Feb 21, 2020; Sacramento</b> |
| • Adoption hearing                  | Apr 15-16, 2020; Sacramento     |

**Background**

DFW proposes changes to migratory waterfowl regulations to comply with the proposed frameworks for the 2020-21 seasons as approved by the Pacific Flyway Council. The proposed frameworks are scheduled to be adopted by the U. S. Fish and Wildlife Service in late Apr 2020. The proposed changes as reflected in Exhibit 1 were vetted at the Sep 2019 WRC meeting and approved at the notice hearing in Dec 2019.

A range for season length and bag limits (zero bag limit represents a closed season) is also provided for black brant. The ranges are necessary, as the black brant frameworks cannot be determined until the Pacific Flyway Winter Brant Survey is finalized. The brant survey has been completed in the state, but DFW is waiting on its partners in Mexico to complete their black brant study later this month, and numbers will be finalized in time for the Apr meeting.

Proposed regulations include changes to duck seasons, goose seasons, the addition of veteran and active military personnel waterfowl hunting days, and the addition of a falconry-only season. Further information is available in Exhibit 1.

**Significant Public Comments (N/A)****Recommendation (N/A)****Exhibits**

1. [Waterfowl, migratory; American coot and common moorhen \(common gallinule\) ISOR](#)

**Motion/Direction (N/A)**

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**26. PUBLIC USE OF DEPARTMENT LANDS****Today's Item****Information** ☒**Action** ☐

Discuss proposed changes to wildlife areas and ecological reserves regulations.

**Summary of Previous/Future Actions**

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| • WRC vetting                       | Sep 10, 2019; WRC, Santa Rosa   |
| • Notice hearing                    | Dec 11-12, 2019; Sacramento     |
| • <b>Today's discussion hearing</b> | <b>Feb 21, 2020; Sacramento</b> |
| • Adoption hearing                  | Apr 15-16, 2020; Sacramento     |

**Background**

Pursuant to California Fish and Game Code sections 1525, 1526 and 1580, FGC may adopt regulations designating and governing the public uses of wildlife areas and ecological reserves. The purposes of wildlife areas are to conserve wildlife and their associated habitats and to allow for compatible recreation. The purposes of ecological reserves are to conserve threatened or endangered plants and/or animals, and/or specialized habitat types, provide opportunities for the public to observe native plants and wildlife, and provide opportunities for environmental research. Recreation on ecological reserves must be compatible with conserving the property's biological resources. Public use of DFW-managed lands is prohibited until they are designated as a wildlife area or ecological reserve.

At its Jun 2019 meeting, FGC adopted a WRC recommendation to advance a rulemaking focused on designating new properties, removing other properties, and making minor changes to clean up existing regulations governing public uses. The rulemaking that went to notice in Dec 2019 and under discussion today includes:

- Designation of eight properties—one as a wildlife area and seven as ecological reserves; and
- Removing designations of four properties in existing regulation that DFW no longer possesses or manages (see Exhibit 1).

Other amendments would:

- Make site-specific regulation changes for certain properties to improve public safety, increase compatible recreational opportunities on certain properties, prohibit general public access on certain properties, provide natural resource protection, and manage staff resources for the conservation and recreational purposes of these properties.
- Improve consistency between federal regulations and state regulations in Section 552 for nine federal refuges on which DFW manages hunting programs, and remove text that is duplicative or otherwise unnecessary in this section. These refuges are also listed as state wildlife areas in subsection 551(c).
- Update information in the "Permit Application For Special Use of Department Lands" (DFW 730 (New 01/14)) which is incorporated by reference in subsection 702(d)(1) and associated subsections of 702 to improve their clarity and consistency.

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**Significant Public Comments (N/A)**

**Recommendation (N/A)**

**Exhibits**

1. [Public use of DFW lands ISOR](#)

**Motion/Direction (N/A)**

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**27. CENTRAL VALLEY SPORT FISHING****Today's Item****Information** ☒**Action** ☐

Discuss proposed changes to Central Valley sport fishing regulations.

**Summary of Previous/Future Actions**

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| • Notice hearing                    | Dec 11-12, 2019; Sacramento     |
| • <b>Today's discussion hearing</b> | <b>Feb 21, 2020; Sacramento</b> |
| • Discussion hearing                | Apr 15-16, 2020; Sacramento     |
| • Adoption hearing                  | May 14, 2020; Teleconference    |

**Background**

In Dec 2019, FGC authorized publication of notice of proposed changes to Sacramento River fall-run Chinook salmon (SRFC) size, bag, and possession limits for the American, Feather, Mokelumne, and Sacramento rivers to encompass possible Pacific Fishery Management Council (PFMC) 2020 recommendations for Central Valley salmon escapement goals. PFMC's escapement estimate will be released in mid-Apr 2020.

For consistency, FGC generally adopts regulations annually to bring state law into conformance with federal fishery management goals for Central Valley salmon. The scope of options in the initial statement of reasons (ISOR) is intentionally broad to allow for flexibility in developing the final Central Valley salmon limits (see exhibits 1 and 2).

At FGC's Apr 15-16, 2020 meeting, DFW will recommend specific size, bag, and possession limits for SRFC based on the final escapement goals established by PFMC. Final changes to regulations will be adopted at FGC's May 14, 2020 teleconference.

Three options for proposed changes to Section 7.50 are being presented for consideration:

- Option 1: Take of any size Chinook salmon up to the daily bag and possession limits;
- Option 2: Take of a limited number of adult (3-5 year-old) Chinook salmon, with grilse (2 year-old) Chinook salmon making up the remainder of daily bag and possession limits;
- Option 3: Take of only grilse Chinook salmon.

For the options that include a grilse fishery, DFW recommends a size limit of less than or equal to 27 inches total length, based upon grilse data analysis conducted by DFW as part of the 2019 Central Valley salmon sport fishing rulemaking (Exhibit 3).

All three options will also:

- Extend the sport fishing season by two weeks (to Dec 31) on the Sacramento River from the Deschutes Road Bridge to the Red Bluff Diversion;
- Remove obsolete Coho salmon regulations concerning take on the Feather River from the Diversion Pool Dam to the Fish Barrier Dam;

## STAFF SUMMARY FOR FEBRUARY 21, 2020

- Prohibit fishing below flood control weirs in the Central Valley and clarify a fishing closure of 0-250 feet downstream from the overflow side of Moulton, Tisdale, Fremont, and Sacramento weirs; and
- Make minor corrections for formatting consistency.

Exhibit 2 provides further details and discussion.

**Significant Public Comments (N/A)****Recommendation (N/A)****Exhibits**

1. [DFW memo transmitting ISOR, received Nov 22, 2019](#)
2. [Central Valley sport fishing ISOR](#)
3. [ISOR, Central Valley Salmon Sport Fishing, dated Nov 20, 2018 \(for background purposes only\)](#)

**Motion/Direction (N/A)**

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**28. KLAMATH RIVER BASIN SPORT FISHING****Today's Item****Information** ☒**Action** ☐

Discuss proposed changes to Klamath River Basin sport fishing regulations.

**Summary of Previous/Future Actions**

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| • Notice hearing                    | Dec 11-12, 2019; Sacramento     |
| • <b>Today's discussion hearing</b> | <b>Feb 21, 2020; Sacramento</b> |
| • Discussion hearing                | Apr 15-16, 2020; Sacramento     |
| • Adoption hearing                  | May 14, 2020; Teleconference    |

**Background**

FGC annually adopts Klamath River Basin sport fishing regulations to bring state law into conformance with federal fishery management goals. In Dec 2019, FGC authorized publication of notice of proposed changes to quotas, and size, bag, and possession limits for Klamath River Basin fall-run Chinook salmon (KRFC). Specific size, bag, and possession limits for KRFC are scheduled for adoption after the Pacific Fishery Management Council (PFMC) has reviewed the status of West Coast salmon stocks and final fishery allocation recommendations have been adopted (Exhibit 1).

Pre-season stock projections of 2020 adult KRFC will not be available from PFMC until Mar 2020; the 2020 basin allocation will be recommended by PFMC in Apr 2020 and subsequently presented by DFW for adoption as the in-river sport harvest quota at FGC's May 14, 2020 teleconference.

For notice purposes, DFW recommended a quota range of 0-67,600 adult KRFC for the in-river sport fishery, as this range encompasses the historical range of Klamath River Basin allocations and allows for adjustments by PFMC and FGC during the 2020 regulatory cycle.

The range of proposed size, bag, and possession limits for KRFC as stated in the initial statement of reasons (ISOR; Exhibit 2) are:

- Bag limit – [0-4] Chinook salmon, of which no more than [0-4] fish over [22-23] inches total length may be retained until the subquota is met, then 0 fish over [22-23] inches total length.
- Possession limit – [0-12] Chinook salmon, of which no more than [0-4] fish over [22-23] inches total length may be retained when the take of salmon over [22-23] inches total length is allowed.

**KRFC Size Limit (Grilse Size Considerations)**

For the purpose of implementing PFMC adult allocation and DFW salmon fishery harvest assessment, within the Klamath River Basin DFW currently considers 22 inches total length (TL) as a provisional size limit cutoff. Salmon greater than 22 inches TL are defined as adult

## STAFF SUMMARY FOR FEBRUARY 21, 2020

salmon (ages three to five), and salmon less than or equal to 22 inches TL are defined as grilse salmon (age two).

DFW is proposing a grilse salmon size limit cutoff range of less than or equal to 22 inches to 23 inches TL for discussion by FGC before DFW makes a final recommendation. The proposal is based on an evaluation of the potential impacts to KRFC from increasing the size limit cutoff distinguishing age-two fish from age-three fish for in-river recreational harvest (Exhibit 3).

***Brown Trout Bag and Possession Limit Increase on the Main Stem Trinity River***

DFW is proposing to increase the daily bag and possession limit for brown trout on the main stem of the Trinity River from a five fish daily bag/10 fish possession limit to a 10 fish daily bag/20 fish possession limit. The proposed change will increase fishing opportunity on a non-native trout species. As the focus for the Trinity River is on native fish production, a reduction in brown trout may help enhance habitat availability for native fish, consistent with the goals of the federally-administered Trinity River Restoration Program.

***Other Changes for Clarity***

A change for clarity was proposed by FGC staff and approved by FGC at its Dec 11-12, 2019 meeting for addition to the ISOR (Exhibit 2):

- Amend subsection 5.87(f) to ensure that the size limit cutoff between a grilse and adult Chinook salmon in the Klamath River Basin is consistent with the size limit cutoff listed in subsection 7.50(b)(91.1). The change will ensure clarity in the regulations and help anglers understand the size limit cutoff that distinguishes a grilse salmon from an adult salmon in the Klamath River Basin.

Additional non-substantive changes are proposed for clarity and accuracy.

**Significant Public Comments (N/A)**

**Recommendation (N/A)**

**Exhibits**

1. [DFW memo transmitting ISOR, received Nov 22, 2019](#)
2. [Klamath River Basin ISOR](#)
3. [ISOR Appendix A: Evaluation of Alternative Size Limits for Klamath River Fall Chinook Salmon Harvest, DFW, Oct 2019](#)

**Motion/Direction (N/A)**

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**29. UPPER KLAMATH-TRINITY SPRING CHINOOK SALMON SPORT FISHING  
(CERTIFICATE OF COMPLIANCE)****Today's Item****Information** ☒**Action** ☐

Discuss proposed implementation of a certificate of compliance for the upper Klamath-Trinity spring Chinook salmon emergency regulations.

**Summary of Previous/Future Actions**

- |                                                                                               |                                 |
|-----------------------------------------------------------------------------------------------|---------------------------------|
| • Adopted emergency regulations authorizing take under Section 2084                           | Apr 17, 2019; Santa Monica      |
| • Re-adopted emergency regulations (1 <sup>st</sup> )                                         | Dec 11-12, 2019; Sacramento     |
| • Notice hearing for certificate of compliance regulations                                    | Dec 11-12, 2019; Sacramento     |
| • Potentially readopt emergency regulations (2 <sup>nd</sup> )                                | Feb 21, 2020; Sacramento        |
| • <b>Today discuss certificate of compliance regulations</b>                                  | <b>Feb 21, 2020; Sacramento</b> |
| • Potentially adopt certificate of compliance regulations authorizing take under Section 2084 | Apr 15-16, 2020; Sacramento     |

**Background**

As of Feb 2019, upper Klamath-Trinity river spring Chinook salmon (UKTSCS) is a candidate species under the California Endangered Species Act (CESA), which confers CESA protections during candidacy. CESA also provides that FGC may adopt regulations to authorize take of certain threatened or endangered species or candidate species under California Fish and Game Code Section 2084. At its Apr 2019 meeting, FGC adopted emergency regulations to allow limited take of UKTSCS at the end of the traditional spring season, while ensuring that substantial protection to UKTSCS is provided, consistent with Section 2084. The emergency regulations, in subsection 7.50(b)(91.2), went into effect Jun 26, 2019 (see Agenda Item 10, this meeting).

Today's meeting is scheduled to receive public comment on the certificate of compliance regulation that will make permanent the Jun 2019 regulations allowing limited sport fishing take of UKTSCS in most of the same reaches. See Exhibit 4 for additional information.

**Significant Public Comments (N/A)****Recommendation (N/A)****Exhibits**

1. [DFW memo, received Nov 25, 2019](#)
2. [Initial statement of reasons, received Nov 25, 2019](#)
3. [Economic and fiscal impact statement \(Std 399\), revised Jan 7, 2020](#)
4. [Staff summary from Dec 2019 FGC meeting \(for background purposes only\)](#)

**Motion/Direction (N/A)**



## STAFF SUMMARY FOR FEBRUARY 21, 2020

**30. BAKER'S LARKSPUR****Today's Item****Information** ☒**Action** ☐

Receive overview of DFW's five-year status review of Baker's larkspur (*Delphinium bakeri*), which is listed as an endangered species under the California Endangered Species Act (CESA).

**Summary of Previous/Future Actions**

- |                                                                       |                                 |
|-----------------------------------------------------------------------|---------------------------------|
| • FGC determined listing Baker's larkspur as endangered was warranted | Apr 4, 2006; Monterey           |
| • Received DFW's status review                                        | Dec 11-12, 2019; Sacramento     |
| • <b>Today's discussion hearing</b>                                   | <b>Feb 21, 2020; Sacramento</b> |

**Background**

Baker's larkspur has been listed as an endangered species under CESA since 2006 and is included in the list of endangered plants found in Section 670.2.

California Fish and Game Code Section 2077 mandates that the status of species listed by FGC under CESA be reviewed every five years, if funding is available. As a result of new funding authorized in 2018, DFW completed a five-year status review for the species (exhibits 1-2).

At its Dec 2019 meeting, FGC received DFW's five-year status review of Baker's larkspur; based on its review, DFW recommends retaining the status of this species as endangered (see Exhibit 3 for additional information).

Today, DFW will give a presentation on the status review of Baker's larkspur in California, which includes identification of habitat that may be essential to the continued existence of the species, DFW's recommendations for management activities, and other recommendations for recovery of the species.

**Significant Public Comments (N/A)****Recommendation (N/A)****Exhibits**

1. [DFW memo transmitting Baker's larkspur status review](#), received Nov 18, 2019
2. [DFW five-year status review](#), dated Dec 2019
3. [Staff summary from Dec 2019 FGC meeting](#) (for background purposes only)
4. [DFW presentation](#)

**Motion/Direction (N/A)**

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**31. CLARA HUNT'S MILKVETCH****Today's Item****Information** ☐**Action** ☒

Consider and potentially act on the DFW five-year status review of Clara Hunt's milkvetch (*Astragalus claranus*), and consider the recommendation and comments received to determine whether a change to the listing status from threatened to endangered under the California Endangered Species Act (CESA) may be warranted.

**Summary of Previous/Future Actions**

- |                                                                             |                                 |
|-----------------------------------------------------------------------------|---------------------------------|
| • FGC determined listing Clara Hunt's milkvetch as threatened was warranted | Jan 7, 1991; Palm Springs       |
| • Received DFW's status review                                              | Dec 11-12, 2019; Sacramento     |
| • <b>Today determine if a change in status may be warranted</b>             | <b>Feb 21, 2020; Sacramento</b> |

**Background**

Clara Hunt's milkvetch has been listed as a threatened species pursuant to CESA since 1991 and is included in the list of threatened plants found in Section 670.2.

California Fish and Game Code Section 2077 mandates that the status of species listed by FGC under CESA be reviewed every five years, if funding is available. As a result of new funding authorized in 2018, DFW was able to complete a five-year status review for the species.

At its Dec 2019 meeting, FGC received DFW's five-year status review of Clara Hunt's milkvetch; based on its review, DFW recommends a change in this species' status from threatened to endangered (exhibits 1 and 2).

The DFW report regarding Clara Hunt's milkvetch is the equivalent of a listing petition with a DFW recommendation for FGC to accept and consider the petition under Fish and Game Code Section 2073.5; as such, the report is subject to the CESA process outlined in Fish and Game Code Sections 2074 to 2079, inclusive (Fish and Game Code sections 2072.7 and 2077(e)). Therefore, today's meeting is a public hearing pursuant to Section 2074.2.

Today, DFW will give a presentation on the status review of Clara Hunt's milkvetch, which includes identification of habitat that may be essential to the continued existence of the species, DFW's recommendations for management activities, and other recommendations for recovery of the species (Exhibit 3).

DFW finds there is sufficient scientific information to indicate that the conditions that led to the listing of Clara Hunt's milkvetch as threatened have changed. Therefore, DFW recommends a change in the status of Clara Hunt's milkvetch from threatened to endangered.

**Significant Public Comments (N/A)**

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**Recommendation**

**FGC staff:** Determine that a change in status from threatened to endangered may be warranted as recommended by DFW.

**DFW:** Accept and consider the DFW report for further evaluation.

**Exhibits**

1. [DFW memo transmitting Clara Hunt's milkvetch status review](#), received Nov 18, 2019
2. [DFW five-year status review](#), dated Sep 2019
3. [DFW presentation](#)

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission, pursuant to Section 2074.2 of the Fish and Game Code, finds that there is sufficient information to indicate that a change in the status of Clara Hunt's milkvetch from threatened to endangered may be warranted based on the information in the record before the Commission, and directs staff to issue a notice reflecting this finding and that Clara Hunt's milkvetch is a candidate for change of species status from threatened to endangered.

**OR**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission, pursuant to Section 2074.2 of the Fish and Game Code, finds that there is not sufficient information to indicate that a change in the status of Clara Hunt's milkvetch from threatened to endangered may be warranted based on the information in the record before the Commission.

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**32A. ADMINISTRATIVE ITEMS - NEXT MEETING****Today's Item**Information ☐Action ☒

This is a standing agenda item to review logistics and approve draft agenda items for the next FGC meeting and consider any changes to meeting dates or locations.

**Summary of Previous/Future Actions (N/A)****Background**

The next FGC meeting is scheduled for Apr 15-16, 2020 in Sacramento. While staff does not anticipate any special travel logistics for this meeting, it is anticipated that one or more events will be held to celebrate FGC's and DFW's 150<sup>th</sup> anniversary.

Potential agenda items for the Apr meeting are provided in Exhibit 1 for consideration and potential FGC approval.

Note that for two-day FGC meetings in 2020, marine items will be heard on the first day and wildlife and inland fisheries items will be heard on the second day.

**Significant Public Comments (N/A)****Recommendation**

**FGC staff:** Approve potential agenda items for the Apr 15-16, 2020 FGC meeting.

**Exhibits**

1. [Potential agenda items for the Apr 15-16, 2020 meeting](#)

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission approves the draft agenda items for the April 15-16, 2020 Commission meeting, as amended today.

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**32B. ADMINISTRATIVE ITEMS – RULEMAKING TIMETABLE****Today's Item**Information ☐Action ☒

Review and consider approving requested changes to the perpetual timetable for anticipated regulatory actions

**Summary of Previous/Future Actions**

- FGC approved changes to rulemaking timetable Dec 11-12, 2019; Sacramento
- **Today consider approving the rulemaking timetable with proposed changes Feb 21, 2020; Sacramento**

**Background**

This is a standing agenda item for FGC staff or DFW to request changes to the FGC regulatory timetable, or for FGC to make changes during the course of today's meeting.

DFW is not proposing any changes ahead of this meeting. However, FGC staff has one proposed change, related to the commercial kelp and algae harvest rulemaking schedule, currently scheduled for notice in Jun and discussion/adoption in Aug.

Due to a vacant FGC regulatory analyst position, another regulatory analyst being redirected primarily to administrative functions (i.e., personnel), and a core team having not yet been established to coordinate between DFW and FGC staff in developing the necessary rulemaking materials, FGC staff requests a schedule change to assist with workload management. After consultation with DFW Marine Region leadership, FGC staff proposes moving the commercial kelp and algae harvest notice from Jun 2020 to Aug 2020 and discussion/adoption from Aug 2020 to Oct 2020.

The amended timetable is Exhibit 1.

**Significant Public Comments (N/A)****Recommendation**

Approve the proposed changes to the rulemaking timetable.

**Exhibits**

1. [Timetable for anticipated regulatory actions](#), dated Feb 12, 2020

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission approves the proposed changes to the rulemaking timetable as discussed today.

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**32C. ADMINISTRATIVE ITEMS - NEW BUSINESS****Today's Item****Information** ☒**Action** ☐

This is a standing agenda item to allow Commissioners to bring new items of business to FGC.

**Summary of Previous/Future Actions (N/A)****Background (N/A)****Significant Public Comments (N/A)****Recommendation (N/A)****Exhibits (N/A)****Motion/Direction (N/A)**

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**EXECUTIVE SESSION****Today's Item****Information** ☐**Action** ☒

Executive session will include four standing topics:

- (A) Pending litigation to which FGC is a party
- (B) Possible litigation involving FGC
- (C) Staffing
- (D) Deliberation and action on license and permit items

**Summary of Previous/Future Actions (N/A)****Background**

During the public portion of its meeting, FGC will call a recess and reconvene in a closed session pursuant to the authority of Government Code subsections 11126(a)(1), (c)(3), and (e)(1), and Section 309 of the California Fish and Game Code. FGC will address four items in closed session:

**(A) Pending litigation to which FGC is a party**

See agenda for a complete list of pending civil litigation to which FGC is a party, at the time the agenda was made public.

**(B) Possible litigation involving FGC**

None to report at the time the meeting binder was prepared.

**(C) Staffing**

For details about staffing, see the executive director's report under Agenda Item 12(A) for today's meeting.

**(D) Deliberation and action on license and permit items**

- I. *Langman accusation*: Consider the Proposed Decision in Agency Case No. 17ALJ01-FGC, the accusation filed against Keith Langman. On Jan 30, 2017, DFW filed an administrative accusation with FGC requesting the revocation of Mr. Langman's commercial fishing license, commercial trap permit, lobster operator permit, and southern rock crab trap permit. Mr. Langman filed a notice of defense asserting his right to a hearing. FGC referred the matter to the Office of Administrative Hearings (OAH) and, on Oct 28, 2019, OAH conducted a hearing. On Nov 25, 2019, OAH provided FGC a proposed decision, which found that DFW had demonstrated an adequate basis for action against Mr. Langman and that the requested revocations were appropriate (Exhibit D1).
- II. *Anderson salmon vessel permit appeal*: Consider the appeal filed by Michael Anderson in Agency Case No. 19ALJ14-FGC regarding his request to renew his salmon vessel permit. On May 30, 2019, DFW provided Mr. Anderson notice that DFW could not reinstate Mr. Anderson's salmon vessel permit (Exhibit D2). On

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Jun 6, 2019, Mr. Anderson filed an appeal with FGC (Exhibit D3). On Jan 13, 2020, DFW submitted a letter to FGC stating that DFW does not oppose granting the appeal (Exhibit D4).

- III. *Dirkse salmon vessel permit appeal:* Consider the appeal filed by Douglas Dirkse in Agency Case No. 19ALJ16-FGC regarding his request to renew his salmon vessel permit. On May 13, 2019, DFW provided Mr. Dirkse notice that DFW could not reinstate Mr. Dirkse's salmon vessel permit (Exhibit D5). On May 22, 2019, Mr. Dirkse filed an appeal with FGC (Exhibit D6). On Nov 27, 2019, DFW submitted a letter to FGC stating that DFW does not oppose granting the appeal (Exhibit D7).

### Significant Public Comments (N/A)

### Recommendation

**FGC staff:** Grant the appeals filed by Michael Anderson and Douglas Dirkse, acknowledging that in both appeals the appeal does not impact fees owed under the statutory structure. Adopt the proposed decision regarding the accusation against Keith Langman.

### Exhibits

- D1. [Proposed Decision for Case No. 17ALJ01-FGC; OAH No. 2019030577](#), received Nov 25, 2019
- D2. [Letter from DFW to Michael Anderson](#), dated May 30, 2019
- D3. [Letter from Michael Anderson](#), received Jun 12, 2019
- D4. [Letter from DFW](#), dated Jan 13, 2020
- D5. [Letter from DFW to Douglas Dirkse](#), dated May 13, 2019
- D6. [Email from Douglas Dirkse](#), dated May 22, 2019
- D7. [Letter from DFW](#), dated Nov 27, 2019

### Motion/Direction

- (D) Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission grants the appeal filed by Michael Anderson.

**AND**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission grants the appeal filed by Douglas Dirkse.

**AND**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission adopts the the proposed decision regarding the accusation against Keith Langman.



**STAFF SUMMARY FOR APRIL 18-19, 2018**

For background only

**12. RECREATIONAL PURPLE SEA URCHIN****Today's Item**Information ☐Action ☒

Adopt emergency regulations concerning recreational take of purple sea urchin to support kelp recovery.

**Summary of Previous/Future Actions**

- MRC vetting Mar 6, 2018; MRC, Santa Rosa
- **Adoption hearing Apr 18-19, 2018; Ventura**

**Background**

Since 2014, FGC and DFW have been tracking a combination of environmental and biological stressors in nearshore waters across northern California, including extreme warm water, catastrophic algae blooms, an unprecedented increase in herbivorous purple sea urchin populations, and significant loss of bull kelp forests and other marine algae. DFW has identified that the large number of purple urchins is contributing to overgrazing of kelp, preventing kelp recovery and leading to red abalone starvation (Exhibit 1).

In Dec 2017, FGC received a petition for regulation change (Petition #2017-014) to remove the take restrictions on recreational purple urchin harvest, with a goal of supporting possible restoration of naturally occurring kelp along the environmentally impacted areas. At its Feb 2018 commission meeting, FGC granted the petition *in part* for consideration, and approved DFW's request to bring an emergency rulemaking proposal to the Apr 2018 meeting. Subsequently, at the Mar MRC meeting, DFW staff presented its proposal for an emergency regulation to temporarily increase the recreational harvest allowance for purple sea urchin, as part of broader collaborative efforts to support kelp bed restoration. A temporary increase in recreational harvest of purple sea urchin may facilitate and mobilize citizen science through recreational harvest as part of the multi-pronged and coordinated approach toward kelp recovery on the north coast.

For today's action, DFW has provided a refined proposal to raise the daily limit for purple sea urchin from the current 35 individuals to 20 gallons per day, taken only while skin-diving or SCUBA diving and in state waters off Mendocino and Sonoma counties (exhibits 1 and 2).

FGC must consider the following factors in determining whether an emergency exists: The magnitude of potential harm, the existence of a crisis situation, the immediacy of the need, and whether the anticipation of harm has a basis firmer than simple speculation. All available information points to a highly volatile and adverse condition for northern California kelp forests and the resident abalone populations, and extraordinary measures must be taken immediately to help restore these important but vulnerable habitats.

**Significant Public Comments**

1. Representatives from Norcal Underwater Hunters and Waterman's Alliance support the proposal and invite FGC and DFW staff to an organized sea urchin removal event on the Sonoma coast over Memorial Day weekend (exhibits 4 and 5).

**STAFF SUMMARY FOR APRIL 18-19, 2018**

2. An abalone diver recommends allowing more than 20 gallons per person per day, supports composting of urchins as a way to avoid “wanton waste,” and urges DFW to authorize restoration within marine protected areas soon (Exhibit 6).
3. An abalone diver encourages “heroic measures” be taken to save abalone and to enlist the commercial sea urchin fishing fleet to efficiently remove urchin and to compost the take (Exhibit 7).

**Recommendation**

**FGC staff:** Adopt the proposed emergency action as recommended by DFW.

**MRC:** Adopt proposed emergency action as recommended by DFW.

**DFW:** Raise the daily bag limit for purple sea urchin, taken while skin-diving or SCUBA diving in state waters off Mendocino and Sonoma Counties, to 20 gallons, with no possession limit.

**Exhibits**

1. DFW memo, received Apr 5, 2018
2. Emergency statement to add Section 29.11
3. Economic and fiscal impact statement (Std. 399)
4. Email from Matt Mattison, received Mar 20, 2018
5. Email from Josh Russo, received Mar 20, 2018
6. Email from Bruce Watkins, received Mar 30, 2018
7. Email from Eric Wunsch, received Mar 07, 2018
8. DFW presentation

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission determines, pursuant to Section 11346.1 of the Government Code, that an emergency situation exists and finds the proposed regulation is necessary to address the emergency.

The Commission further determines, based on the record, pursuant to Section 15061(a) of Title 14, that the proposed action is exempt from the California Environmental Quality Act as an action necessary to prevent or mitigate an emergency as specified in Public Resources Code Section 21080(b)(4).

The Commission further determines, pursuant to Section 399 of the Fish and Game Code, that adopting this regulation is necessary for the immediate conservation, preservation, or protection of birds, mammals, fish, amphibians or reptiles.

Therefore, the Commission adopts the emergency regulation to add Section 29.11.

**STAFF SUMMARY FOR FEBRUARY 6, 2019****For background only****25. RECREATIONAL TAKE OF PURPLE SEA URCHIN (REGULAR RULEMAKING)****Today's Item****Information** ☐**Action** ☒

Consider adopting proposed regulations to add Section 29.06 for the recreational take of purple sea urchin.

**Summary of Previous/Future Actions**

- |                                   |                                |
|-----------------------------------|--------------------------------|
| • MRC vetting                     | Mar 6, 2018; MRC, Santa Rosa   |
| • Adopted emergency regulations   | Apr 18-19, 2018; Ventura       |
| • Emergency regulations extended  | Oct 17, 2018; Fresno           |
| • Notice hearing                  | Oct 17, 2018; Fresno           |
| • Discussion hearing              | Dec 12-13, 2018; Oceanside     |
| • <b>Today's adoption hearing</b> | <b>Feb 6, 2019; Sacramento</b> |

**Background**

For additional background information, please see the staff summary from the Dec 2018 discussion hearing (Exhibit 1).

The proposed regulation would add a new section (29.06), and modify provisions of the emergency regulation governing the recreational take of purple sea urchin in the following ways:

1. Increase the daily recreational take limit to 40 gallons while skin or SCUBA diving;
2. Apply the take allowance to waters off Humboldt County in addition to Sonoma and Mendocino counties;
3. Exempt the take from a daily possession limit; and
4. Includes an option which, if selected, would add Del Norte County to the list of counties for which the take allowance applies.

See Exhibit 3 for more details.

At this time, FGC staff does not believe that the inclusion of Del Norte County is warranted; the ecosystem imbalance that precipitated the rulemaking in Sonoma, Mendocino and Humboldt counties is not documented in this area.

**California Environmental Quality Act (CEQA)**

A notice of exemption (Exhibit 4) has been drafted consistent with FGC staff's recommendation to rely on CEQA categorical exemptions (Class 7 and 8) for these regulation changes. Staff has reviewed all of the available information possessed by FGC relevant to the issue and does not believe adopting the regulation changes pose any unusual circumstances that would constitute an exception to the categorical exemptions set forth above. Compared to the activities that fall within Class 7 and Class 8 generally, which include the example of wildlife preservation activities, such as the effort here, there is nothing unusual about the

**STAFF SUMMARY FOR FEBRUARY 6, 2019**

proposed regulation changes. In addition, even if there were unusual circumstances, no potentially significant effects on either a project-specific or cumulative basis are expected.

**Significant Public Comments**

1. A commenter requests FGC assistance in promoting additional urchin eradication efforts and events. He also suggests to open commercial urchin permit sales to sport divers (Exhibit 7).
2. A commenter from the Humboldt area writes to support the proposed regulation and does not see the need to include Del Norte county (Exhibit 8).

**Recommendation**

**FGC staff:** Determine that adopting the regulation is exempt consistent with the draft notice of exemption and adopt the regulation changes as proposed, excluding Del Norte County.

**DFW:** Select whether to include Del Norte County, and adopt the regulation changes as proposed.

**Exhibits**

1. Staff summary from the Dec 12-13, 2018 discussion hearing, Agenda Item 9 (for background only)
2. DFW memo, received Nov 14, 2018
3. Initial statement of reasons
4. Draft notice of exemption and attachment
5. Email in lieu of pre-adoption statement of reasons, received Jan 25, 2019
6. Economic and fiscal impact statement (Std. 399)
7. Email from Robert Soroka, received Dec 22, 2018
8. Email from Brandi Easter, received Jan 11, 2019

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission determines the project is exempt from the California Environmental Quality Act as being categorically exempt and adopts proposed changes to add Section 29.06 related to the recreational take of purple sea urchin as proposed, excluding Del Norte County.

**OR**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission determines the project is exempt from the California Environmental Quality Act as being categorically exempt and adopts proposed changes to add Section 29.06 related to the recreational take of purple sea urchin as proposed, including Del Norte County.

## Memorandum

**Date:** February 10, 2020

**To:** Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

**From:** Charlton H. Bonham  
Director

**Subject:** **Agenda Item for the February 2020 Fish and Game Commission Meeting. Re: Emergency Regulation Action to Amend Section 29.06, Title 14, Recreational take of Purple Sea Urchin**

The Department of Fish and Wildlife (Department) proposes to temporarily remove the daily bag limit for purple sea urchin in Caspar Cove, Mendocino County, provided that such removal is done using hands or manual handheld tools. The proposal would amend Section 29.06, Title 14, of the California Code of Regulations (CCR) as an emergency to facilitate underwater culling of purple sea urchins by recreational divers in Caspar Cove. The proposal is necessary to determine if this activity can help promote the recovery of kelp and the numerous species and ecosystem services that kelp supports, including red urchin and red abalone.

Transmittal of the attached Findings of Emergency and Statement of Proposed Emergency Regulatory Action to the Fish and Game Commission (Commission) will allow the Commission to consider adopting the emergency rulemaking at its February meeting. The emergency regulation, if adopted, will take effect on March 2, 2020, and continue for a period of six months with a possibility of extensions. Results of the harvest, recreational efforts, and possible negative impacts will be analyzed to determine next steps.

If you have any questions or need additional information, please contact Dr. Craig Shuman, Marine Regional Manager at (916) 373-5491. The Department point of contact for this emergency rulemaking should identify Environmental Scientist, Anthony Shiao. His contact information is (805) 560-6056 or [Anthony.Shiao@Wildlife.ca.gov](mailto:Anthony.Shiao@Wildlife.ca.gov).

Attachment

ec: Stafford Lehr, Deputy Director  
Wildlife and Fisheries Division  
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Melissa Miller-Henson, Executive Director  
Fish and Game Commission  
February 10, 2020  
Page 2 of 2

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# DRAFT

## CALIFORNIA FISH AND GAME COMMISSION FINDING OF EMERGENCY AND STATEMENT OF PROPOSED EMERGENCY REGULATORY ACTION

Emergency Action to  
Amend Section 29.06,  
Title 14, California Code of Regulations  
Re: 2020 Recreational Purple Sea Urchin Emergency Rule

Date of Statement: January 30, 2020

### **I. Statement of Facts Constituting the Need for Emergency Regulatory Action**

Since 2014, bull kelp (*Nereocystis luetkeana*) in northern California has declined by more than 90%. This decline has been linked to a combination of severe warm water events and multiple ecological stressors, particularly an explosive increase in purple sea urchin (PSU) populations exacerbated by the loss of predatory sea stars due to sea star wasting disease. PSU are a native species in California; however, the species' abundance is now at a 60-fold increase compared to historic levels, which has led to the suppression of bull kelp forests on the north coast, and a regime shift from bull kelp forests to urchin barrens across most of the region. The collapse of bull kelp has had cascading effects resulting in significant losses of kelp forest ecosystem services, contributing to the collapse of the north coast commercial red urchin fishery in 2015 and closure of the recreational red abalone fishery in 2018.

The environmental conditions in northern California have continued to deteriorate. By 2019, divers from the California Department of Fish and Wildlife (Department) observed very few remaining patches of bull kelp in northern California as well as a sustained decline in species diversity that would otherwise inhabit a healthy bull kelp ecosystem; this condition has been corroborated by local divers and research entities such as Reef Check California. The remaining stands of kelp tend to occupy the top of isolated, frequently disturbed boulders and rock formations that are more difficult for PSU to reach. However, Department staff is extremely concerned that the expanding PSU population may soon reach the remaining stands. As annual plants, bull kelp require a large standing spore stock to persist successfully. Preserving the remaining stands is critically important in the effort to rebuild this biogenic habitat upon which a myriad of native species including red abalone rely.

Because of the critical environmental situation on the north coast, the Department is working with multiple partners to develop and assess potential management tools to arrest kelp decline and promote broader ecosystem recovery for species that rely upon the kelp ecosystem. One of the primary tools is creating a network of kelp spore "refuges" in localized areas throughout the north coast by locally controlling PSU presence.

One mechanism to locally control PSU that is being explored is to allow removal by recreational divers. After a series of rulemaking actions starting in 2018, the California Fish and Game Commission (Commission) and the Department expanded recreational divers' take limit for PSU by raising the daily bag limit to 40 gallons of PSU per person per day in the most severely-impacted counties of Sonoma, Mendocino, and Humboldt.

However, the expanded bag limit was not as broadly successful as originally anticipated due to the logistical constraints and physical difficulties of bringing such large and unwieldy quantities of PSU safely back to shore.

Without successful local control of PSU, the north coast is at risk of exhausting its kelp spore banks and with them the capacity for broader recovery of the bull kelp ecosystem and the diverse species it supports. Because of the dire circumstances, the Department and its partners have determined it is necessary to explore the role of in-situ culling of PSU by the recreational diver community. The purpose of this rulemaking is to help restore kelp in the north coast through PSU culling and to evaluate the efficacy of this management tool under highly monitored conditions in a localized area. Research suggests that localized culling of PSU in urchin barrens may be effective only if extensive and concentrated effort is focused on an area. This project is expected to generate valuable data for Department staff, which could be used to evaluate its prospects of helping restore kelp forests elsewhere and ultimately recover impacted fisheries.

### **Prior Commission Action**

In April 2018, the Commission adopted an emergency regulation that temporarily increased the recreational take limit of PSU to 20 gallons per-diver per-day in Mendocino and Sonoma counties. The emergency rulemaking was initiated with strong public interest in controlling PSU populations by taking PSUs out of the water.

In February 2019, the Commission raised the recreation limit to 40 gallons through regular rulemaking and extended the higher limit to Humboldt County as well.

### **Proposed Action by the Commission**

The proposed rule would authorize recreational divers to cull PSU underwater within the area commonly referred to as Caspar Cove, Mendocino County (located seaward of Caspar Headlands State Beach, along Point Cabrillo Drive). Specifically, the rule would temporarily remove the recreational take limit for PSU within Caspar Cove. The rule would also specify that PSUs can only be taken by hand or with manually-operated, handheld tools.

The initial assessment of PSU culling will be limited to Caspar Cove in Mendocino County, which was chosen for a combination of reasons. It is in the epicenter of the PSU overpopulation. Existing infrastructure (e.g., access roads, parking lot, campground) at Caspar Headlands State Beach gives recreational divers easy access to the cove. The area has historically been the site of a large kelp forest, and many pinnacles and rock formations just outside of the cove still contains remnant stands of bull kelp that could help repopulate the cove.

It allows for extensive and concentrated effort to be focused on an area. The Department and its partners will also be able to concentrate their resources on the site to assess the effectiveness of culling and any potential negative impacts. For reasons stated here, Caspar Cove makes a very good candidate site for urchin culling, and concentrated effort in this single location has a higher chance of creating lasting impact.



## **Existence of an Emergency and Need for Immediate Action**

The Commission considered the following factors in determining whether an emergency exists: The magnitude of potential harm; the existence of a crisis situation; the immediacy of the need; and whether the anticipation of harm has a basis firmer than simple speculation. The current severely-degraded state of northern California's bull kelp ecosystem is well documented (e.g., Rogers-Bennett and Catton 2019) and has resulted in the closure or collapse of valuable commercial and recreational fisheries in the region, with cascading negative effects to other fisheries and ecosystem services anticipated over time.

Department staff originally had two environmental concerns with *in-situ* culling of PSU. First, it was unclear whether culling urchins underwater could accidentally trigger spawning events, thereby exacerbating the problem or negating any positive impacts. Second, underwater culling activities beyond simple removal carry some risk of impact to non-target components of the ecosystem (e.g., biogenic habitat or other invertebrate species).

Under the current environmental conditions in Caspar Cove and the north coast generally, neither of these concerns is currently considered high risk. Most available food sources for urchin in the north coast have been consumed, and Caspar Cove itself is devoid of kelp. While it is difficult for PSU to starve completely, most PSU are currently not sufficiently nourished to reproduce; this greatly reduce the risks associated with accidentally triggering spawning events. By the same token, community complexity within the urchin barrens has been critically reduced, with most locations now characterized by bare rock reefs dominated by PSU. Therefore, it is unlikely that underwater activities associated with culling PSU will negatively impact non-target species or habitat.

A reduction in PSU populations, even in just one selected location to prevent loss of the remaining bull kelp spore refuges, is critical to the restoration and recovery of the ecosystem, including red urchin and red abalone populations. Controlling urchins through culling with recreational divers may be an important tool in preventing the loss of the remaining stands of bull kelp. However, the effort must begin as soon as conditions allow in spring of 2020 due to the short diving season in northern California. PSU may soon migrate to or settle on the isolated areas where a few kelp stands still persist; once these stands are lost, restoration within the area will become significantly more difficult.

## **II. Impact of Regulatory Action**

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following determinations relative to the required statutory categories have been made:

- (a) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None.
- (b) Nondiscretionary Costs/Savings to Local Agencies: None.
- (c) Programs Mandated on Local Agencies or School Districts: None.

(d) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None.

(e) Effect on Housing Costs: None.

### **III. Technical, Theoretical, and/or Empirical Studies, Reports, or Documents Relied Upon**

Bernard, F. R. (1977). Fishery and reproductive cycle of the red sea urchin, *Strongylocentrotus franciscanus*, in British Columbia. *Journal of the Fisheries Board of Canada*, 34(5), 604-610.

Ling, S. D., Kriegisch, N., Woolley, B., & Reeves, S. E. (2019). Density-dependent feedbacks, hysteresis, and demography of overgrazing sea urchins. *Ecology*, 100(2), e02577.

Rogers-Bennett, L., & Catton, C. A. (2019). Marine heat wave and multiple stressors tip bull kelp forest to sea urchin barrens. *Scientific reports*, 9(1), 1-9.

### **IV. Authority and Reference**

Authority cited: Sections 200, 205 and 399, Fish and Game Code.

Reference: Sections 200, 205 and 399, Fish and Game Code.

### **IV. Section 399 Finding**

Pursuant to Section 399 of the Fish and Game Code, the Commission finds that adopting this regulation is necessary for the immediate conservation, preservation, or protection of the species that rely upon kelp forest ecosystem in northern California.

## **Informative Digest (Policy Statement Overview)**

### **Existence of an Emergency and Need for Immediate Action**

The California Department of Fish and Wildlife (Department) proposes to temporarily remove the daily bag limit for purple sea urchins (PSU) in the area commonly referred to as Caspar Cove, Mendocino County (located seaward of Caspar Headlands State Beach), for the purpose of bull kelp restoration, provided that such removal is done using hands or manual handheld tools. The proposal would amend Section 29.06, Title 14, CCR through emergency action. The proposal is necessary to facilitate underwater culling activities by recreational divers in Caspar Cove.

Since 2014, extreme oceanographic conditions and ecological stressors have caused a greater than 90 percent decline in bull kelp coverage in northern California and critically degraded the kelp ecosystem in the region. Productive kelp forest habitats have been replaced with monotonic PSU barrens. The grazing pressure from PSU needs to be severely curtailed before the kelp can recover and support the species that depend on kelp to survive. The Department is pursuing multiple approaches to achieve this, including assistance in facilitating control of PSU by recreational divers. Past efforts of raising the bag limit and encouraging recreational divers to bring more PSU out of the water has been limited by logistical challenges.

The proposed emergency regulation will stimulate the recovery of bull kelp in Caspar Cove. The Department and its partners will also be able to evaluate the effectiveness and feasibility of using this activity as a tool to address the environmental crisis on the north coast generally. The limited scope of this regulation allows the Department to concentrate its resources on the site while assessing the feasibility of expanding the project as well as evaluate any potential negative consequences. Time is of the essence for this project. The state is at risk of losing its few remaining kelp stands in northern California. Such a loss would significantly limit the capacity for the future recovery of this resource and all marine life dependent upon it, including red abalone.

To determine whether an emergency exists, the California Fish and Game Commission (Commission) considered the following factors: The magnitude of potential harm; the existence of a crisis situation; the immediacy of the need; and whether the anticipation of harm has a basis firmer than simple speculation. Environmental data since 2014 demonstrate that all these factors have been met.

### **Benefits of the Regulation to the State's Environment:**

The Commission anticipates benefits to the State's environment by sustainably managing California's ocean resources. The environmental risk arising from the proposed activities are not regarded as significant, particularly in light of the advanced state of PSU encroachment and the resulting loss of bull kelp habitat upon which a myriad of native species, including red abalone, rely.

The Department conducted an evaluation of existing regulations and this regulation is neither inconsistent nor incompatible with existing state regulations.

## Emergency Regulatory Language

Section 29.06, Title 14, CCR, is amended as follows:

### **§ 29.06. Purple Sea Urchin**

- (a) Except as provided in this section, the daily bag limit for purple sea urchin is 35 individuals.
- (b) The daily bag limit for purple sea urchin is forty (40) gallons when taken while skin or SCUBA diving in ocean waters of the following counties: Humboldt, Mendocino, and Sonoma.
- (c) There is no possession limit for purple sea urchin.

(d) Notwithstanding subsection (b) of this Section, in ocean waters seaward of Caspar Headlands State Beach commonly referred to as Caspar Cove, in Mendocino County, in the area eastward of a straight line connecting points between 39° 22.045 ' N. lat. 123° 49.462 ' W. long. and 39° 21.695 ' N. lat. 123° 49.423 ' W. long., purple sea urchins may be taken in any number for the purpose of restoring the kelp ecosystem. Purple sea urchins may only be taken by hand or with manually operated hand-held tools.

Authority cited: Sections 200, ~~and~~ 205, and 399, Fish and Game Code.

Reference: Sections 200, ~~and~~ 205, and 399, Fish and Game Code.

## Memorandum

**Date:** January 22, 2020

**To:** Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

**From:** Charlton H. Bonham  
Director

**Subject:** **Notice of Exemption for Proposed Amendment of Section 29.06, Title 14, California Code of Regulations; 2020 Recreational Purple Sea Urchin Emergency Rule**

Attached please find the Draft Notice of Exemption (NOE) for the proposed amendment to Sections 29.06, Title 14, California Code of Regulations (CCR). The attached draft notice has been prepared pursuant to Section 15062 of the California Environmental Quality Act (CEQA) Guidelines. Since the NOE is not anticipated to change, this early submission gives the Commission notice of the Department's recommendation to rely on statutory exemption for the proposed action. Staff's analysis of the use of exemption under CEQA is described below.

### **CEQA Exemption**

#### *Statutory Exemption to Specific Actions Necessary to Prevent or Mitigate an Emergency*

Statutorily exempt projects are classes of projects that the Legislature has determined as exempt from the requirements of the California Environmental Quality Act (CEQA; Public Resources Code Section 21000 et seq.).

The review effort by Department staff pursuant to Public Resources Code has led the Department to conclude that the proposed amendment to section 29.06 in Title 14 of the CCR falls within the statutory exemption under Public Resources Code Section 21080. This exemption applies to actions necessary to prevent or mitigate an emergency.

The environmental condition for kelp forests in northern California has continued to deteriorate at a rapid pace, and the loss of the last remaining kelp stands may be imminent, despite prior effort to arrest the trend. This crisis is in large part due to the overgrazing of kelp by purple sea urchins (*Strongylocentrotus purpuratus*). The proposed regulation would temporarily allow recreational divers to take any number of purple sea urchin within Caspar Cove, Mendocino County, to control the purple sea urchin population. The take is expected to help restore bull kelp in Caspar Cove, and provide Department Staff with valuable data to consider the viability of expanding the activity to other areas in Northern California.

*Categorical Exemptions to Protect Natural Resources and the Environment*

Categorically exempt projects are classes of projects that the State Resources Agency has determined not to have a significant effect on the environment; therefore, these projects are exempt from the requirement for the preparation of environmental documents (CEQA Guidelines Section 15300, et seq.).

The review effort by Department staff pursuant to CEQA Guidelines Section 15061 has also led staff to conclude that the proposed amendment to section 29.06 in Title 14 of the CCR falls within the Class 7 and 8 categorical exemptions (CEQA Guidelines sections 15307 and 15308). These two exemptions are related to agency actions to protect natural resources and the environment. The proposed project would benefit the fragile kelp forest ecosystem in Northern California, including the valuable abalone populations.

If you have any questions regarding this item, please contact Dr. Craig Shuman, Marine Regional Manager, at (916) 373-5491.

Attachments

cc: Craig Shuman, D. Env., Regional Manager  
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[Craig.Shuman@wildlife.ca.gov](mailto:Craig.Shuman@wildlife.ca.gov)

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DRAFT

**Notice of Exemption****Appendix E**

**To:** Office of Planning and Research  
P.O. Box 3044, Room 113  
Sacramento, CA 95812-3044

County Clerk

County of: N/A

**From:** (Public Agency): CA Fish and Game Commission  
1416 Ninth Street, Suite 1320  
Sacramento, CA 95814

(Address)

Project Title: 2020 Recreational Purple Sea Urchin Emergency Rule

Project Applicant: N/A

Project Location - Specific:  
State ocean water insider Caspar Cove, Mendocino County

Project Location - City: N/A Project Location - County: Mendocino

Description of Nature, Purpose and Beneficiaries of Project:

The proposed project would amend section 29.06 to Title 14, CCR to temporarily allow unlimited recreational take of Purple Sea Urchin inside Caspar Cove, Mendocino County. The project is designed to test the public's ability to help control urchin population in degraded Northern California kelp forests.

Name of Public Agency Approving Project: California Fish and Game Commission

Name of Person or Agency Carrying Out Project: CA Department of Fish and Wildlife

Exempt Status: **(check one):**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☒ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: Class 7 & 8; 14 CCR 15307 & 15308
- ☐ Statutory Exemptions. State code number: \_\_\_\_\_

Reasons why project is exempt:

Statutory exemption for emergency action applies to actions taken in response to emergencies. Class 7 and 8 categorical exemptions exempt actions for the protection of natural resources and the environment, respectively. The proposed project qualifies because it is designed to help save the last remaining stands of kelp for the benefit of species dependent on kelp & whole ecosystem in Northern California (See Attachment).

Lead Agency  
Contact Person: David Thesell Area Code/Telephone/Extension: (916) 654-9903

**If filed by applicant:**

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? ☐ Yes ☐ No

Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Title: \_\_\_\_\_

☐ Signed by Lead Agency ☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.  
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: \_\_\_\_\_



January 21, 2020

## **ATTACHMENT TO NOTICE OF EXEMPTION 2020 Recreational Purple Sea Urchin Emergency Rule**

The California Fish and Game Commission (Commission) has taken final action under the Fish and Game Code and the Administrative Procedure Act with respect to the proposed project on February 21, 2020. On February 21, 2020, the Commission noticed and adopted an emergency action to amend Section 29.06 to Title 14 of the California Code of Regulations (CCR).

### **Statutory Exemption for Specific Actions Necessary to Prevent or Mitigate an Emergency**

In compliance with the California Environmental Quality Act (CEQA; Public Resources Code Section 21000 et seq.), the Commission adopted the regulation relying on a statutory exemption contained in Public Resources Code Section 21080 (Actions Necessary to Prevent or Mitigate an Emergency). The exemption applies to agency actions to prevent or mitigate an emergency.

A combination of environmental factors has resulted in one of the worst kelp die-offs along northern California coast in recent history. This is accompanied by an explosive growth of purple sea urchins (*Strongylocentrotus purpuratus*) in the region, and the population remains largely unchecked due to decimation of predatory sea stars from disease epidemic occurring in 2013. The lack of kelp recovery is in turn leading to the continued and imminent devastation of northern California kelp forest ecosystem and all its component species, including valuable abalone species.

Previous attempts at controlling the population has not been successful, and the region is at risk of losing its remaining kelp stands. The proposed regulatory action would temporarily allow recreational divers to take any number of purple sea urchins underwater for the purpose of controlling the population within the area commonly known as Caspar Cove, Mendocino County (seaward of Caspar Headlands State Beach). Because the regulation is intended to prevent complete loss of kelp in an important but fragile ecosystem, Commission adoption of the regulation is an activity that is the proper subject of the statutory exemption.

### **Categorical Exemptions to Protect Natural Resources and the Environment**

In compliance with the California Environmental Quality Act (CEQA; Public Resources Code Section 21000 et seq.), the Commission adopted the regulation by also relying on the categorical exemptions contained in CEQA Guidelines Sections 15307 (Action by



Regulatory Agencies for Protection of Natural Resources) and 15308 (Action by Regulatory Agencies for Protection of the Environment). The exemptions apply to agency actions to protect natural resources and the environment, respectively.

The proposed regulation would help restore kelp in Caspar Cove and preserve crucial spore banks in the North Coast. Positioning the area to quickly recover its kelp patches would benefit and help restore the whole ecosystem including fragile and valuable abalone populations that rely upon it. As such, the proposal is an activity that is the proper subject of CEQA's Class 7 and 8 categorical exemptions.

**From:** MADELEINE RUSSO [REDACTED]  
**Sent:** Friday, January 31, 2020 9:44 AM  
**To:** FGC <FGC@fgc.ca.gov>  
**Subject:** FGC Meeting, 2/21/2020, Agenda Item #18

I am writing in full support of any efforts to reduce the purple urchin population on the North Coast, with the aim of helping the kelp to reforest and nourish the environment. As a resident of Mendocino County, I can see the devastating impact the loss of revenue from closing the fisheries, particularly abalone, is having... and it will only get worse if the current urchin population is not reduced.

Thank you for your efforts.

Madeleine Russo  
Willits, CA

[REDACTED]

From: Dan Walsh  
Sent: Wednesday, February 5, 2020 10:42 AM  
To: FGC  
Subject: FGC meeting 2/21/2020 Agenda item 18

I support the motion for an emergency regulation 18. I recall a program decades ago off the Palos Verdes Peninsula called "Project Purp", which was an urchin eradication program. Today, that area is lush with kelp and marine life, including a prolific White Sea Bass fishery.

I'm a NAUI Certified SCUBA Instructor since 1972, a US Coast Guard licensed Captain and have skippered dive boats in Southern California, Hawaii, the Caribbean, and Baja California. I'm also (or was until the closure) an active free diver visiting the Northern California area to legally collect abalone; hopefully someday that area will replenish both kelp and abalone successfully, as what Project Purp did for the PV area so long ago.

Thank you for your time and consideration of supporting emergency regulation 18.

Respectfully,  
Dan Walsh

[REDACTED]

Captain Dan Walsh

[REDACTED]

---

From: doug jung  
Sent: Sunday, February 9, 2020 4:53 PM  
To: FGC  
Subject: Agenda Item 18

[REDACTED]

To: Fish and Game Commissioners

Fr: Doug Jung

Re: 2/21/2020 Agenda Item 18 - Emergency Regulations for Hammering Purple Urchins

We are pleased the Commission is considering the emergency regulations to allow the hammering of killer purple urchins off our coast to save what biodiversity we can for the future. Every sports diver and participant in the abalone culture I have spoken with are deeply frustrated and depressed over the pending death of the people's resource. Not only would we advocate for the opening of Casper Cove for remediation but much much more. We are in the 9th inning and much more must be done before what surviving abalone, kelp and biodiversity dies.

For years we advocated to allow the 40,000 abalone divers an opportunity to volunteer and self identify as purple urchin predators, go to our favorite dive sites and hammer urchins in the shallows surrounding surviving kelp and abalone to create safe spaces to buy time. We leave the calcium shells in place for ocean acidification titration while kelp growth absorbs vast amounts of CO2. But all we were allowed of late were bag and drag events, where we go into urchin barrens and slowly remove by hand urchins, bag them and drag them back to shore where they were smashed and disposed into a landfill. This futile method is labor intensive and dangerous dragging around bags in the surf. Fewer and fewer divers were willing to participate in this fiasco. They want to save abalone at their favorite dive site before they all died, not wanting to clear urchin barrens in the most difficult manor for CDFW. Divers spend their time and considerable resources at dive shops, travel, pay Park camping accommodations, buy fishing licenses for the privilege of removing urchins, hotels, food, restaurants, etc that support the coastal communities that are suffering because of the abalone closure. The last dive shop Sub Surface Progression at Fort Bragg closed after nearly 50 years serving the community. Now none exist on the Coast. With such personal sacrifice should volunteer divers not be able to select our sites while not endanger our lives unnecessarily?

We advocate hiring unemployed commercial urchin divers and recruit new ones to clear urchin barrens in midwater especially surround areas where kelp exist to foster kelp growth. These are our spore banks and the kelp are nursery for our fish and biodiversity. This past year I went free diving to spear a fish and bring home a treat. Four out of five dives I didn't even see a fish. Before urchin barrens I always brought home fish. Is this a harbinger of things to come?

Finally, we have been advocating for the development of drones and robotics to assist the divers. Every engineering student wants to develop killer robots, so let's notify our Universities and progress to SBIR to begin this challenge and let them be creative and we at the end will test and evaluate the many concepts and select winners. I have contacted Deans of Engineering but they want to hear from the State of California, not Award Winning Alumnis.

It should be clear, human divers are a stop gap. This massive endeavor requires a mechanical component. Think of this environmental technology exported to other nations. This urchin crisis is not just a California issue, it is a worldwide plague.

There is great urgency to save what seed stock we can after years of exponential death? We desire a plan that will address the crisis before everything dies while being studied to death. We need boots on the ground before it is too late.

Respectfully,

Doug Jung

# Purple Sea Urchin Emergency Regulation Proposal

California Fish and Game Commission Meeting  
February 21, 2020



# Background

- Perfect Storm of environmental factors triggered shift in north coast kelp forest ecosystem
- December 2017: Commission closed the 2018 recreational abalone fishery – closure extended to April 1, 2021 in December 2018.
- April 2018: Commission adopted emergency regulation raising recreational Purple Sea Urchin take to 20 gallons per day in Mendocino and Sonoma – Re-adopted, October 2018
- February 2019: Commission adopted recreational Purple Sea Urchin take of 40 gallons per day in Mendocino, Sonoma, and Humboldt counties
- In 2018 and 2019 commercial urchin divers conducted pilot removals of Purple Sea Urchin at four sites in Mendocino County with guidance from CDFW staff and supported by funding from the Noyo Center for Marine Science and the Watermen's Alliance.



# Purple Sea Urchin Emergency Regulation- Why?

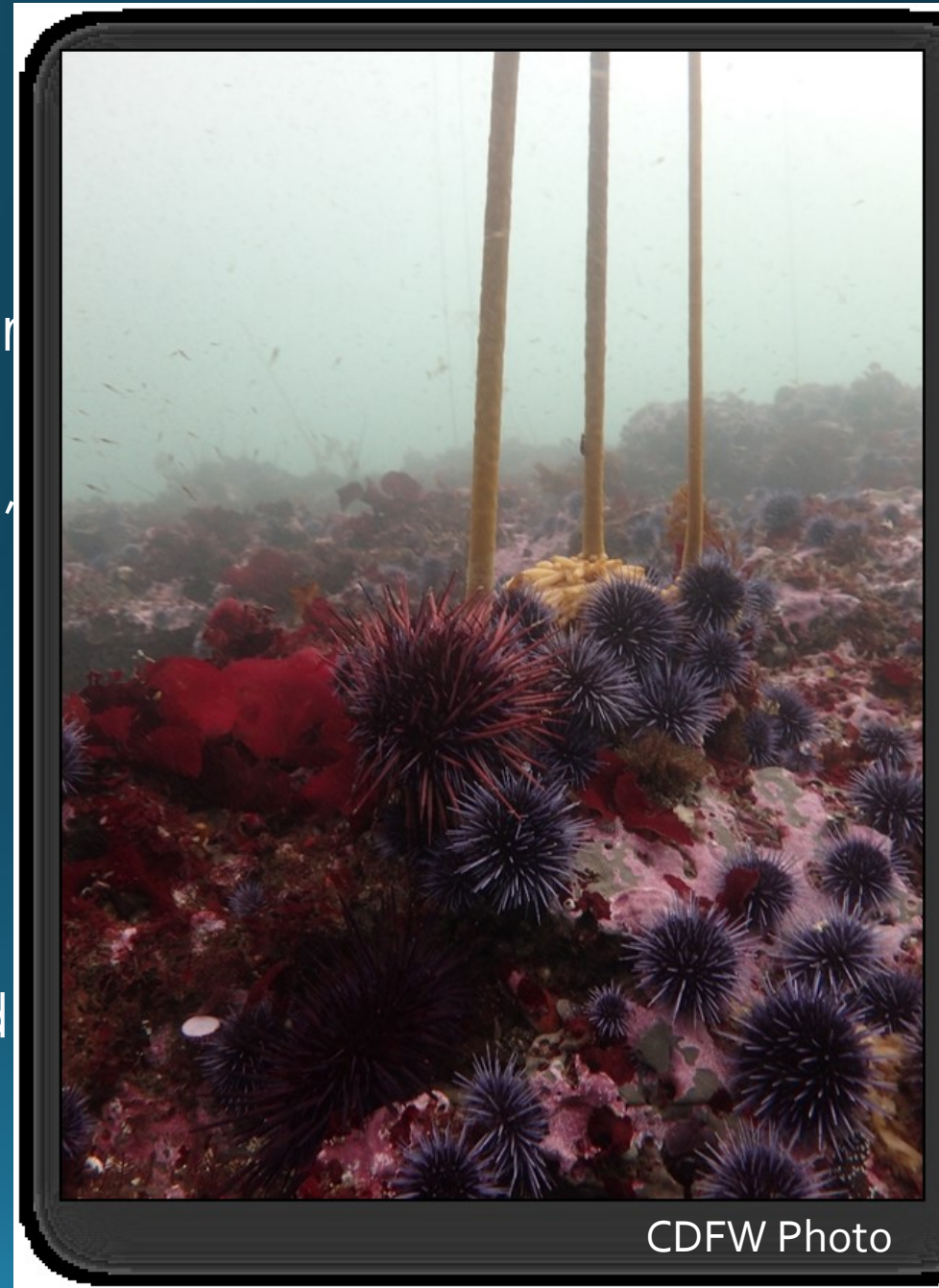
- Kelp ecosystem and associated species still declining
- Efforts to date – challenged
- Evolving strategy – focused experimental design
- Ascertain if, how, when, where kelp recovery can be attained
- Pilot effort - scalable





# Purple Sea Urchin Emergency Regulation- How?

- Developed collaborative effort to promote bull kelp ecosystem and associated species recovery
- Key partners: DFW, OPC, Commercial urchin divers, recreational divers, Waterman's Alliance, Reef Check California, Noyo Center for Marine Science, The Nature Conservancy, Greater Farallones Association
- Study Design:
  - Commercial diver urchin removal – 3 sites
  - Recreational diver urchin removal – 1 site
  - Monitoring of results at treatment sites and control sites



CDFW Photo

# Purple Sea Urchin Emergency Regulation- The Proposed Rule

- Location: Caspar Cove (Anchorage), Mendocino Co.
- No recreational bag limit for Purple urchins east of the designated line
- Take can only be done by hand or manual hand-held tools
- Temporary
  - Evaluate efficacy



CDFW Photo

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the Community

# Thank You

Questions?

James Ray, Environmental Scientist  
California Department of Fish and Wildlife

[James.Ray@Wildlife.ca.gov](mailto:James.Ray@Wildlife.ca.gov)



**STAFF SUMMARY FOR APR 17, 2019***For background only***25. WHALE AND TURTLE PROTECTION – DUNGENESS CRAB FISHERY****Today's Item****Information** ☐**Action** ☒

Receive update on legal settlement agreement to protect whales and sea turtles from entanglement in commercial Dungeness crab gear, and consider potential application to the recreational Dungeness crab fishery.

**Summary of Previous/Future Actions (N/A)****Background**

FGC has authority to regulate the recreational Dungeness crab fishery; however, authority over the commercial Dungeness crab fishery is held by DFW and the California State Legislature. The commercial Dungeness crab fishery operates by using round baited traps covered with netting, which are then set in deeper water and tied to floating buoys. In recent years, whale populations in California's waters have increased, leading to greater presence in Dungeness crab fishing grounds and an increased risk of entanglement in deployed fishing gear.

In 2015, DFW, in partnership with the National Marine Fisheries Service (NMFS) and California Ocean Protection Council (OPC), convened the Dungeness Crab Fishing Gear Working Group to "tackle the challenge of reducing the risk of whale entanglements in the California Dungeness crab fishery". In 2017, following a drastic increase in the number of whale entanglements off the West Coast, the Center for Biological Diversity sued DFW, challenging DFW authorization of the crab fishery as a violation of Section 9 of the federal Endangered Species Act for take of blue and humpback whales and leatherback sea turtles.

On Mar 26, 2019, DFW, together with the Center for Biological Diversity and the Pacific Coast Federation of Fishermen's Associations (as intervenor-defendant), announced they had reached a settlement and filed stipulation to stay the case (Exhibit 1); the settlement includes a series of interim measures to protect listed whales and turtles in the commercial Dungeness crab fishery, using the best available science, until DFW receives an incidental take permit from the federal government. The settlement (Exhibit 2) includes an "Exhibit A – Terms of Agreement" that defines specific measures to be taken.

In a Mar 29, 2019 statement (Exhibit 3), the Dungeness Crab Fishing Gear Working Group provided background, context, and risk assessment strategies for both commercial and recreational crab fisheries, which built on an advisory released by the group's Evaluation Team; the team had just convened on Mar 19 to proactively discuss and assess relative risk of entanglements following reports of increased humpback whale concentrations (Exhibit 4). Specifically, the Dungeness Crab Fishing Gear Working Group encouraged recreational Dungeness crab fishermen, as well as other fisheries using fixed gear, to review the risk assessment and consider fishing as minimal gear as possible to reduce vertical lines, and to avoid fishing in higher risk areas during spring and summer months (Exhibit 3).

This meeting provides FGC an opportunity to discuss the potential implications of the terms of the agreement for the recreational Dungeness crab fishery.

**STAFF SUMMARY FOR APR 17, 2019***For background only***Significant Public Comments (N/A)****Recommendation**

**FGC staff:** Discuss the potential implications of the terms of the agreement for the recreational Dungeness crab fishery; if FGC wishes to discuss further, consider referring to MRC for review and recommendation.

**Exhibits**

1. DFW News: *Entanglement Settlement Protects Whales, Sea Turtles and California's Crab Fishery*, dated Mar 26, 2019
2. Center for Biological Diversity v. Bonham (Defendant), and Pacific Coast Federation of Fishermen's Associations and Institute for Fisheries Resources (Intervenor-Defendants), stipulation and [proposed] order staying case, filed Mar 26, 2019
3. Dungeness Crab Fishing Gear Working Group statement, dated Mar 29, 2019
4. California Dungeness Crab Fishing Gear Working Group Evaluation Team advisory, dated Mar 19, 2019

**Motion/Direction (N/A)**

# RECREATIONAL CRAB FISHERY

## MANAGEMENT PROPOSALS TO PROVIDE MARINE LIFE PROTECTIONS

Fish and Game Commission Meeting  
February 21, 2020  
Sacramento

CDFW Marine Region

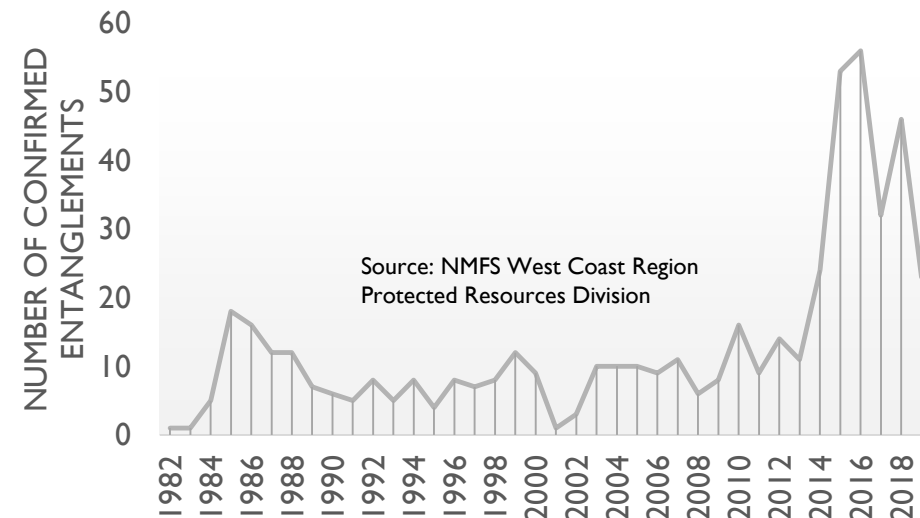


# MARINE LIFE ENTANGLEMENT RISK

- Species listed under Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) entangled in trap gear
- Since 2014 = 48 confirmed CA Dungeness crab gear entanglements, including 3 from recreational crab gear
- Since 2014 = 102 entanglements observed in CA from unknown gear types
- CA, OR, WA, and NMFS all working to reduce risk



Annual Confirmed West Coast Entanglements





# CALIFORNIA'S RESPONSE

- Established the California Dungeness Crab Fishing Gear Working Group (2015)
- Discussions and recommendations have informed:
  - Depth-dependent restriction surface gear regs
  - Best Practices Guide
  - Develop and pilot Risk Assessment and Mitigation Plan (RAMP) for assessing risk and management action
- Senate Bill 1309 (McGuire - 2018)
  - Gear retrieval
  - Marking
  - RAMP (interim Director authority)

## 2019-2020 BEST PRACTICES GUIDE FOR MINIMIZING MARINE LIFE ENTANGLEMENT

Whale and sea turtle entanglement is a concern for fishermen, the public, California Department of Fish and Wildlife (CDFW), Ocean Protection Council and the National Marine Fisheries Service (NMFS). The California Dungeness Crab Fishing Gear Working Group developed this guide as part of a proactive and comprehensive approach to addressing entanglements in Dungeness crab gear. Taking these important steps will help maintain the fleet's access to this valuable resource.



### BEST PRACTICES

- **ADJUST** trap line length when changing set location across depths by maintaining optimal scope.
- **MINIMIZE** knots, leads and scope when compensating for tides, currents, and weather.
- **ELIMINATE** excess lines floating at the surface. Floating line should only be used between the main buoy and the trailer.
- **REDUCE** slack surface line.
- **KEEP** vertical lines taut.
- **AVOID** setting gear in the vicinity of whales and sea turtles.
- **COMMUNICATE** locations of high whale activity to other fishing boats.
- **REMOVE** fishing gear before 11:59 pm on the last day of the season.
- **PROMPTLY** remove gear not being actively fished.
- **MARK** gear consistent with regulations.
- **MAINTAIN** gear to ensure lines and buoys are in good working condition so they do not break and get lost.
- **RETRIEVE** lost or abandoned commercial Dungeness crab traps as authorized in Title 14, CCR Section 132.2 and 132.7.



**KEEP LINE  
BETWEEN  
POT AND  
MAIN BUOY  
TAUT  
AND  
VERTICAL**



Credit: NMFS



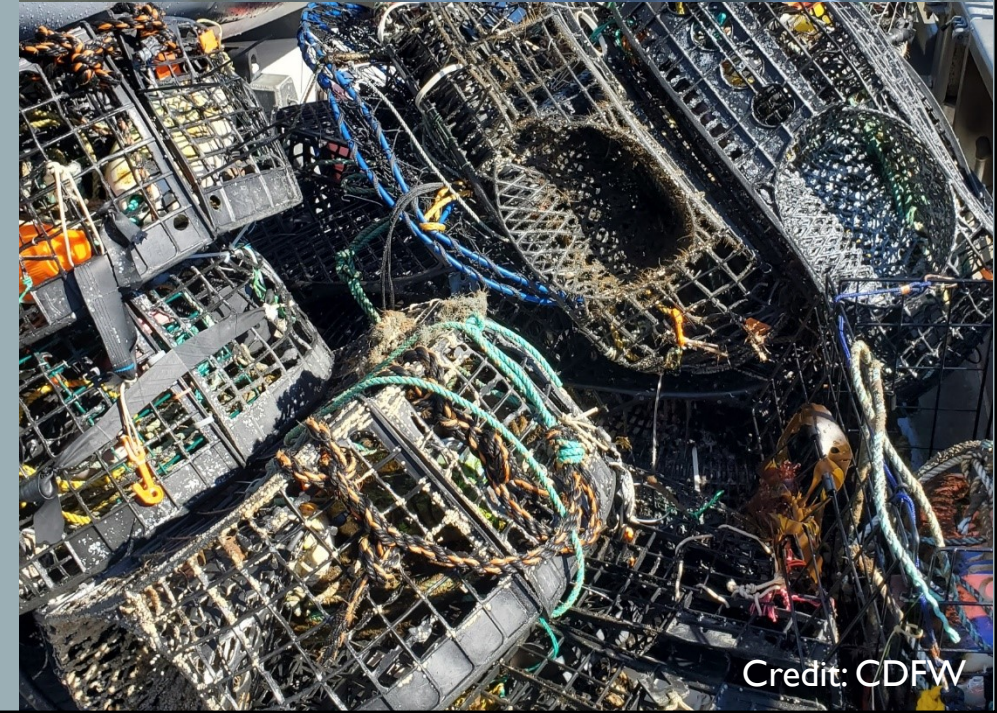


# CDFW RESPONSE

- **Developing a Conservation Plan for Humpback Whales, Blue Whales and Leatherback Sea Turtles – May 15, 2020**
- **Developing RAMP Regulations to be effective by Nov 1, 2020**
- **Submitted Section 6 ESA Grant Proposals**
- **Regular Risk Assessments for the commercial Dungeness crab fishery**
- **Utilized Director Authority due to Significant Risk**



Credit: CDFW



Credit: CDFW





## CDFW RESPONSE...CONTINUED

- **Implemented Surface Gear Limitations and Gear Removal Time – Fall 2018**
- **Implemented a Gear Retrieval Program – Fall 2019**
- **Implemented marking requirement for all commercial trap gear – Fall 2019**
- **Exploring gear modification and innovation**
- **Developing measures for recreational crab trap gear regulation changes**



Credit: CDFW



# RATIONAL FOR RECREATIONAL REGULATION CHANGES

- Protect marine life and listed species under the ESA and MMPA
- Recreational crab fishery is operated in similar locations/configurations
- Recreational fishery has very limited rules regarding deployment, configuration, and servicing of gear
- Help prevent commercial sector from being penalized for entanglement
- Align with other trap fisheries and increase accountability



Credit: CDFW



Credit: CDFW



# RECREATIONAL FISHERY REGULATION PROPOSALS

- **Enhanced Gear Marking**
  - Buoy or Unique Float
  - Simple, low cost and easy to incorporate
- **Trap Limit**
  - Establish limit (5-10 pots)
  - Reduces risk from # vertical lines
- **Service Interval Requirement**
  - Require minimum interval for gear check (9-16 days)
  - Minimize gear loss and by-catch



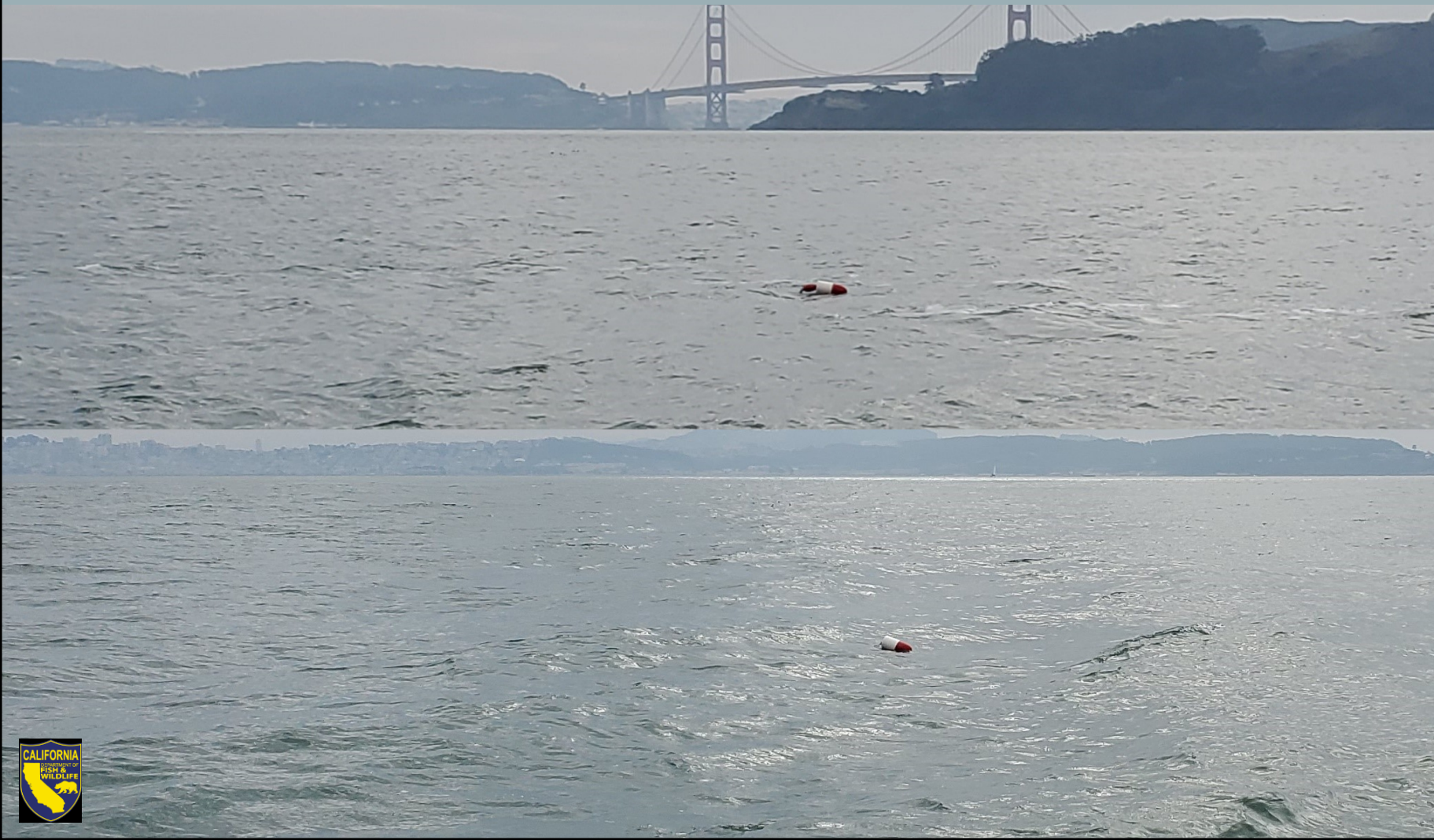
Credit: NMFS



Credit: NMFS



# BUOY MARKING OPTIONS



Credit: CDFW





# RECREATIONAL FISHERY REGULATIONS PROPOSALS

- **Validation Stamp**
  - Helps determine participation levels
  - Target outreach and communication
- **Director Authority**
  - Align with Director's authority (commercial)
  - Swift management response (entanglement risk)



Credit: CDFW

Credit: CDFW



# STAKEHOLDER INPUT

- Calls and in-person meetings with representatives
- Discussed proposals at November MRC
- December FGC discussion resulted in three additional public outreach meetings
- **Comment Summary:**
  - Some support for proposals
  - North fishery different from central fishery
  - Limit surface gear, standardize buoys
  - Lost gear is an issue
  - Exempt passengers from validation
  - Sunset validation
  - Note fishing should be retained
  - Sport fair start





# NEXT STEPS

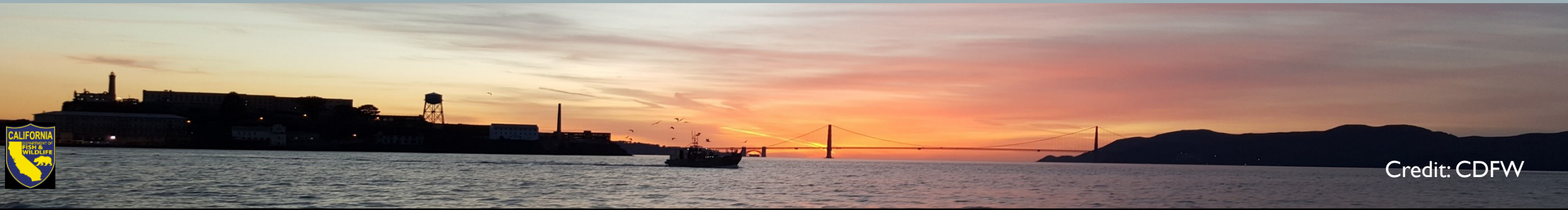
- **Receive Commission Direction**
- **Discuss at March MRC?**
- **Finalize Options for Rulemaking Process?**
- **Recommended Revised Timeline**
  - **Notice June**
  - **Discuss August**
  - **Discuss and Possible Adoption October**
  - **Effective spring or fall 2021**



Credit: CDFW



**More information:**  
**[wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries](http://wildlife.ca.gov/Conservation/Marine/Whale-Safe-Fisheries)**



Credit: CDFW

**Sent:** Monday, December 9, 2019 5:25 PM

**To:** Wildlife DIRECTOR <[DIRECTOR@wildlife.ca.gov](mailto:DIRECTOR@wildlife.ca.gov)>

**Subject:** Comments on proposed 2020 Recreational crab gear regulations from Humboldt Area Saltwater Anglers

**Name:** Scott McBain

**County:** Humboldt

**Message:** December 9, 2019 To: California Fish and Game Commission Re: Proposed Modification to 2020 Recreational Crab Fishing Gear regulations to Reduce Risk to Whale Entanglement The Humboldt Area Saltwater Anglers (HASA) appreciates the opportunity to comment on the proposed modifications as presented by the Department to reduce risk of whale entanglements. HASA is an association whose purpose is to educate anglers in conservation and best management practices of fishing, work cooperatively with Federal and State Regulatory Officials on proposed regulations and provide our perspective on how regulations will affect our sector, from an opportunity and economic perspective. We strongly support the primary objective of reducing whale entanglement by active and derelict fishing gear off our coast, and have been participating on the Dungeness Crab Working Group and are well versed on the issues and conservation concerns. The Department has put forth five recommendations for modifying recreational crab gear regarding this issue, and we have included comments under each of the five recommendations: 1. Enhanced gear marking: We have always supported this effort and believe this can be easily accomplished by fishers marking each buoy with a large "S" (designating Sports) on all 4-sides of their crab buoy along with their GO number. 2. Trap Limit: We would support a ten-pot per angler restriction, specifically focusing on our ability to catch crab after the commercial season has started and crabs/trap is significantly lower than the beginning of the season. 3. Service Interval Requirement: We would support the 14-day proposal. Sports fishers do not use "wet storage" from our experience, but we would support no "wet storage" for any sector to reduce risk of entanglement. 4. Validation stamp: We could support a "validation stamp" to provide the Department with better accounting for involvement in the fishery, but the fee should be part of the license fee, or a very minimal cost. It would seem that the CRFS samplers could currently provide this same data, since they are already sampling a 20% rate at PR 1 sites and 10% at PR 2 sites. 5. Director Authority: We support the current authority structure that allows public input to the Commission prior to any proposed modifications to the regulations, and feel that this public process can be done quickly if needed under emergency procedures. Most importantly, we feel very strongly that derelict gear is a leading source of whale entanglement. Our coastal area north of Cape Mendocino has hundreds of abandoned crab pots through the spring and summer that create hazard for whales, vessels with propeller entanglement, and causes substantial lost fishing gear due to downrigger entanglement while salmon trolling for the sports and commercial sectors. Besides economic loss for sports and commercial fishers, this "ghost gear" increases entanglement risk. In addition, when this entanglement happens, it greatly increases our safety risk as we are trying to disentangle derelict gear from propellers and downriggers, often in a rough ocean. We have been actively working with the Department, Ocean Protection Council, UC Davis, and NMFS over the past several years to help develop a more effective derelict gear removal program. The latest incarnation has been largely ineffective off of the northern California coast, with hundreds of crab pots observed in our salmon fishing zones throughout the summer. In our assessment, this should be the number one priority for any proposed regulations, as this would have the most beneficial impact on reducing whale entanglement (our collective overall objective). Accordingly, our primary recommendation for reducing whale entanglements is a paired approach of 1) rigorous derelict gear removal program,

with 2) a careful application of crab gear regulations that specifically reduce risk of whale entanglement. Therefore, we strongly urge the Department to develop an effective program to remove derelict gear left after the close of the crab season, whether Commercial or Sports. We would appreciate the opportunity to work with the Department to contribute to the solution to this problem by helping in the development and implementation of an effective derelict gear removal program. Thank you for the opportunity to reply to these proposed regulatory modifications to the recreational crab fishery. We support the Departments efforts to reduce risk of whale entanglement causing injury or death, and will work actively with the Department in this endeavor. Please contact me to discuss how we can better assist in this effort. Respectfully, Scott McBain, President Humboldt Area Saltwater Anglers, Inc.

**STAFF SUMMARY FOR AUGUST 22-23, 2018***For background only***17. STRATEGIC PLANNING****Today's Item****Information** ☐**Action** ☒

This is a standing agenda item for 2018-19 FGC meetings as FGC develops a new strategic plan. Today's discussion and potential action will take place in a workshop format.

**Summary of Previous/Future Actions**

- |                                                                          |                                 |
|--------------------------------------------------------------------------|---------------------------------|
| • First FGC strategic planning meeting                                   | Feb 22, 2018; Sacramento        |
| • Discussion held over to Jun meeting                                    | Apr 18-19, 2018; Ventura        |
| • Discussion of mission, vision, core values                             | Jun 20-21, 2018; Sacramento     |
| • <b>Today's discussion of potential mission, vision and core values</b> | <b>Aug 22-23, 2018; Fortuna</b> |
| • Consider adopting mission, vision and core values                      | Oct 17-18, 2018; Fresno         |

**Background**

FGC created its current strategic plan in 1998, which includes a mission statement and a vision statement. Over the ensuing 20 years, much has changed, not the least of which is a commission with broader authorities and a more ecosystem-based approach to addressing fish and wildlife issues. With the upcoming 150-year anniversary of FGC, the time is right to reassess its mission and vision statements, and to potentially adopt a set of core values or a core values statement.

At its Feb 22, 2018 strategic planning kickoff meeting, FGC discussed the overall goals of a new strategic plan and the type of strategic planning process in which to engage. FGC determined that it is seeking a streamlined planning process, given that there is significant information and input on which to build a new strategic plan, including the 2012 "California Fish and Wildlife Strategic Vision: Recommendations for Enhancing the State's Fish and Wildlife Management Agencies."

Today's meeting marks the second focused on potential changes to FGC's mission and vision (Exhibit 6) and a potential statement of core values. As requested during the Jun 2018 FGC meeting, staff has prepared a document that provides samples of mission and vision statements for other fish and game commissions in the United States as well as the U.S. Fish and Wildlife Service; in some cases, there is not a separate fish and game commission from the state's wildlife management agency (Exhibit 1).

After the Jun 2018 discussion, some commissioners were able to provide feedback on the current mission and vision statements, as well as potential core values (Exhibit 2) to help facilitate additional discussion during today's workshop. In addition, to complement the work of FGC, staff has reviewed and discussed potential changes to the mission and vision statements and identified potential core values (exhibits 3-5). These exhibits are meant to help facilitate an engaging discussion with commissioners to develop thoughtful and forward-thinking strategic planning documents.

**STAFF SUMMARY FOR AUGUST 22-23, 2018***For background only*

Today's discussion is being held in a workshop format so that commissioners, staff and stakeholders can have a direct dialogue about the ideas generated to date, to develop additional ideas, and provide guidance to staff on potential changes to the mission and vision statements and on potential core values. FGC is scheduled to consider adopting the mission, vision and core values at its Oct 17-18, 2018 meeting.

**Significant Public Comments (N/A)****Recommendation (N/A)****Exhibits**

1. Samples of mission and vision statements and core values from other states, dated Aug 10, 2018
2. Input from commissioners on potential mission, vision and core values, dated Aug 13, 2018
3. Input from FGC staff on FGC vision, dated Aug 14, 2018
4. Input from FGC staff on FGC mission, dated Aug 14, 2018
5. Input from FGC staff on FGC potential core values, dated Aug 14, 2018
6. Current FGC mission and vision statements, adopted in 1998

**Motion/Direction**

Provide staff with direction on potential changes to the mission and vision statements, as well as core values.

# **California Fish and Game Commission**

## **Commission Mission, Vision and Core Values**

*Adopted December 13, 2018*

### **Mission**

The mission of the California Fish and Game Commission, in partnership with the California Department of Fish and Wildlife, is to provide leadership for transparent and open dialogue where information, ideas and facts are easily available, understood and discussed to ensure that California will have abundant, healthy, and diverse fish and wildlife that thrive within dynamic ecosystems, managed with public confidence and participation, through actions that are thoughtful, bold, and visionary in an ever-changing environment.

We recognize our responsibility to hold California's fish and wildlife and their habitats in the public trust, as well as their cultural and intrinsic value, and therefore work collaboratively with other federal, tribal, state and local government agencies, non-governmental organizations and the people of California to establish scientifically-sound policies and regulations to protect, enhance and restore California's native fish and wildlife in their natural habitats, and to secure a rich and sustainable outdoor heritage for all generations to experience and enjoy through both consumptive and non-consumptive activities.

### **Vision**

The vision of the California Fish and Game Commission is a healthy and biodiverse, natural California in which an array of native fish and wildlife thrive within dynamic ecosystems and inspire human interaction and enjoyment.

### **Core Values**

#### ***Integrity***

We hold ourselves to the highest ethical and professional standards, pledging to transparently fulfill our duties and deliver on our commitments to protect and hold California's fish and wildlife and their ecosystems in the public trust, to ensure consistency of expectations and outcomes. We ensure that our choice or order of decision-making does not arbitrarily prioritize one interest group over others. We hold ourselves accountable to act in accordance with our values and code of ethics, even when it is difficult. Our actions reflect honesty, truthfulness, respect and accuracy.

#### ***Transparency***

We recognize the important and wide-ranging impacts the Commission's decisions have on California's wildlife, wildlife habitat and residents, and that these decisions should be made based on a variety of inputs in an open, inclusive and public process that solicits a diverse set of perspectives. We strive to communicate with our partners, our stakeholders and the public responsively and openly about how and why decisions are made. We use adaptive processes and consistently gather as much information as possible to ensure the Commission is best informed for thoughtful decision-making, while acknowledging that decisions are most often made with incomplete information.

## ***Innovation***

We respond to the ever-changing natural and human environments by evaluating the efficiency and effectiveness of our decisions and processes, identifying new ideas that challenge conventional wisdom and historical biases, and seeking opportunities for innovation. We recognize that innovation always involves some element of risk, and that creative problem-solving and implementing forward-thinking solutions where value is added is key to meeting the constantly evolving needs of our stakeholders and California's fish and wildlife. We take time to frame challenges, adapt, and execute new and useful ideas, including applying advances in sound science, evolving concepts of wildlife management, and public values toward wildlife in new and bold ways. We encourage novelty, creativity and flexibility as we proactively meet challenges and problem-solve.

## ***Collaboration***

We value collaboration, including teamwork and partnerships, in problem-solving and in developing policies and regulations. Teamwork is actively fostered and is one of the main ways we function. Collaborative efforts extend beyond the Commission and its staff to empower a diversity of stakeholders, other federal, tribal, state and local agencies, non-governmental organizations, and the people of California to participate in our problem-solving and decision-making processes and, where appropriate, engage in working groups that are inclusive and transparent.

We pursue productive and considerate partnerships, rather than relationships solely based on a formal legal agreement, and celebrate one another's successes as we take them to the next level together. A partnership is a mutually beneficial arrangement that leverages resources to achieve shared goals between and among the partners, based on mutual respect, open-mindedness, trust, and genuine appreciation of one another's contribution. Our primary partner is our sister agency, the California Department of Fish and Wildlife.

## ***Excellence***

We pursue quality, proactively assessing performance and striving to continuously improve the delivery of fair and accessible services, work products and decisions, as well as the efficiency and cost-effectiveness with which these are delivered. We are committed to being and delivering the best, and are diligent about creating better ways of doing what we do. We take pride in our efforts and what we make possible. We approach every challenge with an expectation and determination to succeed.

## ***Stewardship***

We hold the state's wildlife and their habitats and ecosystems in trust for the public, respecting that they have intrinsic value and are essential to the well-being of all California residents. We give attention to the environmental and human stressors, including climate change, development and other threats, that affect the resilience and health of our wildlife and their habitats and ecosystems. We use credible science, evolving concepts of wildlife management, and public values toward wildlife to evaluate programs, policies and regulations that will help achieve our stewardship goals. We recognize the dynamic nature of and stay abreast of changes in science, and that it should include the evaluation principles of relevance, inclusiveness, objectivity, transparency, timeliness, verification, validation and peer review of information as appropriate.

**STAFF SUMMARY FOR AUGUST 7-8, 2019***For background only***15. STRATEGIC PLANNING****Today's Item****Information** ☒**Action** ☐

This is a standing agenda item for 2018-19 FGC meetings as FGC develops a new strategic plan. Today's discussion and potential action will take place in a workshop format, to receive input on a series of strategic planning questions that will help guide development of draft goals.

**Summary of Previous/Future Actions**

- |                                                    |                                  |
|----------------------------------------------------|----------------------------------|
| • First FGC strategic planning meeting             | Feb 22, 2018; Sacramento         |
| • Discussion of draft mission, vision, core values | Jun, Aug, Oct 2018; various      |
| • Adopted mission, vision, and core values         | Dec 12-13, 2018; Oceanside       |
| • Received updates                                 | Feb, Apr, Jun 2019; various      |
| • <b>Today's input on seven key questions</b>      | <b>Aug 7-8, 2019; Sacramento</b> |

**Background**

In anticipation of FGC's upcoming 150-year anniversary in 2020, a strategic planning process was initiated in early 2018 (see Exhibit 1 for background). In the first of a three-phase process, FGC reassessed its mission and vision, and developed a set of core values, in concert with staff and stakeholders. Adopted in Dec 2018, the revised mission, vision, and new core values (Exhibit 2) are serving to guide a forward-thinking update to the strategic plan.

In Jun 2019, staff reported that the second phase of the planning process was ramping up, to consist primarily of data gathering and synthesis with staff, stakeholders and commissioners. Staff has been reviewing strategic plans developed by other wildlife-focused organizations, assessing surveys conducted through other strategic planning processes, developing a series of questions for an online survey as well as in-person and phone interviews, and creating lists of participants for the survey and interviews. The information gathered during this phase will be analyzed and used to help guide development of draft goals for FGC consideration.

This agenda item will be held in a workshop format, where commissioners can receive input from members of the public on seven key questions:

1. Briefly describe, in a few words or sentences, how you and/or your organization perceive FGC.
2. What do you believe are FGC's three greatest strengths?
3. What are FGC's three areas in greatest need of improvement?
4. What are the three greatest opportunities available to FGC as it moves forward over the next five years?
5. What are the three greatest obstacles FGC is facing in the next five years?
6. In the next five years, what goals do you believe should be the highest priority for FGC?
7. What is your level of trust that FGC leaders are responsible stewards of the resources under their authority?



**STAFF SUMMARY FOR AUGUST 7-8, 2019**

*For background only*

This item will begin at 3:00 p.m. or 30 minutes after the last agenda item heard today, whichever is later.

**Significant Public Comments (N/A)**

**Recommendation**

**Exhibits**

1. Staff summary from Agenda Item 23, Strategic Planning, June 12-13, 2019 (for background only)
2. FGC mission, vision and core values, adopted Dec 13, 2018

**Motion/Direction (N/A)**

# **California Fish and Game Commission**

## **A Review of the Mission within the Strategic Planning Process**

*February 21, 2020*

### **Background**

California Fish and Game Code Section 101.5(a), enacted by statute in 1957, set a foundation for the role of the California Fish and Game Commission in establishing that *“The members of the Commission are expected to make complex public policy and biological decisions on behalf of the people of California”* in undertaking its expanding responsibilities, given the expanding size and diversity of California’s population, and the evolving scientific knowledge of habitat conservation and ecosystem-based management needs of wildlife.

Consistent with its mandates, the California Fish and Game Commission (Commission) has undertaken a strategic planning process to chart a strategic path for fulfilling its mandate. In December 2018, the Commission adopted a new mission statement, a vision statement, and six core values. The Commission expressed interest in reviewing the mission and vision statements following public input gathered throughout the process. Specifically, based on input received during a workshop, a public survey and individual interviews, in December 2019 the Commission expressed support for considering a more focused mission statement by reviewing those aspects of the mission statement already reflected in the six adopted core values (integrity, transparency, innovation, collaboration, excellence and stewardship).

This review of the Commission mission statement relative to the vision statement and core values, and samples of a refined mission, are derived from the public input received over the last six months as well as specific individual feedback and Commission staff input.

### **Mission Statement as Adopted in December 2018**

***The Mission of the California Fish and Game Commission***, in partnership with the California Department of Fish and Wildlife, is to provide leadership for transparent and open dialogue where information, ideas and facts are easily available, understood and discussed to ensure that California will have abundant, healthy, and diverse fish and wildlife that thrive within dynamic ecosystems, managed with public confidence and participation, through actions that are thoughtful, bold, and visionary in an ever-changing environment.

We recognize our responsibility to hold California’s fish and wildlife and their habitats in the public trust, as well as their cultural and intrinsic value, and therefore work collaboratively with other federal, tribal, state and local government agencies, non-governmental organizations and the people of California to establish scientifically-sound policies and regulations to protect, enhance and restore California’s native fish and wildlife in their natural habitats, and to secure a rich and sustainable outdoor heritage through both consumptive and non-consumptive activities for all generations to experience and enjoy.

### **Comparing the Mission’s Key Elements to Core Values and Vision Statement**

Are key elements comprising the mission encompassed within the vision and/or one of the Commission’s core values of *Integrity, Transparency, Innovation, Collaboration, Excellence, and Stewardship*? Key elements of the mission statement are identified in Table 1 and

compared to the Commission's core values and vision statement, showing how the ideas are already captured.

**Table 1: Key Elements of Mission Compared to Core Value and Vision Statement**

<b>Key Elements of Mission</b>	<b>Core Value or Vision</b>
<b>The Mission of the California Fish and Game Commission,</b>	N/A
in partnership with the California Department of Fish and Wildlife,	Collaboration
is to provide leadership for transparent and open dialogue where information, ideas and facts are easily available, understood and discussed	Transparency
to ensure that California will have abundant, healthy, and diverse fish and wildlife that thrive within dynamic ecosystems,	Stewardship, Vision
managed with public confidence and participation,	Integrity, Collaboration
through actions that are thoughtful, bold, and visionary in an ever-changing environment.	Innovation
We recognize our responsibility to hold California's fish and wildlife and their habitats in the public trust, as well as their cultural and intrinsic value,	Stewardship
and therefore work collaboratively with other federal, tribal, state and local government agencies, non-governmental organizations and the people of California	Collaboration
to establish policies and regulations that are scientifically sound	Excellence
and to protect, enhance and restore California's native fish and wildlife in their natural habitats	Stewardship, Vision
and to secure a rich and sustainable outdoor heritage for all generations to experience and enjoy through both consumptive and non-consumptive activities.	Stewardship, Vision

## Combining Select Key Elements

Stewardship is not only a core value, but also integral to the Commission's mandates. Staff suggests that combining phrases associated with stewardship, along with phrases not included in a core value or the vision statement, provides a solid starting point for considering a more focused "elemental" mission statement:

*The Mission of the Fish and Game Commission is to hold California's fish and wildlife and their habitats in the public trust, as well as for their cultural and intrinsic value, to establish policies and regulations that protect, enhance and restore California's native fish and wildlife in their natural habitats and to secure a rich and sustainable outdoor heritage for all generations to experience and enjoy through both consumptive and non-consumptive activities.*

## Developing Refined Versions for Commission Discussion

To help facilitate discussion and ideas about revising the mission statement, six sample versions distill down to greater or lesser degrees the elemental mission identified in the last section to provide increasing focus.

### ***Distilled Mission, Version 1***

To hold California's fish and wildlife and their habitats in the public trust, ~~as well as for their cultural and intrinsic value,~~ by establishing policies and regulations that protect, enhance and restore California's native fish, and wildlife, and ~~in their natural~~ habitats and to secure a rich and sustainable outdoor heritage all generations to ~~experience and~~ enjoy through both consumptive and non-consumptive activities.

### ***Distilled Mission, Version 2, Using Clean Version 1 as Baseline***

To hold California's fish, and wildlife ~~and their habitats~~ in the public trust by establishing policies and regulations that ~~protect, enhance and restore~~ both sustain its fish, wildlife, and habitats and foster to secure a rich and sustainable enduring outdoor heritage for all generations to enjoy. ~~through both consumptive and non-consumptive activities.~~

### ***Distilled Mission, Version 3***

To hold California's fish and wildlife in the public trust through adopting policies and regulations to both sustain fish and wildlife and ecosystems and foster a rich and enduring outdoor heritage for economic, social, and ecological values across generations.

### ***Distilled Mission, Version 4***

To protect, enhance, and provide access to California's fish, wildlife and ecosystems and foster a rich and enduring outdoor heritage for the people of California through complex policy and regulatory decisions.

### ***Alternate Mission, Version 5, Building on Section 101.5(a) Fish and Game Code Mandate***

To hold California's fish and wildlife in the public trust by making complex public policy and biological decisions on behalf of the people of California to protect and enhance California's fish and wildlife and ecosystems and secure a rich and enduring outdoor heritage for the benefit of all generations.

### ***Alternate Mission, Version 6***

To hold California's wildlife and their habitats in the public trust, engage the public who care about them, make complex public policy and biological decisions to ensure long-term sustainability, and manage human use for economic, social, and ecological values.

### **Next Steps**

Staff requests input on a potential, refined mission statement in order to bring you one or more proposals at the Commission's Apr 15-16, 2020 meeting. Staff also suggests requesting public feedback in the coming weeks on the ideas presented herein.

**California Fish and Game Commission**  
**Potential Draft Strategic Planning Goals for Discussion Only**  
**Compiled from Workshop, Public Survey and Interviews**  
*February 21, 2020*

Over the past year, the California Fish and Game Commission (Commission) has solicited public input on potential goals in support of its mission, for inclusion in an updated strategic plan. Input received through public workshops held concurrently with Commission meetings, an online public survey, and individual interviews, has been compiled by staff, including ideas specific to potential goals; a subset of those goal concepts is provided here to help support a discussion between the Commission and public.

**Goal Concepts Frequently Identified**

- Increase public engagement and diversify participation, to bring a broad range of ideas and opinions to inform decision-making
- Engage new audiences, marginalized stakeholders, and next generation
- Improve organizational effectiveness
- Increase readiness to respond to changing conditions, especially related to climate change
- Build resilience and greater adaptability into policies and regulations
- Champion new fisheries management strategies that better meet California's needs on a community level
- Create greater awareness of the Commission's work

**Other Potential Goal Concepts**

- Provide sufficient time for decision-making and better explain decisions
- Provide economic opportunities where feasible
- Explore community-based fishing access
- Seek continual improvement in programs and quality of services
- Source and deploy sufficient resources to achieve mission
- Build stronger relationships with other agencies, tribes, non-governmental organizations and the public
- Provide strategic leadership for planning and management
- Increase capacity and reach effectiveness through strategic partnerships and collaborations
- Strengthen and broaden engagement with agencies, governments, and new/diverse stakeholders
- Focus on areas where Commission has authority and can have the biggest impact
- Champion opportunities for historical user groups
- Promote a healthy economy and healthy fish and wildlife resources

- Promote a sustainable economy through sustainable hunting, fishing, recreating and other wildlife-related activities.
- Fulfill public trust responsibilities
- Enhance (responsible) stewardship of the Commission's decision-making and public engagement process
- Engage in strategies to allow us to be more effective and increase operational performance
- Seek to balance effectiveness and efficiency
- Increase and diversify public use and enjoyment
- Increase adaptability and flexibility in management and develop implementing regulatory framework
- Increase use of science in decision-making while honoring the role of cultural values and policy objectives
- Increase wildlife and lands conservation – be more proactive

# CALIFORNIA FISH AND GAME COMMISSION PETITIONS FOR REGULATION CHANGE - ACTION

Revised 2/14/2020

FGC - California Fish and Game Commission   DFW - California Department of Fish and Wildlife   WRC - Wildlife Resources Committee   MRC - Marine Resources Committee

Grant: FGC is willing to consider the petitioned action through a process   Deny: FGC is not willing to consider the petitioned action   Refer: FGC needs more information before deciding whether to grant or deny

Tracking No.	Date Received	Name of Petitioner	Subject of Request	Short Description	FGC Receipt Scheduled	FGC Action Scheduled	Staff Recommendation	Marine or Wildlife?
2019-022	10/21/2019	Tony Barcellos	Multi-day fishing trip	Request to change section 27.15 to say "as long as each person didn't catch over [their] daily limit came in to dock [fillet their] fish and placed it on ice in a cooler, then person would not be in violation for over limit"	12/11-12/2019	2/21/2020	DENY; Allowing a person to possess more than one daily bag limit would create significant enforcement challenges, such as how to determine when and how many fish were taken by a person in possession of multiple limits of fish.	Marine
2019-023	10/25/2019	Karl Gene Kerster	Allow raven hunting	Add ravens to crows to hunt them both for the same season. Change "\$485. American Crow." to read "\$485. American Crow and Raven."	12/11-12/2019	2/21/2020	DENY; With the exception of American Crow, no federal regulations allow the hunting of these bird species. 50 CFR 21.43 allows take of these species when the are causing damage to crops or other property only.	Wildlife
2019-024	10/25/2019	Karl Gene Kerster	Allow hunting of certain birds	Add hunting of blackbirds, cowbirds, grackles, crows, and magpies.	12/11-12/2019	2/21/2020	DENY; With the exception of American Crow, no federal regulations allow the hunting of these bird species. 50 CFR 21.43 allows take of these species when the are causing damage to crops or other property only. Crow hunting is currently permitted in California.	Wildlife
2019-025	11/15/2019	Thomas Wheeler	Consider non-lethal beaver deterrence and listed species impacts in depredation permit issuance	Propose changing the regulations concerning the take of beavers by requiring landowners to exhaust feasible non-lethal deterrence before killing and removing beavers, and require DFW to consider of impacts to listed species from issuance of a depredation permit.	12/11-12/2019	2/21/2020	REFER to DFW for review and recommendation.	Wildlife
2019-026 AM 1	11/22/2019	Stanley Backlund	Caples Creek trout bag limits	Revise the bag limit for fishing on Caples Creek in El Dorado County to apply the winter regulations year round, thereby reducing the summer take from five fish to zero fish.	12/11-12/2019	2/21/2020	DENY; this area is already under consideration in the draft simplification of statewide inland sport fishing regulations rulemaking under WRC review. Petitioner has been referred to that process.	Wildlife



Tracking Number: 2019-022

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, 1416 Ninth Street, Suite 1320, Sacramento, CA 95814 or via email to FGC@fgc.ca.gov. Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or FGC@fgc.ca.gov.

### SECTION I: Required Information.

Please be succinct. Responses for Section I should not exceed five pages

**1. Person or organization requesting the change (Required)**

Name of primary contact person: TONY Brasil Barcellos

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

Email address: N/A

**2. Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: Section 1.17, 200, 205, 265 Fish and Game Code and Section 27.15, 200, 205, 209, 265, 275 Fish and Game Code

**3. Overview (Required)** - Summarize the proposed changes to regulations: I'd like the Fish and Game Commission to change Section 27.15 Multi day fishing trips to as long as each person didn't catch over his daily limit, come in to dock filled his fish and placed it on ice in a cooler the person would not be in violation for over limits.

**4. Rationale (Required)** - Describe the problem and the reason for the proposed change: The problem is as I explained in my letter dated July 3, 2019. Because we live over one hundred miles from the Ocean we would like to fish for more than one day, come in to dock, and stay for the next day.





## SECTION II: Optional Information

5. **Date of Petition:** Oct. 15, 2019
6. **Category of Proposed Change**  
☐ Sport Fishing  
☐ Commercial Fishing  
☐ Hunting  
☐ Other, please specify: \_\_\_\_\_
7. **The proposal is to:** (To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)  
☒ Amend Title 14 Section(s): \_\_\_\_\_  
☐ Add New Title 14 Section(s): \_\_\_\_\_  
☐ Repeal Title 14 Section(s): \_\_\_\_\_
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** \_\_\_\_\_  
Or ☐ Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency: The desired date for the change on the regulation would be for the year 2020-2021.
10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: I'm attaching a copy of my letter dated July 3, 2019 addressed to The California Fish and Game Commission.
11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: \_\_\_\_\_
12. **Forms:** If applicable, list any forms to be created, amended or repealed: \_\_\_\_\_



RECEIVED  
FISH AND GAME  
COMMISSION

2019 OCT 21 PM 1:3

**SECTION 3: FGC Staff Only**

Date received: \_\_\_\_\_

FGC staff action:

- ☐ Accept - complete
- ☐ Reject - incomplete
- ☐ Reject - outside scope of FGC authority

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- ☐ Denied by FGC
- ☐ Denied - same as petition: \_\_\_\_\_  
Tracking Number
- ☐ Granted for consideration of regulation change

July 3, 2019  
Tony & Elvis Barcellos

To the California Fish And Game Commission.

My Son Elvis, and I went fishing off Morro Bay Harbor December 28, 2018 thru December 30, 2018. On December 28, we each caught 9 rockfish, we filleted the fish, and placed the fish in a ziplock bag then placed the fish on ice in the cooler in the truck.

On December 29, we went out fishing again, we each caught 9 rockfish, and 1 legal lingcod, and repeated the same process as on the previous day. On December 30, went out fishing again and we each caught 10 rockfish and 4 legal lingcod. On this day a fish and game warden, asked my son Elvis if we had any fish in the truck, my son told him yes, from the previous two days. We told the warden we lived over one hundred miles from Morro Bay, and that the way we read the regulations on the book, that the over limits pertained to in the boat.

The warden decided to write each one of us a citation. I would like to ask the Commission to consider changing 14CCR 27.15. Multi-Day Fishing Trips, to allow keeping the fish for each separate day as long as one didn't catch over the legal limit for each day, I would appreciate your consideration, and your correspondence.

Sincerely Yours  
Tony Barcellos



Tracking Number: (2019-023)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to FGC@fgc.ca.gov. Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or FGC@fgc.ca.gov.

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: Karl Gene Kerster

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

### **2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: Title 14**

### **3. Overview (Required) - Summarize the proposed changes to regulations: Add ravens to crows to hunt them both for the same season. Change §485. American Crow. To read §485. American Crow And Raven**

### **4. Rationale (Required) - Describe the problem and the reason for the proposed change: Ravens can be highly destructive to native wildlife including, but not limited to desert tortoises, and ducks. Adding ravens to the crow season would or could facilitate a significant, cost-effective method to use hunters and hunting to manage ravens as needed in a non-political and nimble way. Additionally, it would make moot any concern of ravens being incorrectly identified as crow, by people who are hunting crows, because it would be permissible to hunt either species. Raven breast is exceptional fair on the grill on a par with sandhill crane.**

## **SECTION II: Optional Information**

### **5. Date of Petition: 10/24/2019**

### **6. Category of Proposed Change**

☐ Sport Fishing



- ☐ Commercial Fishing  
☒ Hunting  
☐ Other, please specify:

7. **The proposal is to:** (*To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>*)  
☒ Amend Title 14 Section(s) §485. American Crow.  
☐ Add New Title 14 Section(s):  
☐ Repeal Title 14 Section(s):
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**  
Or ☒ Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency: July 1, 2020
10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents:
11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: This proposal, if enacted, could solve a management problem dealing with ravens without any cost to the CDFW. Hunters would have the pleasure of eating these large and tasty birds.
12. **Forms:** If applicable, list any forms to be created, amended or repealed:

### SECTION 3: FGC Staff Only

Date received: [Received by email on Friday, October 25, 2019 at 9:52 AM.](#)

FGC staff action:

- ☐ Accept - complete  
☐ Reject - incomplete  
☐ Reject - outside scope of FGC authority

Tracking Number 2019-023

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- ☐ Denied by FGC  
☐ Denied - same as petition \_\_\_\_\_

Tracking Number



State of California – Fish and Game Commission

**PETITION TO THE CALIFORNIA FISH AND GAME COMMISSION FOR REGULATION CHANGE**

FGC 1 (Rev 06/19) Page 3 of 3

☐ Granted for consideration of regulation change

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**From:** FGC  
**Sent:** Friday, November 8, 2019 2:25 PM  
**To:** Kinchak, Sergey@FGC  
**Cc:** Cornman, Ari@FGC  
**Subject:** Fw: Addendum to petitions from Karl G Kerster

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**From:** Karl Kerster [REDACTED]  
**Sent:** Friday, November 8, 2019 11:26 AM  
**To:** FGC <FGC@fgc.ca.gov>  
**Subject:** Addendum to petitions from Karl G Kerster

In regard to the two petitions I submitted recently:  
I request to waive time requirements for both petitions.  
I appear to have submitted incomplete documentation regarding the  
**Rulemaking Authority** section.

For the Raven/Crow petition please include: Authority cited: Sections 355, 356, 3004.5 and 3800, Fish and Game Code. Reference: Sections 355, 356, 3004.5 and 3800, Fish and Game Code.

For the depredation species petition please include:

Authority cited: Sections 200, 265, 1050, 3960.2, 4150, 4181 and 4181.5, Fish and Game Code.  
Reference: Sections 3003.1, 3960, 3960.2, 4150, 4152, 4181 and 4181.5, Fish and Game Code.

Thank you,  
Karl Gene Kerster





Tracking Number: (2019-024)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, (physical address) 1416 Ninth Street, Suite 1320, Sacramento, CA 95814, (mailing address) P.O. Box 944209, Sacramento, CA 94244-2090 or via email to FGC@fgc.ca.gov. Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or FGC@fgc.ca.gov.

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: Karl Gene Kerster

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

### **2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: Title 14**

### **3. Overview (Required) - Summarize the proposed changes to regulations: Add hunting of all birds that are listed for federal standing order of depredation.**

### **4. Rationale (Required) - Describe the problem and the reason for the proposed change: Federal depredation order § 50CFR21.43: § 21.43 Depredation order for blackbirds, cowbirds, grackles, crows and magpies. These birds should be legal for hunters to intentionally hunt since they are killed anyways.**

## **SECTION II: Optional Information**

### **5. Date of Petition: 10/24/2019**

### **6. Category of Proposed Change**

☐ Sport Fishing

☐ Commercial Fishing

☒ Hunting

☐ Other, please specify:





7. **The proposal is to:** (*To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>*)
- ☐ Amend Title 14 Section(s):
- ☒ Add New Title 14 Section(s): Hunt birds that are currently under depredation orders
- ☐ Repeal Title 14 Section(s):
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**  
Or ☒ Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency: 07/01/2020
10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: § 21.43 Depredation order for blackbirds, cowbirds, grackles, crows and magpies. A Federal permit shall not be required to control yellow-headed redwinged, rusty, and Brewer's blackbirds, cowbirds, all grackles, crows, and magpies, when found committing or about to commit depredations upon ornamental or shade trees, agricultural crops, livestock, or wildlife, or when concentrated in such numbers and manner as to constitute a health hazard or other nuisance: Provided: (a) That none of the birds killed pursuant to this section, nor their plumage, shall be sold or offered for sale, but may be possessed, transported, and otherwise disposed of or utilized.
11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: Cost savings for the CDFW. Sporting opportunities for hunters.
12. **Forms:** If applicable, list any forms to be created, amended or repealed:

### SECTION 3: FGC Staff Only

Date received: [Received by email on Friday, October 25, 2019 at 9:52 AM.](#)

FGC staff action:

- ☐ Accept - complete
- ☐ Reject - incomplete
- ☐ Reject - outside scope of FGC authority

Tracking Number 2019-024

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- ☐ Denied by FGC



State of California – Fish and Game Commission

**PETITION TO THE CALIFORNIA FISH AND GAME COMMISSION FOR REGULATION CHANGE**

FGC 1 (Rev 06/19) Page 3 of 3

☐ Denied - same as petition \_\_\_\_\_

Tracking Number

☐ Granted for consideration of regulation change

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**From:** FGC  
**Sent:** Friday, November 8, 2019 2:25 PM  
**To:** Kinchak, Sergey@FGC  
**Cc:** Cornman, Ari@FGC  
**Subject:** Fw: Addendum to petitions from Karl G Kerster

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**From:** Karl Kerster [REDACTED]  
**Sent:** Friday, November 8, 2019 11:26 AM  
**To:** FGC <FGC@fgc.ca.gov>  
**Subject:** Addendum to petitions from Karl G Kerster

In regard to the two petitions I submitted recently:  
I request to waive time requirements for both petitions.  
I appear to have submitted incomplete documentation regarding the  
**Rulemaking Authority** section.

For the Raven/Crow petition please include: Authority cited: Sections 355, 356, 3004.5 and 3800, Fish and Game Code. Reference: Sections 355, 356, 3004.5 and 3800, Fish and Game Code.

For the depredation species petition please include:

Authority cited: Sections 200, 265, 1050, 3960.2, 4150, 4181 and 4181.5, Fish and Game Code.  
Reference: Sections 3003.1, 3960, 3960.2, 4150, 4152, 4181 and 4181.5, Fish and Game Code.

Thank you,  
Karl Gene Kerster



Tracking Number: (2019-025)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, 1416 Ninth Street, Suite 1320, Sacramento, CA 95814 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: Thomas Wheeler, Environmental Protection Information Center (EPIC)  
Address: 145 G St., Ste. A, Arcata, CA 95521  
Telephone number: (707) 822-7711  
Email address: [tom@wilcalifornia.org](mailto:tom@wilcalifornia.org)

Additional Co-Petitioners: Center for Biological Diversity, Occidental Arts and Ecology Center, Northcoast Environmental Center, Safe Alternatives for our Forest Environment,

### **2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: FGC 200, 203, 1050, 4009.5, 4180, 4181**

### **3. Overview (Required) - Summarize the proposed changes to regulations:**

Petitioners propose changing the regulations concerning the taking of beaver in the state to better reflect the beaver's unique ecological importance by clarifying the circumstances under which the California Department of Fish and Wildlife may issue a depredation permit for beavers. The proposed changes would require landowners to exhaust feasible non-lethal deterrence before killing and removing beavers, and require the Department to consider impacts to listed species from issuance of a depredation permit. The suggested changes not only better recognize the unique and valuable role beavers play in aquatic ecosystems, but also helps to shield the state against litigation and better aligns California's rules with those of other states.

## **Amend 14 CCR 401**

### **§ 401. Issuance of Permit to Take Animals Causing Damage.**

(a) Application. A person who is a property owner or tenant may apply to the department for a permit to take elk, bear, bobcat, beaver, wild pigs, deer, wild turkeys, or gray squirrels that are damaging or



destroying, or immediately threatening to damage or destroy, land or property. A bobcat in the act of injuring or killing livestock may be taken immediately provided the property owner or tenant applies for a permit from the department the next working day following the take.

(b) Permit Period.

(1) Permits issued pursuant to this section for beaver, wild pigs, or gray squirrels shall be valid for a period not to exceed one year.

(2) Permits issued pursuant to this section for bobcat, elk, bear, wild turkey, or deer shall be valid for a period not to exceed 60 consecutive days.

(3) Permits issued pursuant to this section authorizing the use of dogs for bear or bobcat shall authorize no more than three dogs and shall be valid for a period not to exceed 20 consecutive days.

(4) Permits may be renewed if damage or threatened damage to land or property continues to exist.

(c) Required Information and Conditions of Permit.

(1) The department shall collect the following information before issuing a depredation permit:

(A) The name, mailing address, and contact information of the property owner, including telephone, facsimile, and email. If the owner is a business entity, contact information for the person acting on behalf of the business.

(B) The name, mailing address, and contact information of the tenant (if applicable), including telephone, facsimile, and email.

(C) The name, mailing address, and contact information of any dog handlers or agents as described in subdivision (e), including telephone, facsimile, and email.

(D) The county and address of the location of the damage caused by depredation, or the nearest landmark or cross streets.

(E) A full description of the land or property damaged, destroyed, or immediately threatened, and the date the damage or threat occurred.

(F) The species suspected of damaging, destroying, or threatening land or property, and the method of identifying the species.

(G) A description of all non-lethal or less-lethal measures undertaken to prevent damage caused by animals prior to requesting the permit.

(H) A description of corrective actions that will be implemented to prevent future occurrence of the damage.

(I) The proposed method of take.

(J) Whether dogs will be used to pursue or take the animal, and if so, why dogs are needed, and the number of dogs to be used.

(2) The department may add terms and conditions to the permit necessary to protect wildlife and ensure public safety. To be valid, the permit shall contain a statement signed by the applicant that he/she has read, understands, and agrees to be bound by all the terms of the permit.

(3) The department may not issue any permit that would authorize activities that would violate federal, state or local law.

(4) For the taking of beaver, the department may issue a permit only if the department finds that the applicant has used at least one non-lethal deterrence or mitigation method prior to issuance of the permit, unless the department finds that exigent circumstances, such as a risk to human safety, require immediate lethal action. Non-lethal methods include, but are not limited to, wrapping trees, fencing, flow control devices, and other beaver deterrence. If the permit would remove beaver or their dams in areas occupied by endangered or threatened salmonids or other state or federally-listed species dependent on freshwater habitats maintained by beaver, the department shall analyze impacts to such species, document its findings in a report to accompany the permit, and include mitigation measures to eliminate harm to such species.

(d) Methods of Take.



(1) Animals taken pursuant to a permit may be taken in any legal manner except as herein provided and in accordance with the provisions of Section 465.5 of these regulations. Permits to take deer shall include conditions that comply with Fish and Game Code section 4181.5. Permits to take bear and bobcat with dogs shall include conditions that comply with Fish and Game Code Section 3960.2. No steel-jawed leghold traps may be used to take mammals, and no iron-jawed or any type of metal-jawed traps may be used to take squirrels or bears. No poison may be used. The department may specify the caliber and type of firearm and ammunition, archery equipment or crossbow to be used. The department may require that a permittee take animals alive by the use of live traps.

(2) The permittee and/or agent shall ensure that all animals are killed in a humane manner instantly and prevent any injured animal from escaping.

(e) Government Employees and Designated Agents.

(1) An employee of a federal, State, or local government agency or local district with responsibilities including but not limited to animal control, animal damage control, irrigation, flood, or natural resource reclamation, while acting in his/her official capacity may take depredating animals on the property designated in a permit issued pursuant to this section.

(2) The permittee may designate up to three other persons, including any dog handler who will be utilized in any pursuit, as his/her agents to take animals under the terms of the permit. A designated agent shall be any person who is acting under the direction and control of the permittee and who is 21 years of age or older. The designated agent(s) shall be named on the permit. The permittee may substitute designated agents with prior written approval of the department.

(f) Persons Prohibited from Taking Animals. No person shall take animals pursuant to the permit if he/she has been convicted of a violation related to the take or possession of game or furbearing mammals in the past 24 months or if he/she is on probation and may not hunt or possess a firearm as part of the terms of probation. A landowner who is on probation and may not hunt or possess a firearm as part of the terms of probation shall designate a qualified agent to take animals under a permit.

(g) Reports Required.

(1) Holders of permits authorizing take of wild pigs shall provide a report listing the date and sex of each wild pig taken. A report shall be submitted whether or not any animals were taken. The reporting period shall be by calendar month. The permittee or designated agent shall complete and submit the report to the department on or before the 15th day of the following month. Reports shall be submitted to the address provided by the department.

(2) Holders of permits authorizing the use of dogs to take bear or bobcat shall comply with the requirements of Fish & Game Code section 3960.2 and shall submit a report to the department within 30 days of permit issuance. Reports shall be submitted to the address provided by the department. Reports shall include the following information:

(A) Date of kill and the sex of any bear or bobcat that was killed.

(B) Details regarding all pursuits, including any information about a pursued bear or bobcat, even if the animal was not killed.

(C) An explanation of why any pursued bear or bobcat was not killed, and whether such bear or bobcat was harmed.

(3) Holder of permits authoring take of beavers shall provide a report documenting whether associated natural structures, such as beaver dams, were removed, destroyed, or otherwise altered.

(h) Tagging Animals. All animals taken pursuant to a permit, except wild pigs, shall be immediately tagged with tags provided by the department. Wild pigs shall be tagged prior to being transported from the property designated in the permit. Tags for animals except wild pigs shall be completed at the time the animal is taken. Tags for wild pigs shall be completed before the wild pigs are removed from the property. Tags shall clearly show the permittee's name, address, date and location the animal was taken and shall include the signature of the person taking the animal. The report portion of each tag shall be



mailed to the department without delay. No tags are required for squirrels or beavers.

(i) Utilization of Carcass. Animals taken pursuant to this permit must be disposed of as required in the permit. No animals, except wild pigs, may be utilized by the permittee or designated agent. The permittee or designated agent may leave the carcass of any wild pig where it was taken for reasons of high air temperatures, disease, parasites, or conditions which preclude use of the carcass. A person who makes every reasonable attempt to utilize the carcass of any wild pig as required in this subsection shall be deemed to be in compliance with Section 4304 of the Fish and Game Code. (1) After any taking of bear, the permittee or agent shall comply with Section 367.5 of these regulations, except the skull shall not be returned to the permittee or agent.

(j) Suspension and Revocation of Permits.

(1) Permits may be suspended temporarily by the director for a breach or violation of the permit by the holders thereof, their agents, servants, employees or any person acting under their direction and control. The commission shall be notified of any such suspension and subsequently may revoke or reinstate the permit, or fix the period of its suspension, after written notice to the permittee and the permittee has been afforded an opportunity to be heard.

(2) Any person who has had his/her permit revoked or suspended by the commission shall be required, upon application for a new or subsequent permit, to appear before the commission and demonstrate to its satisfaction that the use of such a permit will be consistent with depredation control, with these regulations, and with the laws under which they are promulgated.

(k) It is unlawful for a permittee or agent to violate any of the terms or conditions of a permit issued pursuant to this section.

(l) The permit does not invalidate any city, county, or state firearm regulation.

#### **4. Rationale (Required) - Describe the problem and the reason for the proposed change:**

The North American beaver (*Castor canadensis*) is native to California. Accordingly, the flora and fauna of the state have co-evolved with the beaver, developing unique and complex interwoven relationships. Beavers, however, are currently missing from much of their historic range and the effects of their absence are felt by the species that co-evolved with beavers. Beaver create freshwater habitats used by a variety of wildlife, including fish, birds, and other mammals. Their dams filter stream water, improve water quality, raise the water table, increase water storage, and repair eroded riparian areas. In particular, beavers have a significant beneficial relationship to many species currently listed as threatened or endangered under the California Endangered Species Act and/or the federal Endangered Species Act, such as coho salmon. The proposed amendments to the regulations recognize the unique ecological importance of beavers and take steps towards promoting our co-existence with beavers by prohibiting the commercial trapping of beavers, and by requiring that non-lethal or less-lethal measures have been taken to avoid and minimize conflicts with humans. The proposed regulations are in line with how many other states now manage beavers.

#### ***Beavers are Biologically Important to California***

Beavers are native to much of California, from arid desert streams, to high mountain meadows, to coastal forests. California's beavers were nearly extirpated from the state by over trapping. Although some attempts have been made to reintroduce beavers or assist in their dispersal, beavers remain missing from much of their historic territory, in particular northern California coastal streams and high mountain meadows where the benefits of beavers may be most acutely felt.





The total impact of beavers to the hydrologic characteristics of streams is difficult to overestimate. Beaver dams increase in-stream storage capacity, which in turn has been shown to result in greater summer flows, even going so far as to result in continual flow in previously seasonal streams. Impoundment of water also has been shown to stabilize water temperatures. Beaver dams slow stream flow resulting in increased sedimentation, thereby raising incised channels to the point where streams are reconnected to their historic floodplains.

Beaver dams are so ecologically important that watershed restoration groups are now turning to “beaver dam analogs,” human engineered approximations of beaver dams, to provide the same ecological functions. Unlike beaver dams, continual human maintenance—and cost—is required.

Broadly, the presence of beaver has been shown to increase bird, fish, invertebrate, amphibian and mammalian abundance and diversity. Turning specifically to native fish species, the overall net effect of beavers is positive, as many of these hydrologic changes associated with beaver dams benefit fish. Over 80 species of North American fish have been documented using beaver ponds; 48 of which commonly use beaver pond habitats. The slow current and large surface to edge ratio has been shown to increase vegetation and aquatic invertebrates, providing substantially improved forage compared to unimpounded streams. The slow current also requires less expense of energy for fish. Turning specifically to coho salmon, the effects of these changes are perhaps most pronounced. For overwinter use, coho salmon use side channel habitat influenced by beaver dams at a higher density, and were larger and had a better juvenile survival rate than juvenile salmon in side channels not impacted by beavers. Similarly, beaver dams are important during the summer, as are salmon who were found upstream of beaver dam were not only consistently larger, but also occurred there in higher densities. One study found, for example, that though these upstream reaches accounted for less than 1% of the total available habitat, these dam-influenced areas contained over a third of the total juvenile salmon for the entire watercourse.

Beavers also have been shown to have positive benefits to other species. Beaver dams are associated with increased riparian habitat, such as willow. This willow serves as important habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell’s vireo (*Vireo bellii pusillus*). Tidewater goby (*Eucyclogobius newberryi*), listed as “endangered” under the Endangered Species Act, has been shown to utilize both inundated areas behind beaver dams and bank burrows made by beavers. (USFWS 2005). Beaver dams are thought to provide important refugia for endangered California red-legged frogs (*Rana draytonii*) and western pond turtles (*Actinemys marmorata*), a “species of special conservation concern” in California.

### ***New Regulations Pose Minimal Hardship for Landowners***

In some places, beavers can conflict with human uses of the landscape, as dams can cause flooding for adjacent lands. Additionally, beavers may remove some riparian vegetation or may alter the structure or composition of riparian areas in a way that is undesirable to a landowner. As the rules are currently written, it is too easy to obtain a permit to take beaver through a depredation permit, thereby discouraging non-lethal deterrence. The proposed rulemaking would not prohibit lethal removal of beavers but it would ensure that beavers are taken (killed) only when necessary, after non-lethal measures have been attempted. Further, the rules would still allow for the lethal removal of beaver if exigent circumstances require their removal.

Coexistence with beavers is often possible with minimal effort by landowners. Many beavers are removed because of the dams that they produce impound areas with water against the wishes of property





owners. A variety of devices and techniques have been developed to reduce impoundment and flooding. Beavers are also taken because of impacts to vegetation adjacent to waterways. This vegetation can easily be protected with hardware cloth or welded wire mesh wrapped around the base of the tree. The Department maintains a guide on “Living with Beavers,” which is attached to this petition, that discusses many of the ways humans can co-exist with beavers.

### ***Proposed Regulations Insulate State Against Litigation***

The proposed rulemaking also insulates the Department against potential litigation under the Endangered Species Act (ESA). In issuing permits to allow the taking of beavers, the Department may violate the ESA if such taking would, in turn, take any other species subject to the Endangered Species Act’s take prohibition. By making clear that the Department is unable to authorize the taking of beavers if such taking would result in the violation of the ESA or any other law and by requiring the Department to conduct a site-specific investigation of potential impacts, the Department will avoid future litigation.

As it relates here, the ESA prohibits any person, including state and local governments, from “tak[ing] any [endangered or threatened] species within the United States or the territorial sea of the United States.” 16 U.S.C. § 1538(a) (1) (B). In addition, the ESA makes it unlawful for any person “to attempt to commit, solicit another to commit, or cause to be committed, any offense defined” in the ESA. *See* 16 U.S.C. § 1538(g). The term “‘take’ means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” § 1532(19). In turn, “[t]ake’ is defined...in the broadest possible manner to include every conceivable way in which a person can ‘take’ or attempt to ‘take’ any fish or wildlife.” S.Rep. No. 93-307, at 7 (1973); *see also Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687 (1995) (citing Senate and House Reports indicating that “take” is to be defined broadly). Pursuant to 16 U.S.C. § 1538(g), “It is unlawful for any person to...cause to be committed[] any offense defined in this section,” which includes the taking of a protected species. The Department, in issuing permits, is subject to the Act’s prohibition on authorizing take.

As the First Circuit Court of Appeals found in *Strahan v. Cox*, “The statute not only prohibits the acts of those parties that directly exact the taking, but also bans those acts of a third party that bring about the acts exacting a taking.” *Strahan v. Cox*, 127 F.3d 155, 163 (1st Cir. 1997) cert. den. 525 U.S. 830 (1998). This includes situations where a government authorizes another to conduct activities that would result in a violation of the act. In *Strahan*, the court found Massachusetts officials liable under the ESA for licensing commercial fishermen who employ methods known to harm listed whales.<sup>1</sup>

The proposed regulation would make clear the Department’s obligation to deny any permit application that may cause the taking of any listed species or may otherwise cause a violation of federal, state, or local laws. Furthermore, it directs the Department to make a finding on impacts to listed species if lethal removal may adversely impair a listed species. Lastly, the proposed regulations would require a report if a beaver dam were to be removed.

### ***Proposed Regulations are Consistent with Regulations in Other States***

<sup>1</sup> The First Circuit is not alone. A long-line of “*Strahan-take*” cases have been upheld in courts across the country, including in California. *See Coalition for a Sustainable Delta v. McCamman*, 725 F. Supp. 2d 1162, 1167–68 (E.D. Cal. 2010) (recognizing that state regulating agencies may be held liable for take under the ESA, but holding there were disputes of material fact regarding whether the striped bass sportfishing regulations at issue caused take of listed salmonids).



In recognizing the unique biological importance of beavers and limiting their take to reduce impacts on the environment, California would join many other states who have come to recognize the importance of beaver in restoring and preserving healthy aquatic ecosystems. Massachusetts, for example, requires individuals to apply to remove beavers and limits their removal when beavers are causing material harm or when they pose a threat to human health or safety. Further, if removal of beavers, dams, or the de-watering of ponds may impact listed species, applicants have to seek other separate advance approval from the state. As another example, New York requires a site-specific consideration of local beaver populations and requires the state to inform applicants of the positive ecological benefits of beavers and alternatives to trapping prior to issuance of a depredation permit.

## **SECTION II: Optional Information**

**5. Date of Petition:**

**6. Category of Proposed Change**

- ☐ Sport Fishing
- ☐ Commercial Fishing
- ☐ Hunting
- ☒ Other, please specify: Depredation permit issuance

**7. The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

- ☒ Amend Title 14 Section(s): 401
- ☐ Add New Title 14 Section(s):
- ☐ Repeal Title 14 Section(s):

**8. If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**

Or ☒ Not applicable.

**9. Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency:

**10. Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: "Living with Beavers, produced by the California Department of Fish and Wildlife, is attached to this petition. .

**11. Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: The state already created resources on non-lethal methods of dealing with beavers, and the costs of implementing those methods on site will be the responsibility of the applicant. The proposed regulatory changes would likely result in fewer permit applications, reducing the need for processing and oversight of permits issued by the agency. If the



agency continues to issue permits to kill beavers in areas occupied by listed species that depend upon beavers, however, more resources may be required to analyze, document, and mitigate impacts to listed species.

**12. Forms:** If applicable, list any forms to be created, amended or repealed:

### **SECTION 3: FGC Staff Only**

Date received: [Received by email on Friday, November 15, 2019 at 10:51 AM.](#)

FGC staff action:

- ☐ Accept - complete
- ☐ Reject - incomplete
- ☐ Reject - outside scope of FGC authority

Tracking Number 2019-025

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- ☐ Denied by FGC
- ☐ Denied - same as petition \_\_\_\_\_
- ☐ Granted for consideration of regulation change

Tracking Number

# Living with Beavers

The American Beaver (*Castor canadensis*) is the largest living rodent in North America, with adults averaging 40 pounds in weight and measuring more than 3 feet in length, including the tail. These semi-aquatic mammals have webbed hind feet, large incisor teeth, and a broad, flat tail (Figures 1 and 2).

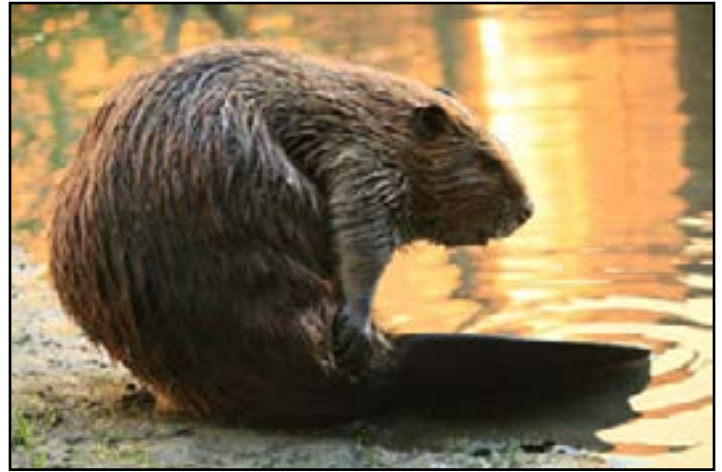


Figure 1. Photo by Cheryl Reynolds and courtesy of Worth A Dam

Once among the most widely distributed mammals in North America, beavers were eliminated from much of their range in the late 1800s because of unregulated trapping and loss of suitable habitat. Beaver are native to California and historically occurred along the coast, throughout the Central Valley, Colorado River basin, and into the Sierra Nevada and Cascades mountain ranges. However, by the early the 20th century their geographic range had decreased dramatically as a result of intensive fur-trapping and loss of suitable habitat caused by extensive land and water development. Between 1923 and 1950, the State of California conducted a successful reintroduction program using parachutes in some instances to plant beavers in remote mountain locations (Hensley 1946). Today, interest in beavers in California is on the rise as the benefits to fish and wildlife habitat, surface water storage and ground water recharge become more apparent during drought conditions.

## Life History

Beavers are monogamous and mate for life. Females reach sexual maturity at 1.5 to 3 years of age and will typically birth 1-4 or more kits per year, depending on habitat quality and the availability of food. Beavers typically breed only once per year during the winter months, giving birth to kits in late spring, though significant variation occurs depending on latitude and climate (Baker and Hill 2003).

Beavers maintain family units which consist of an adult breeding pair, young of the year and young from the previous year. Sometimes, when habitat quality is poor or population levels are near their carrying capacity, older offspring will remain with the family unit for more than 2 years.

Beavers are strict herbivores and they generally prefer grasses, leaves, and aquatic plants such as cattails, bulrushes, and water lilies. Fermentation by special intestinal microorganisms allows beavers to digest 30 percent of the cellulose they ingest. In the fall and winter, they feed primarily on the bark and cambium of trees and shrubs. Aspen, cottonwood, willow and alder are preferred woody species in California. Beavers sometimes consume growing crops, and in some cases may travel 100 yards or more from a pond or stream to reach corn fields, soybean fields, and other growing crops. In these cases they generally cut the plants off at ground level and drag them back to the water.

Beavers do not hibernate. When the surface of the water is frozen, beavers eat bark and stems from a food “cache” they have anchored to the bottom of the waterway for the winter. They have also been seen swimming under the ice to retrieve roots and stems of aquatic plants. They are generally nocturnal, but it is not uncommon to see beavers during daylight hours, particularly in larger water bodies. They generally do not stray far from the relative safety of water.



## Viewing Beavers

Look for signs of beavers during the day; look for the animals themselves before sunset or sunrise. Approach a beaver site slowly and downwind. (Beavers have poor eyesight but excellent hearing and sense of smell.) Look for a V-shaped series of ripples on the surface of calm water. A closer view with binoculars may reveal the nostrils, eyes, and ears of a beaver swimming.



**Figure 2.** Beaver at French Creek, Siskiyou County. Photo by M. Stapleton.

If you startle a beaver and it goes underwater, wait quietly in a secluded spot and chances are that it will reemerge within one or two minutes. However, beavers are able to remain underwater for at least 15 minutes by slowing their heart rate.

When seen in the water, beavers are often mistaken for muskrats. Try to get a look at the tail: Beavers have a broad, flat tail that doesn't show behind them when swimming, whereas muskrats have a thin tail that is either held out of the water or sways back and forth on the water's surface as the animal swims.

Beavers stand their ground and should not be closely approached when cornered on land. They face the aggressor, rear up on their hind legs, and hiss or growl loudly before lunging forward to deliver extremely damaging bites.

## Wildlife Habitat Benefits

Beavers are well known for their construction efforts. They create dams and lodges for shelter and protection, largely with woody material. The woody material used in construction is either gathered from the ground locally, or from small and medium sized trees that the beavers fell with their teeth (Figures 4 and 5). The orange tooth enamel of their incisors is thicker on the front than the back, allowing for a self-sharpening wear pattern that maintains their chisel-like edge.



**Figure 3.** A beaver uses its tail as a prop in order to sit upright. (Miller and Yarrow 1994)

Depending on the type of water body and local habitat conditions, beavers may also construct burrows in the bank of a stream or river. These bank dens may be used in lieu of, or in conjunction with a lodge (Figure 5) and often take advantage of natural features such as logs or stumps.

Beaver dams create habitat for many other animals and plants of California. Deer and elk



**Figure 4.** Beavers have self-sharpening incisors. Photo courtesy Washington Dept. of Fish and Wildlife.

frequent beaver ponds to forage on shrubby plants that grow where beavers cut down trees for food or for use in constructing their dams and lodges. Weasels, raccoons, and herons hunt frogs and other prey along the marshy edges of beaver ponds. Sensitive species such as red-legged, yellow-legged and Cascade frogs all benefit from habitat created by beaver wetlands. Migratory water birds use beaver ponds as nesting areas and resting stops during migration. Ducks and geese often nest on top of beaver lodges since they offer warmth and protection, especially when lodges are formed in the middle of a pond. Willow flycatchers use the shrubby re-growth of chewed willow stumps to seek shelter and find food.



**Figure 5:** Beaver pond and lodge on Sugar Creek, Siskiyou County. Photo by CDFW's Mary Olswang.

The trees that die as a result of rising water levels attract insects, which in turn feed woodpeckers, whose holes later provide homes for other wildlife. In coastal rivers and streams, young coho salmon and steelhead may use beaver ponds to find food and protection from high flows and predators while waiting to grow big enough to go out to sea (Pollock et al. 2003).

## Preventing Conflicts

Beaver activities can cause problems, but before beginning a beaver control action, assess the problem and aim to match the most appropriate and cost-effective controls to the situation. There are two basic control methods used in California: prevention and lethal control. There are many non-profit organizations in California that support alternatives to lethal control. [The Benefits of Beaver to California & Stewardship Strategies Resource List](#) is a valuable educational resource.

Practical tips for minimizing conflict. It is almost impossible as well as cost prohibitive to exclude beavers from ponds, lakes, or impoundments.

## Exclusion

Fencing off groups of trees or shrubs or garden plots with a low fence (three feet tall) will protect them. Since beavers generally do not like to stray far from water (this opens them up to greater risk of predation), fences may be effective even if they do not completely surround the area (if you choose to fence only part of an area, fence the portion of the area toward the water source, and part way along the sides). The fence should be constructed of woven or welded wire and be well anchored to the ground, so that beavers do not crush it, crawl under it, or walk over it.

An electrified wire strung 4-6" above the ground may also be an effective beaver deterrent. Fence chargers, wiring, and wire hangers suitable for use on pets and other small animals are generally available at hardware stores, feed stores, and home improvement centers.

## Protection of individual trees and plants

Valuable trees and other plants adjacent to waterways may be protected from beavers by encircling them with hardware cloth (chicken wire is generally too flimsy), welded wire mesh or sheet metal (WDFW 2015). Welded wire mesh of 2" x 4" seems to be an optimal material in terms of

effectiveness, durability, aesthetics and cost of construction. The barrier should afford 6 inches to one foot of space between the barrier and the tree, extend at least three (preferably four) feet above ground level and be dug into the ground 3-4 inches for maximum effectiveness (Figure 6).

Alternatively, painting tree trunks with a sand and paint mixture may also prevent beaver gnawing, and may be more aesthetically pleasing than metal barriers. Beavers do not find the sand to be appetizing, and the mixture will be effective for approximately two years. The sand/paint ratio should be approximately 8 ounces (2/3 cup) of fine sand to one quart of latex paint.

## Prevent flooding

Have you ever cut a notch into the dam and come back the next day to see it patched and re-enforced with mud? Beavers are attracted to the sound of running water and will repair most dam breaches and plug most culverts and pipes that are installed in order to drain the ponds. Beavers also require a certain depth of water to move around and escape predation.

A variety of devices and designs have been developed for controlling beaver impoundments and keeping blocked culverts open. The Flexible Leveler and Beaver Deceiver are two examples. Visit <http://www.beaversolutions.com/> for more information.

Modification of beaver dams, or any construction work within lakes or within the bed and bank of a stream, may require a Streambed Alteration Agreement permit from the California Department of Fish and Wildlife (CDFW). Before attempting to install any beaver devices, contact CDFW in order to determine for assistance.

## Depredation Regulations

If all alternatives are exhausted and beavers are continuing to damage or threaten to damage land or property, the owner or tenant of such property may apply to the Department for a permit to kill the depredating animals. Upon satisfactory evidence of such damage or destruction, the Department shall issue a revocable permit allowing the taking of such animals (Fish and Game Code §4181). No animals killed pursuant to such a permit may be utilized by the permittee or his agent (Title 14, California Code of Regulations, §401(i)). For additional information, contact your regional Department of Fish and Wildlife office or visit <https://www.wildlife.ca.gov/Regions>.

## Public Health Concerns

Beavers can be infected with the bacterial disease tularemia that is transmitted by ticks, flies and ingestion of contaminated water (Gaydos 1998). Human can also contract the disease by eating infected meat or allow an open wound come in contact with an infected animal.

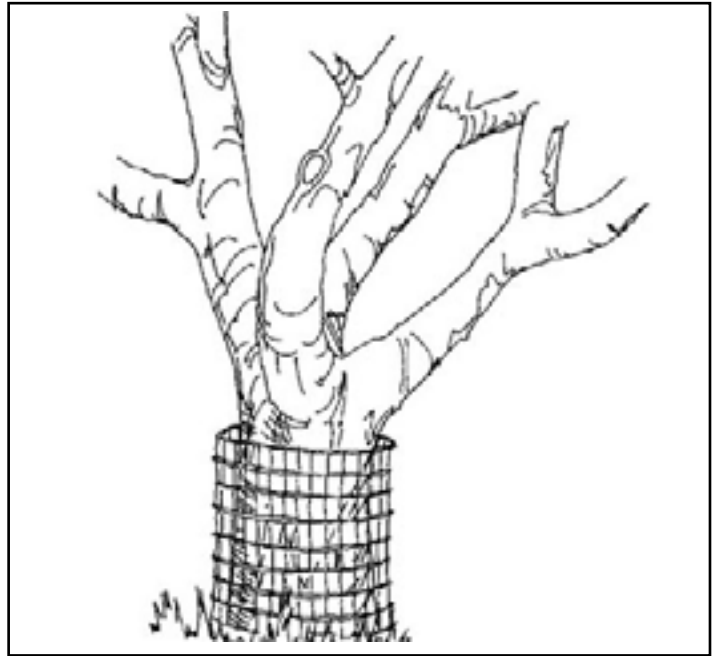


Figure 6. Drawing by Jenifer Reese (Miller and Yarrow 1994)

Beavers defecate in the water in which they live. Ingested water by humans may cause Giardia, a common flu-like infection.

## **Acknowledgments**

Occidental Arts and Ecology Center WATER Institute (OAEC)  
Washington Department of Fish & Wildlife (WDFW)

## **References**

Baker, B. W., and E. P. Hill. 2003. Beaver (*Castor Canadensis*). Pages 288-310 in G. A. Feldhamer, B. C. Thompson, and J. A. Chapman, editors. *Wild Mammals of North America: Biology, Management and Conservation*. Second Edition. The Johns Hopkins University Press, Baltimore, Maryland, USA.

Gaydos, J. 1998. Giardia and Wildlife. Southeastern Cooperative Wildlife Disease Study Briefs. College of Veterinary Medicine, University of Georgia, Athens, GA. Available online: [http://www.uga.edu/scwds/topic\\_index/1998/GiardiaandWildlife.pdf](http://www.uga.edu/scwds/topic_index/1998/GiardiaandWildlife.pdf)

Miller, J.E. and G.K. Yarrow. 1994. Beavers. Pages b1-b12 in *Prevention and Control of Wildlife Damage*. Editors, Scott E. Hygnstrom, Robert M. Timm, Gary E. Larson. University of Nebraska-Lincoln. 2 vols. Available online: [http://wildlifedamage.unl.edu/handbook/handbook/allPDF/ro\\_b1.pdf](http://wildlifedamage.unl.edu/handbook/handbook/allPDF/ro_b1.pdf)

Pollock, M.M., M.Heim, and D. Werner. 2003. Hydraulic and geomorphic effects of beaver dams and their influence on fishes. *American Fisheries Society Symposium* 37:213-233.

Washington Department of Fish and Wildlife (WDFW). 2015. Living with Wildlife. <http://wdfw.wa.gov/living/beavers.html#trapping>





Tracking Number: (2019-026)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, 1416 Ninth Street, Suite 1320, Sacramento, CA 95814 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: Stanley Backlund, Trout Unlimited El Dorado

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [REDACTED]

### **2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested:** In 1945 the Fish and Game Commission received the responsibility for promulgating regulations to manage sport fishing and hunting. This act was done by the Legislature, through a constitutional amendment. The Fish and Game Commission has a wide range of responsibilities that continually expands and includes: Seasons, bag limits and methods of take for game animals, sport fishing and some commercial fishing. Beginning October 1, 2015, every person or agency recommending that a regulation be added, amended, or repealed must submit a petition to the commission using the authorized petition form: [FGC 1](#).

### **3. Overview (Required) - Summarize the proposed changes to regulations:** Revise the bag limit for fishing on Caples Creek in El Dorado County. The winter regulations shall be applied year round. The effect is to reduce the summer take from five fish to zero.

### **4. Rationale (Required) - Describe the problem and the reason for the proposed change:** Caples Creek was designated as a Wild Trout Water by the DFW in 2015. No management changes have been made in the interim. Wild Trout Waters are those that support self-sustaining (wild) populations of trout, are aesthetically pleasing and environmentally productive, provide adequate catch rates in terms of numbers of trout, and are open to public angling. Fish populations in Caples Creek do not support this definition. Surveys do not find rainbow trout where observed prior to designation. Restricting take should result in a rebound of fish population. Our El Dorado Chapter of Trout Unlimited has a goal to create an improved fishery with a large population of Rainbow Trout including fish in excess of 12 inches in length. This change will allow fish repopulation, improve fishing opportunity and result in an increase in visitation to the region. The existing five fish limit allows removal of the prior population.



Surveys conducted in 1998, 1999, 2000 and 2001 prior to licensing found rainbow trout at all survey sites. In 2011 the DFW found densities of 849 rainbow trout per mile averaged from all sites. Their angling survey yielded 1-2 fish per hour. In 2011, 41 brook trout and 4 brown trout were reported. Limited surveys of the creek have been performed four times from 2011 to 2017. No Rainbow Trout were detected. Fishing by members of our Trout Unlimited chapter in 2013 and 2014 was unproductive. There are 58 Wild Trout Waters in California. Forty of them have special regulations limiting catch. Caples is deserving of a limit to protect fish stock.

## **SECTION II: Optional Information**

**5. Date of Petition: March 22, 2019**

**6. Category of Proposed Change**

- ☒ Sport Fishing
- ☐ Commercial Fishing
- ☐ Hunting
- ☐ Other, please specify:

**7. The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

- ☒ Amend Title 14 Section(s): Division 1-Department of Fish and Wildlife Freshwater Sport Fishing Regulations, 7.5 Waters with Special Fishing Regulations, (b) Special Regulations, (4.5)
- ☒ Add New Title 14 Section(s): 7.5 Waters with Special Fishing Regulations, (b) Special regulations. (New paragraph) Caples Creek: Open all year. Only artificial lures with barbless hooks may be used. 0 trout.
- ☐ Repeal Title 14 Section(s): None

**8. If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text.](#)  
Or ☒ Not applicable.

**9. Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency: April 26, 2020.

**10. Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: Attachment 1 provides links to the survey data referenced in paragraph 4.

**11. Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: This regulatory change is expected to expand catch and release opportunities in Caples Creek thereby increasing visitation and recreational spending in the three counties of El Dorado, Amador and Alpine.



**12. Forms:** If applicable, list any forms to be created, amended or repealed:

None

### **SECTION 3: FGC Staff Only**

Date received: [Received by email on Friday, November 22, 2019 at 11:00 AM.](#)

FGC staff action:

- ☐ Accept - complete
- ☐ Reject - incomplete
- ☐ Reject - outside scope of FGC authority

Tracking Number 2019-026

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- ☐ Denied by FGC
- ☐ Denied - same as petition \_\_\_\_\_
- ☐ Granted for consideration of regulation change

Tracking Number

Attachment 1 to Fish and Game Commission Petition re Caples Creek

Links to Caples Creek Trout Monitoring Reports

1. FISHERIES DATA REPORT FOR PROJECT-AFFECTED STREAM REACHES, EL DORADO IRRIGATION DISTRICT Hydroelectric Project 184. April 7, 2002. Surveys 1998, 1999, 2000, 2001.  
<https://www.eid.org/home/showdocument?id=4719>
2. FERC Project No. 184. Rainbow Trout Monitoring 2011  
<https://www.eid.org/home/showdocument?id=4717>
3. FERC Project No. 184 Rainbow Trout Monitoring 2012  
<https://www.eid.org/home/showdocument?id=3394>
4. FERC Project No. 184 Rainbow Trout Monitoring 2016  
<https://www.eid.org/home/showdocument?id=7102>
5. FERC Project No. 184 Rainbow Trout Monitoring 2017  
<https://www.eid.org/home/showdocument?id=9785>
6. Caples Creek 2009 Summary Report September 8-10, 2009. Department of Fish and Game  
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=29677&inline>
7. Caples Creek 2011 Summary Report October 18-21, 2011. Department of Fish and Game  
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=118303&inline>

**From:** [REDACTED]  
**Sent:** Thursday, January 30, 2020 8:13 PM  
**To:** FGC <FGC@fgc.ca.gov>  
**Subject:** Re: Fish and Game Commission meeting agenda - February 21, 2020

This may not be the right place, but I want to make a comment since I am unable to attend the upcoming meeting. I am appalled to see:

Petition #2019-023 AM 1: Authorize hunting of ravens  
III. Petition #2019-024 AM 1: Authorize hunting of blackbirds, cowbirds, grackles, crows, and magpies

With the loss of billions of birds over the past 2 decades, it is foolish and arrogant to kill MORE birds just because they are not native/or unwanted. We need every bird we have! With habitat loss and climate change, species will fill emptied niches; we CANNOT allow those niches to be left vacant so we can wait for birds we "prefer" to come back.

Songbirds mostly disappeared from my home in Sonoma County many years ago; after the Tubbs fire, hundreds of refugee birds showed up! I go through 40 pounds of feed a month for them. Let Nature find the correct balance.

Thank you.

Blessings, Jane  
~^..^~ Denali's Legacy Arctic Dog Rescue ~^..^~

Each day, a person who eats a vegan diet saves 1,100 gallons of water, 45 pounds of grain, 30 square feet of forested land, 20 pounds of CO2 equivalent, and ONE ANIMAL'S LIFE.

Food is GROWN - NOT BORN. Food has DIRT - NOT BLOOD. Food does NOT have a family and a heartbeat.



**From:** Kara Norris [REDACTED]

**Sent:** Sunday, February 2, 2020 10:46 PM

**To:** FGC

**Subject:** Comment in support of Petition #2019-024

Hello,

I am writing in support of Petition #2019-024: Authorize hunting of blackbirds, cowbirds, grackles, crows, and magpies.

There are many reasons, such as:

- They are plentiful, often becoming a nuisance or a human health and safety issue.

- There is a standing federal depredation order on them.

- <https://law.cornell.edu/cfr/text/50/21.43>

- California considers cowbirds as an invasive species.

- <https://wildlife.ca.gov/Conservation/Invasives/Species/Cowbird>

The above birds open up a new quarry base that will bring more hunters into the field, in addition to providing

sustainable game meat.

I urge the commission to support Petition 2019-24.

Thank you for your time,

Kara Norris

**From:** NATHANIEL NORRIS [REDACTED]

**Sent:** Sunday, February 2, 2020 10:44 PM

**To:** FGC

**Subject:** Comment in support of Petition #2019-23

Petition #2019-023 AM 1: Authorize hunting of ravens

I am writing in support of the hunting of the common Raven (corvus corax) for the following reasons.

1. The Raven population is out of control in California due to human interaction.

<https://www.audubon.org/news/the-common-raven-boom-rugged-west-isnt-necessarily-good-thing>

2. Ravens have decimated the sensitive native fauna and Flora here in California.

<https://www.nps.gov/articles/ravens.htm>

3. Ravens will open up new hunting opportunities. Bringing more hunters to the field.

4. Ravens can be a viable source of game meat.

I urged the commission to support petition number #2019-23

Thank you for your consideration,

Nathan Norris

Sent from my T-Mobile 4G LTE Device

Get [Outlook for Android](#)

# CALIFORNIA FISH AND GAME COMMISSION PETITIONS FOR REGULATION CHANGE - ACTION

Revised 2/14/2020

FGC - California Fish and Game Commission   DFW - California Department of Fish and Wildlife   WRC - Wildlife Resources Committee   MRC - Marine Resources Committee

Grant: FGC is willing to consider the petitioned action through a process   Deny: FGC is not willing to consider the petitioned action   Refer: FGC needs more information before deciding whether to grant or deny

Tracking No.	Date Received	Name of Petitioner	Subject of Request	Short Description	FGC Receipt Scheduled	FGC Action Scheduled	Staff Recommendation	Marine or Wildlife?
2019-012 (b)	5/30/2019	Carl W. Vogler	Water pumps and clams	Prohibit the use of hand operated water pumps to take gaper and other clams.	6/12-13/2019	4/17/2019: Referred to DFW ----- 2/21/2020	DFW recommendation on 2/21/2020:  GRANT for consideration in a future rulemaking.	Marine
2019-014 (b)	6/20/2019	Karen Martin, PhD	Recreational take of California grunion	Amend California grunion (Leuresthes tenuis) recreational take regulations to (1) change the bag limit from "none" to "ten", (2) reduce the season length, and (3) shift the timing of the seasonal closure north of Pt. Conception.	8/7-8/2019	10/9-10/2019: Referred to DFW ----- 2/21/2020	DFW recommendation on 2/21/2020:  GRANT in concept for a future rulemaking, with details for proposal to be developed by DFW following its completion of an enhanced status report for the species. (See DFW memo in Exhibit B.3 of Item 20.)	Marine



Tracking Number: (2019-012)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, 1416 Ninth Street, Suite 1320, Sacramento, CA 95814 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

### **1. Person or organization requesting the change (Required)**

Name of primary contact person: Carl W. Vogler

Address:

Telephone number:

Email address:

### **2. Rulemaking Authority (Required) - Reference to the statutory or constitutional authority of the Commission to take the action requested: FGC §200, 202, 205, 210, 219, and 220**

### **3. Overview (Required) - Summarize the proposed changes to regulations: I propose to prohibit the use of hand operated water pumps to take gaper and other clams.**

### **4. Rationale (Required) - Describe the problem and the reason for the proposed change: In the past a person wanting to get a limit of gaper clams needed a daylight tide lower than 0.5' MLLW in order to dig a hole in the mud no longer covered with water. In any given year no more than 45% of the days would have such an opportunity. Hand operated water pumps have become popular with which to jet out the gaper clams. The pumps not only allow users to access clams on higher tides but actually require that some water be present in order to function. Skilled users are able to get their limits of gaper clams on most days. At Lawson's Landing in Dillon Beach on Tomales Bay, we are seeing an average of 40 people per day getting their 10 clam limits, or about 60,000 clams taken by the end of May this year. One of the clammers told me that he thought that there were about two more years of clams left before he'd have to go somewhere else.**

## **SECTION II: Optional Information**

### **5. Date of Petition: May 29, 2019**

### **6. Category of Proposed Change**



- ☒ Sport Fishing
- ☐ Commercial Fishing
- ☐ Hunting
- ☐ Other, please specify:

7. **The proposal is to:** (*To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>*)
- ☒ Amend Title 14 Section(s):29.20
  - ☐ Add New Title 14 Section(s):
  - ☐ Repeal Title 14 Section(s):
8. **If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**  
Or ☒ Not applicable.
9. **Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency: February 1, 2020
10. **Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: Letter from Carl Vogler of May 13, 2019
11. **Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing:
12. **Forms:** If applicable, list any forms to be created, amended or repealed:

### SECTION 3: FGC Staff Only

Date received: [Received by email on Thursday, May 30, 2019 at 8:00 AM.](#)

FGC staff action:

- ☒ Accept - complete
- ☐ Reject - incomplete
- ☐ Reject - outside scope of FGC authority

Tracking Number 2019-012

Date petitioner was notified of receipt of petition and pending action: June 12-13, 2019

Meeting date for FGC consideration: August 7-8, 2019

FGC action:

- ☐ Denied by FGC
- ☐ Denied - same as petition \_\_\_\_\_  
Tracking Number
- ☐ Granted for consideration of regulation change

Received by email on Thursday, May 30, 2019 at 8:00 AM as an attachment to petition 2019-012.

California Fish and Game Commission

May 7, 2019

Marine Resources Committee

P.O. Box 944209

Sacramento, CA 94244-2090

To Whom It May Concern,

I am one of the owners of Lawson's Landing in Dillon Beach. Lawson's Landing is located at the mouth of Tomales Bay and has been providing access to the California coast since the late 1950's. Fishing, crabbing and clamming have been the major attractions with the plentiful gaper clams on Clam and Seal islands being the original and most consistent draw. On a tide low enough for the islands to be exposed, with a little hard work and a short boat ride, most people can dig enough clams for a tasty dinner. Unfortunately, that looks like it's about to change.

In the last few years a new innovation, the hand operated water pump, has allowed clammers to retrieve their limits of gapers even when the tide isn't low enough for the islands to come out of the water. In fact, the pumps only work while in 6" of water or more. Where clams were only attainable 38% to 45% of the days per year, now attainable days approach 80% of the year. The pumps also limit physical damage to the individual clams, making for a more attractive, and therefore more marketable, product that many are tempted to sell. Gaper clams, as unlikely as it sounds, are becoming the new abalone.

Lawson's Landing operated boats to ferry clammers over to the islands for over forty years, but when we saw the increased number of people clamming and the decreasing catches of clams, we ended a very lucrative part of our business in order to preserve the resource. The clams bounced back in the 2000's, but now a new generation of clammers with cheap inflatable boats and hand pumps paddle across almost every day to collect their ten clams each. I'm writing this now because one of the clammers told me today that he thought that there's about two years of clams left on the islands. When they're gone from here he'll go somewhere else, he said.

I would like to see a change in the regulations that would outlaw hand operated water pumps in the same way that hooked devices are illegal to use. The gapers will have a chance to recover again if the number of opportunities to dig them up remain limited.

Carl W. Vogler

Lawson's Landing Inc.

137 Marine View Dr.

Dillon Beach, CA 94929-0067





Tracking Number: (2019-014)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, 1416 Ninth Street, Suite 1320, Sacramento, CA 95814 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

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## SECTION I: Required Information.

*Please be succinct. Responses for Section I should not exceed five pages*

### 1. Person or organization requesting the change (Required)

Name of primary contact person: Karen Martin, PhD

Address: [REDACTED]

Telephone number: [REDACTED]

Email address: [karen.martin@pepperdine.edu](mailto:karen.martin@pepperdine.edu)

2. **Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: **Fish and Game Code Section 8381**; Section 28.00 cites sections 200, 202 205, 210, 219, and 220 of the Fish and Game Code. Section 200 is relevant as this is not a commercial take. Section 202 was repealed Stats 2016. Section 205 is relevant as it allows the Commission to change or abolish an open season and to establish or change a bag limit. Section 210 is repealed Stats 2016. Section 219 is relevant as it provides the Commission authority to act to protect fish, wildlife, and natural resources. Section 220 is repealed Stats 2016.

3. **Overview (Required)** - Summarize the proposed changes to regulations: 1) Change the bag limit from "none" to "ten of one species" for California Grunion *Leuresthes tenuis*; 2) Reduce the length of the seasonal closure for California Grunion; 3) Shift the timing of the seasonal closure north of Pt. Conception for California Grunion.

4. **Rationale (Required)** - Describe the problem and the reason for the proposed change: See Attached for full text: Rationale for request for change in regulations: Unique Species Targeted During Critical Reproductive Season in a Shrinking Habitat

## SECTION II: Optional Information

5. **Date of Petition: June 2019**



**6. Category of Proposed Change**

- ☒ Sport Fishing
- ☐ Commercial Fishing
- ☐ Hunting
- ☐ Other, please specify:

**7. The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

- ☐ Amend Title 14 Section(s): 27.60(b); no bag limit, to 27.60 (a), limit of 10 for one species; Section 28.00, seasonal closure, may be taken June 1 – March 31; change to July 1 – March 31 south of Pt. Conception. North of Pt. Conception, seasonal closure, change so may be taken September 1 – March 31. Section 28.00 cites sections 200, 202 205, 210, 219, and 220 of the Fish and Game Code. Section 200 is relevant as this is not a commercial take. Section 202 was repealed Stats 2016. Section 205 is relevant as it allows the Commission to change or abolish an open season and to establish or change a bag limit. Section 210 is repealed Stats 2016. Section 219 is relevant as it provides the Commission authority to act to protect fish, wildlife, and natural resources. Section 220 is repealed Stats 2016.
- ☐ Add New Title 14 Section(s):
- ☐ Repeal Title 14 Section(s):

**8. If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition**

Or ☒ Not applicable.

**9. Effective date:** If applicable, identify the desired effective date of the regulation. If the proposed change requires immediate implementation, explain the nature of the emergency: April 2020

**10. Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: Powerpoint about California grunion, scientific journal article on population trends of California grunion .

**11. Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: There is no commercial fishery and it is illegal to sell recreational catch. No gear is legal for this species. It is unlikely that there will be negative economic impacts from reduced recreational fishing. It is possible that improved grunion runs will attract tourism for wildlife watching during the expanded closed season. Tourism agencies in coastal cities currently list grunion runs as an attraction.

**12. Forms:** If applicable, list any forms to be created, amended or repealed:

**SECTION 3: FGC Staff Only**

Date received: [Received by email on Thursday, June 20, 2019 at 7:22 AM.](#)



FGC staff action:

- ☒ Accept - complete
- ☐ Reject - incomplete
- ☐ Reject - outside scope of FGC authority

Tracking Number 2019-014

Date petitioner was notified of receipt of petition and pending action: August 7-8, 2019

Meeting date for FGC consideration: October 9-10, 2019

FGC action:

- ☐ Denied by FGC
- ☐ Denied - same as petition \_\_\_\_\_
- ☐ Granted for consideration of regulation change

Tracking Number

Rationale for request for change in regulations: Unique Species Targeted During Critical Reproductive Season in a Shrinking Habitat

*Life History and Current Regulations:*

California grunion *Leuresthes tenuis* (Atherinopsidae), indigenous endemic marine fish, emerge out of water onto sandy beaches on the Pacific coast of California and Baja California to reproduce (Gregory, 2001). In a unique recreational fishery, people capture these fish out of water with bare hands during their midnight spawning runs (Spratt, 1986; Sandrozkinski, 2013).

Because of their unusual life cycle, California Grunion are particularly vulnerable to overharvest. Less than 10 years after the first published scientific description of their spawning behavior (Barnhart, 1918; Thompson, 1919), the first regulations to protect them were enacted in 1927 (Clark, 1926, 1938) by the California Department of Fish and Game (now Wildlife), CDFW. At that time, people would line the shore, capturing hundreds of grunion with improvised nets made of bed sheets (Andrew Olson, Jr., personal communication), using them for food and fertilizer.

Early protections included a seasonal closure, with no take from April through June, the peak of the spawning season. Gear restrictions specify no gear at all; only bare hands are allowed for capturing these fish, presumably to give them a sporting chance while on shore. Under the age of 16, children do not need a fishing license to catch grunion during open season. No commercial use of the species is permitted. However, there is no bag limit, and no requirement to report recreational catch of this species.

Walker (1949) observed grunion runs on Scripps Beach directly following World War II. Based on his recommendations, CDFW shortened the seasonal closure to April and May. Gear restrictions and license requirements remained in place. At that time California's population was substantially smaller, 10 million. Today, more than 35 million people live along one of the most densely populated coasts in the world, and millions more visit as tourists.

Sandy beaches are critical to California grunion as Essential Fish Habitat for spawning (Robbins 2006). However, beaches in California and worldwide are losing habitat by coastal squeeze (Defeo et al., 2009; Shoeman et al., 2014; Martin, 2015), with sea level rise and erosion encroaching on the beach from the seaward side, and coastal development and seawalls preventing natural retreat of the beach on the landward side (Dugan et al., 2008). Exacerbated by climate change and increasing human population, California is predicted to lose 31 to 67% of its sandy beaches by the year 2100 under current predictions of sea level rise (Vitousek et al., 2017).

*Current uses of California Grunion:*

Some anglers catch this species for bait, some people catch these small fish to consume whole, but most of those capturing the grunion report they are doing so for the sport, not for any specific use but because hunting them is part of popular culture.

California Grunion runs are highlighted in public education programs of public aquariums and California State Beaches, and for youth organizations such as the Boy Scouts. Because runs follow the highest spring tides of full or new moons, likely nights and times can be forecast (Walker, 1952; Spratt, 1986). Runs can be dazzling, with thousands of fish moving out of waves onto shore for an hour or more.

Because of its beach-spawning habits, California Grunion has been identified as a Key Indicator Species for the South and Central regions of California Marine Protected Area (Marine Protected

Area Monitoring Action Plan, 2018), and as an indicator species for climate change on beaches in the Ventura County Coastal Resilience Plan (<https://www.vcrma.org/vc-resilient-coastal-adaptation-project> ).

#### *Population status of California Grunion:*

Traditional fishery methods cannot be used for stock assessments of California grunion. This species has never been abundant (Gregory, 2001). It is planktivorous (Higgins and Horn, 2014) and does not take a hook. Adults are rarely caught in trawl surveys except within enclosed bays (Allen et al., 2002; Martin et al., 2013; Williams et al., 2016). The only time California grunion can reliably be observed is during their spawning runs.

Runs may occur when tides are suitable, within a two-hour window following the highest nightly tide in four nights after full and new moons in spring and summer. However, often on nights when runs are forecast, no grunion are seen on shore (Martin et al., 2019).

Volunteer citizen scientists, the Grunion Greeters, report observations of spawning runs on beaches all along the California Coast. With reports across the habitat range over two decades (Martin et al., 2007, 2011), this long-term dataset can discern broad trends in population, in order to guide conservation of this endemic species. Grunion Greeters assess the number of fish on shore, the length of shoreline involved, and the duration of the spawning run at its peak with a metric, the Walker Scale, which ranges from W0 (no fish) to W5 (fish covering the shore).

Over 4500 Grunion Greeters have provided over 5000 reports in the past two decades. This compilation is the most complete dataset for this species in existence, both in terms of geographic coverage and duration of observations. Reports come from the entire habitat range, over 50 beaches in California and Baja California, Mexico. A range extension for spawning runs was discovered in 2002 in San Francisco Bay (Johnson et al., 2009), followed by a northward range extension to Tomales Bay in 2005 (Roberts et al., 2007).

#### *Concerns raised by reports from Grunion Greeters:*

Large spawning runs still occur, but smaller grunion runs are much more common than in past. Spawning on shore has declined significantly across much of the habitat range in the past fifteen years. This pattern is consistent for this endemic fish across the three coastal counties constituting its core habitat (San Diego, Orange, and Los Angeles), and also on individual beaches known historically for large grunion runs (Martin et al., 2019).

California grunion appear to be shifting habitat range northward to some extent (Martin et al. 2013; Martin et al., 2019). The shift in habitat comes at the cost of smaller adult size and reduced number of eggs, as well as a shorter spawning season (Johnson et al., 2009).

Noisy activities of recreational grunion hunters on shore disrupt spawning runs, preventing fish from reproducing before capture. Poaching during closed season is common on some urban beaches, reported in about 20% of closed season observations. Collection of spawning fish is nearly universal during open season, identified in 90% of open season reports, disrupting runs and preventing reproduction while removing ripe adults from the population (Martin et al., 2019). Regulations are rarely and unevenly enforced, in part because spawning runs always occur in the dark of night.

Many grunion hunters do not fish for any other species, and do not possess fishing licenses. Thus the potential number of people hunting California Grunion is far greater than the 2.5 million sport fishing licenses that were sold in California in 2016.

The occasional presence of large spawning aggregations may create the illusion of abundance even when a population is depleted (Erisman et al., 2011). Occasional large runs may tempt resource managers to believe that these kinds of runs are both more common and more widespread geographically than is the actual situation (Sadovy and Domeier, 2005).

We suggest it is possible that the numbers of adult fish could drop too low for successful spawning even when some members of the species are present and ripe. Runs with fewer than a hundred individuals usually do not include spawning events or egg deposition. Small numbers of fish in a run indicate unsuccessful reproduction. The consistent pattern of decline in median run size is of great concern for this beach-spawning species.

The sister species, the Gulf Grunion *Leuresthes sardina*, endemic to the northern Gulf of California (Bernardi et al., 2003), shares the beach-spawning habits of *L. tenuis* (Thomson and Muench, 1976). The Gulf Grunion appears on the IUCN Red List as “Near Threatened” because of potential habitat loss and human interference. (Findlay et al., 2010). Our California Grunion may face even greater threats than the Gulf Grunion because of larger human populations and more coastal development in California compared with Mexico.

#### *Recommendations for change:*

Although this managed species enjoys some unique protections, fishing regulations have not changed since 1949, while fishing pressure has increased.

We strongly encourage increased protection for this charismatic indigenous endemic marine fish.

- Section 28.00, seasonal closure, may be taken June 1 – March 31 → change seasonal closure to include June; may be taken July 1 – March 31 south of Pt. Conception. North of Pt. Conception, seasonal closure, may be taken September 1 – March 31.

Change requested: For the southern population, return seasonal closure April - June, as originally designated in 1927. For the *L. tenuis* north of Pt. Conception, shift the timing of the seasonal closure, to protect the peak season that occurs later there, closure from April – August.

- Section 27.60(b); no bag limit → change to 27.60 (a), limit of 10 for one species.

Change requested: We recommend a change from no bag limit to a limit of no more than 10 fish.

Section 28.00 cites sections 200, 202 205, 210, 219, and 220 of the Fish and Game Code. Section 200 is relevant as this is not a commercial take. Section 202 was repealed Stats 2016. Section 205 is relevant as it allows the Commission to change or abolish an open season and to establish or change a bag limit. Section 210 is repealed Stats 2016. Section 219 is relevant as it provides the Commission authority to act to protect fish, wildlife, and natural resources. Section 220 is repealed Stats 2016.

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# Tracking Populations of California Grunion: Petition for Change

Dr. K. L. M. Martin,  
Pepperdine University,

With citizen science data  
from the  
Grunion Greeters



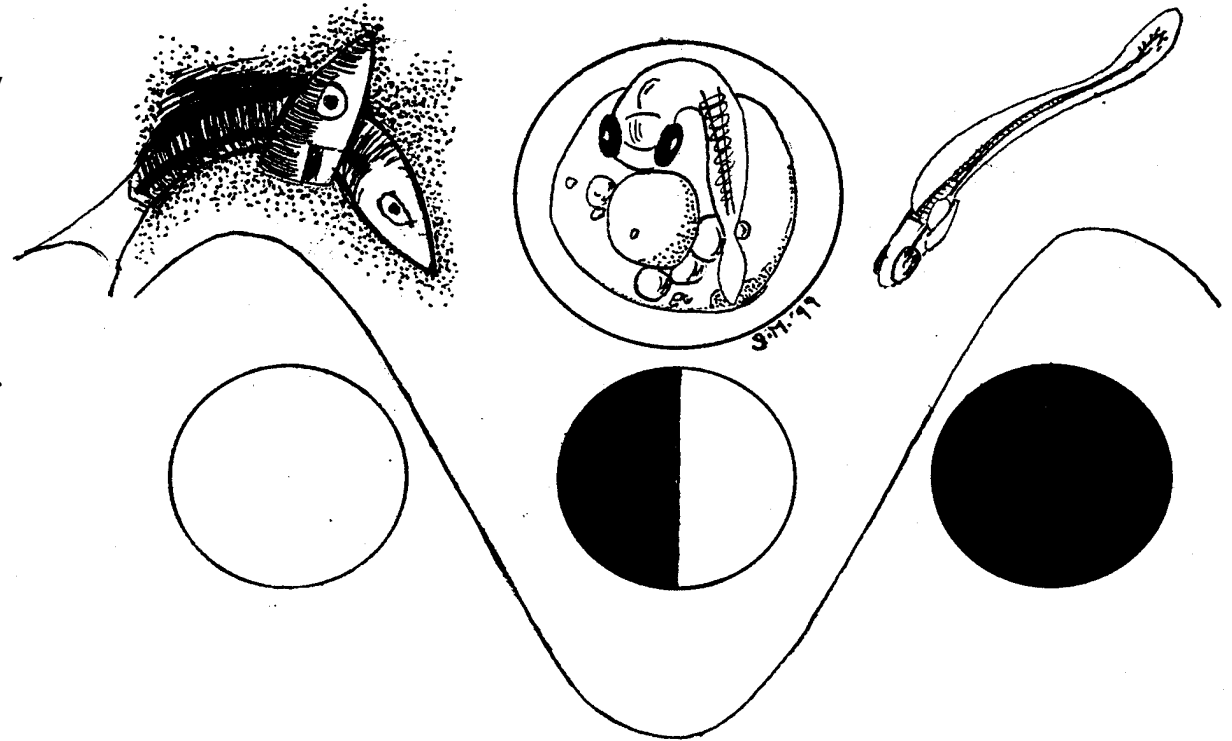
Photo: Carl Manaster, Grunion.org



# CA Grunion life cycle

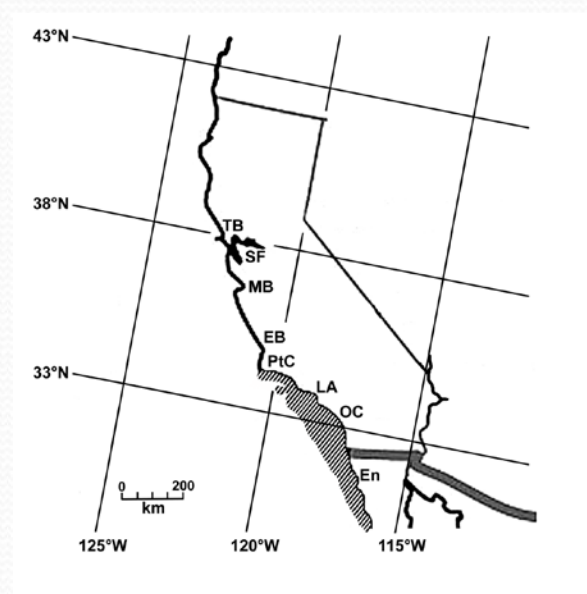
## *Leuresthes tenuis*

- Endemic species, only in California and Baja California, Mexico.
- Spawn on sandy beaches during high tides, after full or new moons.
- Eggs incubate out of water under sand until the next semilunar tides.
- Larvae hatch with rising tides.



Art by G. Martin

# CA Grunion: CDFW Managed Species



This indigenous endemic marine fish occurs mainly off the coast of three counties: San Diego, Orange, and Los Angeles.

Recently the habitat expanded to a few locations north of Pt. Conception.

CA Grunion have never been abundant.

CA Grunion are vulnerable to recreational overharvest and to other human activities on the shore.



# Since 1927, spawning CA Grunion are protected by:



Photo by J. Flannery, M. Reiss, Grunion.org



- Closed season (no take) April and May, originally April - June.
- Gear restrictions (none allowed).
- License requirement for age 16 and above.
- HOWEVER--
- No bag limit.
- No reporting of catch.



# The challenges of assessing the stock of *L. tenuis* are many.

- Traditional fishery sampling methods don't work.
- CA Grunion are observed only during spawning runs.
  - Runs vary widely over space and time.
  - All runs occur around the same time of night.
  - Runs occur late at night on dark beaches.

# Solution: Grunion Greeters!

Citizen scientists attend training workshops and monitor specific beaches during nights when grunion runs are forecast.



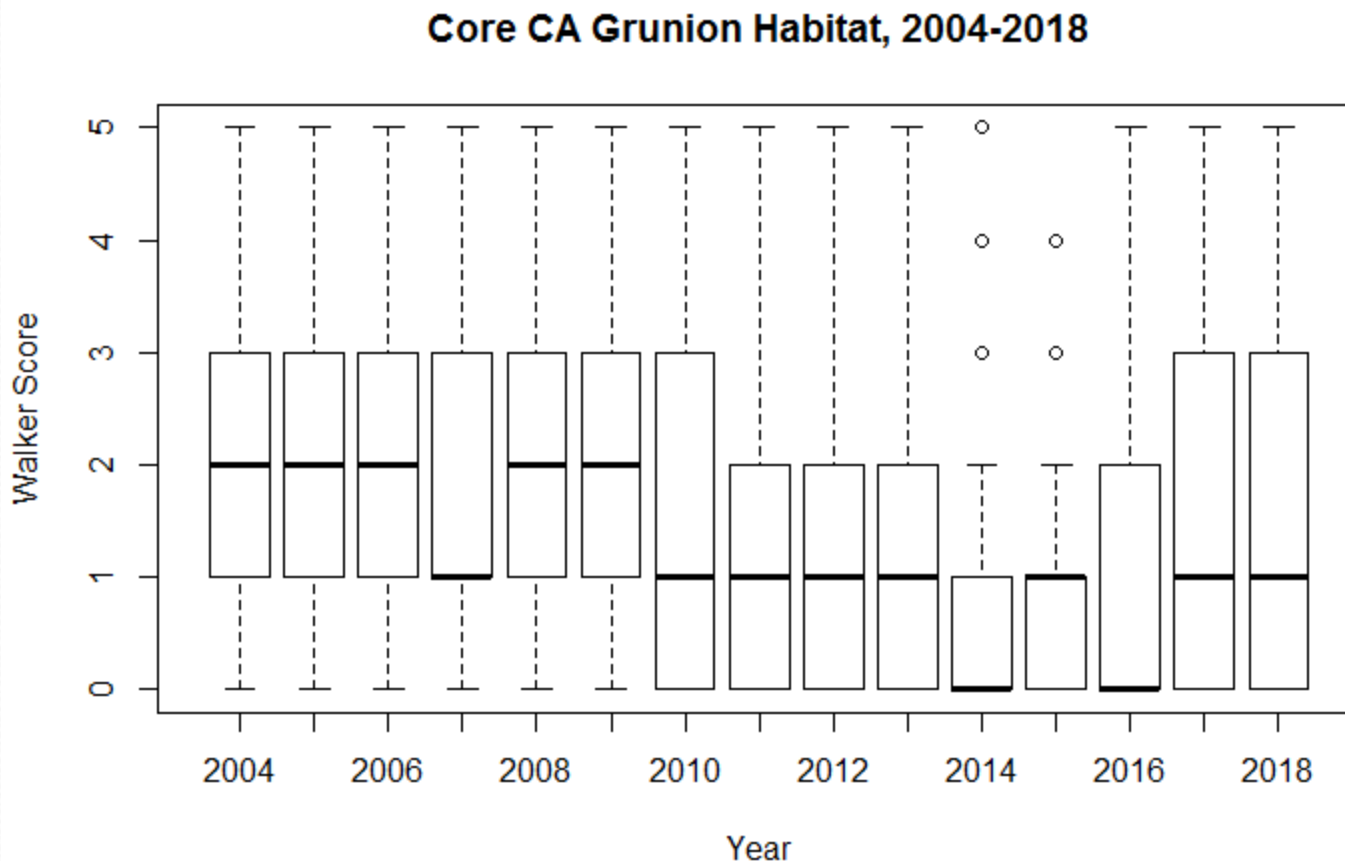


# Walker Scale for Grunion Runs

used by Grunion Greeters

- **W-0**: No fish show up, or just a few, no spawning.
- **W-1**: More than 10, and up to 100 fish show up, little or no spawning behavior
- **W-2**: 100-500 fish; scattered across the beach or in one area, spawning activity
- **W-3**: several hundred to 1000 fish spawning in one or several locations along the beach
- **W-4**: thousands of fish spawning across a wide area of the beach
- **W-5**: fish covering the beach across a wide area, run lasts an hour or more

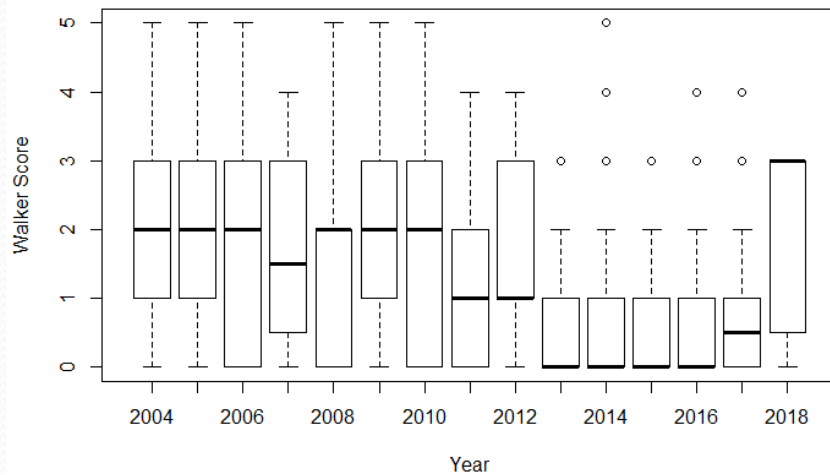
# Reports indicate runs have decreased over time in the core species habitat.



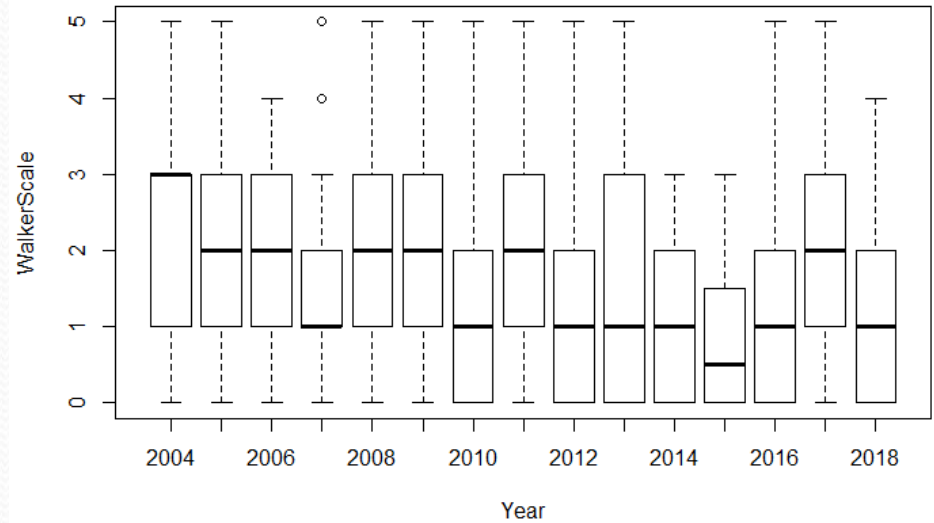
Median run has declined over the past 15 years in San Diego, Orange, and LA counties.

Decline in runs is consistent across each county in the core habitat.

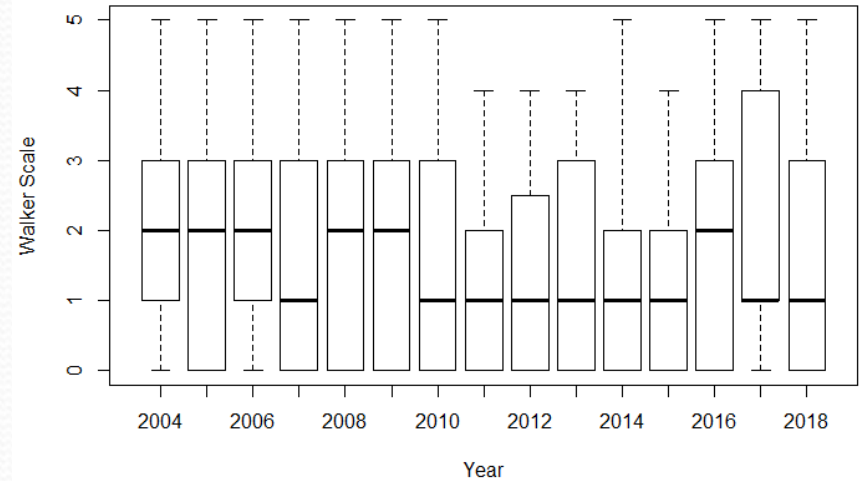
Orange County 2004-2018



San Diego County 2004-2018



Los Angeles County 2004-2018





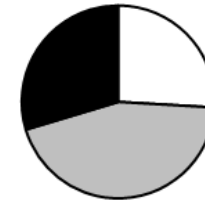
# Decline in runs is consistent even at beaches known to hold large runs

White: small, W0-1

Grey: medium, W2-3

Black: large runs, W4-5

Coronado 2004-08



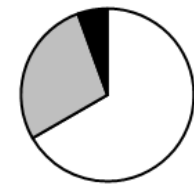
Coronado 2014-18



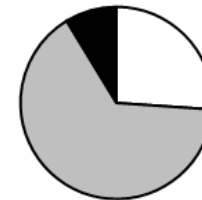
La Jolla 2004-08



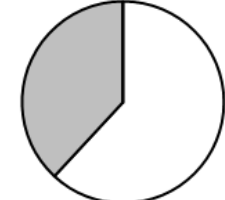
La Jolla 2014-18



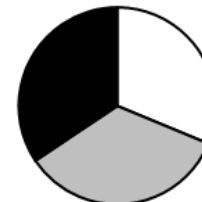
Oceanside 2004-08



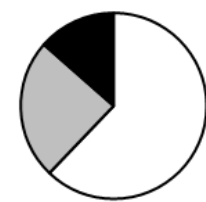
Oceanside 2014-18



Cabrillo 2004-08



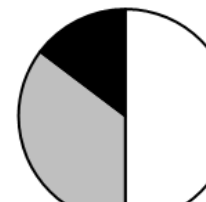
Cabrillo 2014-18



Surfrider 2004-08

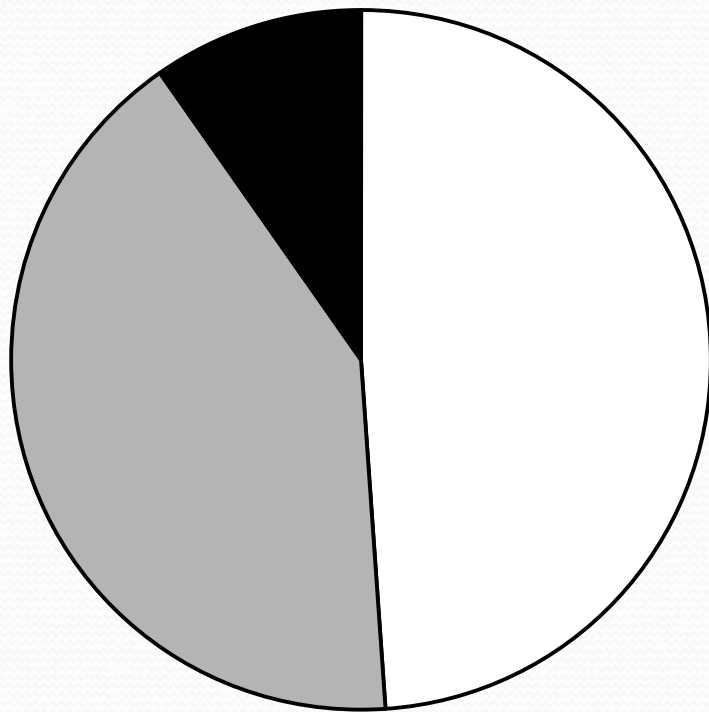


Surfrider 2014-18

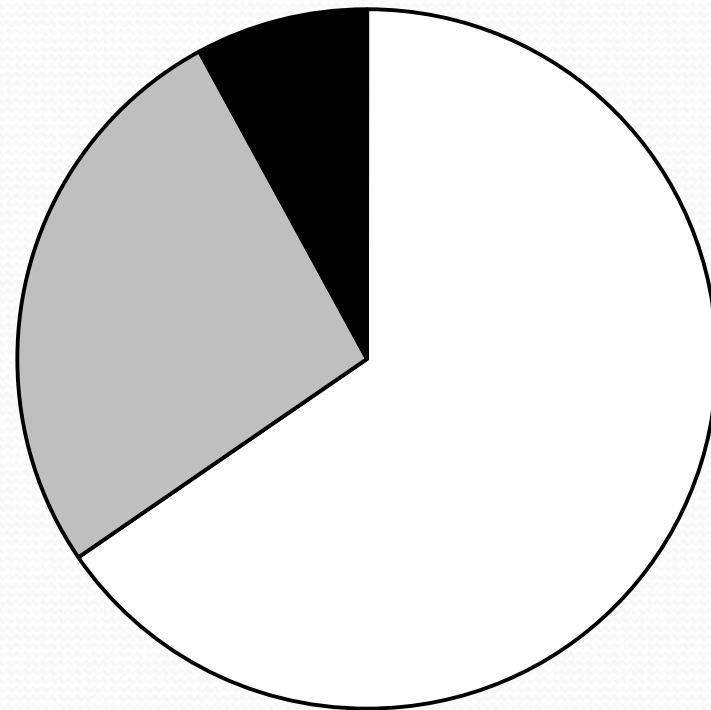




Comparison across decades: significantly more small runs, fewer medium and large runs, suggests lower reproductive output.



**2004-08**



**2014-18**

□ small  
■ medium  
■ large

# Poaching (out of season, or using gear in season, or without a fishing license)

In general: poaching in about 20% of reports in Closed Season

Hunting is reported in 93% of observations in Open Season

Regulations are rarely enforced late at night when runs occur.





# Grunion spawning zone is small



- Clutches of eggs are buried in a band no more than 3 m wide parallel to shore on busy recreational beaches
- Yes, this is a grunion beach during spawning season.



Northern Grunion are smaller, spawn later,  
and produce fewer eggs → more vulnerable



Malibu grunion (L)  
northern grunion (R)





# What actions are needed?

- We recommend changes for the recreational fishery
  - Amend 27.60(b); no **bag limit**, to 27.60(a), limit 10;
  - Section 28.00, **seasonal closure**, south of Pt. Conception restore June closure, 7/1 – 3/31.
  - Section 28.00 north of Pt. Conception: **later closure**, may be taken 9/1 – 3/31.



Photo: Bill Hootkins, 2004



# Grunion Greeters THANK YOU FOR YOUR HELP!!!

We encourage  
“Observe and Conserve,”  
or “Catch and Release”  
so that future generations will be  
able to marvel at this unique,  
charismatic species.

See [www.Grunion.org](http://www.Grunion.org) for more








## Contribution to the Themed Section: 'Marine recreational fisheries - current state and future opportunities'

# Population trends of beach-spawning California grunion *Leuresthes tenuis* monitored by citizen scientists

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Martin, K. L. M., Pierce, E. A., Quach, V. V., and Studer, M. Population trends of beach-spawning California grunion *Leuresthes tenuis* monitored by citizen scientists. – ICES Journal of Marine Science, doi:10.1093/icesjms/fsz086.

Received 31 January 2019; revised 7 April 2019; accepted 13 April 2019.

California Grunion *Leuresthes tenuis* (Atherinopsidae), an indigenous endemic marine fish, makes spectacular midnight spawning runs onto sandy beaches on the Pacific coast of California and Baja California. In a unique recreational fishery, people capture the fish out of water with bare hands. Grunion hunters are not required to report their catch, and there is no bag limit. California Grunion rarely appear in trawls and do not take a hook, so population status for this species is impossible to obtain by traditional fishery methods. With citizen scientists, the "Grunion Greeters," we monitored spawning runs along most of their habitat range. California Grunion recently underwent a northward range extension, but runs appear to be declining broadly across the core habitat. Noisy activities of recreational grunion hunters on shore disrupt spawning runs, preventing fish from reproducing before capture. *Leuresthes tenuis* has been identified as a Key Indicator Species for the South and Central regions of California Marine Protected Areas, and as an indicator species for climate change on beaches. Gear restrictions, license requirements, and a two-month closed season are rarely enforced late at night. We recommend continued monitoring for *L. tenuis* in California and increased protections for this unique charismatic fish.

**Keywords:** beach-spawning, citizen science, closed season, endemic species, Atherinopsidae, fishing gear, poaching, recreational fishery, reproduction, spawning run, spawning aggregations.

## Introduction

California Grunion *Leuresthes tenuis* (Atherinopsidae) is an indigenous endemic marine fish on the Pacific coast of California. Famous for forming large assemblages that lead to massive runs, individual fish emerge fully out of waves onto beach sand to spawn (Martin, 2015). Runs may last for over an hour following full or new moons in spring and summer, and fish may cover the beach along the water line (see [Supplementary Material](#)). In the traditional habitat range of southern California, between Pt. Conception, California and Punto Abreojos, Mexico, spawning season starts in March and may extend into August, peaking between April and June (Clark, 1938; Walker, 1952).

Females dig into the soft wet sand to deposit 1500–3000 eggs while surrounded by males providing milt for external fertilization. Males do not dig into the sand, and may outnumber females by 10 to 1 during the run. Multiple paternity of clutches is typical (Byrne and Avise, 2009), and each male may repeatedly return to shore during a single night's run (Walker, 1949), providing milt for multiple females with a muscular genital papilla (Aryafar *et al.*, 2019). Thus, multiple waves may carry hundreds of the same individuals over and over again. Females spawn once during a series but can spawn multiple times across the season (Clark, 1925; Walker, 1949). The number of fish on shore cannot be easily counted during a large run, but the density, duration, and

extent of the fish are far greater during some runs than others (Walker, 1949; Martin *et al.*, 2007).

*Leuresthes tenuis* is targeted by a unique recreational fishery, solely during these spawning runs (Spratt, 1986; Sandrozinski, 2013). Because of their unusual life cycle, California Grunion are particularly vulnerable to overharvest. Less than 10 years after the first published scientific description of their spawning behaviour (Barnhart, 1918; Thompson, 1919), the first regulations to protect them were enacted in 1927 (Clark, 1926, 1938) by the California Department of Fish and Game (now Wildlife), CDFW. At that time, people would line the shore and capture hundreds of grunion with improvised nets made of bed sheets (Andrew Olson, pers. comm.). Early protections included a closure with no take from April to June, the peak of the spawning season, and gear restrictions that specify no gear at all. Only bare hands were (and are) allowed for capturing the fish, presumably to give them a sporting chance while on shore. Those under the age of 16 did not (and still do not) need a fishing license to catch grunion during the open season.

Walker (1949) observed grunion runs on Scripps Beach directly following World War II. On the basis of his recommendations, CDFW reduced the closed season to just April and May. Gear restrictions and license requirements remain in place. At that time California's population was substantially smaller, around 10 million, than it is today, with >35 million people living along one of the most extensively populated and urbanized coasts in the world.

During open season there is no bag limit and no requirement to report catch of this species. No commercial use of the species is permitted. Some anglers catch this species for bait, some people catch these small fish to consume whole, but most of those capturing the grunion report they are doing so for the sport, not for any particular use but because it is part of popular culture.

In reality, regulations are rarely enforced, in part because spawning runs always occur in the dark of night. Although this endemic species enjoys some unique protections, regulations have not been changed since 1949.

California Grunion runs are highlighted in public education programs of coastal public aquariums and California State Beaches, and for youth organizations such as the Boy Scouts. Because runs follow the highest spring tides of full or new moons, likely nights and times can be predicted with some success (Walker, 1952; Spratt, 1986). Especially during closed season, observation of runs can be dazzling, with thousands of fish moving out onto shore from waves for an hour or more. Runs may occur when tides are suitable, within a 2-h window following the highest nightly tide in four nights after full and new moons in spring and summer. However, often on nights when runs are forecast, no grunion are seen on shore.

Sandy beaches are critical to *L. tenuis* as essential fish habitat for spawning (Robbins, 2006). However, beaches in California and worldwide are undergoing habitat loss by coastal squeeze (Defeo *et al.*, 2009; Schoeman *et al.*, 2014; Martin, 2015), with sea level rise and erosion encroaching on the beach from the seaward side, and coastal development and shoreline armouring preventing natural retreat of the beach on the landward side (Dugan *et al.*, 2008). Exacerbated by climate change and increasing human population, California is predicted to lose 31–67% of its sandy beaches by the year 2100 under current predictions of sea level rise (Vitousek *et al.*, 2017).

Because of its beach-spawning habits, *L. tenuis* has been identified as a Key Indicator Species for the South and Central regions

of California Marine Protected Area (Marine Protected Area Monitoring Action Plan, 2018), and as an indicator species for climate change on beaches in the Ventura County Coastal Resilience Plan (<https://www.vcrma.org/vc-resilient-coastal-adaptation-project>). However, monitoring for *L. tenuis* is problematic. This species has never been abundant (Gregory, 2001). *Leuresthes tenuis* is planktivorous (Higgins and Horn, 2014); this species does not take a hook. Adults are rarely caught in trawl surveys except within enclosed bays (Allen *et al.*, 2002; Martin *et al.*, 2013; Williams *et al.*, 2016). Recreational fishers are not required to report catch of this species. Thus, traditional fishery methods cannot be used for stock assessments. The only time *L. tenuis* adults can reliably be observed is during their spawning runs.

We developed a group of volunteer citizen scientists, the Grunion Greeters, to report observations of spawning runs on suitable nights all along the California Coast. This started as a way of addressing management issues on sandy beaches, particularly the ecological effects of raking or grooming of beach sand for aesthetic purposes (Martin *et al.*, 2006; Defeo *et al.*, 2009; Dugan and Hubbard, 2010). On the basis of observations and reports across the habitat range over two decades (Martin *et al.*, 2007, 2011), we have become concerned about the status of the California Grunion population as a whole. We hypothesized that this long-term dataset from Grunion Greeter observations would enable us to discern broad trends in population size of this species along its habitat range, in order to guide conservation of this endemic species.

## Methods

### Metric for spawning run assessment

Strength, duration, and extent of the spawning runs are assessed by a species-specific metric, the Walker Scale, developed in 1999 by the first author with Mike Schaadt and Suzanne Lawrenz-Miller of Cabrillo Marine Aquarium in San Pedro, CA (Table 1). Initially used to compare runs in Malibu with runs in San Pedro, this method was adopted for volunteers in the Grunion Greeter program starting in 2002 (Martin *et al.*, 2007, 2011). The metric was named after Boyd Walker, in honour of his research on the timing of grunion spawning runs, mainly at Scripps Beach in La Jolla, CA. Walker also relied on volunteer observers to assess runs on two nights in 1947 from multiple different beach locations (Walker, 1949), although they used a different metric than ours.

Grunion Greeters were trained in a series of short workshops from 2002 to 2018 to understand the Walker Scale categories and assess the number of fish on shore at the peak of the run, the duration of the peak of the run, and the extent of shoreline involved in the peak of the run. Greeters make other observations about the conditions during a night when a grunion run is forecast, including weather and presence of animal predators or grunion hunters. Observers use an online web portal to input their data, usually within 24 h. The data portal is open to the public, and the questionnaire includes an assessment of the experience of the observer and whether or not they attended previous training workshops. See [www.Grunion.org](http://www.Grunion.org) for additional details. Grunion Greeter data focus on closed season, April and May, but also includes reports from open season before and after. Because the Greeters are volunteers, the locations and number of reports are not constant from year to year, however some beaches are more consistently observed, and may be considered sentinel beaches.

**Table 1.** The Walker Scale for assessment of grunion runs.

Scale	Number of Grunion on shore at the peak of the run	Duration of peak	Descriptor
W0	No fish or only a few, little or no spawning	Up to an hour	Not a run
W1	Up to 100 fish scattered over a wide area of the beach at a time, some spawning	Up to an hour	Light run
W2	100–500 fish spawning over time, many fish ashore with many of the waves	Up to an hour	Good run
W3	Hundreds of fish spawning at once on several areas of the beach, or thousands in one area	Up to an hour or more	Strong run
W4	Thousands of fish together over a broad area, little sand visible between fish at peak of run	Peak lasts minutes up to an hour	Excellent run
W5	Fish covering the beach several individuals deep, a silver lining of the surf over an extensive area, impossible to walk through run without stepping on fish	Peak spawning continues longer than 1 h	Incredible run

Boyd Walker's pioneering research on grunion provided the scientific basis for understanding the periodicity of the spawning runs in California. The Walker Scale, developed by K. Martin, M. Schaadt, and S. Lawrenz-Miller, is a way to assess the spawning run without actually counting the fish, for comparisons across space and time. Observations should start at or before the time of the highest tides on the four nights following a new or full moon, and continue for 2 h as the tide falls. The number of grunion should be assessed at the peak of the run; most runs start small but some may build up over time. At the peak of the run, how many fish are on shore at any given time? Are they on shore over a short or long period of time? Over a small area or a large extent of the beach? How long does the peak spawning aggregation last? (c) Grunion Greeters and Beach Ecology Coalition, used by permission.

### Quality control for Grunion Greeter data

All data were evaluated by scientists before use in analysis. Incomplete forms or forms with no identification from the observer were discarded. Forms from dates or times that were unlikely for grunion to run, or from unclear locations were discarded. Grunion Greeters generally work in pairs to provide internal validation. If multiple observer groups on the same run gave different scores, more credence was given to a more experienced, trained observer. Multiple observers on the same run may have different scores because they observed from different locations on the shore; this was evaluated in the reports. Unusual or atypical reports for a location or time are followed up with an e-mail or phone call for additional details. Reports were verified on subsequent days by sampling for presence and density of clutches of eggs in the sand in some but not all cases.

For the purposes of this study and to avoid bias for data from certain beaches that have more frequent observations, we selected for each beach, only the highest Walker score reported from each spawning series (the four-day period following a new or full moon), from our verified data. Thus, a spawning series with few grunion on the first two nights after a full moon but a large run on the third would be represented only by the highest Walker score for that series.

Data were compared by beach location, county, and year using non-parametric statistics. Data from within the primary habitat of southern California, containing over 90% of the species population (Martin *et al.*, 2013; Martin, 2015), were analysed separately from much sparser data for the central coast that followed a northward range extension in 2002 (Roberts *et al.*, 2007; Johnson *et al.*, 2009).

### Results

Since 2002, over 4500 Grunion Greeters have provided over 5000 reports. This Grunion Greeter compilation is the most complete dataset for spawning runs of this species in existence, both in terms of geographic coverage and duration of observations. Reports have come from the entire range of the species, over 50 beaches in California and Baja California, Mexico. A northern range extension for spawning runs was discovered in 2002 in San Francisco Bay (Johnson *et al.*, 2009), followed by a northward range extension to Tomales Bay in 2005 (Roberts *et al.*, 2007). Many Grunion Greeters provided multiple observations over

several years. Verified data from professional biologists using our methods to observe California Grunion as part of their monitoring efforts for coastal construction projects are also included.

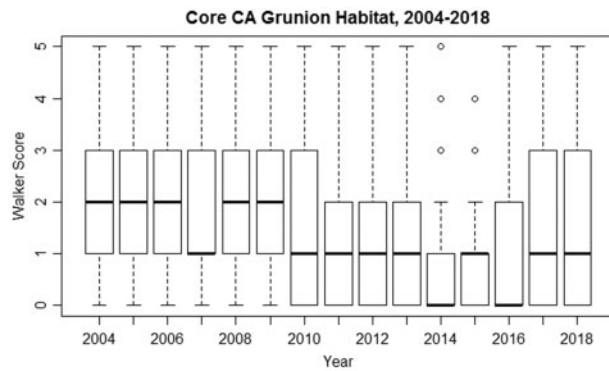
Grunion Greeters reliably report the location of a run and its strength, based on both multiple independent observations of the same run, and on sporadic post-run sampling of beaches for clutches. In 445 runs with multiple observers, there is 87.6% agreement on the ranking of the Walker Scale. Even with disagreement, scores rarely differ more than one rank between observers.

The core of the habitat range is from the border of California and Mexico in San Diego County through Orange County and Los Angeles County through Malibu. From 2002 to 2010, typically the median run strength in this core area was W2, with a small percentage of the runs at W4 or W5 level (Figure 1). Large spawning runs (W4 and W5) have been seen in every year, on occasion. On a year with a low median, the number of large runs is very low as well. Although large runs still occurred in 2018, in 6 of the past 8 years, 75% of the runs have been W2 or lower in the core habitat for this endemic species.

Examining by county, runs in Los Angeles County, Orange County, and San Diego County have decreased in Walker Score over the time of the study (Figure 2). The five years 2004–2008 compared with the five years 2014–2018 show a significant decrease in the Walker Score of runs in the core habitat over time. This decline is consistent whether testing the three core counties together (Figure 1), looking within individual counties in southern California (Figure 2), or comparing across time within individual sentinel beaches (Figure 3). For the three core counties, significant differences are seen in frequencies of large and small runs between decades ( $N=1952$ ,  $X^2=18.42$ ,  $df=5$ ,  $p<0.01$ ). By county, these differences are also significant. For San Diego County,  $N=742$ ,  $X^2=11.81$ ,  $df=5$ ,  $p<0.037$ ; for Orange County,  $N=500$ ,  $X^2=78.12$ ,  $df=5$ ,  $p<0.0001$ ; and for Los Angeles County  $N=465$ ,  $X^2=18.5$ ,  $df=5$ ,  $p<0.01$ ).

Runs are highly variable in space and time. Although on a given night one beach may hold a large run, other beaches on the same night or run series may show little activity (Figure 4). The proportion of runs that are small (W0 or W1) has significantly increased over the past 15 years (Spearman Rank Correlation Coefficient  $r_s=0.57$ ,  $df=13$ ,  $p=0.025$ ). For the three counties of San Diego, Orange, and Los Angeles, small runs were 48.9% of reports from five years between 2004 and 2008, and increased to





**Figure 1.** When the Grunion Greeters started, median (heavy bars) run size was a moderate but effective W2 in the core species habitat of southern California. Since 2010, the median of runs reported has been no higher than W1, meaning that at least 50% of the runs observed do not hold significant spawning activity. In two years (2014 and 2016) the median was W0, meaning that >50% of the time runs were predicted, few or no spawning fish were present. From 2011 to 2018, the median across the traditional habitat range typically was W1 and twice was W0.  $N = 3462$ .

65.4% of reports in the 5 years from 2014 to 2018. The proportion of runs at the W5 level has remained low and fairly consistent over the years,  $1.58 \pm 0.76\%$  of reports in a given year.

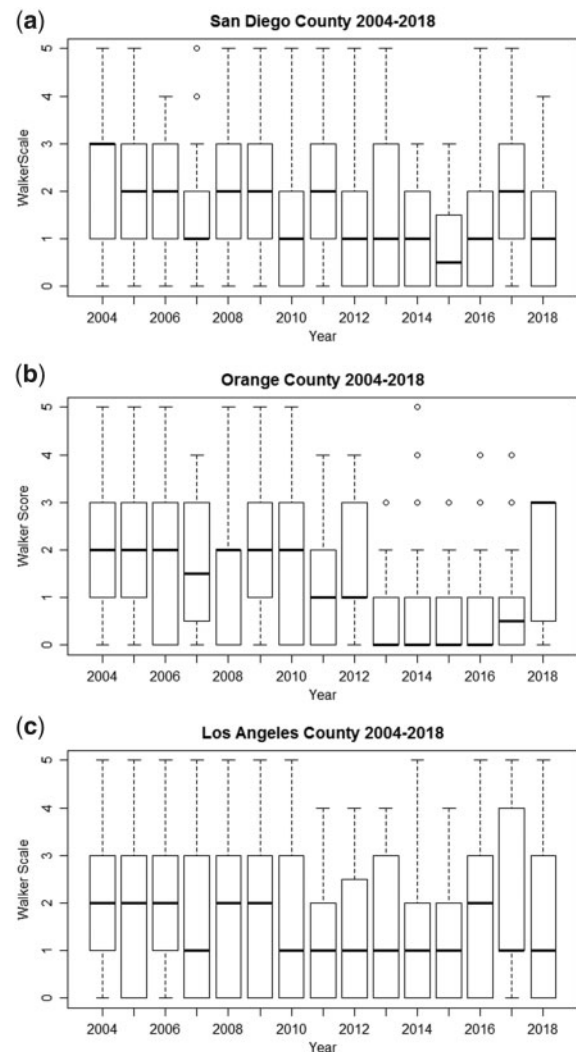
Runs north of the core habitat seem to be increasing according to our reports, although not yet significantly (Figure 5). The areas of northward range extension around San Francisco Bay underwent local extirpation in 2008 (Martin et al., 2013) but have been re-colonized in 2014. Runs in locations in and around San Francisco Bay start later, in May rather than March, and continue into August, with the largest runs usually in July and August.

Grunion Greeters reported poaching (catching out of season, without a license, or with the use of any gear) in ~20% of reports during closed season, and hunting or poaching for 93% of reports during open season. California fishers are not required to display a license while fishing. Informal questioning indicated that many adults hunting grunion during runs did not purchase a fishing license. Game Wardens were rarely observed during runs, <5 instances out of 5133 reports. Active hunting was often accompanied by loud, raucous crowds and high disturbance and prevention of spawning (Table 2).

Clutches of eggs are buried 10–20 cm deep in beach sand in a band no >1–3 m wide parallel to shore on the upper beach in the mid to high intertidal zone. Considering a narrow strip on average ~3 m wide along 483 km of sandy beaches in southern California results in a total spawning habitat area of 1.45 km<sup>2</sup> for *L. tenuis* in its core primary habitat at the current time.

## Discussion

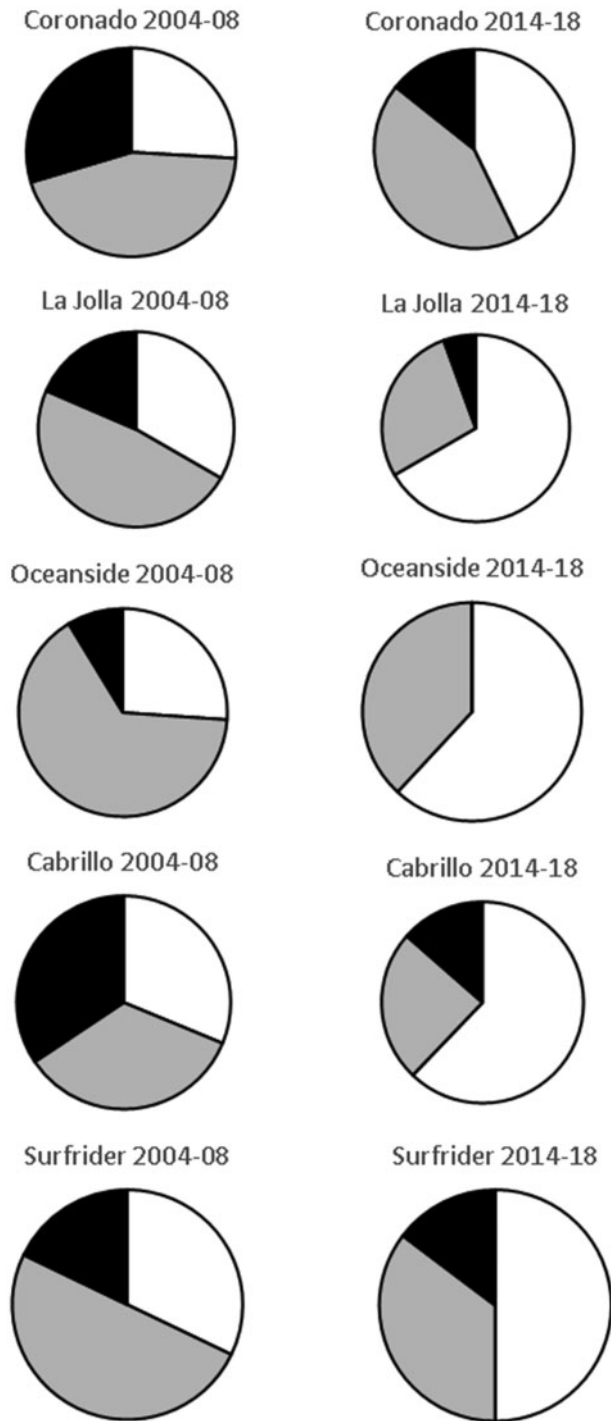
California Grunion spawning runs can be assessed with the help of citizen scientists; in fact this may be the only way to obtain these extensive, hyperlocal data. The Walker Scale is currently used by professional resource biologists to monitor grunion runs for agencies such as US Army Corps of Engineers, California Department of Fish and Wildlife, California Coastal Commission, National Marine Fisheries Service, and California State Parks, as well as for public educational programs at Cabrillo Aquarium and Birch Aquarium at Scripps, among others (Martin et al., 2011). The Walker Scale is an effective, accurate, non-invasive



**Figure 2.** Reports from Grunion Greeters indicate that median (heavy bars) run size based on the Walker Scale have significantly decreased over time for each of the three southern counties. (a) San Diego, (b) Orange, and (c) Los Angeles.

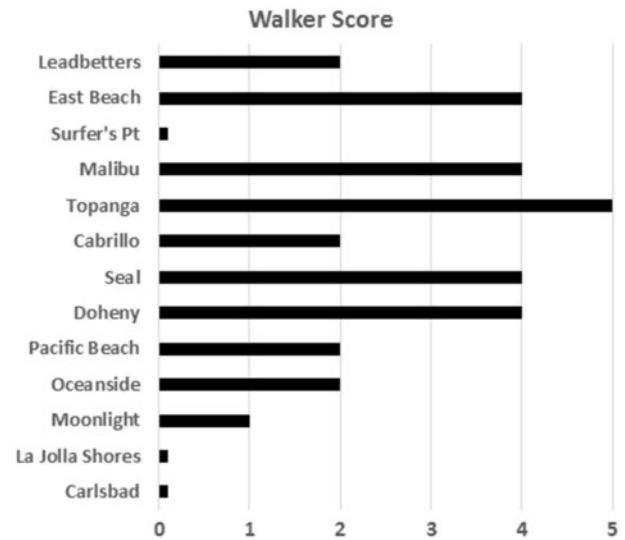
although labour-intensive method for assessment of this species and other beach-spawning fishes. While the data from professional biologists monitoring grunion runs for coastal projects are certainly reliable, the number, locations, and frequency of these short-term projects are small relative to the substantial, long-term efforts of volunteer Grunion Greeters.

Even though large runs can still be observed, the median Walker Score for California Grunion spawning on shore has declined significantly across much of the core habitat range in the past ten years (Figure 1). This pattern is consistent for this endemic fish across the three coastal counties constituting its core habitat (Figure 2) and within individual beaches known historically for large spawning runs of grunion (Figure 3). The occasional presence of large spawning aggregations may create the illusion of abundance even when a population is depleted (Erisman et al., 2011). These occasional large runs may tempt resource managers to believe that these kinds of runs are both more common and more widespread geographically than is the actual situation (Figure 4, Sadovy and Domeier, 2005).

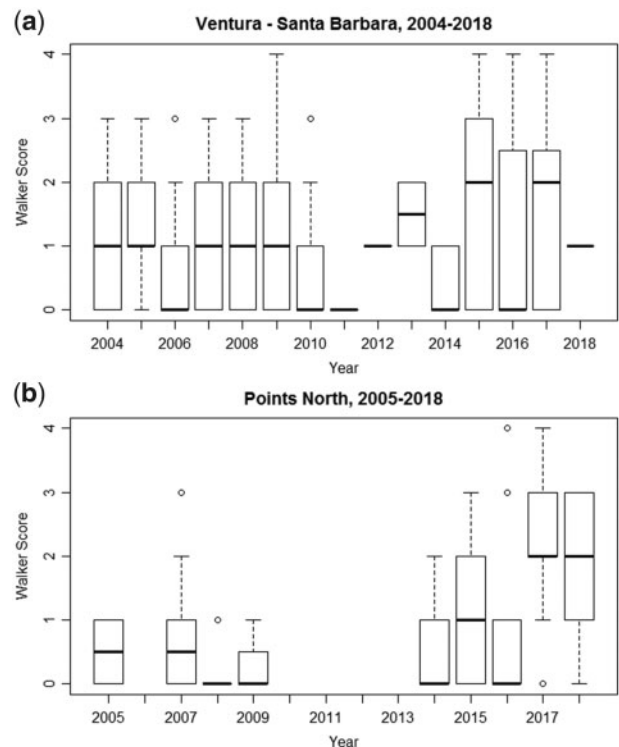


**Figure 3.** Proportions of runs that are small (W0 or W1), medium (W2 or W3), and large (W4 or W5) in five sentinel beaches in the core habitat range of southern California. Median runs dropped over the past decade and the likelihood of large runs decreased significantly in all cases.

On the basis of reports from Grunion Greeters and resource biologists, California Grunion appear to be both shifting their habitat range northward (Figure 5) and decreasing in numbers in the more southern habitats (Figures 1 and 2). Warming trends in ocean water and the atmosphere may be affecting this species



**Figure 4.** For one April night, beaches from San Diego, Orange, Los Angeles, Ventura, and Santa Barbara counties show the variability in run strength. The median run score is W2 for these 12 beaches.



**Figure 5.** Runs appear to be increasing north of the core habitat range, but these differences are not significant. (a) Ventura and Santa Barbara Counties are north of the core habitat but within the traditional spawning range of *L. tenuis*. (b) *L. tenuis* colonized San Francisco Bay and points north in 2002, and then was locally extirpated by 2008. They returned in 2014 and runs are increasing in strength. Heavy line is median.

(Martin, 2015), along with ocean acidification (Tasoff and Johnson, 2019). There is an environmental component to sex determination of *L. tenuis*, so that warmer temperatures during



**Table 2.** Grunion Greeter reports indicate high levels of disturbance of spawning by people hunting.

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“Unruly THOUSANDS, some in water, all making noise. Looked like some sort of post-apocalyptic marine Mad Max.”
“The few grunion that actually came up onto the beach were automatically grabbed by poachers. There were probably 20–30 people taking the fish last night.”
“Hundreds of people on beach, many using buckets and strainers to collect fish; informed them of regulations.” (report from a marine biologist with California Department of Fish and Wildlife).
“A large group of people gathered at least 10 plastic grocery bags full of grunion and women were walking behind them laughing and kicking the grunion. Many people were taking several hundred grunion home in trash bags.”
“Over a hundred people in a frenzy to get the few fish that came in with each wave. Lots of screaming kids, dogs, and flashlights.”
“Three families harvested hundreds.”
“One goofy guy was running wildly up and down the beach with a flashlight and grabbing at any fish that started to spawn.”
“Hunting–Splashing into water, capturing in water or at surf’s edge, noisy, yelling, screaming.”
“Lots of youngsters excited and splashing in the shallows chasing grunion. Probably they harvested 200 or 300. There were maybe 50+ in groups of 4–10 running to and fro.”
“There was a very rowdy group of ~10 people, catching and collecting the grunion during the entire run, yelling and chasing after the fish into the water, up to even waist deep!”
“Bad behavior: Kicking fish, throwing, stepping, or jumping on them.”
“TONS of people. At the first big sighting of fish the people rushed the water & the grunion fled.”
“There was a pack of ~12–14 non-English speaking people stomping on and kicking fish on the beach. One run of grunion had started and when these people behaved in this way that run went back into the water and did not return to that location.”
“Poachers continuously ignored our information very frustrating. Picking them up filling buckets and stepping on them and ripping them in half.”
“Fish tried to come ashore but a crazy mob of people lined beach with buckets & lights.”

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early life result in greater proportions of males (Brown *et al.*, 2014). Of more immediate concern, their critical spawning habitat is also declining (Dugan *et al.*, 2008; Vitousek *et al.*, 2017; King *et al.*, 2018), potentially concentrating the spawning population into fewer locations on shore. The spawning zone of *L. tenuis*, the upper beach between the mid and high intertidal zone (Martin *et al.*, 2006), is also the beach area that is most vulnerable to loss by coastal squeeze (Dugan and Hubbard, 2010; Schooler *et al.*, 2017). The core spawning habitat total area of 1.45 km<sup>2</sup> for *L. tenuis* is smaller than Dodger Stadium or the Los Angeles International Airport. The minimum size is 25 km<sup>2</sup> for one Marine Protected Area (MPA) in California (Botsford *et al.*, 2014), in a network of over 100 MPAs. This critical habitat for *L. tenuis* is likely to decrease, and is already <0.001% of the area of the California MPA network.

Even though the species has managed to shift its habitat and colonize some northern bays, the northern ecotype grows to a smaller adult size, spawns less frequently, and produces significantly fewer, smaller eggs per clutch (Johnson *et al.*, 2009; Martin *et al.*, 2013). For these reasons the northern populations are more vulnerable to ecosystem perturbations and local extirpation than the populations in the traditional habitat. In addition, the more northern populations spawn on a different annual schedule than the southern populations of this species, and therefore the peak run times of the northern populations are not protected by the current closed season of April and May. These northern fish are neither different genetically (Johnson *et al.*, 2009; Byrne *et al.*, 2013) nor are they different in physiological response to temperature (Brown *et al.*, 2012) from the southern grunion, so this habitat shift appears to be restricted to areas of bays that are warmer than the waters of the open ocean.

Fished species that form spawning aggregations face an increased extinction risk (Sadovy and Erisman, 2012). Modern conservation practices almost universally protect the reproductive period and spawning aggregations of species (Hutchings, 2001). The regulations for fishing on California Grunion do the opposite by specifically targeting the spawning aggregations, striking this

species at its most vulnerable and critical time, disrupting its ability to produce the next generations. Fishing on large aggregations can mask population declines or collapse (Erisman *et al.*, 2011).

Regulations put in place to protect the endemic California Grunion during spawning runs are rarely and unevenly enforced. Poaching during closed season is common on some urban beaches, and reported during ~20% of closed season observations. Collection of spawning fish by people with or without fishing licenses is nearly universal during open season, identified in the vast majority of open season reports, disrupting runs, and preventing reproduction while removing ripe adults from the population (Table 2). Many grunion hunters do not fish for any other species, and do not possess fishing licenses. Children, not required to have a license, are very effective hunters (see Supplementary Material). Thus the potential number of people hunting California Grunion is far greater than the 2.5 million sport fishing licenses that were sold in California in 2016 (<https://www.wildlife.ca.gov/Licensing/Statistics#SportFishingLicenses>).

Data from entrainment surveys are the only other long term dataset available for *L. tenuis*. The entrainment data conforms with CalCOFI nearshore trawl data pattern (Miller and McGowan, 2013). For California Grunion, usually less than one, or fewer than two individuals are seen per million cubic meter flow (E. Miller, pers. comm.). Compared with other local silverside fishes, for Topsmelt *Atherinops affinis* 14.6, and Jacksmelt *Atherinopsis californiensis* 39.4 are present per million cubic meters flow at a peak. Both *A. affinis* and *A. californiensis* are fished commercially and recreationally, with hundreds of thousands landed each year (Vejar, 2013). These fishery-independent surveys indicate at a minimum that *L. tenuis* abundance is substantially lower than its sister silverside species of similar size.

Trawl surveys of San Diego Bay (Williams *et al.*, 2016) and San Francisco Bay (Johnson *et al.*, 2009) show large population fluctuations from year to year. In 2016 Williams *et al.* suggested a stock estimate for *L. tenuis* in San Diego Bay of 785,183 fish, but 92% were juveniles in surveys taken during the spawning season. This suggests substantially fewer, only 62,815 adult grunion in

San Diego Bay in 2016. The human population of San Diego's metropolitan area is 3.1 million, <http://worldpopulationreview.com/us-cities/san-diego-population/> not including the city's 35 million tourist visitors per year (<https://www.sandiego.org/about.aspx>).

Because of the tendency of this species to aggregate, we hypothesize that even if fewer fish are present in the total population, large runs will still occur on occasion. Our observations suggest that it is likely that a minimum number of fish must be present for a spawning run to occur. Runs with fewer than a hundred individuals usually do not include spawning events or egg deposition. Therefore the presence of only small numbers of fish during a run suggests unsuccessful reproduction. As runs decline, fewer observations can be made. If the population declines, fewer locations will hold runs, and those runs will occur less frequently. The consistent pattern of decline in median run size is of great concern for this endemic indigenous species. We suggest it is possible that the numbers of adult fish could drop too low for successful spawning even when some members of the species are present and ripe.

The sister species, *Leuresthes sardina* the Gulf Grunion, is endemic to the northern Gulf of California (Bernardi *et al.*, 2003). This species shares the beach-spawning habits of *L. tenuis* (Thomson and Muench, 1976). *Leuresthes sardina* appears on the IUCN Red List as "Near Threatened" because of potential habitat loss and human interference (Findley *et al.*, 2010). The California Grunion *L. tenuis* may face even greater threats because of larger human populations and more coastal development in California compared with Mexico.

In summary, large spawning runs still occur for *L. tenuis*, but smaller runs have been much more common in the present decade than in the previous one in its core habitat range. There may be fewer California Grunion, or the fish may not be able to spawn as frequently as in the past. Either way, reproductive output appears to be lower. For those populations that have moved north, the shift in habitat comes at the cost of smaller size and reduced clutch size, as well as a shift in spawning season that is shorter and holds less frequent spawning.

We strongly encourage increased protection of the spectacular spawning runs for this charismatic indigenous endemic marine fish. Its status as a managed species and an indicator species for climate change warrant greater concern. At minimum, a return to closed season from April to June, as originally designated in 1927, would help protect the southern population from fishing pressure. We recommend that the *L. tenuis* population on the central coast, in Monterey Bay and around San Francisco Bay, should be completely closed to take, as the populations there appear to be too small to withstand any fishing pressure.

Outreach with the Grunion Greeters may help shift public perception of this species and their interaction with its runs. Greeters report with dismay that those hunting *L. tenuis* during its spawning runs exploit the vulnerability of these fish when out of water (Table 2). Unlike typical fishers who respectfully interact with the resource and take no more than they will use, grunion hunters often say they are following some sort of (perhaps misguided) cultural tradition. They scream and yell while running to wildly chase the fish that are trying to spawn. They sometimes step on the fish in their haste, breaking their backs; then toss them into buckets to expire. Instead, we hope that more and more people will come to quietly observe the run spectacle on its own terms, without disturbing the fish, as watchable wildlife. All should be

able to simply enjoy the amazing sight of California's original surfers dancing on the beach.

## Supplementary data

Supplementary material is available at the ICESJMS online version of the manuscript.

## Acknowledgements

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Handling editor: Howard Browman

State of California  
Department of Fish and Wildlife

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## Memorandum

2020 JAN 24 AM 11:00

Date: January 23, 2020

To: Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

From: Charlton H. Bonham  
Director



Subject: **Petition #2019-012: Water Pumps and Clams**

A petition submitted by Mr. Carl Vogler to the Fish and Game Commission (Commission) proposes to prohibit the use of hand operated water pumps to take gaper and other clams. The California Department of Fish and Wildlife (Department) has reviewed the petition and finds that the proposed regulatory changes may help ensure the sustainable harvest of clams. The recent introduction of water pumps to take clams enables take in areas that were previously not accessible, creates efficiencies that may jeopardize the sustainable harvest of the resource, and may introduce new and expanded habitat impacts. In addition, the use of water pumps introduces enforcement concerns because the gear allows clamming activity to occur underwater and out of view, making it for difficult to enforce take limits and high grading for larger clams.

While the Department does not currently have the capacity to undertake this rulemaking due to other higher priority tasks, it supports the Commission's approval of this petition and direction to its staff to lead the development of a regulatory package.

Please direct further questions to Dr. Craig Shuman, Marine Regional Manager, at (916) 445-6459 or by email at [Craig.Shuman@Wildlife.ca.gov](mailto:Craig.Shuman@Wildlife.ca.gov).

ec: Stafford Lehr, Deputy Director  
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Melissa Miller-Henson, Executive Director  
California Fish and Game Commission  
January 23, 2020  
Page 2

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## Memorandum

2020 JAN -9 PM 2:35

Date: January 8, 2020

To: Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

From: Charlton H. Bonham  
Director



Subject: **Petition to Change Bag Limit and Seasonal Closure of California Grunion**  
(Tracking Number: 2019-14)

A petition submitted by Dr. Karen Martin to the Fish and Game Commission (Commission) proposes to amend Section 27.60(b) and Section 28.00, Title 14, California Code of Regulations. The proposed changes are to create a 10 fish bag limit for California Grunion (Grunion), and to change the open season to July 1 – March 31 south of Pt. Conception, and September 1 – March 31 north of Pt. Conception. The rationale provided by Dr. Martin states Grunion are vulnerable to overharvest and habitat loss due to their unusual life cycle.

Grunion are an iconic and endemic species to California. They have a unique spawning strategy by beaching themselves at night during the four high tides following a full and new moon from February through September. During these spawning runs, the female's half bury themselves in the sand while the males curl around them releasing milt to fertilize the eggs before both return to the ocean. These predictable runs have become a cultural event in southern California sometimes drawing large numbers of individuals to observe this unique behavior and/or recreationally harvest grunion as they come ashore.

There is no commercial fishery for Grunion and a recreational bag limit has not been established. In 1927, a seasonal closure of April 1 through June 30 was enacted due to signs of a depleting population. This seasonal closure was amended in 1947 to reduce the closure to April 1 through May 31 due to signs of a recovering population. This seasonal closure is still in effect today, which protects the peak of the spawning period.

The Department of Fish and Wildlife (Department) has very limited data on Grunion since they are not frequently caught using traditional fishery methods (e.g. hook-and-line, trawling, etc.) and are difficult to monitor due to their unique life cycle. The only abundance data available are from a group of citizen scientists, the Grunion Greeters, who monitor Grunion runs along the southern California coastline.

Melissa Miller-Henson, Executive Director  
Fish and Game Commission  
January 8, 2020  
Page 2

Over the past 15 years, their data show a decline in the frequency and numbers of Grunion in those runs. Additionally, Grunion are vulnerable to spawning habitat loss due to sea-level rise, beach erosion, and coastal development.

As outlined in the 2018 Master Plan for Fisheries scaled-management framework, the Department proposes to prepare an Enhanced Status Report (ESR) for Grunion in early 2020. The ESR will compile available information on the species, fishery, current management and monitoring efforts, and will help inform future management needs. The Department agrees the existing management measures for the Grunion fishery may need to be adjusted to address specific overharvest and habitat loss concerns. Once evaluated through the scaled-management framework, the Department proposes to provide an update to the Marine Resources Committee in July 2020 in San Clemente, CA to discuss possible regulatory amendments.

cc: California Department of Fish and Wildlife

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Tracking Number: (\_\_\_\_\_)

To request a change to regulations under the authority of the California Fish and Game Commission (Commission), you are required to submit this completed form to: California Fish and Game Commission, 1416 Ninth Street, Suite 1320, Sacramento, CA 95814 or via email to [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov). Note: This form is not intended for listing petitions for threatened or endangered species (see Section 670.1 of Title 14).

Incomplete forms will not be accepted. A petition is incomplete if it is not submitted on this form or fails to contain necessary information in each of the required categories listed on this form (Section I). A petition will be rejected if it does not pertain to issues under the Commission's authority. A petition may be denied if any petition requesting a functionally equivalent regulation change was considered within the previous 12 months and no information or data is being submitted beyond what was previously submitted. If you need help with this form, please contact Commission staff at (916) 653-4899 or [FGC@fgc.ca.gov](mailto:FGC@fgc.ca.gov).

## **SECTION I: Required Information.**

*Please be succinct. Responses for Section I should not exceed five pages*

1. **Person or organization requesting the change (Required)**  
Name of primary contact person: Karen Martin, PhD  
Address: 24255 Pacific Coast Highway, Malibu, CA 90263-4321  
Telephone number: 310-506-4808  
Email address: [karen.martin@pepperdine.edu](mailto:karen.martin@pepperdine.edu)
2. **Rulemaking Authority (Required)** - Reference to the statutory or constitutional authority of the Commission to take the action requested: **Fish and Game Code Section 8381**; Section 28.00 cites sections 200, 202 205, 210, 219, and 220 of the Fish and Game Code. Section 200 is relevant as this is not a commercial take. Section 202 was repealed Stats 2016. Section 205 is relevant as it allows the Commission to change or abolish an open season and to establish or change a bag limit. Section 210 is repealed Stats 2016. Section 219 is relevant as it provides the Commission authority to act to protect fish, wildlife, and natural resources. Section 220 is repealed Stats 2016.
3. **Overview (Required)** - Summarize the proposed changes to regulations: 1) Change the bag limit from "none" to "ten of one species" for California Grunion *Leuresthes tenuis*; 2) Reduce the length of the seasonal closure for California Grunion; 3) Shift the timing of the seasonal closure north of Pt. Conception for California Grunion.
4. **Rationale (Required)** - Describe the problem and the reason for the proposed change: See Attached for full text: Rationale for request for change in regulations: Unique Species Targeted During Critical Reproductive Season in a Shrinking Habitat

## **SECTION II: Optional Information**

5. **Date of Petition: June 2019**





**6. Category of Proposed Change**

- ☒ Sport Fishing  
☐ Commercial Fishing  
☐ Hunting  
☐ Other, please specify: [Click here to enter text.](#)

**7. The proposal is to:** *(To determine section number(s), see current year regulation booklet or <https://govt.westlaw.com/calregs>)*

- ☐ Amend Title 14 Section(s): 27.60(b); no bag limit, to 27.60 (a), limit of 10 for one species; Section 28.00, seasonal closure, may be taken June 1 – March 31; change to July 1 – March 31 south of Pt. Conception. North of Pt. Conception, seasonal closure, change so may be taken September 1 – March 31. Section 28.00 cites sections 200, 202 205, 210, 219, and 220 of the Fish and Game Code. Section 200 is relevant as this is not a commercial take. Section 202 was repealed Stats 2016. Section 205 is relevant as it allows the Commission to change or abolish an open season and to establish or change a bag limit. Section 210 is repealed Stats 2016. Section 219 is relevant as it provides the Commission authority to act to protect fish, wildlife, and natural resources. Section 220 is repealed Stats 2016.  
☐ Add New Title 14 Section(s): [Click here to enter text.](#)  
☐ Repeal Title 14 Section(s): [Click here to enter text.](#)

**8. If the proposal is related to a previously submitted petition that was rejected, specify the tracking number of the previously submitted petition** [Click here to enter text.](#)  
Or ☒ Not applicable.

**9. Effective date:** If applicable, identify the desired effective date of the regulation.  
If the proposed change requires immediate implementation, explain the nature of the emergency: April 2020

**10. Supporting documentation:** Identify and attach to the petition any information supporting the proposal including data, reports and other documents: Powerpoint about California grunion, scientific journal article on population trends of California grunion .

**11. Economic or Fiscal Impacts:** Identify any known impacts of the proposed regulation change on revenues to the California Department of Fish and Wildlife, individuals, businesses, jobs, other state agencies, local agencies, schools, or housing: There is no commercial fishery and it is illegal to sell recreational catch. No gear is legal for this species. It is unlikely that there will be negative economic impacts from reduced recreational fishing. It is possible that improved grunion runs will attract tourism for wildlife watching during the expanded closed season. Tourism agencies in coastal cities currently list grunion runs as an attraction.

**12. Forms:** If applicable, list any forms to be created, amended or repealed:  
[Click here to enter text.](#)

**SECTION 3: FGC Staff Only**

Date received: [Click here to enter text.](#)



FGC staff action:

- ☐ Accept - complete
- ☐ Reject - incomplete
- ☐ Reject - outside scope of FGC authority

Tracking Number

Date petitioner was notified of receipt of petition and pending action: \_\_\_\_\_

Meeting date for FGC consideration: \_\_\_\_\_

FGC action:

- ☐ Denied by FGC
- ☐ Denied - same as petition \_\_\_\_\_
- ☐ Granted for consideration of regulation change

Tracking Number



## Rationale for request for change in regulations: Unique Species Targeted During Critical Reproductive Season in a Shrinking Habitat

### *Life History and Current Regulations:*

California grunion *Leuresthes tenuis* (Atherinopsidae), indigenous endemic marine fish, emerge out of water onto sandy beaches on the Pacific coast of California and Baja California to reproduce (Gregory, 2001). In a unique recreational fishery, people capture these fish out of water with bare hands during their midnight spawning runs (Spratt, 1986; Sandrozinski, 2013).

Because of their unusual life cycle, California Grunion are particularly vulnerable to overharvest. Less than 10 years after the first published scientific description of their spawning behavior (Barnhart, 1918; Thompson, 1919), the first regulations to protect them were enacted in 1927 (Clark, 1926, 1938) by the California Department of Fish and Game (now Wildlife), CDFW. At that time, people would line the shore, capturing hundreds of grunion with improvised nets made of bed sheets (Andrew Olson, Jr., personal communication), using them for food and fertilizer.

Early protections included a seasonal closure, with no take from April through June, the peak of the spawning season. Gear restrictions specify no gear at all; only bare hands are allowed for capturing these fish, presumably to give them a sporting chance while on shore. Under the age of 16, children do not need a fishing license to catch grunion during open season. No commercial use of the species is permitted. However, there is no bag limit, and no requirement to report recreational catch of this species.

Walker (1949) observed grunion runs on Scripps Beach directly following World War II. Based on his recommendations, CDFW shortened the seasonal closure to April and May. Gear restrictions and license requirements remained in place. At that time California's population was substantially smaller, 10 million. Today, more than 35 million people live along one of the most densely populated coasts in the world, and millions more visit as tourists.

Sandy beaches are critical to California grunion as Essential Fish Habitat for spawning (Robbins 2006). However, beaches in California and worldwide are losing habitat by coastal squeeze (Defeo et al., 2009; Shoeman et al., 2014; Martin, 2015), with sea level rise and erosion encroaching on the beach from the seaward side, and coastal development and seawalls preventing natural retreat of the beach on the landward side (Dugan et al., 2008). Exacerbated by climate change and increasing human population, California is predicted to lose 31 to 67% of its sandy beaches by the year 2100 under current predictions of sea level rise (Vitousek et al., 2017).

### *Current uses of California Grunion:*

Some anglers catch this species for bait, some people catch these small fish to consume whole, but most of those capturing the grunion report they are doing so for the sport, not for any specific use but because hunting them is part of popular culture.

California Grunion runs are highlighted in public education programs of public aquariums and California State Beaches, and for youth organizations such as the Boy Scouts. Because runs follow the highest spring tides of full or new moons, likely nights and times can be forecast (Walker, 1952; Spratt, 1986). Runs can be dazzling, with thousands of fish moving out of waves onto shore for an hour or more.

Because of its beach-spawning habits, California Grunion has been identified as a Key Indicator Species for the South and Central regions of California Marine Protected Area (Marine Protected

Area Monitoring Action Plan, 2018), and as an indicator species for climate change on beaches in the Ventura County Coastal Resilience Plan (<https://www.vcrma.org/vc-resilient-coastal-adaptation-project> ).

#### *Population status of California Grunion:*

Traditional fishery methods cannot be used for stock assessments of California grunion. This species has never been abundant (Gregory, 2001). It is planktivorous (Higgins and Horn, 2014) and does not take a hook. Adults are rarely caught in trawl surveys except within enclosed bays (Allen et al., 2002; Martin et al., 2013; Williams et al., 2016). The only time California grunion can reliably be observed is during their spawning runs.

Runs may occur when tides are suitable, within a two-hour window following the highest nightly tide in four nights after full and new moons in spring and summer. However, often on nights when runs are forecast, no grunion are seen on shore (Martin et al., 2019).

Volunteer citizen scientists, the Grunion Greeters, report observations of spawning runs on beaches all along the California Coast. With reports across the habitat range over two decades (Martin et al., 2007, 2011), this long-term dataset can discern broad trends in population, in order to guide conservation of this endemic species. Grunion Greeters assess the number of fish on shore, the length of shoreline involved, and the duration of the spawning run at its peak with a metric, the Walker Scale, which ranges from W0 (no fish) to W5 (fish covering the shore).

Over 4500 Grunion Greeters have provided over 5000 reports in the past two decades. This compilation is the most complete dataset for this species in existence, both in terms of geographic coverage and duration of observations. Reports come from the entire habitat range, over 50 beaches in California and Baja California, Mexico. A range extension for spawning runs was discovered in 2002 in San Francisco Bay (Johnson et al., 2009), followed by a northward range extension to Tomales Bay in 2005 (Roberts et al., 2007).

#### *Concerns raised by reports from Grunion Greeters:*

Large spawning runs still occur, but smaller grunion runs are much more common than in past. Spawning on shore has declined significantly across much of the habitat range in the past fifteen years. This pattern is consistent for this endemic fish across the three coastal counties constituting its core habitat (San Diego, Orange, and Los Angeles), and also on individual beaches known historically for large grunion runs (Martin et al., 2019).

California grunion appear to be shifting habitat range northward to some extent (Martin et al. 2013; Martin et al., 2019). The shift in habitat comes at the cost of smaller adult size and reduced number of eggs, as well as a shorter spawning season (Johnson et al., 2009).

Noisy activities of recreational grunion hunters on shore disrupt spawning runs, preventing fish from reproducing before capture. Poaching during closed season is common on some urban beaches, reported in about 20% of closed season observations. Collection of spawning fish is nearly universal during open season, identified in 90% of open season reports, disrupting runs and preventing reproduction while removing ripe adults from the population (Martin et al., 2019). Regulations are rarely and unevenly enforced, in part because spawning runs always occur in the dark of night.



Many grunion hunters do not fish for any other species, and do not possess fishing licenses. Thus the potential number of people hunting California Grunion is far greater than the 2.5 million sport fishing licenses that were sold in California in 2016.

The occasional presence of large spawning aggregations may create the illusion of abundance even when a population is depleted (Erisman et al., 2011). Occasional large runs may tempt resource managers to believe that these kinds of runs are both more common and more widespread geographically than is the actual situation (Sadovy and Domeier, 2005).

We suggest it is possible that the numbers of adult fish could drop too low for successful spawning even when some members of the species are present and ripe. Runs with fewer than a hundred individuals usually do not include spawning events or egg deposition. Small numbers of fish in a run indicate unsuccessful reproduction. The consistent pattern of decline in median run size is of great concern for this beach-spawning species.

The sister species, the Gulf Grunion *Leuresthes sardina*, endemic to the northern Gulf of California (Bernardi et al., 2003), shares the beach-spawning habits of *L. tenuis* (Thomson and Muench, 1976). The Gulf Grunion appears on the IUCN Red List as “Near Threatened” because of potential habitat loss and human interference. (Findlay et al., 2010). Our California Grunion may face even greater threats than the Gulf Grunion because of larger human populations and more coastal development in California compared with Mexico.

#### *Recommendations for change:*

Although this managed species enjoys some unique protections, fishing regulations have not changed since 1949, while fishing pressure has increased.

We strongly encourage increased protection for this charismatic indigenous endemic marine fish.

- Section 28.00, seasonal closure, may be taken June 1 – March 31 → change seasonal closure to include June; may be taken July 1 – March 31 south of Pt. Conception. North of Pt. Conception, seasonal closure, may be taken September 1 – March 31.

Change requested: For the southern population, return seasonal closure April - June, as originally designated in 1927. For the *L. tenuis* north of Pt. Conception, shift the timing of the seasonal closure, to protect the peak season that occurs later there, closure from April – August.

- Section 27.60(b); no bag limit → change to 27.60 (a), limit of 10 for one species.

Change requested: We recommend a change from no bag limit to a limit of no more than 10 fish.

Section 28.00 cites sections 200, 202 205, 210, 219, and 220 of the Fish and Game Code. Section 200 is relevant as this is not a commercial take. Section 202 was repealed Stats 2016. Section 205 is relevant as it allows the Commission to change or abolish an open season and to establish or change a bag limit. Section 210 is repealed Stats 2016. Section 219 is relevant as it provides the Commission authority to act to protect fish, wildlife, and natural resources. Section 220 is repealed Stats 2016.

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<https://www.wildlife.ca.gov/Conservation/Marine/MPAs/Management/Monitoring/Action-Plan>
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Scott Miller  
[REDACTED]  
[REDACTED]  
[REDACTED]

February 8, 2020

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090



Re: **Petition # 2019-012:** Prohibit the use of hand operated water pumps.

Dear Commissioners and Staff,

Hand operated water pumps have greatly increased the number of days clams are taken from Tomales Bay and, presumably, the number of clams taken as well.

There has been an increase in the number of vehicles/people coming to Lawson's Landing to go clamming and, more notably, a *major* increase in the number of days those vehicles/people come each year.

I've been wondering why the clammers are now coming on such high tides, as I have never seen that before. Now I know why. It's the hand pump.

The hand pump has increased the number of days clams can be taken, as well as the number of hours each day clams can be taken. The increase in hours opens up the potential for more "double-dipping" (get limits before the tide, then come back and get more limits after). These increases are not sustainable, even in the short-term.

If the Commission wants to maintain a viable clam population it could:

- A) Prohibit the use of these pumps
- B) Lower the daily bag limit
- C) Have seasonal closures
- D) Close it year-round

My recommendation:

Start with option A. If that doesn't work move on to B, then C, then D.

I applaud Mr. Vogler's commitment to *responsible* fishing and clamming, and the Lawson family's past and present commitment to protecting a valuable resource.

**Save the Clams. Ban the Pumps.**

Sincerely,  
Scott Miller

## CALIFORNIA FISH AND GAME COMMISSION - NONREGULATORY REQUESTS

*Revised 1/24/2020*

FGC: California Fish and Game Commission | DFW: California Department of Fish and Wildlife | WRC: Wildlife Resources Committee | MRC: Marine

Date Received	Name/ Organization of Requestor	Subject	Short Description	Category	Current Status	FGC Receipt meeting	Action Scheduled	Recommendation
11/19/19	Heidi Gregory, Tomales Bay Oyster Company	Amendment to state water bottom lease	Request for an amendment to State Water Bottom Lease No. M-430-05 for purposes of aquaculture to add approved species and amend approved culture methods.	Marine	Active	12/11-12/2019	2/20-21/2020	<b>REFER</b> to DFW and schedule for action once DFW has completed its review and recommendation. Requestor will be notified when scheduled.
11/20/19	Ken Bates	Experimental gear permit	Request for issuance of an experimental gear permit to take Pacific Herring in Humboldt Bay by lampara net.	Marine	Active	12/11-12/2019	2/20-21/2020	FGC's authority to approve experimental gear permits was repealed through statute (Jan 2019), but replaced with authorization for an experimental fishing permit (EFP) program upon adopting regulations. The EFP program is currently under development. Requestor has been notified; requestor may resubmit request once authorizing regulations are in place. <b>No further action recommended.</b>
11/29/19	Paul Eisenhardt for Sheryl Keller	Bear behavior management	Request for assistance and/or guidance on how to address problematic bear behavior (i.e., repeated house break-ins) in Chamberlands at Lake Tahoe.	Wildlife	Active	12/11-12/2019	2/20-21/2020	<b>REFER</b> to DFW
12/6/19	Tom Schiff	Recreational take of swordfish	Request for FGC to track increases in recreational swordfish take occurring along southern California waters; a reported 150 have been taken this year (prior years in single digits) using "Deep Drop" squid bait with big reels, electric assisted gear, at 800-1,000+ feet.	Marine	Active	12/11-12/2019	2/20-21/2020	<b>REFER</b> to MRC to discuss swordfish management and request that DFW review and provide recommendations.
12/2/19	Brandon Scott Barney, Primary Ocean, for Sustainable Ocean Harvest	Kelp harvest plan	Submits a mechanical harvest plan as required in regulation before commercial kelp harvest using mechanical harvester.	Marine	Active	12/11-12/2019	2/20-21/2020	<b>REFER</b> to DFW and direct staff to work with DFW to return with recommendation.

**Commissioners**  
**Eric Sklar**, President  
Saint Helena

**Jacque Hostler-Carmesin**, Vice President  
McKinleyville

**Russell E. Burns**, Member  
Napa

**Peter S. Silva**, Member  
Jamul

**Samantha Murray**, Member  
Del Mar

STATE OF CALIFORNIA  
Gavin Newsom, Governor

**Melissa Miller-Henson**  
**Executive Director**  
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## Fish and Game Commission



*Wildlife Heritage and Conservation*  
*Since 1870*

### WILDLIFE RESOURCES COMMITTEE

Committee Co-Chairs: Commissioner Burns and President Sklar

### January 16, 2020 Meeting Summary

Following is a summary of the California Fish and Game Commission (Commission) Wildlife Resources Committee (WRC) meeting as prepared by staff. An audio recording of the meeting is available upon request.

#### Call to order

The meeting was called to order at 1:02 p.m. by Commissioner Burns at the Aquarium of the Pacific, 100 Aquarium Way, Long Beach, CA 90802. Commissioner Burns gave welcoming remarks.

Wildlife Advisor Ari Cornman outlined meeting procedures and guidelines for participating in Committee discussions, noting that the Committee is a non-decision-making body that provides recommendations to the Commission on wildlife and inland fisheries items. He introduced Commission staff and California Department of Fish and Wildlife (Department) staff. The following Committee members, and Commission and Department staff, attended:

#### **Committee Co-Chairs**

Russell Burns	Present
Eric Sklar	Present

#### **Commission Staff**

Melissa Miller-Henson	Executive Director
Ari Cornman	Wildlife Advisor
Craig Castleton	Associate Government Program Analyst

#### **Department Staff**

Chris Stoots	Captain, Law Enforcement Division
Brad Burkholder	Environmental Program Manager, Wildlife Branch
Karen Mitchell	Senior Environmental Scientist (Specialist), Fisheries Branch
Russell Black	Fisheries Supervisor, South Coast Region

### 1. Approve agenda and order of items

The Committee approved the agenda and order of items.

## **2. Public comment for items not on the agenda**

A representative of the Ballona Wetlands Land Trust presented concerns with the recently-released environmental impact report (EIR) for the Ballona Wetlands Restoration Project, specifically issues surrounding the parking garage. He indicated that the trust may file a petition on the subject but is seeking an “alternate way” to resolve its concerns and asked the Committee for help. He also stated that the date for EIR certification was unclear due to confusion surrounding which flow rates were to be used.

Several commenters voiced concerns regarding coyote impacts in various areas throughout the Los Angeles area. Concerns included attacks on pets, dead animal remains, trash and food availability, potential threats to children, interactions with the homeless, ineffective control measures, and difficulties in working with local governments. Suggestions included coyote culls, improved data collection and reporting, and collaboration with the Department.

### *Discussion*

Co-chair Sklar emphasized the importance of education and gathering data. David Bess was asked about private citizens’ ability to trap coyotes in their community. He answered that there is multi-layered jurisdiction, and that local municipalities have different ordinances governing trapping and coyote control. Co-chair Sklar added that it depends on who owns the land on which trapping occurs. A stakeholder asked about the mission of the Department, and Co-chair Sklar explained the difference between the Commission and the Department. A stakeholder asked about the Commission’s involvement in local municipality issues, and Co-chair Sklar responded that the Commission cannot direct cities to act regarding issues that are within their jurisdiction. Melissa Miller-Henson remarked that neither the Commission nor the Department have the statutory mandate and funding to address coyote problems. The co-chairs indicated a willingness to continue dialogue on the topic.

### *Committee Recommendation*

WRC recommended that the Commission add a discussion of urban coyote issues to a future Commission agenda.

## **3. Department updates**

### **(A) Fisheries Branch**

No updates were provided.

### **(A) Wildlife Branch**

No updates were provided.

### **(B) Law Enforcement Division**

Chris Stoots discussed the start of a new class of cadets at the Department’s Wildlife Officer Academy. There are currently 465 officers statewide. The Department and its Law Enforcement Division are participating in various sporting shows around the state. He highlighted cases involving trash dumping in waterways and trophy deer poaching.

## *Discussion*

Co-chair Sklar asked about the roadkill bill that recently passed, and David Bess explained that possessing roadkill is still illegal; the Commission has authority to write regulations governing a roadkill permit program. Melissa Miller-Henson added that the legislation indicated that funds should be available before undertaking a rulemaking. Ari Cornman noted that the statute directs the Commission and Department to work with several other agencies to develop the program, so appropriations would have to include them as well. David Bess explained some of the complexities involved in implementing the statute.

### **4. Bullfrogs and non-native turtles**

Ari Cornman provided an update on the bullfrog and non-native turtle stakeholder engagement process. Staff is in the process of scheduling the next meeting of the agency team. The environmental/animal welfare team has met four times and made substantial progress. The industry team is still being formed.

## *Discussion*

Co-chair Sklar asked about the industry team, and Ari explained that it has been difficult to find participants from the live food market industry; they discussed potential ways to reach out to that community. A representative of the Center for Biological Diversity (CBD) urged moving forward with the project. Ari thanked CBD for its participation and stated that ongoing challenges with stakeholder participation needed to be addressed to have meaningful progress.

### **5. Simplification of statewide inland fishing regulations**

Karen Mitchell presented the simplification of inland fishing regulations rulemaking proposal, including the purposes and goals, public outreach, some examples of how public comment was considered by the Department, and a new proposed timeline. Revisions from the last version include retaining the traditional trout opener and a category for artificial lures. The overall rulemaking revisions will reduce the number of localized seasons from 33 to 2 and size limits from 8 to 2, reduce the number of special regulations by 25 percent, expand angling opportunity in 48% of existing waters with special regulations, and align the regulations with current biological management goals.

## *Discussion*

Co-chair Sklar emphasized the importance of the regulatory proposal. He further asked the Department to consider a regulation that, when there is sufficient stock, anglers who have caught all other trout species be permitted to catch and release a single Paiute cutthroat trout; Co-chair Burns remarked that this may help the Department's hunter and angler recruitment, retention, and reactivation (R3) program.

### **6. Future agenda items**

The next WRC meeting is scheduled for March 5, 2020 at the Natural Resources Building in Sacramento. Added by FGC as an additional special meeting, the sole agenda topic will be a



discussion and potential recommendation on the simplification of statewide inland fishing regulations.

### **Adjourn**

The Committee adjourned at 10:42 a.m.

# California Fish and Game Commission Wildlife Resources Committee (WRC)

## 2020 Work Plan: Scheduled Topics and Timeline for Items Referred to WRC by the California Fish and Game Commission

Updated Feb a 11, 2020

		Jan 2020 Long Beach	Mar 2020 Sacramento	May 2020 Santa Rosa	Sep 2020 Sacramento
<b>Annual Regulations</b>					
Upland (Resident) Game Birds	Annual				X
Sport Fishing	Annual				
Mammal Hunting	Annual			X	X/R
Waterfowl	Annual			X	X/R
Central Valley Salmon Sport Fishing	Annual			X	X/R
Klamath River Basin Sport Fishing	Annual			X	X/R
<b>Regulations &amp; Legislative Mandates</b>					
Falconry	Referral for Review				
Simplification of Statewide Inland Fishing Regulations	Regulatory	X	X/R		
<b>Special Projects</b>					
American Bullfrog and Non-native Turtle Stakeholder Engagement Project	Referral for Review	X		X	X

KEY: X Discussion scheduled X/R Recommendation developed and moved to FGC

\* Note: The March meeting is an additional meeting added by FGC.

**STAFF SUMMARY FOR AUGUST 7-8, 2019**  
**(For background purposes only)**

## 11. DELTA FISHERIES MANAGEMENT POLICY

### Today's Item

Information ☐

Action ☒

Discuss the potential adoption of a Delta Fisheries Management Policy and compatibility of the FGC Striped Bass Policy.

### Summary of Previous/Future Actions

- |                                               |                                  |
|-----------------------------------------------|----------------------------------|
| • Delta Fisheries Forum                       | May 24, 2017; Sacramento         |
| • WRC discussion                              | Sep 20, 2018; WRC, Sacramento    |
| • WRC discussion                              | Jan 10, 2019; WRC, Ontario       |
| • WRC discussion and recommendation           | May 16, 2019; WRC, Sacramento    |
| • FGC accepted WRC recommendation to schedule | Jun 12-13, 2019; Redding         |
| • <b>Today's discussion</b>                   | <b>Aug 7-8, 2019; Sacramento</b> |

### Background

In Jun 2016, FGC received a regulation change petition (Tracking Number 2016-011) from the Coalition for a Sustainable Delta and others requesting to increase the bag limit and reduce the minimum size limit for striped bass and black bass in the Sacramento-San Joaquin Delta (Delta) and rivers tributary to the Delta. The expressed intent of the petition was to reduce predation by non-native bass on fish that are native to the Delta and listed as threatened or endangered under the federal or California endangered species acts, including winter-run and spring-run Chinook salmon, Central Valley steelhead, and delta smelt.

While the regulation change petition was formally withdrawn prior to FGC action, FGC requested that WRC schedule a discussion to explore the issue more comprehensively; the request also included a review of the existing FGC Striped Bass Policy that was adopted in 1996 and focuses on restoring and maintaining striped bass for recreational fishing opportunity (Exhibit 6). FGC staff was directed to hold a half-day forum focused on the State's vision for managing fisheries in the Delta for the benefit of native fish species and sport fisheries, implementation of the State's vision, and soliciting stakeholder input on potential actions FGC could consider related to this topic.

Held in May 2017, the forum was publicized and open to the public. The forum included a state agency panel discussion, an overview of FGC's policies and regulations for sport fisheries in the Delta, and a full group discussion. The discussion included two presentations by representatives for the original petition, consistent with direction provided by FGC. One of the recommendations that emerged from that forum was FGC adoption of a policy for fisheries management in the Delta that would provide science-based guidance to balance native fish needs with sport fishing opportunities in management decisions. The Coalition for a Sustainable Delta offered a proposed draft policy which, together with stakeholder and DFW input, formed the basis for the initial draft policy.

At its Sep 2018, Jan 2019, and May 2019 meetings, WRC discussed the draft policy and in May developed a recommendation that FGC schedule consideration of the draft policy. At its Jun

**STAFF SUMMARY FOR AUGUST 7-8, 2019**  
**(For background purposes only)**

2019 meeting, FGC received the draft Delta Fisheries Management Policy advanced from WRC (Exhibit 5). At that meeting and following, stakeholders raised several significant issues with the draft policy. Following considerable public comment regarding the draft policy and current Striped Bass Policy, FGC accepted WRC's recommendation and directed staff to add the draft policy to the Aug 2019 meeting for discussion.

At this time, staff believes that additional discussions between stakeholders and staff of DFW and FGC are warranted to explore how to resolve the identified issues before FGC considers the draft Delta Fisheries Management Policy and any potential changes to the FGC Striped Bass Policy. Postponing discussion would allow dialogue to proceed and give additional stakeholders the chance to participate in ongoing discussions. Staff recommends that FGC consider new draft policies (based on discussions with stakeholders) at its Dec 2019 meeting in Sacramento, which will facilitate participation by stakeholders from in and around the Delta. If approved, FGC staff will provide a progress update at FGC's Oct 2019 meeting.

### **Significant Public Comments**

1. The American Sportfishing Association and Coastside Fishing Club ask FGC to focus on the root causes of poor Delta health and oppose any effort to reduce long-term recreational fishing opportunities (Exhibit 1).
2. The California Sportsfishing League emphasizes the economic importance of striped bass, states that predation from non-native game fish in the Delta is a "red herring", and opposes a repeal of the FGC Striped Bass Policy. The league states that reductions in fishing opportunity run counter to the State's R3 project and ask that discussions be scheduled near the greater Sacramento area (Exhibit 2).
3. The Northern California Guides and Sportsmen's Association states that predation on salmonid species is a minor stressor. The association asks that the item be tabled until Dec to allow for ongoing discussions to ensue, and that any further FGC conversations take place in the vicinity of the potential impacts of the draft Delta Fisheries Management Policy (Exhibit 3).
4. The Congressional Sportsman's Foundation states that striped bass contribute to a healthy Delta ecosystem and that predation is not a significant factor driving Delta fish population abundances. They oppose the repeal of the Striped Bass Policy (Exhibit 4).

### **Recommendation**

**FGC staff:** Postpone discussion of the draft policy to the Dec 2019 FGC meeting to allow FGC and DFW staff time to work with stakeholders on ways to address the issues that have been raised.

### **Exhibits**

1. Letter from the American Sportfishing Association and Coastside Fishing Club, received Jul 25, 2019
2. Letter from the California Sportsfishing League, received July 25, 2019
3. Letter from the Northern California Guides and Sportsmen's Association, received July 25, 2019

**STAFF SUMMARY FOR AUGUST 7-8, 2019**  
**(For background purposes only)**

4. Letter from the Congressional Sportsman's Foundation, received July 25, 2019
5. Draft Delta Fisheries Management Policy, revised Aug 1, 2019
6. FGC Striped Bass Policy, adopted Apr 5, 1996

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission postpones discussion of the draft Delta Fisheries Management Policy and Commission's Striped Bass Policy until the December 2019 meeting.



# California Fish and Game Commission

## Draft Delta Fisheries Management Policy

*Version date: February 14, 2020*

*This version of the draft policy reflects the December 3, 2019 version with additional minor clean-up proposed by staff; proposed changes are shown in strike-out (deletion) and underscore (addition).*

The Sacramento-San Joaquin Delta has faced, and continues to experience, declines in pelagic fishes and anadromous salmonids. This policy is intended to guide management decisions that could affect fish species and other aquatic resources. ~~The Delta, for~~For the purposes of this policy, the Delta means the Sacramento-San Joaquin Delta as defined in Section 12220 of the California Water Code. "Delta fisheries" includes listed species, species of greatest conservation need, native species, and game fish.

It is the policy of the California Fish and Game Commission (Commission) that:

- I. The Commission and California Department of Fish and Wildlife (Department) shall seek to collaborate and coordinate with other agencies whose actions may affect species and other resources in the Delta and its tributaries as the Department manages Delta fisheries and other aquatic resources. The Commission and Department will provide feedback to other agencies on any actions in the Delta that could have significant, adverse impacts to California's fisheries.
- II. The Commission and Department shall strive to manage ~~these~~fisheries and aquatic resources holistically, sustainably, and consistent with the direction of the legislature to protect, restore, and enhance the Delta ecosystem.
- III. The Department shall rely on credible science (as defined by Section 33 of the California Fish and Game Code) to develop strategies and recommendations for managing Delta fisheries; using this information, the Department shall strive to improve habitat conditions (such as water temperature and flows, water quality, and food) and manage other stressors (such as disease, predation and prey availability, and competition) to promote recovery of Delta fisheries, ~~{where applicable}~~.
- IV. Recognizing that listed species have highest priority, the Department shall manage Delta fisheries to protect and enhance each species' abundance, distribution, and genetic integrity to support ~~their~~ resiliency and, ~~{where applicable}~~, recovery.
- V. The Department shall manage Delta fisheries in a manner that provides for maximizing sustainable recreational angling opportunities while avoiding or minimizing adverse effects to native and listed species, species of greatest conservation need, and recovery activities.
- VI. To the extent feasible, the Commission and the Department shall support scientific research on habitat or species improvement projects and investments to help the policy goals set forth herein. The Department ~~should~~shall ~~determine and~~ identify clear, objective-based research needs when developing research and recovery project plans, making research investments, making research and recovery funding decisions, and when reviewing and/or authorizing research projects. Where feasible, the Department should encourage and permit recreational anglers to contribute to

scientific research of native and non-native species to help inform efforts to protect and enhance Delta fisheries; such studies should be carefully considered in light of the overall population goals for, and effect on, both the study target and related species.

**California Fish and Game Commission**  
**Striped Bass Policy**

*Adopted April 5, 1996*

It is the policy of the Commission that:

- I. The Department of Fish and Game shall work toward stabilizing and then restoring the presently declining striped bass fishery of the Sacramento-San Joaquin Estuary. This goal is consistent with Commission policy that the Department shall emphasize programs that ensure, enhance, and prevent loss of sport fishing opportunities.
- II. The Department shall ensure that actions to increase striped bass abundance are consistent with the Department's long-term mission and public trust responsibilities including those related to threatened and endangered species and other species of special concern. Recognizing issues associated with potential incidental take of these species, an appropriate interim objective is to restore the striped bass population to the 1980 population level of 1.1 million adults within the next 5-10 years.
- III. The long-term striped bass restoration goal, as identified in the Department's 1989 Striped Bass Restoration Plan, is 3 million adults.
- IV. The Department shall work toward these goals through any appropriate means. Such means may include actions to help maintain, restore, and improve habitat; pen-rearing of fish salvaged from water project fish screens; and artificial propagation.

**California Fish and Game Commission**  
**Proposed Changes to the Striped Bass Policy:**  
**Stakeholder Draft 1**

*Version date: December 3, 2019*

*Proposed changes to the policy are shown in strike-out (deletion) and underscore (addition).*

It is the policy of the Commission that:

- I. The Department of Fish and ~~Game~~ Wildlife shall work toward stabilizing and then restoring the presently declining striped bass fishery of the Sacramento-San Joaquin Estuary. This ~~goal~~ is consistent with Commission policy that the Department shall emphasize programs that ensure, enhance, and prevent loss of sport fishing opportunities.
- II. The Department shall ensure that actions to increase striped bass abundance are consistent with the Department's long-term mission and public trust responsibilities including those related to threatened and endangered species and other species of special concern. Recognizing issues associated with potential incidental take of these species, the department's goal is to restore the striped bass population to a healthy, self-sustaining growing population and robust recreational fishery. An appropriate interim target objective is to restore the striped bass population to ~~the 1980 population level of 1.1-1~~ 1 million adults within the next 5-10 years, taking into account the availability of habitat to support the species.
- ~~III. The long-term striped bass restoration goal, as identified in the Department's 1989 Striped Bass Restoration Plan, is 3 million adults.~~
- ~~IV.~~ III. The Department shall work toward these goals through any appropriate means. Such means may include actions to help maintain, restore, and improve habitat; beneficial to striped bass, reduce impacts of invasive aquatic vegetation, improve water quality, reduce loss of striped bass pen-rearing of fish salvaged from water projects and diversions fish screens; and artificial propagation and assess the status and population of striped bass in the Delta.

**California Fish and Game Commission**  
**Proposed Changes to the Striped Bass Policy:**  
**Stakeholder Draft 2**

*Version date: December 3, 2019*

*Proposed changes to the policy are shown in strike-out (deletion) and underscore (addition).*

It is the policy of the Commission that:

- I. The Department of Fish and ~~Game~~ Wildlife shall ~~work toward stabilizing and then restoring the presently declining~~ monitor and manage striped bass fishery ~~of in~~ the Sacramento-San Joaquin Estuary. This goal is consistent with Commission policy that the Department shall emphasize programs that ensure, enhance, and prevent loss of ~~sport fishing~~ recreational angling opportunities.
- II. The Department shall ensure that actions to increase striped bass abundance are consistent with the Department's long-term mission and public trust responsibilities including those related to threatened and endangered species and other species of ~~special concern~~ greatest conservation need. ~~Recognizing issues associated with potential incidental take of these species, an appropriate interim objective is to restore the striped bass population to the 1980 population level of 1.1 million adults within the next 5-10 years.~~ In light of the foregoing, the Department will seek to achieve a sustainable striped bass population in order to maintain or increase recreational angling opportunities, taking into account the availability of habitat to support the species as well as the need to avoid taking any action that would result in incidental take of listed species.
- III. ~~The long-term striped bass restoration goal, as identified in the Department's 1989 Striped Bass Restoration Plan, is 3 million adults.~~
- IV. ~~III.~~ The Department shall work toward these goals through any appropriate means. Such means may include actions to help maintain, restore, and improve habitat; beneficial to striped bass, reduce impacts of invasive aquatic vegetation, improve water quality, reduce loss of striped bass, pen-rearing of fish salvaged from water projects and diversions, fish screens; and artificial propagation and assess the status and population of striped bass in the Delta.



**California Fish and Game Commission**  
**Proposed Changes to the Striped Bass Policy:**  
**Staff Draft**

*Version date: February 14, 2020*

*Proposed changes to the policy are shown in strike-out (deletion) and underscore (addition).*

It is the policy of the California Fish and Game Commission that:

- I. ~~The Department of Fish and Game shall work toward stabilizing and then restoring the presently declining~~ monitor and manage the striped bass fishery of the Sacramento-San Joaquin Estuary Delta. ~~This goal is consistent with Commission policy that the Department shall emphasize programs that ensure, enhance, and prevent loss of sport fishing opportunities.~~
- II. The Department shall ensure that actions to increase striped bass abundance are consistent with the Department's long-term mission and public trust responsibilities including those related to threatened and endangered species and other species of ~~special concern~~ greatest conservation need. Recognizing issues associated with potential incidental take of these species, ~~an appropriate interim objective is to restore the striped bass population to the 1980 population level of 1.1 million adults within the next 5-10 years~~ the Department shall strive to maintain a healthy, self-sustaining striped bass population in support of a robust recreational fishery. Consistent with the Commission Policy on Cooperation, the Department shall work with relevant stakeholders, organizations, and the public to develop appropriate goals and objectives to achieve these broad aims.
- III. ~~The long-term striped bass restoration goal, as identified in the Department's 1989 Striped Bass Restoration Plan, is 3 million adults.~~
- IV. ~~III.~~ The Department shall work toward these goals through any appropriate means. Such means may include actions to help maintain, restore, and improve habitat; beneficial to striped bass, reduce impacts of invasive aquatic vegetation, improve water quality, reduce loss of striped bass from; ~~pen-rearing of fish salvaged from water projects and diversions, fish screens; and artificial propagation~~ and assess the status and population of striped bass in the Delta.



JOHN MUIR INSTITUTE OF THE ENVIRONMENT  
CENTER FOR WATERSHED SCIENCES

December 9, 2019

ONE SHIELDS AVENUE  
DAVIS, CALIFORNIA 95616-8527

To: Fish & Game Commission (December 7 2019)

Re: Draft Delta Fisheries Management Policy and Draft Striped Bass Management Policy

I appreciate the efforts of the Commission to develop a holistic fisheries management policy for the Delta and for striped bass in particular. I encourage you to treat the striped bass as an important member of the San Francisco Estuary ecosystem, including the Delta, and to avoid regulations designed to reduce its declining abundance even further. I write this as an academic researcher who has studied fishes of the estuary for nearly 50 years, including establishing a Suisun Marsh monitoring program that has sampled fish on a monthly basis since January, 1979. One of the principal fishes captured in our samples over the decades is striped bass, which has given me an appreciation of their importance to the estuary ecosystem.

I must admit that in the past, my attitude towards striped bass has been ambiguous because they are a non-native species and much of my research has focused on conservation of native species. However, striped bass are also one of the best studied species, whose population fluctuations, with a mostly downward trend, are a good indicator of the 'health' of the estuary, including its ability to support native fishes. The importance of striped bass for monitoring started when regular fish sampling programs were established to determine the impacts of the State Water Project and the Central Valley Project on fisheries (e.g. Fall Midwater Trawl Survey, Summer Tow Net Survey). These surveys were focused on striped bass and are still ongoing; they have been the principal source of status information on other species such as delta smelt, as well as striped bass. In fact, the trends in juvenile striped bass numbers closely follow those of delta and longfin smelt, indicating all have a similar response to the major changes that have taken place in the Delta in the past couple of decades. I recognized this in my 2002 book *Inland Fishes of California* where I conclude the striped bass account with:

"The striped bass is a very resilient species and is now a permanent part of the California fish fauna....The best thing that can be done for striped bass is to restore the estuary to a condition that allows it to support more fish of all kinds, but especially native species (p 362)."

Striped bass were introduced into California in 1879 with explosive success and have become naturalized, adapting to an estuary that bears little resemblance to the one into which they were introduced. There are 23 other non-native fish species permanently established in the estuary, as well as over 150 invertebrate species. Today's Delta ecosystem is best termed a novel ecosystem cause of the strong presence of non-native species from all over the world and the extensive alteration of its physical structure. But striped bass remain one of the best species for monitoring this novel system because they use the entire estuary to complete their life cycle.

Earlier this year, I was part of an Independent Scientific Advisory Panel which wrote a report for the Delta Science Program on *Developing Biological Goals for the Bay-Delta Plan*. In this report, we recommended getting away from using endangered fishes as the principal species to monitor to determine actions to improve the Delta as habitat for desirable fishes. We recommended instead that new metrics be developed that integrate information from multiple species, native and non-native, including striped bass.

The importance of striped bass stems from our extensive knowledge of its life history and the fact that its population tracks the condition of the pelagic portions of the ecosystem well.

The upshot of all this background, is that regulations for managing striped bass should not be aimed at reducing its population, especially regulations that might increase the removal of large fish from the system. The largest fish are females that produce the most eggs that ultimately become juvenile fish so sensitive to annual changes in estuarine condition. The striped bass should be treated as a species that not only supports an important fishery but is an important indicator of estuarine health.

I appreciate your considerable efforts to design regulations that are flexible and science- based.

A handwritten signature in black ink, appearing to read 'P. B. Moyle' with a stylized flourish at the end.

Peter B. Moyle  
Distinguished Professor, Emeritus  
Center For Watershed Sciences  
Department of Wildlife, Fish, and Conservation Biology  
pbmoyle@ucdavis.edu

**DELTA PROTECTION COMMISSION**

2101 Stone Blvd., Suite 240  
West Sacramento, CA 95691  
(916) 375-4800  
[www.delta.ca.gov](http://www.delta.ca.gov)



**Oscar Villegas, Chair**  
Yolo County Board of  
Supervisors

**Don Nottoli, Vice Chair**  
Sacramento County Board of  
Supervisors

**Chuck Winn**  
San Joaquin County Board of  
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**Diane Burgis**  
Contra Costa County Board of  
Supervisors

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Solano County Board of  
Supervisors

**Ronald Kott**  
Cities of Contra Costa and  
Solano Counties

**Christopher Cabaldon**  
Cities of Sacramento and  
Yolo Counties

**Alan Nakanishi**  
Cities of San Joaquin County

**VACANT**  
Central Delta Reclamation  
Districts

**Justin van Loben Sels**  
North Delta Reclamation  
Districts

**Nick Mussi**  
South Delta Reclamation  
Districts

**Brian Annis**  
CA State Transportation  
Agency

**Karen Ross**  
CA Department of Food and  
Agriculture

**Wade Crowfoot**  
CA Natural Resources Agency

**Brian Bugsch**  
CA State Lands Commission

Ex Officio Members

**Honorable Susan Talamantes  
Eggman**  
California State Assembly

**Honorable Cathleen Galgiani**  
California State Senate

January 16, 2020

Mr. Eric Sklar, President  
California Fish and Game Commission  
1416 Ninth Street, Suite 1320  
Sacramento, CA 95814

RE: Comments on proposed Striped Bass Policy

Dear Mr. Sklar,

The Delta Protection Commission serves as a forum for Delta residents and fosters communication between public agencies and private entities to encourage increased recreation and tourism in the Delta. The Delta Protection Commission supports efforts to maintain the striped bass population as important to Delta recreational and economic values, and approved this letter at its January 16, 2020 meeting by a unanimous vote.

At the December 2019 California Fish and Game Commission (CFGF) meeting, your Commission heard public comment on the proposed amended Delta Fisheries Management Policy and Striped Bass Policy. Many of the speakers at the meeting were concerned the Delta striped bass fishery will no longer be supported because of concerns over bass predation of listed fish species. Fish researchers also commented that striped bass were unlikely to be the primary cause of listed species declines. We ask that you consider the following comments as you work with stakeholders to revise the Striped Bass Policy:

- Include the language from Stakeholder Draft Version 1: "...the department's goal is to restore the striped bass population to a healthy, self-sustaining growing population and robust recreation fishery...reduce impacts of invasive aquatic vegetation, improve water quality, reduce loss of striped bass...and assess the status and population of striped bass in the Delta." Further, incorporate the 1.1 million striped bass fish population numeric target as a replacement for the existing numeric target, as supported by many members of the stakeholder group.

- Include language supportive of interagency research efforts to identify steps to manage a successful striped bass fishery and what the striped bass population needs to be self-sustaining.
- In order to address the questions about predation, the CFGC should promote additional studies on the relationship between striped bass and listed species, including predation, habitat needs, and how to manage game fish and species of conservation need.

Our Commission also recognizes the broad agreement on the Delta Fisheries Management Policy and urges its adoption as well.

We appreciate the opportunity to comment on the CFGC proposed policy. We understand the important need to balance all of the species in the Delta and look forward to future engagement opportunities. Please contact me at (916) 376-8941 or at [erik.vink@delta.ca.gov](mailto:erik.vink@delta.ca.gov) if I can provide additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Vink', with a stylized, cursive script.

Erik Vink  
Executive Director

cc: Chairman Oscar Villegas and members, Delta Protection Commission



**LONG ISLAND PROPERTY OWNER'S ASSOCIATION  
LONG ISLAND – ON THE SACRAMENTO RIVER  
WALNUT GROVE, CALIFORNIA**

Eric Sklar, President  
California Fish and Game Commission  
1416 Ninth Street Suite 1320  
Sacramento, California 95814

February 6, 2020

Dear President Sklar and Members of the Commission,

**The Long Island Property Owner's Association strongly urges you to reject the proposed modification of the Striped Bass Policy. Our Delta and the local business will be significantly adversely impacted by modification of the policy.**

**TWO SPECIFIC THOUGHTS**

**We urge you to include language that requires an objective and measurable target for Striped Bass (our observation is that the population has significantly declined)**

**We urge you to have language in the policy that provides for "Restore and Enhance" this fishery, NOT "monitor and manage."**

We write you to express our strong opposition to the proposed update to the Striped Bass Policy. We are a group of neighbors of very diverse backgrounds and interests. The 32 homes on our island sit between Rio Vista and Isleton on the Sacramento river. One issue we all agree upon is our love for the Delta and helping the area stay vibrant. Many of our residents have lived and fished the area of the Sacramento River Delta for decades. We know this river and support the recreation and the businesses that depend on anglers who come to this area.

Many of our residents are active anglers and daily we see many recreational anglers and guide boats fishing in front of Long Island. We know how businesses struggle to survive in the Delta. Modification of the Striped Bass policy and eventual eradication of the species in the Delta undermines the quality of life and will be devastating to the businesses that depend on striped bass fishing as part of their livelihood.

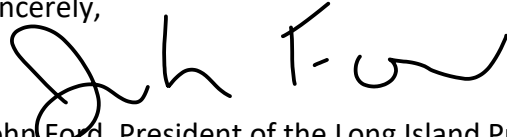
Local businesses in the Delta struggle and need your help. Declining fish numbers, weed growth in the Sacramento river, sediment in the river and struggling local businesses all are big impacts. Do not add yet another impact. The recent designation of this area as the **Delta National Heritage Area underscores the importance of this region**. Commerce and quality fishing, as well as protection of our waterway is critical.

You certainly will hear all the science experts, but we are here to talk about quality of life for our residents, the many people who love to fish here and the businesses who depend on this fishery.

Please say NO, we are not going to modify the Striped Bass Policy.

**The Long Island Property Owner's strongly urge you to say NO and instead say, "what can we do proactively to help this important area and incorporate several changes above?"**

Sincerely,

A handwritten signature in black ink, appearing to read "John Ford". The signature is fluid and cursive, with the first name "John" and last name "Ford" clearly distinguishable.

John Ford, President of the Long Island Property Owner's Association



Mr. Eric Sklar, President  
 California Fish and Game Commission  
 1416 Ninth Street, Suite 1320  
 Sacramento, CA 95814

February 7, 2020

RE: Striped Bass and Delta Fisheries Management Policies

Dear President Sklar and Members of the Fish and Game Commission:

The undersigned recreational fishing organizations (Coalition) write to express our continued opposition to the update of the Striped Bass Policy without an objective, measurable numeric target for striped bass management in the Delta. Additionally, our organizations strongly urge you to strengthen the management language in section 3 of the Delta Fisheries Management Policy.

Collectively, our organizations represent more than 50,000 members of the recreational fishing community. Recreational anglers generated \$61.83 million in fishing license sales for the California Department of Fish and Wildlife in 2018, raising \$16.51 million in federal aid through the Dingell-Johnson/ Wallop-Breaux Acts.

Striped bass were introduced in California back in 1879. Since that time, striped bass has been an economically significant and recreationally important fishery in the Delta. Recreational striped bass fishing is an economic driver creating revenue and jobs, supporting industry and local businesses, and draws tourism and competitive events. A numeric striped bass population target is necessary to ensure proper fisheries management of this important fishery.

The California Fish and Game Commission received the responsibility for promulgating regulations to manage sport fishing in 1945 through a constitutional amendment. The Department of Fish and Wildlife is charged with implementing and enforcing the regulations set by the Fish and Game Commission, as well as providing biological data and expertise to inform the Commission's decision-making process.

Furthermore, under the "About the California Fish and Game Commission – Historical Background" states, the "Department shall, upon request by the Commission, report on the subject of departmental adherence to specified Commission policies, and any administrative problems posing a need for

modifying, repealing or adding Commission policies.” It seems to clearly be within the purview of the California Fish and Game Commission to implement policies that include numeric management goals, as well as provide reports on how well the Department is meeting the goals outlined in a given policy.

Since 1996, the Department has been tasked with ensuring their actions increase striped bass abundance and restore the population to the 1980 population level of 1.1. million, with a long-term goal of 3 million adults under the Striped Bass Policy. The Department has not done so, and the population of striped bass continues to decline, despite the Department’s long-term mission and public trust responsibilities. Numeric targets are critical to hold the Department accountable in public trust and to the Commission.

In conclusion, the Coalition respectfully requests the Department include an objective, measurable numeric target be included in the Striped Bass Policy. Our support for the Delta Fisheries Management Policy is contingent on inclusion of a numeric target for striped bass populations in the Delta. In addition, we request replacement of “monitor and manage” language with “restore and enhance” language in the Delta Fisheries Management Policy to ensure more active management and commitment to recreational striped bass fishing opportunities in the interest of the public-trust and the fishery.

Sincerely,

Aoibheann Cline  
Western States Coordinator, Congressional Sportsmen’s Foundation

James Stone  
President, Nor-Cal Guides and Sportsmen’s Association

Dr. Cynthia Le Doux-Bloom  
Senior Scientist, retired, State of California

Marko Mlikotin  
Executive Director, California Sportfishing League

David Ostrach  
Science Advisor, Allied Fishing Groups & Nor-Cal Guides and Sportsmen’s Association

Chad Tokowicz  
Inland Fisheries Policy Manager, American Sportfishing Association

Capt. Jim Cox, retired  
California Striped Bass Association

Gerald Neuburger  
President 2017-2019, Delta Fly Fishers

Bill Jennings  
Chairman/ Executive Director, California Sportfishing Protection Alliance

Fish and Game Commission  
1416 Ninth St. Sacramento, Ca 95814

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FISH AND GAME  
COMMISSION

2020 FEB -7 PM 2:00

Commissioners,

I am Capt James Cox. I am President of the State Board of the California Striped Bass Assoc. I am also a retired sport fishing charter boat Captain.

I am writing you regarding the upcoming possible changes to the Striped Bass policy

The California Striped Bass Assoc, feels any changes to the current striped bass policy must include the following. An appropriate target objective is to restore the population to 1 million adults within the next 5 to 10 years taking into account the availability of habitat to support the species."

All other species that have policies without numeric goals ALL have management plans except striped bass. Management plans usually will have the goals included in them. Without a management plan the goal must be included in the policy.

The species that do not have goals in the policies are mostly commercial species with landing receipts and or hatchery tags , as in the case of salmon, that help to monitor the health of the specie. No such reporting for the strictly recreational take of striped bass.

The Dept of F&W has not even done a striped bass count in over ten years. There is no current information on the status of the striped bass population

We are not opposed to changes to the striped bass policy, but want to see at least a striped bass count done before making changes. As the new Delta Fisheries Policy and Fish and Game code require that "credible science" be used in to develop strategies and recommendations for managing delta fisheries.

Without a study or a count not only will credible science not be used but no science at all. If you arbitrarily take the target goal out of the striped bass policy, you are telling every striped bass fisherman in California that "credible science" applies to every specie in the delta except striped bass. To make changes to the striped bass policy without using credible science you will be violating your new delta fisheries policy and VIOLATING FISH AND GAME CODE!

I am one of the stakeholders involved in the negotiation of this new delta fisheries policy. The only votes against including a target number in the striped bass policy were the lawyers for the Coalition for a sustainable delta, all the sporting groups voted in favor of the 1 million goal number. This number is important to the policy for these reasons.

The Dept of Fish and Wildlife has not done a thing for striped bass for over two decades. Without a target number in the policy, this becomes a policy that will excuse another two decades of inaction.

I would like to make some comments about these negotiating sessions. A negotiation is a give and take between parties to come to a mutual agreement. To say these sessions were a negotiation is a misnomer. The sporting groups and the Coalition negotiated in earnest giving up points both wanted to come to a solution. Not so Fish and Game commission. Your representatives never gave up a single point, and continue to insist that there would only be one outcome to this, a policy with no goal. I feel the Commission representatives were disingenuous at best.



Your representatives, Ari Corman and your executive director kept giving us information regarding the commission that was very misleading. Both were trying to tell us, on a number of occasions, that the Commission does not get involved in management decisions. Your executive director went so far as to tell us that the "commission has no authority over the Dept"

Upon further investigation we have found that this information is not correct. This is the first paragraph on your commissions website.

Established by the California State Constitution, the **Fish and Game Commission** is composed of five commissioners appointed by the Governor and confirmed by the Senate. The Commission has been involved in the management and wise use of California's fish and wildlife resources since 1870. The Commission has general regulatory powers, under which it decides seasons, bag limits and methods of take for game animals and sport fish. With the passage of the Marine Life Management Act (MLMA) in 1998, management authority for many commercial fisheries has been transferred from the state Legislature, and now resides with the Commission. Many Californians are not fully aware of the identity, function or responsibilities of the California Fish and Game Commission, and consider it synonymous with the California Department of Fish and Wildlife. Actually, the Commission is a separate entity. Some have criticized the Commission's regulatory actions as being nothing more than a rubber stamp for CDFW's recommendations. A review of the Commission's actions on various Department recommendations indicates that this is not the case. In many instances, the Commission rejects or substantially modifies actions recommended by CDFW, but only where it is convinced that such action is in the best interest of the resource and truly reflects the wishes and needs of the people. It is only natural that the Commission often relies heavily on CDFW's biological data and recommendations, since CDFW has the largest staff of experts for compiling data on California's wildlife.

Sentence #2. "the commission has been involved in the MANAGMENT and wise use of California's fish and wildlife resources since 1870." So the commission does make management decisions

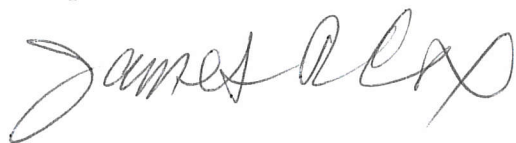
Sentence #5 says that the "commission now has management authority for many commercial fisheries". So the commission does have management authority, and management is not solely the Dept of F&W

Sentence #9 . In many instances, the Commission rejects or substantially modifies actions recommended by CDFW, but only where it is convinced that such action is in the best interest of the resource and truly reflects the wishes and needs of the people. So again you are suppose to be taking "the wishes and needs of the people" into account. I believe you have seen from the times striped bass fisherman have flooded your chambers that the majority of the fishing public do not want these changes.

Please make a decision that shows striped bass fisherman that you value striped bass as much as they do. You can do this by delaying any decision until a striped bass count is done, or accept the 1 million target goal in the policy.

Thank you,

Capt James R. Cox

A handwritten signature in cursive script, appearing to read "James R. Cox". The signature is written in dark ink and is positioned below the typed name.

February 3, 2020

RECEIVED  
CALIFORNIA  
FISH AND GAME  
COMMISSION

2020 FEB -7 PM 2:00

Melissa Miller-Henson, Executive Director  
Eric Sklar, President  
California Fish & Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

**Re: Striped Bass Policy**

Dear Executive Director Miller-Henson and President Sklar:

It is my understanding that the Commission does not want any numeric goals in a proposed new Striped Bass policy. It is difficult to understand how a policy does not set goals. An appropriate target objective is to restore the adult population of adult Striped Bass to 1 million fish within a 5 to 10 period taking into account the availability of habitat to support the species. This objective is far below the Departments 1989 goal of 3 million adults.

The DFW has not performed any population assessments on Striped Bass in over 10 years and has done nothing for Striped Bass in over 20 years... Most researchers estimate the adult population of adult Striped Bass to be around 250,000 fish. For any policy to be effective it must first know the current population of the species and have a target goal.

Paragraph III of the proposed Delta Fisheries Management Policy states that "The Department shall rely on credible science (as defined by Section 33 of the Fish and Game code) to develop strategies and recommendations for managing delta fisheries". If the Striped Bass Policy is changed without an adult population survey taken it would appear that there would be a violation of paragraph III of Delta Fisheries Management Policy. Section 33 of the F&G code also requires "credible science" to be used in any changes made to the Striped Bass Policy.

I am not opposed to changes in the existing Striped Bass Policy as long as it starts at the beginning, that being a comprehensive survey to establish the current adult population. From there changes can be made from an informed perspective.

Without a target number the Striped Bass Policy has no goal. Without a goal this is a policy of no action on Striped Bass and their recovery.

The Delta Fishery Management Policy and Striped Bass Policy were brought about by a petition filed by the Coalition for a Sustainable Delta and other water contractors who wish to drain the Delta for personal gain. If they were truly concerned about the state of Delta fisheries, why haven't they constructed the state of the art fish screening facilities at the pumps which were part of a settlement agreement?

The three most popular fisheries in California are: #1 trout; #2 Black Bass and #3 Striped Bass. The Delta Fisheries Management and Striped Bass Policy both target the second and third most popular fisheries in our State. Here is a link to Fish Bio outlining the decline of our fishery and anglers in our State;  
<https://fishbio.com/field-notes/the-fish-report/decline-recreational-fishing-california>.

It is incumbent upon the Commission to do what is right for our public trust resource and the remaining anglers whose hard earned dollars support the Department of Fish & Wildlife. The current cost of a basic California fishing license is \$51.02. Also taken into consideration must be the related economic benefit to all industries and businesses which depend on the dollars expended by anglers. It is in the hundreds of millions of dollars.

Thank you for taking my comments into consideration.

Very Truly Yours,



Roger S. Mammon



State of California  
Fish and Game Commission  
Initial Statement of Reasons for Regulatory Action

Amend Subsection 360(c)  
Title 14, California Code of Regulations  
Re: Deer: Additional Hunts

I. Date of Initial Statement of Reasons: November 13, 2019

II. Dates and Locations of Scheduled Hearings

- |                       |                                                     |
|-----------------------|-----------------------------------------------------|
| a) Notice Hearing     | Date: December 11, 2019<br>Location: Sacramento, CA |
| b) Discussion Hearing | Date: February 21, 2020<br>Location: Sacramento, CA |
| c) Adoption Hearing   | Date: April 16, 2020<br>Location: Sacramento, CA    |

III. Description of Regulatory Action

- (a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

The Fish and Game Commission (Commission) periodically considers the recommendations of the Department of Fish and Wildlife (Department) in establishing deer regulations. Subsection 360(c) provides definitions, hunting zone descriptions, season opening and closing dates, and tag quotas for Additional Hunts of deer.

In order to maintain appropriate harvest levels and hunting quality it is necessary to periodically adjust tag quotas (total number of hunting tags to be made available) in response to dynamic environmental and biological conditions. Current regulations in subsection 360(c) specify deer license tag quotas for each hunt zone in accordance with management goals and objectives.

The specific recommended regulation changes are:

1. Number of Tags

Existing regulations provide for the number of deer hunting tags in the Additional Hunts. The proposed action initially provides a range (e.g., [ 0 - 100 ] ) of tag numbers for each zone from which a final number will be determined based on the post-winter status of each deer herd. The maximum number of tags available in the proposed range is at or below the number of tags analyzed in the 2007 Final Environmental Document regarding Deer Hunting and the approved deer herd management plans. Ranges are necessary at this time because the final number of tags cannot be determined until spring herd data are collected in March/April and analyzed. A low-end quota range of zero (0) tags is used in the event final tag quotas need to be reduced. Hunts may be cancelled due to events such as fire, disease or other factors.

In early spring, surveys of deer herds are conducted to determine the proportion of fawns that have survived the winter. This information is used in conjunction with the prior year harvest and fall herd composition data to estimate overall herd size, sex and age ratios, and the predicted allowable deer harvest (ADH) for next season. The number of bucks and does needs to be estimated prior to the hunting season to determine how many surplus deer are likely to exist over and above the number required to maintain the desired buck to doe ratio objectives stated in approved deer herd management plans.

Actual tag numbers for each affected zone will be reflected in the Final Statement of Reasons and will be selected from the range of values recommended in this proposal. The recommended number of tags is intended to allow an appropriate level of hunting opportunity and harvest of bucks and does in the population, while achieving or maintaining buck to doe ratios at, or near, objective levels set forth in approved deer herd management plans. The final recommendations for the number of tags to be issued will be based upon findings from the annual harvest and herd composition counts.

The current tag quota of zero (0) for additional deer hunt G-9 (Camp Roberts Antlerless Deer Hunt) reflects the Base's closure to hunting while construction was under way on the base. Construction was scheduled for completion in 2013; however, the timetable for resumption of base hunting programs has not been determined. The Department is currently in meetings with base command, and a decision regarding tag quotas is anticipated prior to the April 2020 Fish and Game Commission meeting. At this time, the current tag quota of zero (0) has been modified to the former tag quota of thirty (30) in anticipation of the possible resumption of deer hunting activities by the Base in the 2020/2021 season. However, if Base operations take precedence over conducting the G-9 hunt, the tag quota will be reduced to zero (0) and reflected in the Final Statement of Reasons.

## 2. Modify Additional Hunt G-8 (Fort Hunter Liggett Antlerless Deer Hunt)

Existing regulations for Additional Hunt G-8 provide for hunting to begin on October 7 and October 14, and continue for 3 and 2 days respectively, including the Columbus Day holiday, in order to accommodate Base operations and other hunt opportunities. Tags are split between military and the public.

The current proposal would modify the season to account for the annual calendar shift by changing the season dates to open on October 3 and continue for two (2) consecutive days, including the Columbus Day holiday, and reopen on October 10 and continue for three (3) consecutive days. No loss of hunter opportunity would result from this action and the proposal is consistent with existing deer herd management plan recommendations.

The tag split will be deleted, and the tags will be available to any hunter, military or public.

## 3. Modify Additional Hunt J-10

Existing regulations for Additional Hunt J-10 (Fort Hunter Liggett Junior Either-Sex Deer Hunt) provide for hunting to begin on October 7 and October 14, and continue for 3 and 2 days respectively, including the Columbus Day holiday, in order to accommodate Base operations and other hunt opportunities. Tags are split between military and the public.

The current proposal would modify the season to account for the annual calendar shift by changing the season dates to open on October 3 and continue for two (2) consecutive



days, including the Columbus Day holiday, and reopen on October 10 and continue for three (3) consecutive days. No loss of hunter opportunity would result from this action and the proposal is consistent with existing deer herd management plan recommendations.

The tag split will be deleted, and the tags will be available to any hunter, military or public.

(b) Goals and Benefits of the Regulation

The Commission anticipates benefits to the health and welfare of California residents. Hunting provides opportunities for multi-generational family activities and promotes respect for California's environment by the future stewards of the State's resources. The Commission anticipates benefits to the State's environment in the sustainable management of natural resources.

(c) Authority and Reference

Authority: Section(s) 200, 203, 265, 460, 3051, 3452, 3453, 3953 and 4334, Fish and Game Code.

Reference: Section(s) 200, 203, 203.1, 255, 265, 458, 459, 460, 3051, 3452, 3453, 3953 and 4334, Fish and Game Code.

(d) Specific Technology or Equipment Required by Regulatory Change: None

(e) Identification of Reports or Documents Supporting Regulation Change: None

(f) Public Discussions of Proposed Regulations Prior to Notice Publication

Fish and Game Commission Wildlife Resources Committee meetings held in Sacramento on May 16, 2019, and in Santa Rosa on September 10, 2019.

#### IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change

1. Number of Tags

There is no reasonable alternative to the proposed action.

2. Modify Season for Additional Hunt G-8

There is no reasonable alternative to the proposed action.

3. Modify Season Additional Hunt J-10

There is no reasonable alternative to the proposed action.

(b) No Change Alternative

1. Number of Tags

The "No Change Alternative" was considered and found inadequate to attain the project objectives. Retaining the current number of tags for the hunts listed may not be responsive to changes in the status of the herds. The deer herd management plans specify objective levels for the proportion of bucks to does in the herds. These ratios are maintained and managed in part by modifying the number of tags. The "No Change Alternative" would not allow management of the desired proportion of bucks stated in the approved deer herd management plans.

2. Modify Additional Hunt G-8

The “No Change Alternative” was considered and found inadequate to attain the project objectives. Retaining the current season length and timing would be unresponsive to Base operations, scheduled activities and unnecessarily restrict hunter opportunity.

3. Modify Additional Hunt J-10

The “No Change Alternative” was considered and found inadequate to attain the project objectives. Retaining the current season length and timing would be unresponsive to Base operations, scheduled activities and/or unnecessarily restrict hunter opportunity.

V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed. The maximum number of tags available in the proposed range is at or below the number of tags analyzed in the 2007 Final Environmental Document regarding Deer Hunting and the approved deer herd management plans.

VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. The proposed action adjusts tag quotas for existing hunts and modifies season dates for hunts on military land. Given the number of tags available and the area over which they are distributed, these proposals are economically neutral to business.

(b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State’s Environment

The proposed action will not have significant impacts on the creation or elimination of jobs or the creation of new businesses or the elimination of existing businesses within California because it is unlikely to result in a change in hunting effort. The proposed action does not provide benefits to worker safety because it does not address working conditions.

The Commission anticipates benefits to the health and welfare of California residents. Hunting provides opportunities for multi-generational family activities and promotes respect for California’s environment by the future stewards of the State’s resources. The Commission anticipates benefits to the State’s environment in the sustainable management of natural resources.

(c) Cost Impacts on a Representative Private Person or Business

The Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with this proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None

- (e) Nondiscretionary Costs/Savings to Local Agencies: None
- (f) Programs Mandated on Local Agencies or School Districts: None
- (g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None
- (h) Effect on Housing Costs: None

VII. Economic Impact Assessment

- (a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

The regulation will not affect the creation or elimination of jobs because no significant changes in hunting activity levels are anticipated.

- (b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The regulation will not impact the creation of new businesses or the elimination of businesses because no significant changes in hunting activity levels are anticipated.

- (c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

The regulation will not affect the expansion of businesses currently doing business within the State because no significant changes in hunting activity levels are anticipated.

- (d) Benefits of the Regulation to the Health and Welfare of California Residents

The proposed regulation will benefit the health and welfare of California residents by maintaining sustainable deer populations and providing opportunities for the public to participate in a healthy outdoor activity.

- (e) Benefits of the Regulation to Worker Safety

The proposed regulation will not affect worker safety.

- (f) Benefits of the Regulation to the State's Environment

It is the policy of the State to encourage the conservation, maintenance, and utilization of the State's living resources. The proposed action will further this core objective.

## Informative Digest/Policy Statement Overview

Existing regulations provide for the number of deer hunting tags in subsection 360(c) Additional Hunts. The proposed action provides a recommended range of tag numbers for each hunt from which a final number will be determined, based on the post-winter status of each deer herd. These ranges are necessary at this time because the final number of tags cannot be determined until spring herd data are collected in March/April and analyzed.

The proposed action changes the number of tags for all existing hunts (except those on military installations) to a series of ranges as indicated in the table below.

Deer: Section 360(c) Additional Hunts, Tag Allocations

- Hunt number G-1 (Late Season Buck Hunt for Zone C-4); Current 2019, 2,710; Proposed 2020 Range [0 - 5,000]
- Hunt number G-3 (Goodale Buck Hunt); Current 2019, 25; Proposed 2020 Range [0 – 50]
- Hunt number G-6 (Kern River Deer Herd Buck Hunt); Current 2019, 50; Proposed 2020 Range, [0 – 100]
- Hunt number G-7 (Beale Either-Sex Deer Hunt); Current 2019 20 Military\* [20 Military\*]
- Hunt number G-8 (Fort Hunter Liggett Antlerless Deer Hunt); Current 2019 10 Military\* & 10 Public [20\*]
- Hunt number G-9 (Camp Roberts Antlerless Deer Hunt); Current 2019, 0; Proposed 2020 Range, [30\*]
- Hunt number G-10 (Camp Pendleton Either-Sex Deer Hunt); Current 2019, 250 Military\*; Proposed 2020 Range, [250 Military\*]
- Hunt number G-11 (Vandenberg Either-Sex Deer Hunt); Current 2019, 0; Proposed 2020 Range, [0 – 500]
- Hunt number G-12 (Gray Lodge Shotgun Either-Sex Deer Hunt); Current 2019, 30; Proposed 2020 Range [0 – 50]
- Hunt number G-13 (San Diego Antlerless Deer Hunt); Current 2019, 300; Proposed 2020 Range [0 – 300]
- (Hunt number G-19 (Sutter-Yuba Wildlife Areas Either-Sex Deer Hunt); Current 2019, 25; Proposed 2020 Range [0 – 50]
- Hunt number G-21 (Ventana Wilderness Buck Hunt) Current 2019, 25; Proposed 2020 Range [0 – 100]
- Hunt number G-37 (Anderson Flat Buck Hunt); Current 2019, 25; Proposed 2020 Range [0 – 50]
- Hunt number G-38 (X-10 Late Season Buck Hunt); Current 2019, 300; Proposed 2020 Range [0 – 300]
- Hunt number G-39 (Round Valley Late Season Buck Hunt); Current 2019, 2; Proposed 2020 Range [0 – 150]
- Hunt number M-3 (Doyle Muzzleloading Rifle Buck Hunt); Current 2019, 20; Proposed 2020 Range [0 – 75]
- Hunt number M-4 (Horse Lake Muzzleloading Rifle Buck Hunt); Current 2019, 10; Proposed 2020 Range [0 – 50]
- Hunt number M-5 (East Lassen Muzzleloading Rifle Buck Hunt); Current 2019, 5; Proposed 2020 Range [0 – 50]
- Hunt number M-6 (San Diego Muzzleloading Rifle Either-Sex Deer Hunt); Current 2019, 80; Proposed 2020 Range [0 – 100]
- Hunt number M-7 (Ventura Muzzleloading Rifle Either-Sex Deer Hunt); Current 2019, 150; Proposed 2020 Range [0 – 150]
- Hunt number M-8 (Bass Hill Muzzleloading Rifle Buck Hunt); Current 2019, 20; Proposed 2020 Range [0 – 50]
- Hunt number M-9 (Devil's Garden Muzzleloading Rifle Buck Hunt); Current 2019, 15; Proposed 2020 Range [0 – 100]
- Hunt number M-11 (Northwestern California Muzzleloading Rifle Buck Hunt); Current 2019, 0; Proposed 2020 Range [0 – 200]
- Hunt number MA-1 (San Luis Obispo Muzzleloading Rifle/Archery Either-Sex Deer Hunt); Current 2019, 150; Proposed 2020 Range [0 – 150]

- Hunt number MA-3 (Santa Barbara Muzzleloading Rifle/Archery Buck Hunt); Current 2019, 150; Proposed 2020 Range [0 – 150]
- Hunt number J-1 Lake Sonoma Apprentice Either-Sex Deer Hunt); Current 2019, 25; Proposed 2020 Range [0 – 25]
- Hunt number J-3 (Tehama Wildlife Area Apprentice Buck Hunt); Current 2019, 15; Proposed 2020 Range [0 – 30]
- Hunt number J-4 Shasta-Trinity Apprentice Buck Hunt); Current 2019, 15; Proposed 2020 Range [0 – 50]
- Hunt number J-7 (Carson River Apprentice Either-Sex Deer Hunt); Current 2019, 0; Proposed 2020 Range [0 – 50]
- Hunt number J-8 (Daugherty Hill Wildlife Area Apprentice Either-Sex Deer Hunt); Current 2019, 15; Proposed 2020 Range [0 – 20]
- Hunt number J-9 (Little Dry Creek Apprentice Shotgun Either-Sex Deer Hunt); Current 2019, 5; Proposed 2020 Range [0 – 10]
- Hunt number J-10 (Fort Hunter Liggett Apprentice Either-Sex Deer Hunt); Current 2019, 25 Military & 60 Public; Proposed 2020 Range [30\*]
- Hunt number J-11 (San Bernardino Apprentice Either-Sex Deer Hunt); Current 2019, 40; Proposed 2020 Range [0 – 50]
- Hunt number J-12 (Round Valley Apprentice Buck Hunt); Current 2019, 10; Proposed 2020 Range [0 – 20]
- Hunt number J-13 (Los Angeles Apprentice Either-Sex Deer Hunt); Current 2019, 40; Proposed 2020 Range [0 – 100]
- Hunt number J-14 (Riverside Apprentice Either-Sex Deer Hunt); Current 2019, 30; Proposed 2020 Range [0 – 75]
- Hunt number J-15 (Anderson Flat Apprentice Buck Hunt); Current 2019, 10; Proposed 2020 Range [0 – 30]
- Hunt number J-16 (Bucks Mountain-Nevada City Apprentice Either-Sex Deer Hunt); Current 2019, 75; Proposed 2020 Range [0 – 75]
- Hunt number J-17 (Blue Canyon Apprentice Either-Sex Deer Hunt); Current 2019, 25; Proposed 2020 Range [0 – 25]
- Hunt number J-18 (Pacific-Grizzly Flat Apprentice Either-Sex Deer Hunt); Current 2019, 75; Proposed 2020 Range [0 – 75]
- Hunt number J-19 (Zone X-7a Apprentice Either-Sex Deer Hunt); Current 2019, 25; Proposed 2020 Range [0 – 40]
- Hunt number J-20 (Zone X-7b Apprentice Either-Sex Deer Hunt); Current 2019, 20; Proposed 2020 Range [0 – 20]
- Hunt number J-21 (East Tehama Apprentice Either-Sex Deer Hunt); Current 2019, 50; Proposed 2020 Range [0 – 80]

\* Specific numbers of tags are provided for military hunts through a system which restricts hunter access to desired levels and ensures biologically conservative hunting programs. Military only tags are designated for Department of Defense and eligible personnel as authorized by the Installation Commander.

Existing regulations for Additional Hunts G-8 (Fort Hunter Liggett Antlerless Deer Hunt) and J-10 (Fort Hunter Liggett Apprentice Either-Sex Deer Hunt) provide for hunting to begin on October 7 and continue for three consecutive days and reopen on October 14 and continue for two consecutive days, including the Columbus Day holiday. The proposal would modify the season to account for the annual calendar shift. The proposal would change the season dates to open on October 3 and October 10, for two and three consecutive days respectively and include the Columbus Day holiday.

#### Benefits of the regulations

Deer herd management plans specify objective levels for the proportion of bucks to does in the herds. These ratios are maintained and managed in part by annually modifying the number of hunting tags.



The final recommended values for the license tag numbers will be based upon findings from the annual harvest and herd composition counts. Adjusting tag allocations in response to current deer herd conditions contributes to the sustainable management of healthy deer populations and the maintenance of continued hunting opportunities.

#### Non-monetary benefits to the public

The Commission does not anticipate non-monetary benefits to the protection of public health and safety, worker safety, the prevention of discrimination, the promotion of fairness or social equity and the increase in openness and transparency in business and government.

#### Consistency and Compatibility with State Regulations

The Fish and Game Commission, pursuant to Fish and Game Code sections 200 and 203, has the sole authority to regulate deer hunting in California. Commission staff has searched the California Code of Regulations and has found the proposed changes pertaining to deer tag allocations are consistent with sections 360, 702, 708.5 and 708.6 of Title 14. Therefore, the Commission has determined that the proposed amendments are neither inconsistent nor incompatible with existing State regulations.

Proposed Regulatory Language

Subsection (c), Section 360, Title 14 CCR, is amended to read:

**§360. Deer**

**[No changes to subsections (a) or (b).]**

(c) Additional Hunts.

(1) G-1 (Late Season Buck Hunt for Zone C-4).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~2,740~~ [0 - 5,000].

(2) G-3 (Goodale Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~25~~ [0 - 50].

(3) G-6 (Kern River Deer Herd Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~50~~ [0 - 100].

(4) G-7 (Beale Either Sex Hunt).

. . . *[No changes to subsections (A) through (E)]*

(5) G-8 (Fort Hunter Liggett Antlerless Deer Hunt).

. . . *[No changes to subsection (A)]*

(B) Season: The season for additional hunt G-8 (Fort Hunter Liggett Antlerless Deer Hunt) shall open on October ~~7~~ 3 and extend for ~~3~~ 2 consecutive days and reopen on October ~~14~~ 10 and extend for ~~2~~ 3 consecutive days, except if rescheduled by the Commanding Officer with Department concurrence between the season opener and December 31.

. . . *[No changes to subsections (C)]*

(D) Number of Tags: ~~20-(10-military-and-10-general-public)~~.

. . . *[No changes to subsections (E)]*

(6) G-9 (Camp Roberts Antlerless Deer Hunt).

. . . *[No changes to subsections (A) through (E)]*

(7) G-10 (Camp Pendleton Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (E)]*

(8) G-11 (Vandenberg Either-Sex Deer Hunt).

. . . *[No changes to subsection (A) through (E)]*

(9) G-12 (Gray Lodge Shotgun Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~30~~ [0 - 50].

. . . *[No changes to subsection (E)]*

(10) G-13 (San Diego Antlerless Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~300~~ [0 - 300].

(11) G-19 (Sutter-Yuba Wildlife Areas Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) and (C)]*

(D) Number of Tags: ~~25~~ [0 - 50].

. . . *[No changes to subsection (E)]*

(12) G-21 (Ventana Wilderness Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~25~~ [0 - 100].

(13) G-37 (Anderson Flat Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~25~~ [0 - 50].

(14) G-38 (X-10 Late Season Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~300~~ [0 - 300].

(15) G-39 (Round Valley Late Season Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~2~~ [0 - 150].

(16) M-3 (Doyle Muzzleloading Rifle Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~20~~ [0 - 75].

. . . *[No changes to subsection (E)]*

(17) M-4 (Horse Lake Muzzleloading Rifle Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 - 50].

. . . *[No changes to subsection (E)]*

(18) M-5 (East Lassen Muzzleloading Rifle Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~5~~ [0 - 50].

. . . *[No changes to subsection (E)]*

(19) M-6 (San Diego Muzzleloading Rifle Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~80~~ [0 - 100].

. . . *[No changes to subsection (E)]*

(20) M-7 (Ventura Muzzleloading Rifle Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~450~~ [0 - 150].

. . . *[No changes to subsection (E)]*

(21) M-8 (Bass Hill Muzzleloading Rifle Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~20~~ [0 - 50].

. . . *[No changes to subsection (E)]*

(22) M-9 (Devil's Garden Muzzleloading Rifle Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~45~~ [0 - 100].

. . . *[No changes to subsection (E)]*

(23) M-11 (Northwestern California Muzzleloading Rifle Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~20~~ [0 - 200].

. . . *[No changes to subsection (E)]*

(24) MA-1 (San Luis Obispo Muzzleloading Rifle/Archery Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~450~~ [0 - 150].

. . . *[No changes to subsection (E)]*

(25) MA-3 (Santa Barbara Muzzleloading Rifle/Archery Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~450~~ [0 - 150].

. . . *[No changes to subsection (E)]*

(26) J-1 (Lake Sonoma Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~25~~ [0 - 25].

. . . *[No changes to subsection (E)]*

(27) J-3 (Tehama Wildlife Area Apprentice Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~45~~ [0 - 30].

. . . *[No changes to subsection (E)]*

(28) J-4 (Shasta-Trinity Apprentice Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~45~~ [0 - 50].

. . . *[No changes to subsection (E)]*

(29) J-7 (Carson River Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~0~~ [0 - 50].

. . . *[No changes to subsection (E)]*

(30) J-8 (Daugherty Hill Wildlife Area Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~15~~ [0 - 20].

. . . *[No changes to subsection (E)]*

(31) J-9 (Little Dry Creek Apprentice Shotgun Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~5~~ [0 - 10].

. . . *[No changes to subsection (E)]*

(32) J-10 (Fort Hunter Liggett Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsection (A)]*

(B) Season: The season for additional hunt J-10 (Fort Hunter Liggett Apprentice Either-Sex Deer Hunt) shall open on October ~~7~~ 3 and extend for ~~3~~ 2 consecutive days and reopen on October ~~44~~ 10 and extend for ~~2~~ 3 consecutive days, except if rescheduled by the Commanding Officer with Department concurrence between the season opener and December 31.

. . . *[No changes to subsection (C)]*

(D) Number of Tags: ~~85-30~~ (25 military and 60 general public).

. . . *[No changes to subsection (E)]*

(33) J-11 (San Bernardino Apprentice Either-Sex Deer Hunt).

. . . *[No changes for subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 - 50].

. . . *[No changes to subsection (E)]*

(E) Special Conditions:

(34) J-12 (Round Valley Apprentice Buck Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~10~~ [0 - 20].

. . . *[No changes to subsection (E)]*

(35) J-13 (Los Angeles Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 - 100].

. . . *[No changes to subsection (E)]*

(36) J-14 (Riverside Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~30~~ [0 - 75].

. . . *[No changes to subsection (E)]*

(37) J-15 (Anderson Flat Apprentice Buck Hunt).



. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 - 30].

. . . *[No changes to subsection (E)]*

(38) J-16 (Bucks Mountain-Nevada City Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~75~~ [0 - 75].

. . . *[No changes to subsection (E)]*

(39) J-17 (Blue Canyon Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~25~~ [0 - 25].

. . . *[No changes to subsection (E)]*

(40) J-18 (Pacific-Grizzly Flat Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~75~~ [0 - 75].

. . . *[No changes to subsection (E)]*

(41) J-19 (Zone X-7a Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~25~~ [0 - 40].

. . . *[No changes to subsection (E)]*

(42) J-20 (Zone X-7b Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~20~~ [0 - 20].

. . . *[No changes to subsection (E)]*

(43) J-21 (East Tehama Apprentice Either-Sex Deer Hunt).

. . . *[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~50~~ [0 - 80].

. . . *[No changes to subsections (c)(43)(E) through (e)(1)(E).]*

Note: Authority: Sections 200, 203, 265, 460, 3051, 3452, 3453, 3953 and 4334, Fish and Game Code. Reference: Sections 200, 203, 203.1, 255, 265, 458, 459, 460, 3051, 3452, 3453, 3953 and 4334, Fish and Game Code.

State of California  
Fish and Game Commission  
Initial Statement of Reasons for Regulatory Action

Amend Subsection 361(b)  
Title 14, California Code of Regulations  
Re: Archery Deer Hunting

I. Date of Initial Statement of Reasons: November 13, 2019

II. Dates and Locations of Scheduled Hearings

- |                        |                                                     |
|------------------------|-----------------------------------------------------|
| (a) Notice Hearing     | Date: December 11, 2019<br>Location: Sacramento, CA |
| (b) Discussion Hearing | Date: February 21, 2020<br>Location: Sacramento, CA |
| (c) Adoption Hearing   | Date: April 16, 2020<br>Location: Sacramento, CA    |

III. Description of Regulatory Action

(a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

The Fish and Game Commission (Commission) periodically considers the recommendations of the Department of Fish and Wildlife (Department) in establishing deer regulations. Subsection 361(b) provides definitions, hunting zone descriptions, season opening and closing dates, and tag quotas for Archery Deer Hunting.

In order to maintain appropriate harvest levels and hunting quality it is necessary to periodically adjust tag quotas (total number of hunting tags to be made available) in response to dynamic environmental and biological conditions. Current regulations in subsection 361(b) specify deer license tag quotas for each hunt zone in accordance with management goals and objectives.

The specific recommended regulation changes are:

1. Number of Tags

Existing regulations provide for the number of deer hunting tags for area-specific archery hunts. The proposed action initially provides a range (e.g., [ 0- 100 ] ) of tag numbers for each zone from which a final number will be determined based on the post-winter status of each deer herd. The maximum number of tags available in the proposed range is at or below the number of tags analyzed in the 2007 Final Environmental Document regarding Deer Hunting and the approved deer herd management plans. Ranges are necessary at this time because the final number of tags cannot be determined until spring herd data are collected in March/April and analyzed. A low-end quota range of zero (0) tags is used in the event final tag quotas need to be reduced. Hunts may be cancelled due to events such as fire, disease or other factors.

In early spring, surveys of deer herds are conducted to determine the proportion of fawns that have survived the winter. This information is used in conjunction with the prior year harvest and fall herd composition data to estimate overall herd size, sex and age ratios, and the predicted allowable deer harvest (ADH) for next season. The number of bucks and does needs to be estimated prior to the hunting season to determine how many surplus deer are likely to exist over and above the number required to maintain the desired buck to doe ratio objectives stated in the approved deer herd management plans.

Actual tag numbers for each affected zone will be reflected in the Final Statement of Reasons and will be selected from the range of values recommended in this proposal. The recommended number of tags is intended to allow an appropriate level of hunting opportunity and harvest of bucks and does in the population, while achieving or maintaining the buck to doe ratios at, or near, objective levels set forth in approved deer herd management plans. These final recommendations for the number of tags to be issued will be based upon findings from the annual harvest and herd composition counts.

2. Modify hunt A-33 (Fort Hunter Liggett Late Season Archery Either-Sex Deer Hunt)

Existing regulations for A-33 provide for hunting to open beginning the first Saturday in October and continuing through November 12, except if rescheduled by the Commanding Officer with Department concurrence between the season opener and December 31. Tags are split between military and the public.

The current proposal would modify the season to account for the annual calendar shift by changing the season dates to open beginning the first Saturday in October and continuing through November 11, except if rescheduled by the Commanding Officer with Department concurrence between the season opener and December 31.

The tag split will be deleted, and the tags will be available to any hunter, military or public.

3. Minor non-substantive correction for A-31 (Los Angeles Archery Either-Sex Deer Hunt). Existing regulations incorrectly reference a definition for either-sex deer, it should be subsection 351(c), not (b).

(b) Goals and Benefits of the Regulation

The Commission anticipates benefits to the health and welfare of California residents. Hunting provides opportunities for multi-generational family activities and promotes respect for California's environment by the future stewards of the State's resources. The Commission anticipates benefits to the State's environment in the sustainable management of natural resources.

(c) Authority and Reference

Authority: Section(s) 200, 203, 265, 3453, and 4370, Fish and Game Code.

Reference: Section(s) 200, 203, 203.1, 255, 265, and 4370, Fish and Game Code.

(d) Specific Technology or Equipment Required by Regulatory Change. None

(e) Identification of Reports or Documents Supporting Regulation Change: None

(f) Public Discussions of Proposed Regulations Prior to Notice Publication

Fish and Game Commission Wildlife Resources Committee meetings held in Sacramento on May 16, 2019 and in Santa Rosa on September 10, 2019.

#### IV. Description of Reasonable Alternatives to Regulatory Action

##### (a) Alternatives to Regulation Change

No alternatives were identified.

##### (b) No Change Alternative

###### 1. Number of Tags

The “No Change Alternative” was considered and found inadequate to attain the project objectives. Retaining the current number of tags for the hunts listed may not be responsive to changes in the status of the herds. The deer herd management plans specify objective levels for the proportion of bucks to does in the herds. These ratios are maintained and managed in part by modifying the number of tags. The “No Change Alternative” would not allow management of the desired proportion of bucks stated in the approved deer herd management plans.

###### 2. Modify hunt for A-33 (Fort Hunter Liggett Late Season Archery Either-Sex Deer Hunt)

The “No Change Alternative” was considered and found inadequate to attain the project objectives. Retaining the current season length and timing would be unresponsive to Base operations, scheduled activities and unnecessarily restrict hunter opportunity.

#### V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed. The maximum number of tags available in the proposed range is at or below the number of tags analyzed in the 2007 Final Environmental Document regarding Deer Hunting and the approved deer herd management plans.

#### VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

##### (a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. The proposed action adjusts tag quotas for existing hunts. Given the number of tags available and the area over which they are distributed, these proposals are economically neutral to business.

##### (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State’s Environment

The proposed action will not have significant impacts on the creation or elimination of jobs or the creation of new businesses or the elimination of existing businesses within California because it is unlikely to result in a change in hunting effort. The proposed action does not provide benefits to worker safety because it does not address working conditions.

The Commission anticipates benefits to the health and welfare of California residents. Hunting provides opportunities for multi-generational family activities and promotes respect for California's environment by the future stewards of the State's resources. The Commission anticipates benefits to the State's environment in the sustainable management of natural resources.

(c) Cost Impacts on a Representative Private Person or Business

The Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with this proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State. None

(e) Nondiscretionary Costs/Savings to Local Agencies. None

(f) Programs Mandated on Local Agencies or School Districts. None

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code. None

(h) Effect on Housing Costs. None

VII. Economic Impact Assessment

(a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

The regulation will not affect the creation or elimination of jobs because no significant changes in hunting activity levels are anticipated.

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The regulation will not impact the creation of new businesses or the elimination of businesses because no significant changes in hunting activity levels are anticipated.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

The regulation will not affect the expansion of businesses currently doing business within the State because no significant changes in hunting activity levels are anticipated.

(d) Benefits of the Regulation to the Health and Welfare of California Residents

The proposed regulation will benefit the health and welfare of California residents by maintaining sustainable deer populations and providing opportunities for the public to participate in a healthy outdoor activity.

(e) Benefits of the Regulation to Worker Safety

The proposed regulation will not affect worker safety.

(f) Benefits of the Regulation to the State's Environment

It is the policy of the State to encourage the conservation, maintenance, and utilization of the State's living resources. The proposed action will further this core objective.



## Informative Digest/Policy Statement Overview

Existing regulations provide for the number of deer hunting tags for existing area-specific archery hunts. The proposed action provides a recommended range of tag numbers for each hunt from which a final number will be determined, based on the post-winter status of each deer herd. These ranges are necessary at this time because the final number of tags cannot be determined until spring herd data are collected and analyzed in March/April and analyzed.

The proposed action changes the number of tags for all existing hunts (except those on military installations) to a series of ranges as indicated in the table below.

### Archery Deer Hunting: Section 361(b)

- A-1 (C Zones Archery Only Hunt); Current 2019 1,945; Proposed 2020 [ 0 - 3,000 ]
- A-3 (Zone X-1 Archery Hunt); Current 2019 100; Proposed 2020 [ 0 - 1,000 ]
- A-4 (Zone X-2 Archery Hunt); Current 2019 10; Proposed 2020 [ 0 - 100 ]
- A-5 (Zone X-3a Archery Hunt); Current 2019 40; Proposed 2020 [ 0 - 300 ]
- A-6 (Zone X-3b Archery Hunt); Current 2019 70; Proposed 2020 [ 0 - 400 ]
- A-7 (Zone X-4 Archery Hunt); Current 2019 120; Proposed 2020 [ 0 - 400 ]
- A-8 (Zone X-5a Archery Hunt); Current 2019 15; Proposed 2020 [ 0 - 100 ]
- A-9 (Zone X-5b Archery Hunt); Current 2019 5; Proposed 2020 [ 0 - 100 ]
- A-11 (Zone X-6a Archery Hunt); Current 2019 50; Proposed 2020 [ 0 - 200 ]
- A-12 (Zone X-6b Archery Hunt); Current 2019 90; Proposed 2020 [ 0 - 300 ]
- A-13 (Zone X-7a Archery Hunt); Current 2019 45; Proposed 2020 [ 0 - 200 ]
- A-14 (Zone X-7b Archery Hunt); Current 2019 25; Proposed 2020 [ 0 - 100 ]
- A-15 (Zone X-8 Archery Hunt); Current 2019 40; Proposed 2020 [ 0 - 100 ]
- A-16 (Zone X-9a Archery Hunt); Current 2019 140; Proposed 2020 [ 0 - 500 ]
- A-17 (Zone X-9b Archery Hunt); Current 2019 300; Proposed 2020 [ 0 - 500 ]
- A-18 (Zone X-9c Archery Hunt); Current 2019 350; Proposed 2020 [ 0 - 500 ]
- A-19 (Zone X-10 Archery Hunt); Current 2019 100; Proposed 2020 [ 0 - 200 ]
- A-20 (Zone X-12 Archery Hunt); Current 2019 100; Proposed 2020 [ 0 - 500 ]
- A-21 (Anderson Flat Archery Buck Hunt); Current 2019 25; Proposed 2020 [ 0 - 100 ]
- A-22 (San Diego Archery Either-Sex Deer Hunt); Current 2019 1,000; Proposed 2020 [ 0 - 1,500 ]
- A-24 (Monterey Archery Either-Sex Deer Hunt); Current 2019 100; Proposed 2020 [ 0 - 200 ]
- A-25 (Lake Sonoma Archery Either-Sex Deer Hunt); Current 2019 35; Proposed 2020 [ 0 - 75 ]
- A-26 (Bass Hill Archery Buck Hunt); Current 2019 30; Proposed 2020 [ 0 - 100 ]
- A-27 (Devil's Garden Archery Buck Hunt); Current 2019 5; Proposed 2020 [ 0 - 75 ]
- A-30 (Covelo Archery Buck Hunt); Current 2019 40; Proposed 2020 [ 0 - 100 ]
- A-31 (Los Angeles Archery Either-Sex Deer Hunt); Current 2019 1,000; Proposed 2020 [ 0 - 1,500 ]
- A-32 (Ventura/Los Angeles Archery Late Season Either-Sex Deer Hunt); 250; Proposed 2020 [ 0 - 300 ]
- A-33 (Fort Hunter Liggett Late Season Archery Either-Sex Deer Hunt); Current 2019 50\*; Proposed 2020 (25 Military and 25 Public) 50\*

\* Specific numbers of tags are provided for military hunts through a system which restricts hunter access to desired levels and ensures biologically conservative hunting programs. Military only tags are designated for Department of Defense and eligible personnel as authorized by the Installation Commander.

Existing regulations for Hunt A-33 (Fort Hunter Liggett Late Season Archery Either-Sex Deer Hunt) provide for hunting to open beginning the first Saturday in October and continue through November 12, except if rescheduled by the Commanding Officer with Department concurrence between the season opener and December 31. The current proposal would modify the season to account for the annual calendar shift by changing the season dates to open beginning the first Saturday in October and continue through November 11, except if rescheduled by the Commanding Officer with Department concurrence between the season opener and December 31.

#### Benefits of the regulations

Deer herd management plans specify objective levels for the proportion of bucks to does in the herds. These ratios are maintained and managed in part by annually modifying the number of hunting tags. The final recommended values for the license tag numbers will be based upon findings from the annual harvest and herd composition counts. Adjusting tag allocations in response to current deer herd conditions contributes to the sustainable management of healthy deer populations and the maintenance of continued hunting opportunities.

#### Non-monetary benefits to the public

The Commission does not anticipate non-monetary benefits to the protection of public health and safety, worker safety, the prevention of discrimination, the promotion of fairness or social equity and the increase in openness and transparency in business and government.

#### Consistency and Compatibility with State Regulations

The Fish and Game Commission, pursuant to Fish and Game Code sections 200 and 203, has the sole authority to regulate deer hunting in California. Commission staff has searched the California Code of Regulations and has found the proposed changes pertaining to deer tag allocations are consistent with sections 361, 702, 708.5 and 708.6 of Title 14. Therefore, the Commission has determined that the proposed amendments are neither inconsistent nor incompatible with existing State regulations.

## Proposed Regulatory Language

Subsection (b) of Section 361, Title 14, CCR is amended to read:

### **§361. Archery Deer Hunting.**

(b) Archery Hunting With Area-specific Archery Tags. Deer may be taken only with archery equipment specified in Section 354, only during the archery seasons as follows:

(1) A-1 (C Zones Archery Only Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~4,945~~ [0 - 3,000] A-1 (C Zones Archery Only Hunt) tags are valid in Zones C-1, C-2, C-3, and C-4 only during the archery season as specified above in subsections 361(b)(1)(B)1 through 4.

(2) A-3 (Zone X-1 Archery Hunt)

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~400~~ [0 - 1,000].

(3) A-4 (Zone X-2 Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 – 100].

(4) A-5 (Zone X-3a Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 – 300].

(5) A-6 (Zone X-3b Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~70~~ [0 – 400].

(6) A-7 (Zone X-4 Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~420~~ [0 - 400].

(7) A-8 (Zone X-5a Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 - 100].

(8) A-9 (Zone X-5b Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~5~~ [0 - 100].

(9) A-11 (Zone X-6a Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~50~~ [0 - 200].

(10) A-12 (Zone X-6b Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~90~~ [0 - 300].

(11) A-13 (Zone X-7a Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~45~~ [0 - 200].

(12) A-14 (Zone X-7b Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~25~~ [0 - 100].

(13) A-15 (Zone X-8 Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 - 100].

(14) A-16 (Zone X-9a Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~30~~ [0 - 500].

(15) A-17 (Zone X-9b Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~240~~ [0 - 500].

(16) A-18 (Zone X-9c Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~350~~ [0 - 500].

(17) A-19 (Zone X-10 Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~400~~ [0 - 200].

(18) A-20 (Zone X-12 Archery Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 - 500].

(19) A-21 (Anderson Flat Archery Buck Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~25~~ [0 - 100].

(20) A-22 (San Diego Archery Either-Sex Deer Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~1,000~~ [0 - 1,500].

(21) A-24 (Monterey Archery Either-Sex Deer Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~400~~ [0 - 200].

(22) A-25 (Lake Sonoma Archery Either-Sex Deer Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~35~~ [0 - 75].

*[No changes to subsection (E)]*

(23) A-26 (Bass Hill Archery Buck Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~30~~ [0 - 100].

(24) A-27 (Devil's Garden Archery Buck Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 - 75].

(25) A-30 (Covelo Archery Buck Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~40~~ [0 - 100].

(26) A-31 (Los Angeles Archery Either-Sex Deer Hunt).

*[No changes to subsections (A) through (B)]*

(C) Bag and Possession Limit: One either-sex deer (see subsection 351-~~(b)~~ (c)) per tag.

(D) Number of Tags: ~~1,000~~ [0 - 1,500].

(27) A-32 (Ventura/Los Angeles Late Season Archery Either-Sex Deer Hunt).

*[No changes to subsections (A) through (C)]*

(D) Number of Tags: ~~250~~ [0 - 300].

(28) A-33 (Fort Hunter Liggett Late Season Archery Either-Sex Deer Hunt).

*[No changes to subsection (A)]*

(B) Season: The season for hunt A-33 (Fort Hunter Liggett Late Season Archery Either-Sex Deer Hunt) shall be open beginning the first Saturday in October and continuing through November ~~42~~ 11,



except if rescheduled by the Commanding Officer with Department concurrence between the season opener and December 31.

*[No changes to subsection (C)]*

(D) Number of Tags: 50 (~~25 military and 25 general public~~).

*[No changes to subsection (E)]*

Note: Authority cited: Sections 200, 203, 265, 3453, and 4370, Fish and Game Code.

Reference: Sections 200, 203, 203.1, 255, 265 and 4370, Fish and Game Code.

State of California  
Fish and Game Commission  
Initial Statement of Reasons for Regulatory Action

Amend Section 362  
Title 14, California Code of Regulations  
Re: Nelson Bighorn Sheep

I. Date of Initial Statement of Reasons: November 13, 2019

II. Dates and Locations of Scheduled Hearings

- |                              |                                               |
|------------------------------|-----------------------------------------------|
| (a) Notice Hearing Date:     | December 11, 2019<br>Location: Sacramento, CA |
| (b) Discussion Hearing Date: | February 6, 2019<br>Location: Sacramento, CA  |
| (c) Adoption Hearing Date:   | April 16, 2019<br>Location: Sacramento, CA    |

III. Description of Regulatory Action

(a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

In accordance with management goals and objectives, and in order to maintain hunting quality, it is necessary to periodically consider tag quotas for hunting. Current regulations specify the number of bighorn sheep hunting tags for the 2019 season. The proposed action initially provides a range of tag numbers from which a final number will be determined based on the post-winter status. A low-end quota range of zero (0) tags is used in the event final tag quotas need to be reduced.

Preliminarily, the tag numbers are presented as ranges (e.g., [ 0-3 ]) in the table in subsection 362(d) of the amended Regulatory Text. Final tag quota recommendations for each zone will be identified and presented to the Fish and Game Commission and interested and affected parties prior to the adoption hearing.

Final tag quotas for bighorn sheep cannot be determined until surveys are completed and all data are analyzed. Surveys and analyses are scheduled for completion by Spring 2020. Final tag quotas will recommend a biologically appropriate harvest of bighorn sheep. Due to the timing of administrative procedures and requirements of the Fish and Game Code, the Department submits proposed regulatory changes to the Fish and Game Commission prior to completion of all surveys, necessitating a proposed range of tags. Monitoring continues and final tag quotas for each zone will be recommended in the Preadoption Statement of Reasons based upon findings from 2019-2020 fall/winter surveys.

(b) Goals and Benefits of the Regulation

The goals and benefits of the regulations are to provide for the conservation and maintenance of bighorn sheep populations to ensure their persistence. It is the policy of this State to

encourage the preservation, conservation and maintenance of wild resources under the jurisdiction and influence of the state including, but not limited to sections 1801 and 4900 of the Fish and Game Code.

(c) Authority and Reference

Authority: Sections 200, 203, 265, 1050, and 4902, Fish and Game Code

Reference: Sections 1050, 3950, and 4902, Fish and Game Code

(d) Specific Technology or Equipment Required by Regulatory Change. None

(e) Identification of Reports or Documents Supporting Regulation Change. None

(f) Public Discussions of Proposed Regulations Prior to Notice Publication

Fish and Game Commission's Wildlife Resources Committee meeting held on May 16, 2019 in Sacramento and on September 10, 2019 in Santa Rosa, California.

IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change

No alternatives were identified.

(b) No Change Alternative

The no-change alternative was considered and rejected because it would not attain project objectives of providing for hunting opportunities while maintaining bighorn sheep populations within desired population objectives. Retaining the current tag quota for each zone may not be responsive to biologically-based changes in the status of various herds. The no-change alternative would not allow for adjustment of tag quotas in response to changing environmental/biological conditions.

V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed. The maximum number of tags available in the proposed range is at or below the number of tags analyzed in the 2019 Final Environmental Document regarding bighorn sheep hunting.

VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states.

The proposed regulations adjust tag quotas for existing hunts to provide public recreational opportunity and could result in minor increases or decreases in hunting days and hunter

spending on equipment, fuel, food, and accommodations. Given the number of tags available and the area over which they are distributed, the proposed regulations are anticipated to be economically neutral for business.

- (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment.

The Commission does not anticipate any impacts on the creation or elimination of jobs, the creation of new business, the elimination of existing businesses or the expansion of businesses in California. Minor variations in hunting regulations are, by themselves, unlikely to provide a substantial enough economic stimulus to the state.

The Commission anticipates benefits to the health and welfare of California residents because hunting is an outdoor activity that can provide exercise, a greater awareness of the connections between wildlife and habitat, and fresh game to eat. The proposed regulation will not affect worker safety. The Commission anticipates benefits to the state's environment through the maintenance of sufficient populations of bighorn sheep to ensure their continued existence.

- (c) Cost Impacts on a Representative Private Person or Business

The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

- (d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State. None.

- (e) Nondiscretionary Costs/Savings to Local Agencies. None.

- (f) Programs Mandated on Local Agencies or School Districts. None.

- (g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code. None.

- (h) Effect on Housing Costs. None.

## VII. Economic Impact Assessment

- (a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

No impacts on the creation or elimination of jobs within businesses that provide services to bighorn sheep hunters may result from the adoption of the proposed bighorn sheep hunting regulations for the 2020-21 hunt season.

- (b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The proposed regulation is not anticipated to prompt the creation of new businesses or the elimination of existing businesses within the state. Minor variations in regulations pertaining to hunting are, by themselves, unlikely to stimulate the creation of new businesses or cause the elimination of existing businesses. The number of hunting trips and the economic contributions from the trips are not expected to change substantially.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

The proposed variations in bighorn sheep tag quotas are, by themselves, unlikely to stimulate substantial expansion of businesses currently doing business in the state. The long-term intent of the proposed regulations is to sustainably manage bighorn sheep populations, and consequently, the long-term viability of various businesses that serve recreational bighorn sheep hunters.

(d) Benefits of the Regulation to the Health and Welfare of California Residents

Hunting is an outdoor activity that can provide several health and welfare benefits to California residents. Hunters and their families benefit from fresh game to eat, and from the benefits of outdoor recreation, including exercise. People who hunt have a special connection with the outdoors and an awareness of the relationships between wildlife, habitat, and humans. With that awareness comes an understanding of the role humans play in being caretakers of the environment. Hunting is a tradition that is often passed from one generation to the next creating a special bond between family members and friends.

(e) Benefits of the Regulation to Worker Safety

The proposed regulation will not affect worker safety.

(f) Benefits of the Regulation to the State's Environment

As set forth in Fish and Game Code section 1801, it is the policy of the state to encourage the conservation, maintenance, and utilization of wildlife resources for the benefit of all the citizens of the state. The objectives of this policy include, but are not limited to, the maintenance of sufficient populations of bighorn sheep to ensure their continued existence and the maintenance of a sufficient resource to support recreational opportunity. Adoption of scientifically-based bighorn sheep seasons and tag quotas provides for the maintenance of sufficient bighorn sheep populations to ensure those objectives are met. The fees that hunters pay for licenses and tags fund big game conservation.

## Informative Digest/Policy Statement Overview

The current regulation in Section 362, Title 14, CCR, provides for limited hunting of Nelson bighorn rams in specified areas of the State. The proposed change is intended to adjust the number of tags available for the 2020 season based on bighorn sheep fall/winter population surveys conducted by the Department. Final tag quota recommendations will be made pending completion of all surveys and data analyses. quota recommendations will be made pending completion of all surveys and data analyses.

Nelson Big Horn Sheep hunt zones followed by 2020 proposed range of tags.

- Zone 1 – Marble/Clipper Mountains [0-5]
- Zone 2 - Kelso Peak/Old Dad Mountains [0-4]
- Zone 3 - Clark/Kingston Mountain Ranges [0-4]
- Zone 4 - Orocopia Mountains [0-2]
- Zone 5 - San Gorgonio Wilderness [0-3]
- Zone 6 - Sheep Hole Mountains [0-2]
- Zone 7 - White Mountains [0-6]
- Zone 8 - South Bristol Mountains [0-3]
- Zone 9 – Cady Mountains [0-4]
- Zone 10 – Newberry, Rodman, Ord Mountains [0-6]
- Open Zone Fund-Raising Tag [0-1]
- Marble/Clipper/South Bristol Mountains Fund-Raising Tag [0-1]
- Cady Mountains Fund-Raising Tag [0-1]

### Benefits of the regulations

The benefits of the proposed regulations are consistency with statute and the sustainable management of the State's wildlife resources.

### Non-monetary benefits to the public

The Commission does not anticipate non-monetary benefits to the protection of public health and safety, worker safety, the prevention of discrimination, the promotion of fairness or social equity, and the increase in openness and transparency in business and government.

### Evaluation of incompatibility with existing regulations

The Commission has reviewed its regulations in Title 14, CCR, and conducted a search of other regulations on this topic and has concluded that the proposed amendments are neither inconsistent nor incompatible with existing State regulations. No other State agency has the authority to promulgate wildlife hunting regulations.



## Proposed Regulatory Language

Section 362, Title 14 CCR, is amended to read:

### **§362 Nelson Bighorn Sheep**

*[No changes to subsections (a) through (c)]*

(d) Number of License Tags:

<b><i>Nelson Bighorn Sheep Hunt Zones</i></b>	<b><i>Tag Allocation</i></b>
Zone 1 - Marble/Clipper Mountains	5 [0-5]
Zone 2 - Kelso Peak/Old Dad Mountains	0 [0-4]
Zone 3 - Clark/Kingston Mountain Ranges	4 [0-4]
Zone 4 - Orocopia Mountains	4 [0-2]
Zone 5 - San Gorgonio Wilderness	0 [0-3]
Zone 6 - Sheep Hole Mountains	0 [0-2]
Zone 7 - White Mountains	6 [0-6]
Zone 8 - South Bristol Mountains	2 [0-3]
Zone 9 - Cady Mountains	2 [0-4]
Zone 10 - Newberry, Rodman, Ord Mountains	6 [0-6]
Open Zone Fund-Raising Tag	4 [0-1]
Marble/Clipper/South Bristol Mountains Fund-Raising Tag	4 [0-1]
Cady Mountains Fund-Raising Tag	4 [0-1]
Total:	29 [0-42]

*[No changes to subsection (e)]*

Note: Authority cited: Sections 200, 203, 265, 1050 and 4902, Fish and Game Code. Reference: Sections 1050, 3950 and 4902, Fish and Game Code.

State of California  
Fish and Game Commission  
Initial Statement of Reasons for Regulatory Action

Amend Section 364  
Title 14, California Code of Regulations  
Re: Elk

I. Date of Initial Statement of Reasons: November 14, 2019

II. Dates and Locations of Scheduled Hearings

- |                              |                                               |
|------------------------------|-----------------------------------------------|
| (a) Notice Hearing Date:     | December 11, 2019<br>Location: Sacramento, CA |
| (b) Discussion Hearing Date: | February 21, 2019<br>Location: Sacramento, CA |
| (c) Adoption Hearing Date:   | April 16, 2019<br>Location: Sacramento, CA    |

III. Description of Regulatory Action

(a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

The Fish and Game Commission (Commission) periodically considers the recommendations of the Department of Fish and Wildlife (Department) in establishing elk regulations. Section 364 provides definitions, hunting zone descriptions, season opening and closing dates, and tag quotas for elk.

In order to maintain appropriate harvest levels and hunting quality it is necessary to periodically adjust tag quotas (total number of hunting tags to be made available) in response to dynamic environmental and biological conditions. Current regulations in Section 364 specify elk license tag quotas for each hunt zone in accordance with management goals and objectives.

The specific recommended regulation changes are:

1) Number of Tags

Proposed amendments to Section 364 will establish new tag quotas to adjust for periodic fluctuations in elk population numbers. Proposed tag quotas are presented as ranges shown in brackets, e.g. [ 0-4 ], in the tables of the amended Regulatory Text (subsections 364 (r) through (aa)) attached to this Initial Statement of Reasons. The ranges allow the final number of tags to be determined based on analysis of survey and harvest data from the 2019-20 hunt season. These results are anticipated in the spring of 2020 and a final analysis will support the Department's recommendation for the number of tags to be allocated to each hunt prior to the Commission's adoption hearing in April 2020.

2) Modify Season Dates on Fort Hunter Liggett

Due to military use constraints at Fort Hunter Liggett, hunt dates are annually subject to change, and may be adjusted or cancelled by the Commanding Officer. There are several changes to the hunt openers on the Fort Hunter Liggett Military Base. The changes to the 2020 season openers will be.

(u) Department Administered General Methods Tule Elk Hunts

(12)(C) Fort Hunter Liggett General Public: Shall open on the fourth Tuesday in December and continue for 13 consecutive days.

(v) Department Administered Apprentice Hunts

(7)(A) General method Apprentice: Shall open on the fourth Tuesday in December and continue for 13 consecutive days.

(w) Department Administered Archery Only Hunt

(6)(B) Shall open on the First Saturday in November and continue for 9 consecutive days.

(b) Goals and Benefits of the Regulation

The proposed regulations will contribute to the sustainable management of elk populations in California. Existing elk herd management goals specify objective levels for the proportion of bulls to cows in the herds. These ratios are maintained and managed in part by periodically modifying the number of tags. The final recommended number of tags will be based upon findings from annual harvest, herd composition counts, and population estimates where appropriate.

(c) Authority and Reference

Authority: Section(s) 200, 203, 203.1, 265, 332 and 1050, Fish and Game Code.

Reference: Section(s) 332, 1050, 1570, 1571, 1572, 1573 and 1574, Fish and Game Code.

(d) Specific Technology or Equipment Required by Regulatory Change: None

(e) Identification of Reports or Documents Supporting Regulation Change: None

(f) Public Discussions of Proposed Regulations Prior to Notice Publication:

This proposal was discussed at Wildlife Resources Committee Meetings on May 16, 2019, in Sacramento and September 10, 2019 in Santa Rosa.

IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change

No alternatives were identified.

(b) No Change Alternative

1. Number of Tags

The “no-change alternative” was considered and rejected because it would not meet project objectives. Elk hunts and opportunity must be adjusted periodically in response to a variety of environmental and biological conditions.

## 2. Modify Season Dates on Fort Hunter Liggett

The “no-change alternative” was considered and found inadequate to meet project objectives. Retaining current season length and timing would be unresponsive to Base operations, scheduled activities, and/or unnecessarily restrict hunter opportunity.

## V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed. The maximum number of tags available in the proposed range is at or below the number of tags analyzed in the 2010 Environmental Document, and its 2019 Final Supplemental Environmental Document regarding elk hunting.

## VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

### (a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. Considering the relatively small number of tags issued over the entire state, this proposal is economically neutral to business.

### (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State’s Environment

The Commission anticipates no to minor positive impacts on the creation or elimination of jobs within the state, and no impact on the creation of new business, the elimination of existing businesses or the expansion of businesses in California as minor variations in hunting regulations are, by themselves, unlikely to provide a substantial enough economic stimulus to the state. The Commission anticipates benefits to the health and welfare of California residents. Hunting provides opportunities for multi-generational family activities and promotes respect for California’s environment by the future stewards of the State’s resources. The proposed action will not provide benefits to worker safety. The Commission anticipates benefits to the State’s environment in the sustainable management of natural resources.

### (c) Cost Impacts on a Representative Private Person or Business

The Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with this proposed action.

### (d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None

### (e) Nondiscretionary Costs/Savings to Local Agencies: None

### (f) Programs Mandated on Local Agencies or School Districts: None

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None

(h) Effect on Housing Costs: None

## VII. Economic Impact Assessment

### (a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

No impact to minor positive impacts on the creation of jobs within businesses that provide services to elk hunters may result from the adoption of the proposed elk hunting regulations for the 2020-21 season.

### (b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The proposed regulation is not anticipated to prompt the creation of new businesses or the elimination of existing businesses within the state. Minor variations in regulations pertaining to hunting are, by themselves, unlikely to stimulate the creation of new businesses or cause the elimination of existing businesses. The number of hunting trips and the economic contributions from the trips are not expected to change substantially.

### (c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

The proposed minor variations in elk tag quotas are, by themselves, unlikely to stimulate substantial expansion of businesses currently doing business in the state. The long-term intent of the proposed regulations is to sustainably manage elk populations, and consequently, the long-term viability of various businesses that serve recreational elk hunters.

### (d) Benefits of the Regulation to the Health and Welfare of California Residents

Hunting is an outdoor activity that can provide several health and welfare benefits to California residents. Hunters and their families benefit from fresh game to eat, and from the benefits of outdoor recreation, including exercise. People who hunt have a special connection with the outdoors and an awareness of the relationships between wildlife, habitat, and humans. With that awareness comes an understanding of the role humans play in being caretakers of the environment. Hunting is a tradition that is often passed from one generation to the next creating a special bond between family members and friends.

### (e) Benefits of the Regulation to Worker Safety

The proposed regulation will not affect worker safety.

### (f) Benefits of the Regulation to the State's Environment

As set forth in Fish and Game Code section 1801, it is the policy of the state to encourage the conservation, maintenance, and utilization of fish and wildlife resources for the benefit of all the citizens of the state. The objectives of this policy include, but are not limited to, the maintenance of sufficient populations of elk to ensure their continued existence and the maintenance of a sufficient resource to support recreational opportunity. Adoption of scientifically based elk seasons and tag quotas provides for the maintenance of sufficient elk

populations to ensure those objectives are met. The fees that hunters pay for licenses and tags fund wildlife conservation.

(g) Other Benefits of the Regulation

Hunting seasons provide incentives for private landowners to maintain habitats that benefit elk and other forest and upland dependent species.



## Informative Digest/Policy Statement Overview

Current regulations in Section 364, Title 14, CCR, provide definitions, hunting zone descriptions, season dates, and elk license tag quotas. In order to achieve elk herd management goals and objectives and maintain hunting quality, it is periodically necessary to adjust quotas, seasons, hunt areas and other criteria in response to dynamic environmental and biological conditions. The proposed amendments to Section 364 will establish the 2020 tag quotas, season dates, and tag distribution within each hunt adjusting for annual fluctuations in populations.

Proposed Amendments: The proposed ranges of elk tags for 2020 are presented in the Proposed Regulatory Text of Section 364.

1. Subsections 364(r) through (aa) specify elk license tag quota ranges for each hunt in accordance with management goals and objectives.
2. Modify Season Dates. Due to military use constraints at Fort Hunter Liggett, hunt dates are annually subject to change and may be adjusted or cancelled by the Commanding Officer.

### Benefits of the regulations

The proposed regulations will contribute to the sustainable management of elk populations in California. Existing elk herd management goals specify objective levels for the proportion of bulls to cows in the herds. These ratios are maintained and managed in part by periodically modifying the number of tags. The final recommended number of tags will be based upon findings from annual harvest, herd composition counts, and population estimates where appropriate.

### Non-monetary benefits to the public

The Commission does not anticipate non-monetary benefits to the protection of public health and safety, worker safety, the prevention of discrimination, the promotion of fairness or social equity and the increase in openness and transparency in business and government.

### Evaluation of incompatibility with existing regulations

The Fish and Game Commission, pursuant to Fish and Game Code Sections 200 and 203, has the sole authority to regulate elk hunting in California. Commission staff has searched the California Code of Regulations and has found the proposed changes pertaining to elk tag allocations are consistent with Title 14. Therefore, the Commission has determined that the proposed amendments are neither inconsistent nor incompatible with existing State regulations.

## PROPOSED REGULATORY TEXT

Section 364 is amended to read as follows:

### §364. Elk Hunts, Seasons, and Number of Tags.

§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
(r) Department Administered General Methods Roosevelt Elk Hunts					
(1)(A)	Siskiyou	<del>20</del> <u>[0-38]</u>	<del>20</del> <u>[0-42]</u>		
		Shall open on the Wednesday preceding the second Saturday in September and continue for 12 consecutive days.			
(2)(A)	Northwestern	<del>45</del> <u>[0-44]</u>	<del>0</del> <u>[0-58]</u>	<del>3</del> <u>[0-3]</u>	
		Shall open on the first Wednesday in September and continue for 23 consecutive days.			
(3)(A)	Marble Mountains	<del>35</del> <u>[0-70]</u>	<del>40</del> <u>[0-30]</u>		
		Shall open on the Wednesday preceding the second Saturday in September and continue for 12 consecutive days.			
(s) Department Administered General Methods Rocky Mountain Elk Hunts					
(1)(A)	Northeastern California	<del>45</del> <u>[0-30]</u>			
	Bull	The bull season shall open on the Wednesday preceding the third Saturday in September and continue for 12 consecutive days			
(B)	Northeastern California		<del>40</del> <u>[0-10]</u>		
	Antlerless	The antlerless season shall open on the second Wednesday in November and continue for 12 consecutive days.			
(t) Department Administered General Methods Roosevelt/Tule Elk Hunts					
(1)(A)	Mendocino	<del>2</del> <u>[0-4]</u>	<del>0</del> <u>[0-4]</u>		
		The season shall open on the Wednesday preceding the fourth Saturday in September and continue for 12 consecutive days.			
(u) Department Administered General Methods Tule Elk Hunts					

§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
(1)(A)	Cache Creek Bull	2 <u>[0-4]</u>			
		The Bull season shall open on the second Saturday in October and continue for 16 consecutive days.			
(B)	Antlerless		2 <u>[0-4]</u>		
		The Antlerless season shall open on the third Saturday in October and continue for 16 consecutive days.			
(2)(A)	La Panza Period 1	6 <u>[0-12]</u>	5 <u>[0-10]</u>		
		Shall open on the second Saturday in October and extend for 23 consecutive days			
(B)	Period 2	6 <u>[0-12]</u>	6 <u>[0-12]</u>		
		Shall open on the second Saturday in November and extend for 23 consecutive days.			
(3)(A)	Bishop Period 3	9 <u>[0-10]</u>	9 <u>[0-30]</u>		
		Shall open on the third Saturday in October and extend for 9 consecutive days.			
(B)	Period 4	9 <u>[0-10]</u>	9 <u>[0-30]</u>		
		Shall open on the first Saturday in November and extend for 9 consecutive days.			
(C)	Period 5	9 <u>[0-10]</u>	9 <u>[0-30]</u>		
		Shall open on the first Saturday in December and continue for 9 consecutive days.			
(4)(A)	Independence Period 2	4 <u>[0-10]</u>	4 <u>[0-30]</u>		
		Shall open on the first Saturday in October and extend for 9 consecutive days.			
(B)	Period 3	4 <u>[0-10]</u>	4 <u>[0-30]</u>		
		Shall open on the third Saturday in October and extend for 9 consecutive days.			
(C)	Period 4	9 <u>[0-10]</u>	4 <u>[0-30]</u>		
		Shall open on the first Saturday in November and extend for 9 consecutive days.			
(D)	Period 5	9 <u>[0-10]</u>	9 <u>[0-30]</u>		

§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
		Shall open on the first Saturday in December and continue for 9 consecutive days.			
(5)(A)	Lone Pine Period 2	4 [0-10]	4 [0-30]		
		Shall open on the first Saturday in October and extend for 9 consecutive days.			
(B)	Period 3	4 [0-10]	4 [0-30]		
		Shall open on the third Saturday in October and extend for 9 consecutive days.			
(C)	Period 4	0 [0-10]	4 [0-30]		
		Shall open on the first Saturday in November and extend for 9 consecutive days.			
(D)	Period 5	0 [0-10]	0 [0-30]		
		Shall open on the first Saturday in December and continue for 9 consecutive days.			
(6)(A)	Tinemaha Period 2	0 [0-10]	0 [0-30]		
		Shall open on the first Saturday in October and extend for 9 consecutive days.			
(B)	Period 3	0 [0-10]	0 [0-30]		
		Shall open on the third Saturday in October and extend for 9 consecutive days.			
(C)	Period 4	0 [0-10]	0 [0-30]		
		Shall open on the first Saturday in November and extend for 9 consecutive days.			
(D)	Period 5	0 [0-10]	0 [0-30]		
		Shall open on the first Saturday in December and continue for 9 consecutive days.			
(7)(A)	West Tinemaha Period 1	0 [0-10]	0 [0-30]		
		Shall open on the second Saturday in September and extend for 16 consecutive days.			
(B)	Period 2	0 [0-10]	0 [0-30]		
		Shall open on the first Saturday in October and extend for 9 consecutive days.			

§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
(C)	Period 3	0 [0-10]	0 [0-30]		
		Shall open on the third Saturday in October and extend for 9 consecutive days.			
(D)	Period 4	0 [0-10]	0 [0-30]		
		Shall open on the first Saturday in November and extend for 9 consecutive days.			
(E)	Period 5	0 [0-10]	0 [0-30]		
		Shall open on the first Saturday in December and continue for 9 consecutive days.			
(8)(A)	Tinemaha Mountain Period 1	0 [0-8]			
		Shall open on the second Saturday in September and extend for 16 consecutive days.			
(B)	Period 2	0 [0-8]			
		Shall open on the first Saturday in October and extend for 9 consecutive days.			
(C)	Period 3	0 [0-8]			
		Shall open on the third Saturday in October and extend for 9 consecutive days			
(D)	Period 4	0 [0-8]			
		Shall open on the first Saturday in November and extend for 9 consecutive days.			
(E)	Period 5	0 [0-8]			
		Shall open on the first Saturday in December and continue for 9 consecutive days.			
(9)(A)	Whitney Period 2	0 [0-4]	4 [0-10]		
		Shall open on the first Saturday in October and extend for 9 consecutive days.			
(B)	Period 3	0 [0-4]	0 [0-10]		
		Shall open on the third Saturday in October and extend for 9 consecutive days			
(C)	Period 4	0 [0-4]	0 [0-10]		

§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
		Shall open on the first Saturday in November and extend for 9 consecutive days.			
(D)	Period 5	0 [0-4]	0 [0-10]		
		Shall open on the first Saturday in December and continue for 9 consecutive days.			
(10)(A)	Goodale Period 1	0 [0-10]	0 [0-30]		
		Shall open on the second Saturday in September and extend for 16 consecutive days.			
(B)	Period 2	0 [0-10]	4 [0-30]		
		Shall open on the first Saturday in October and extend for 9 consecutive days.			
(C)	Period 3	0 [0-10]	4 [0-30]		
		Shall open on the third Saturday in October and extend for 9 consecutive days			
(D)	Period 4	0 [0-10]	0 [0-30]		
		Shall open on the first Saturday in November and extend for 9 consecutive days.			
(E)	Period 5	0 [0-10]	0 [0-30]		
		Shall open on the first Saturday in December and continue for 9 consecutive days.			
(11)(A)	Grizzly Island Period 1	0 [0-3]	6 [0-12]		0 [0-6]
		Shall open on the second Tuesday after the first Saturday in August and continue for 4 consecutive days.			
(B)	Period 2	0 [0-3]	2 [0-12]		-4 [0-6]
		Shall open on the first Thursday following the opening of period one and continue for 4 consecutive days.			
(C)	Period 3	0 [0-3]	6 [0-12]		0 [0-6]
		Shall open on the first Tuesday following the opening of period two and continue for 4 consecutive days			
(D)	Period 4	0 [0-3]	-4 [0-12]		2 [0-6]
		Shall open on the first Thursday following the opening of period three and continue for 4 consecutive days.			



§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
(E)	Period 5	0 [0-3]	8 [0-12]		0 [0-6]
		Shall open on the first Tuesday following the opening of period four and continue for 4 consecutive days			
(F)	Period 6	0 [0-3]	0 [0-12]		0 [0-6]
		Shall open on the first Thursday following the opening of period five and continue for 4 consecutive days.			
(G)	Period 7	0 [0-3]	8 [0-12]		0 [0-6]
		Shall open on the first Tuesday following the opening of period six and continue for 4 consecutive days			
(H)	Period 8	0 [0-3]	0 [0-12]		6 [0-6]
		Shall open on the first Thursday following the opening of period seven and continue for 4 consecutive days.			
(I)	Period 9	0 [0-3]	8 [0-12]		0 [0-6]
		Shall open on the first Tuesday following the opening of period eight and continue for 4 consecutive days.			
(J)	Period 10	0 [0-3]	0 [0-12]		0 [0-6]
		Shall open on the first Thursday following the opening of period nine and continue for 4 consecutive days.			
(K)	Period 11	0 [0-3]	8 [0-12]		0 [0-6]
		Shall open on the first Tuesday following the opening of period ten and continue for 4 consecutive days.			
(L)	Period 12	3 [0-3]			0 [0-6]
		Shall open on the first Thursday following the opening of period eleven and continue for 4 consecutive days.			
(M)	Period 13	0 [0-3]	8 [0-12]		0 [0-6]
		Shall open on the first Tuesday following the opening of period twelve and continue for 4 consecutive days.			
(12)(A)	Fort Hunter Liggett General Public Period 1	0	0 [0-16]		
		Shall open on the first Thursday in November and continue for 9 consecutive days.			
(B)	Period 2	0	0 [0-16]		

§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
		Shall open November <del>22-25</del> and continue for 9 consecutive days.			
(C)	Period 3	0 <u>[0-14]</u>	0		
		Shall open on the <del>third Saturday</del> <u>fourth Tuesday</u> in December and continue for <del>12-13</del> consecutive days.			
(13)(A)	East Park Reservoir	2 <u>[0-4]</u>	2 <u>[0-8]</u>		
		Shall open the first Saturday in September and continue for 27 consecutive days.			
(14)(A)	San Luis Reservoir	0 <u>[0-10]</u>	0 <u>[0-10]</u>	5 <u>[0-10]</u>	
		Shall open on the first Saturday in October and continue for 23 consecutive days.			
(15)(A)	Bear Valley	2 <u>[0-4]</u>	4 <u>[0-2]</u>		
		Shall open on the second Saturday in October and continue for 9 consecutive days.			
(16)(A)	Lake Pillsbury Period 1		-4 <u>[0-4]</u>		
		Shall open on the Wednesday preceding the second Saturday in September and continue for 10 consecutive days.			
(B)	Period 2	2 <u>[0-4]</u>			
		Shall open Monday following the fourth Saturday in September and continue for 10 consecutive days.			
(17)(A)	Santa Clara	0 <u>[0-4]</u>	0		
		Shall open on the second Saturday in October and continue for 16 consecutive days.			
(18)(A)	Alameda	0 <u>[0-4]</u>	0		
		Shall open on the second Saturday in October and continue for 16 consecutive days.			
(v) Department Administered Apprentice Hunts					
(1)(A)	Marble Mountain General Methods Roosevelt Elk Apprentice			-4 <u>[0-4]</u>	
		Shall open on the Wednesday preceding the second Saturday in September and continue for 12 consecutive days.			
(2)(A)	Northeast California			2 <u>[0-4]</u>	

§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
	General Methods Rocky Mountain Elk Apprentice	Shall open on the Wednesday preceding the third Saturday in September and continue for 12 consecutive days			
(3)(A)	Cache Creek General Methods	4 <u>[0-2]</u>	0 <u>[0-2]</u>		
	Tule Elk Apprentice	Shall open on the second Saturday in October and continue for 16 consecutive days.			
(4)(A)	La Panza General Methods	0 <u>[0-2]</u>	4 <u>[0-2]</u>		
	Tule Elk Apprentice	Shall open on the second Saturday in October and extend for 23 consecutive days.			
(5)(A)	Bishop General Methods	0 <u>[0-10]</u>	0 <u>[0-30]</u>		
	Tule Elk Apprentice Period 2	Shall open on the first Saturday in October and extend for 9 consecutive days.			
(6)(A)	Grizzly Island General Methods		3 <u>[0-4]</u>		0 <u>[0-4]</u>
	Tule Elk Apprentice Period 1	Shall open on the second Tuesday after the first Saturday in August and continue for 4 consecutive days			
(B)	Period 2		0 <u>[0-4]</u>		2 <u>[0-4]</u>
		Shall open on the first Thursday following the opening of period one and continue for 4 consecutive days.			
(C)	Period 3		3 <u>[0-4]</u>		0 <u>[0-4]</u>
		Shall open on the first Tuesday following the opening of period two and continue for 4 consecutive days.			
(D)	Period 4		0 <u>[0-4]</u>		2 <u>[0-4]</u>
		Shall open on the first Thursday following the opening of period three and continue for 4 consecutive days.			

§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
(7)(A)	Fort Hunter Liggett	0 [0-2]	0 [0-8]		
	General Public General Methods Apprentice	Shall open on the <del>third Saturday</del> <u>fourth Tuesday</u> in December and continue for <del>12</del> <u>13</u> consecutive days.			
(w) Department Administered Archery Only Hunts					
(1)(A)	Northeast California	0	0	40 [0-20]	
	Archery Only	Shall open on the Wednesday preceding the first Saturday in September and continue for 12 consecutive days.			
(2)(A)	Owens Valley Multiple Zone	3 [0-10]	0 [0-5]		
	Archery Only	Shall open on the second Saturday in August and extend for 9 consecutive days.			
(3)(A)	Lone Pine	0 [0-10]	4 [0-30]		
	Archery Only Period 1	Shall open on the second Saturday in September and extend for 16 consecutive days.			
(4)(A)	Tinemaha	0 [0-10]	0 [0-30]		
	Archery Only Period 1	Shall open on the second Saturday in September and extend for 16 consecutive days.			
(5)(A)	Whitney	0 [0-10]	0 [0-30]		
	Archery Only Period 1	Shall open on the second Saturday in September and extend for 16 consecutive days.			
(6)(A)	Fort Hunter Liggett			3 [0-10]	
	General Public Archery Only Either Sex	Shall open on the last Saturday in July and continue for 9 consecutive days.			
(B)	Fort Hunter Liggett		-4 [0-10]		
	General Public Archery Only Antlerless	Shall open on the <del>Second</del> <u>First</u> Saturday in November and continue for 9 consecutive days.			
(x) Department Administered Muzzleloader Only Tule Elk Hunts					

§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
(1)(A)	Bishop	0 [0-10]	0 [0-30]		
	Muzzleloader Only Period 1	Shall open on the second Saturday in September and extend for 16 consecutive days.			
(2)(A)	Independence	4 [0-10]	0 [0-10]		
	Muzzleloader Only Period 1	Shall open on the second Saturday in September and extend for 16 consecutive days.			
(3)(A)	Goodale	0 [0-10]	4 [0-10]		
	Muzzleloader Only Period 1	Shall open on the second Saturday in September and extend for 16 consecutive days.			
(4)(A)	Fort Hunter Liggett	−4 [0-10]	0 [0-10]		
	General Public Muzzleloader Only	Shall open on the fourth Saturday in November and continue for 9 consecutive days.			
(y) Department Administered Muzzleloader/Archery Only Hunts					
(1)(A)	Marble Mountain			40 [0-20]	
	Muzzleloader/Archery Roosevelt Elk	Shall open on the last Saturday in October and extend for 9 consecutive days.			
(z) Fund Raising Elk tags					
(1)(A)	Multi-zone Fund Raising Tags	1			
		Siskiyou and Marble Mountains Roosevelt Elk Season shall open on the Wednesday preceding the first Saturday in September and continue for 19 consecutive days.  Northwestern Roosevelt Elk Season shall open on the last Wednesday in August and continue for 30 consecutive days.  Northeastern Rocky Mountain Elk Season shall open on the Wednesday preceding the last Saturday in August and continue for 33 consecutive days.  La Panza Tule Elk Season shall open on the first Saturday in October and extend for 65 consecutive days.			
(2)(A)	Grizzly Island	1			

§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
	Fund Raising Tags	Shall open on the first Saturday in August and continue for 30 consecutive days.			
(3)(A)	Owens Valley	1			
	Fund Raising Tags	Shall open on the last Saturday in July and extend for 30 consecutive days.			
(aa) Military Only Tule Elk Hunts					
(1)(A)	Fort Hunter Liggett Military Only	0 [0-2]	0 [0-2]		
	General Methods Early Season	The early season shall open on the second Monday in August and continue for 5 consecutive days and reopen on the fourth Monday in August and continue for 5 consecutive days			
(B)	Period 1		0 [0-16]		
		Shall open on the first Thursday in November and continue for 9 consecutive days.			
(C)	Period 2		0 [0-14]		
		Shall open November 22 and continue for 9 consecutive days.			
(D)	Period 3	0 [0-16]			
		Shall open on the third Saturday in December and continue for 12 consecutive days.			
(2)(A)	Fort Hunter Liggett Military Only	0 [0-2]	0 [0-8]		
	General Methods Apprentice	Shall open on the third Saturday in December and continue for 12 consecutive days.			
(3)(A)	Fort Hunter Liggett Military Only			3 [0-6]	
	Archery Only Either sex	Shall open on the last Saturday in July and continue for 9 consecutive days.			
(B)	Antlerless		-4 [0-10]		



§	Hunt	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		5. Season			
		Shall open on the Second Saturday in November and continue for 9 consecutive days.			
(4)(A)	Fort Hunter Liggett	<del>4</del> [0-6]			
	Military Only Muzzleloader Only	Shall open on the third Saturday in November and continue for 9 consecutive days.			

Note: Authority cited: Sections 200, 203, 203.1, 265, 332 and 1050, Fish and Game Code.  
Reference: Sections 332, 1050, 1570, 1571, 1572, 1573 and 1574, Fish and Game Code.

State of California  
Fish and Game Commission  
Initial Statement of Reasons for Regulatory Action

Amend Section 364.1  
Title 14, California Code of Regulations  
Re: SHARE Elk Hunts

I. Date of Initial Statement of Reasons: November 13, 2019

II. Dates and Locations of Scheduled Hearings

- |                              |                                               |
|------------------------------|-----------------------------------------------|
| (a) Notice Hearing Date:     | December 11, 2019<br>Location: Sacramento, CA |
| (b) Discussion Hearing Date: | February 6, 2019<br>Location: Sacramento, CA  |
| (c) Adoption Hearing Date:   | April 16, 2019<br>Location: Sacramento, CA    |

III. Description of Regulatory Action

(a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

The Fish and Game Commission (Commission) periodically considers the recommendations of the Department of Fish and Wildlife (Department) in establishing elk regulations. Section 364.1 identifies hunting zones, season opening and closing dates, and tag quotas for SHARE Elk Hunts.

In order to maintain appropriate harvest levels and hunting quality it is necessary to periodically adjust tag quotas (total number of hunting tags to be made available) in response to dynamic environmental and biological conditions. Current regulations in Section 364.1 specify elk license tag quotas for each hunt zone in accordance with management goals and objectives.

1. Number of Tags

Proposed amendments to Section 364.1 will establish new tag quotas to adjust for periodic fluctuations in elk populations. The proposed tag quotas are presented within ranges shown in brackets, e.g. [ 0-4 ], in the tables of the amended Regulatory Text (subsections 364.1(i) through (l)) attached to this Initial Statement of Reasons. The ranges allow the final number of tags to be determined based on the analysis of survey and harvest data from the 2019-20 hunt season. These results are anticipated in the spring of 2020 and a final analysis will support the Department's recommendation for the number of tags to be allocated to each hunt prior to the Commission's adoption hearing in April 2020.

The Shared Habitat Alliance for Recreational Enhancement (SHARE) Program private property elk hunts correspond with elk hunt zones identified in Section 364. These regulations authorize

SHARE elk hunts with separate seasons and tag quotas. The SHARE program will issue tags under the Department's existing tag distribution procedures.

(b) Goals and Benefits of the Regulation:

The proposed regulations will contribute to the sustainable management of elk populations and to relieve depredation damage to landowners in California. The final values for the license tag numbers will be based upon findings from annual harvest and herd composition counts where appropriate.

(c) Authority and Reference:

Authority: Sections 332 and 1050, Fish and Game Code.

Reference: Sections 332, 1050 and 1574, Fish and Game Code.

(d) Specific Technology or Equipment Required by Regulatory Change: None.

(e) Identification of Reports or Documents Supporting Regulation Change: None

(f) Public Discussions of Proposed Regulations Prior to Notice Publication:

Fish and Game Commission's Wildlife Resources Committee meetings held on May 16, 2019 in Sacramento and on September 10, 2019 in Santa Rosa.

#### IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change:

No alternatives were identified

(b) No Change Alternative:

The no-change alternative was considered and rejected because it would not attain the project objectives. Elk hunts and opportunity must be adjusted periodically in response to a variety of environmental and biological conditions including forage availability, population structure, and over-winter survival rates. Elk populations have increased, and landowner conflicts have also escalated in several areas. Adjusting tag quotas provides for appropriate harvest levels within the hunt zones.

#### V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed. The maximum number of tags available in the proposed range is at or below the number of tags analyzed in the 2010 Environmental Document, and its 2019 Final Supplemental Environmental Document regarding elk hunting.

#### VI. Impact of Regulatory Action

This proposed action adjusts tag quotas in an effort to meet management goals and provide hunting opportunities for the public. Given the number of tags available, and the area over which they are distributed, this proposal is economically neutral to business.

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States:

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states.

- (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment:

The Commission anticipates no to minor positive impacts on the creation or elimination of jobs within the state, and no impact on the creation of new business, the elimination of existing businesses or the expansion of businesses in California as minor variations in hunting regulations are, by themselves, unlikely to provide a substantial enough economic stimulus to the state. The Commission anticipates benefits to the health and welfare of California residents. Hunting provides opportunities for multi-generational family activities and promotes respect for California's environment by the future stewards of the State's resources. The proposed action will not provide benefits to worker safety. The Commission anticipates benefits to the State's environment in the sustainable management of natural resources.

- (c) Cost Impacts on a Representative Private Person or Business:

The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with this proposed action.

- (d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None.

- (e) Nondiscretionary Costs/Savings to Local Agencies: None.

- (f) Programs Mandated on Local Agencies or School Districts: None.

- (g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None.

- (h) Effect on Housing Costs: None.

## VII. Economic Impact Assessment

The proposed action will have no statewide economic or fiscal impact because the proposed action would not constitute a significant change from the 2019 elk season. The number of tags to be set in regulation for 2020 is intended to achieve or maintain the levels set forth in the approved management plans and environmental documents to sustainably manage elk populations and maintain hunting opportunities in subsequent seasons.

- (a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State:

Little to minor positive impacts on the creation of jobs within businesses that provide services to elk hunters may result from the adoption of the proposed SHARE elk hunting regulations for the 2020-21 season.

- (b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State:

The proposed regulation is not anticipated to prompt the creation of new businesses or the elimination of existing businesses within the state. Minor variations in regulations pertaining to hunting are, by themselves, unlikely to stimulate the creation of new businesses or cause the

elimination of existing businesses. The number of hunting trips and the economic contributions from the trips are not expected to change substantially.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State:

The proposed SHARE elk tag quotas are, by themselves, unlikely to stimulate substantial expansion of businesses currently doing business in the state. The long-term intent of the proposed regulations is to sustainably manage elk populations, and consequently, the long-term viability of various businesses that serve recreational elk hunters.

(d) Benefits of the Regulation to the Health and Welfare of California Residents:

Hunting is an outdoor activity that can provide several health and welfare benefits to California residents. Hunters and their families benefit from fresh game to eat, and from the benefits of outdoor recreation, including exercise. People who hunt have a special connection with the outdoors and an awareness of the relationships between wildlife, habitat, and humans. With that awareness comes an understanding of the role humans play in being caretakers of the environment. Hunting is a tradition that is often passed from one generation to the next creating a special bond between family members and friends.

(e) Benefits of the Regulation to Worker Safety:

The proposed regulation will not affect worker safety.

(f) Benefits of the Regulation to the State's Environment:

As set forth in Fish and Game Code section 1800, it is the policy of the state to encourage the conservation, maintenance, and utilization of fish and wildlife resources for the benefit of all the citizens of the state. The objectives of this policy include, but are not limited to, the maintenance of sufficient populations of elk to ensure their continued existence and the maintenance of a sufficient resource to support recreational opportunity. Adoption of scientifically-based elk seasons and tag quotas provides for the maintenance of sufficient elk populations to ensure those objectives are met. The fees that hunters pay for licenses and tags fund wildlife conservation

(g) Other Benefits of the Regulation:

The SHARE Program provides incentives to private landowners to allow public access.

## Informative Digest/Policy Statement Overview

Current regulations in Section 364.1, SHARE Elk Hunts, T14, CCR, specify elk tag quotas for each hunt area. In order to achieve elk herd management goals and objectives and maintain hunting quality, it is periodically necessary to adjust quotas in response to dynamic environmental and biological conditions.

Preliminary tag quota ranges are indicated pending final 2020 tag allocations in accordance with elk management goals and objectives. Survey data collected between August 2019, and March 2020, will be the basis for the final tag numbers recommended to the Commission at the April 2020 adoption hearing.

The preliminary tag quota ranges for 2020 are found in the attached proposed Regulatory Text of Section 364.1.

### Benefits of the regulations:

The proposed regulations will contribute to the sustainable management of elk populations and to relieve depredation damage to landowners in California. The final values for the license tag numbers will be based upon findings from annual harvest and herd composition counts where appropriate.

### Non-monetary benefits to the public:

The Commission does not anticipate non-monetary benefits to the protection of public health and safety, worker safety, the prevention of discrimination, the promotion of fairness or social equity and the increase in openness and transparency in business and government.

### Evaluation of Incompatibility with existing regulations:

The Fish and Game Commission, pursuant to Fish and Game Code Sections 200 and 203, has the sole authority to regulate elk hunting in California. Commission staff has searched the California Code of Regulations and has found the proposed changes pertaining to elk tag allocations are consistent with Title 14. Therefore, the Commission has determined that the proposed amendments are neither inconsistent nor incompatible with existing State regulations.



Proposed Regulatory Language

**Section 364.1, Title 14, CCR is amended to read:**

**§ 364.1. Department Administered Shared Habitat Alliance for Recreational Enhancement (SHARE) Elk Hunts.**

*. . . [ No changes subsections (a) through (h) ]*

§	(A) Hunts	1. Bull Tags	2. Antlerless Tags	3. Either-Sex Tags	4. Spike Tags
		(B) Area			
(i) Department Administered SHARE Roosevelt Elk Hunts					
(1)	Siskiyou	2 [0-10]	2 [0-10]		
		(B) Area: The tag shall be valid in the area described in subsection 364(a)(1)(A).			
(2)	Northwestern	13 [0-44]	34 [0-58]	0 [0-3]	
		(B) Area: The tag shall be valid in the area described in subsection 364(a)(2)(A).			
(3)	Marble Mountain	0 [0-10]	0 [0-15]		
		(B) Area: The tag shall be valid in the area described in subsection 364(a)(3)(A).			
(j) Department Administered General Methods SHARE Rocky Mountain Elk Hunts					
(1)	Northeast California	2 [0-10]	0 [0-10]	2 [0-10]	
		(B) Area: The tag shall be valid in the area described in subsection 364(b)(1)(A).			
(k) Department Administered SHARE Roosevelt/Tule Elk Hunts					
(1)	Mendocino	2 [0-4]	4 [0-4]		
		(B) Area: The tag shall be valid in the area described in subsection 364(c)(1)(A).			
(l) Department Administered SHARE Tule Elk Hunts					
(1)	Cache Creek	4 [0-2]	4 [0-2]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(1)(A).			
(2)	La Panza	5 [0-10]	40 [0-10]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(2)(A).			

(3)	Bishop	$\emptyset$ [0-2]	$\emptyset$ [0-2]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(3)(A).			
(4)	Independence	$\emptyset$ [0-2]	$\emptyset$ [0-2]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(4)(A).			
(5)	Lone Pine Period 2	$\emptyset$ [0-2]	$\emptyset$ [0-2]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(5)(A).			
(6)	Tinemaha	$\emptyset$ [0-2]	$\emptyset$ [0-2]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(6)(A).			
(7)	West Tinemaha	$\emptyset$ [0-2]	$\emptyset$ [0-2]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(7)(A).			
(8)	Tinemaha Mountain	$\emptyset$ [0-2]			
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(8)(A).			
(9)	Whitney	$\emptyset$ [0-2]	$\emptyset$ [0-2]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(9)(A).			
(10)	Goodale	$\emptyset$ [0-2]	$\emptyset$ [0-2]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(10)(A).			
(11)	Grizzly Island	$\emptyset$ [0-2]	$\emptyset$ [0-10]		$\emptyset$ [0-10]
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(11)(A).			
(12)	Fort Hunter Liggett	$\emptyset$ [0-4]	$\emptyset$ [0-4]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(12)(A).			
(13)	East Park Reservoir	4 [0-6]	4 [0-6]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(13)(A).			
(14)	San Luis Reservoir	2 [0-5]	3 [0-5]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(14)(A).			
(15)	Bear Valley	4 [0-2]	4 [0-2]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(15)(A).			

(16)	Lake Pillsbury	$\theta$ [0-4]	$\theta$ [0-4]		
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(16)(A).			
(17)	Santa Clara	$\theta$ [0-2]			
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(17)(A).			
(18)	Alameda	$\theta$ [0-2]			
		(B) Area: The tag shall be valid in the area described in subsection 364(d)(18)(A).			

Note: Authority cited: Sections 332 and 1050, Fish and Game Code. Reference: Sections 332, 1050 and 1574, Fish and Game Code.

State of California  
Fish and Game Commission  
Initial Statement of Reasons for Regulatory Action

Amend Sections 502 and 507  
Title 14, California Code of Regulations  
Re: Waterfowl, Migratory; American Coot and Common Moorhen (Common Gallinule)

I. Date of Initial Statement of Reasons: November 13, 2019

II. Dates and Locations of Scheduled Hearings

- |                        |                                                     |
|------------------------|-----------------------------------------------------|
| (a) Notice Hearing     | Date: December 11, 2019<br>Location: Sacramento, CA |
| (b) Discussion Hearing | Date: February 21, 2020<br>Location: Sacramento, CA |
| (c) Adoption Hearing   | Date: April 16, 2020<br>Location: Sacramento, CA    |

III. Description of Regulatory Action

- (a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

The U.S. Fish and Wildlife Service (Service) annually establishes federal regulation frameworks (Frameworks) for migratory bird hunting. California must set its waterfowl hunting regulations within the Frameworks. The Frameworks describe the earliest dates that waterfowl hunting seasons may open, the maximum number of days hunting can occur, the latest dates that hunting seasons must close, and the maximum daily bag limit. The proposed hunting season Frameworks for a given year are developed in the fall of the prior year for a majority of species and populations. For example, the breeding populations (including the California Breeding Population Survey) and habitat conditions observed in 2019 and the regulatory alternatives selected for the 2019 hunting season will be used to develop the Frameworks for the 2020-21 season.

States may make recommendations to change the Frameworks. These recommendations are made to flyway councils in August or September. The councils may elect to forward recommendations to the Service. The Service may elect to incorporate proposed changes in the Frameworks. The Service considers these and other recommendations at the Service's Regulation Committee public meeting held in late October. Proposed season Frameworks are typically published in the Federal Register by mid-December and final Frameworks published by late February.

Section 355 of the Fish and Game Code authorizes the Fish and Game Commission (Commission) to adopt annual regulations pertaining to the hunting of migratory birds that conform with, or further restrict, the regulations prescribed by the Service pursuant to its

authority under the Migratory Bird Treaty Act. The Commission selects and establishes in State regulations the specific hunting season dates and daily bag limits within the Frameworks.

Current regulations in Section 502, Title 14, California Code of Regulations (CCR), provide definitions, hunting zone descriptions, season opening and closing dates, and daily bag and possession limits. The proposed Frameworks for the 2020-21 season were approved by the flyway councils and were considered for adoption at the Service's Regulations Committee meeting October 8-9, 2019. The proposed Frameworks allow for a liberal duck season which includes: a 107-day season; 7 daily duck limit including 7 mallards but only 2 hen mallards, 1 pintail, 2 canvasback, 2 redheads, and 2 scaup (during an 86 day season; daily bag limit decrease from 3 to 2); and closing no later than January 31. Duck daily bag limit ranges and duck season length ranges are provided to allow the Commission flexibility.

A range of season length and bag limit (zero bag limit represents a closed season) are also provided for black brant. The range is necessary, as the black brant Framework cannot be determined until the Pacific Flyway Winter Brant Survey is conducted in January 2020. The regulatory package is determined by the most current Winter Brant Survey, rather than the prior year survey. The regulatory package will be prescribed per the Black Brant Harvest Strategy pending results of the survey, well before the Commission's adoption meeting. See the table in the Informative Digest for the range of season and bag limits. Lastly, Federal regulations require that California's hunting regulations conform to those of Arizona in the Colorado River Zone and those of Oregon in the North Coast Special Management Area.

The Department recommended changes to Section 502 are:

- 1) Open the duck season on the second Saturday in October and close January 20 in subsection 502(d)(1)(B) for the Northeastern Zone. This recommendation reduces the duck season length to 103 days.

The existing duck season length in this zone is 105 days and closes on a Friday. The Northeastern Zone is considered a staging area and the habitat becomes unavailable to waterfowl by late fall, typically, so the season opens sooner than the rest of the zones. The Friday closure was allowed because the Youth Hunt Days occur before the season to allow youth hunters opportunity commensurate with waterfowl occurrence and to provide as many days to hunters as possible in this zone because of habitat conditions. Two days need to be removed to allow for the Veterans and Active Military Personnel Day recommendation, see item 5 below.

- 2) Open the duck season on the fourth Saturday of October and close January 31 in subsection 502(d)(2)(B) for the Southern San Joaquin Valley Zone, in subsection 502(d)(3)(B) for the Southern California Zone, and in subsection 502(d)(5)(B) for the Balance of State Zone. This recommendation reduces the duck season length to 100 days.

The existing duck season length for the referenced zones is 105 days. In the prior year rulemaking, the Commission adopted a later season closing date of January 31 in these zones because Frameworks were changed to allow a later closing date. Historically, the latest closing date in the Frameworks was the last Sunday in January. Closing on January 31 and maintaining a traditional opening Saturday in later October results in an

annual adjustment to the season length; from 105 to 100 days for the upcoming season. This annual adjustment also results in modifications to the regular and Late Goose seasons, Youth Hunt Days and Falconry seasons, see below.

- 3) Open the regular goose season on the fourth Saturday in October and close January 31 in subsection 502(d)(2)(B) for the Southern San Joaquin Valley Zone and in subsection 502(d)(3)(B) for the Southern California Zone. This recommendation reduces the season length to 100 days.

The existing goose season length for the referenced zones is 105 days. See item 1 above for the justification. This annual adjustment also results in modifications to Late Goose, Youth Hunt Days and Falconry seasons.

- 4) Open the Late Season for geese on the weekend after the Youth Hunt Days in subsection 502(5)(B) for the Balance of State Zone and in subsection 502(d)(6)(A)9 for the Imperial County Special Management Area. If item 5 (below) is enacted, the Late Season for geese would occur after the Veterans and Active Military Personnel Waterfowl Hunting Days.

The existing regulation opens the Late Season for geese on the same weekend as the Youth Hunt Days in these referenced areas. The proposed change is intended to allow greater flexibility for those wanting to participate in the Youth Hunt Days and or the Late Seasons for geese.

- 5) Designate two days as Veterans and Active Military Personnel Waterfowl Hunting Days (VAMP Days hereafter) for the Northeastern, Southern San Joaquin Valley, Southern California, and Balance of State zones. This recommendation creates a new subsection, 502(f)(1)(A)(B)(C)1-4 and renumbering will occur for the subsequent section (Falconry Take of Ducks subsection becomes 502(g)(1)).

Federal legislation was passed to allow up to two days designated as VAMP Days if states choose. These days may coincide with the Youth Hunt Days or held separately and must occur with 14 days of the regular duck season opening and closing dates. VAMP Days can be held on weekdays, unlike the Youth Hunt Days. Both the Youth Hunt and VAMP Days can be held concurrently with Late Goose seasons. The Department is recommending creating two VAMP Days to occur after the Youth Hunt Days in all zones except the Northeastern Zone where the VAMP Days will occur on the weekend after the close of the general waterfowl season; the Youth Hunt Days in this zone occur prior to the opening of the season. Allowable species include Ducks, American Coots, Common Moorhens, and Geese for the Southern San Joaquin Valley, Southern California, and Colorado River zones because not all 107 days (per Frameworks) will be used as recommended. However, in the Northeastern and Balance of State zones all 107 days for geese have been used as recommended in the Regular and Late Seasons to address crop depredation complaints. Persons participating in this special hunt must possess and present upon demand verification of eligibility to participate in this hunt. Verification for veterans includes: A Veterans Affairs issued Veterans ID Card; or State issued driver's license or Identification Card with Veteran Designation. Active Duty and Retired must present a current Military Identification Card. Veterans can apply for a Veteran ID card at: <https://www.va.gov/records/get-veteran-id-cards/vic/>.



- 6) Allow up to five days of falconry-only season in subsection 502(g)(1)(B)2 for the Balance of State Zone, in subsection 502(g)(1)(B)3 for the Southern San Joaquin Valley Zone and in subsection 502(g)(1)(B)4 for the Southern California Zone.

The existing regulation uses all available days for Duck, Goose, and Youth Hunt Day seasons in these zones. The recommended opening and closing days (Items 1-3) do not use all allotted days for ducks or geese, depending on the zone. The length of the falconry-only season is contingent upon enactment and placement of the VAMP Days.

Current regulations in Section 507(a)(4), Title 14, CCR, describe the shotgun size and shot shell type authorized for the taking of migratory game birds.

The Department is recommending deleting the reference to lead and No BB:

- 1) Shotgun shells may not be used or possessed that contain shot size larger than ~~No. BB in lead~~ or T shot in steel or other nontoxic shot approved by the U.S. Fish and Wildlife Service. All shot shall be loose in the shell.

This section is being corrected to comply with legislation in effect regarding the use of non-lead ammunition when taking any wildlife with a firearm in California and improve clarity of the regulation.

#### (b) Goals and Benefits of the Regulation

The goals and benefits of the regulations are to provide for the conservation and maintenance of sufficient waterfowl populations to ensure their continued existence.

The Commission does not anticipate non-monetary benefits to the protection of public health and safety, worker safety, the prevention of discrimination, the promotion of fairness or social equity and the increase in openness and transparency in business and government.

#### (c) Authority and Reference

Authority: Section(s) 265 and 355, Fish and Game Code

Reference: Section(s) 265, 355, and 356, Fish and Game Code

#### (d) Specific Technology or Equipment Required by Regulatory Change: None.

#### (e) Identification of Reports or Documents Supporting Regulation Change: None.

#### (f) Public Discussions of Proposed Regulations Prior to Notice Publication

This proposal was discussed at the Commission's Wildlife Resources Committee meeting held on September 10, 2019 and a public scoping session will be held in late October or early November 2019.

### IV. Description of Reasonable Alternatives to Regulatory Action

#### (a) Alternatives to Regulation Change

No other alternatives were identified.

#### (b) No Change Alternative

- 1) The No Change Alternative would not open the duck season on the second Saturday in October and close January 20 in the Northeastern Zone.
- 2) The No Change Alternative would not open duck season on the fourth Saturday of October and close January 31 in the Southern San Joaquin Valley, Southern California, and Balance of State zones.
- 3) The No Change Alternative would not open the regular goose season on the fourth Saturday in October and close January 31 for the Southern San Joaquin Valley and Southern California zones.
- 4) The No Change Alternative would not open the Late Season for geese on the weekend after the Youth Hunt Days in the Balance of State Zone and the Imperial County Special Management Area; or after the Veterans and Active Military Personnel Waterfowl Hunting Days, if enacted.
- 5) The No Change Alternative would not designate two days as Veterans and Active Military Personnel Waterfowl Hunting Days.
- 6) The No Change Alternative would not allow up to five days of falconry-only season in the Balance of State, Southern San Joaquin Valley and the Southern California zones.
- 7) The No Change Alternative would not delete the reference to No. BB in lead.

#### V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

#### VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

##### (a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States:

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states.

The proposed regulations would provide additional recreational opportunity to the public and could result in minor increases in hunting days and hunter spending on equipment, fuel, food and accommodations.

##### (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment:

The Commission does not anticipate any impacts on the creation or elimination of jobs, the creation of new business, the elimination of existing businesses, or the expansion of businesses in California. The proposed waterfowl regulations will set the 2020-21 waterfowl hunting season dates and bag limits within the federal Frameworks. Little to minor positive impacts to jobs and/or businesses that provide services to waterfowl hunters may result from the proposed regulations for the 2020-21 waterfowl hunting season.

The most recent U.S. Fish and Wildlife national survey of fishing, hunting, and wildlife-associated recreation for California, estimated that migratory bird hunters contributed about \$169,115,000 to businesses in California during the 2011 migratory bird hunting season. The impacted businesses are generally small businesses employing a few individuals and, like all small businesses, are subject to failure for a variety of causes. Additionally, the long-term intent of the proposed regulations is to sustainably manage waterfowl populations, and consequently, the long-term viability of the same small businesses.

(c) Cost Impacts on a Representative Private Person or Business:

The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None.

(e) Nondiscretionary Costs/Savings to Local Agencies: None.

(f) Programs Mandated on Local Agencies or School Districts: None.

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None.

(h) Effect on Housing Costs: None.

VII. Economic Impact Assessment

(a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State:

Little to minor positive impacts on the creation of jobs within businesses that provide services to waterfowl hunters may result from the adoption of the proposed waterfowl hunting regulations for the 2020-21 season. The most recent U.S. Fish and Wildlife national survey of fishing, hunting, and wildlife-associated recreation for California, estimated that waterfowl hunters contributed about \$169,115,000 to small businesses in California during the 2011 waterfowl hunting season. The impacted businesses are generally small businesses employing few individuals and, like all small businesses, are subject to failure for a variety of causes. Additionally, the long-term intent of the proposed regulations is to sustainably manage waterfowl populations, and consequently, the long-term viability of the same small businesses. The 2011 report is posted on the U.S. Department of Commerce website [https://wsfrprograms.fws.gov/Subpages/NationalSurvey/2011\\_Survey.htm](https://wsfrprograms.fws.gov/Subpages/NationalSurvey/2011_Survey.htm).

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State:

The proposed regulation is not anticipated to prompt the creation of new businesses or the elimination of existing businesses within the state. Minor variations in regulations pertaining to hunting are, by themselves, unlikely to stimulate the creation of new businesses or cause the elimination of existing businesses. The number of hunting trips and the economic contributions from the trips are not expected to change substantially.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State:

The proposed minor variations in waterfowl bag limits are, by themselves, unlikely to stimulate substantial expansion of businesses currently doing business in the state. The long-term intent of the proposed regulations is to sustainably manage waterfowl populations, and consequently, the long-term viability of various businesses that serve recreational waterfowl hunters.

(d) Benefits of the Regulation to the Health and Welfare of California Residents:

Hunting is an outdoor activity that can provide several health and welfare benefits to California residents. Hunters and their families benefit from fresh game to eat, and from the benefits of outdoor recreation, including exercise. People who hunt have a special connection with the outdoors and an awareness of the relationships between wildlife, habitat and humans. With that awareness comes an understanding of the role humans play in being caretakers of the environment. Hunting is a tradition that is often passed from one generation to the next, creating a special bond between family members and friends.

(e) Benefits of the Regulation to Worker Safety:

The regulations will not affect worker safety because they do not address working conditions.

(f) Benefits of the Regulation to the State's Environment:

As set forth in Fish and Game Code section 1801, it is the policy of the state to encourage the preservation, conservation, and maintenance of waterfowl resources for all citizens of the state. The objectives of this policy include, but are not limited to, maintenance of sufficient populations and their habitats, provide for beneficial use and enjoyment, to perpetuate the waterfowl resource for their intrinsic and ecological values, and to maintain diversified recreation use including sport hunting consistent with the status of this resource. Adoption of scientifically based waterfowl hunting regulations provides for the maintenance of sufficient waterfowl populations to ensure these objectives are met. Further, the fees that hunters pay for licenses and stamps fund wildlife conservation.

(g) Other Benefits of the Regulation:

Hunting seasons provide an incentive for private landowners to maintain waterfowl habitat, mainly wetlands, that benefit waterfowl and other wetland dependent wildlife.

## Informative Digest/Policy Statement Overview

Current regulations in Section 502, Title 14, California Code of Regulations (CCR), provide definitions, hunting zone descriptions, season opening and closing dates, and daily bag and possession limits. The proposed Frameworks for the 2020-21 season were approved by the flyway councils and will be considered for adoption at the Service's Regulations Committee meeting October 8-9, 2019. The proposed Frameworks allow for a liberal duck season which includes: a 107-day season, 7 daily duck limit including 7 mallards but only 2 hen mallards, 1 pintail, 2 canvasback, 2 redheads, and 2 scaup (during an 86 day season; daily bag limit decrease from 3 to 2); and closing no later than January 31. Duck daily bag limit ranges and duck season length ranges are provided to allow the Commission flexibility.

A range of season length and bag limit (zero bag limit represents a closed season) is also provided for black brant. The range is necessary, as the black brant Framework cannot be determined until the Pacific Flyway Winter Brant Survey is conducted in January 2020. The regulatory package is determined by the most current Winter Brant Survey, rather than the prior year survey. The regulatory package will be prescribed per the Black Brant Harvest Strategy pending results of the survey, well before the Commission's adoption meeting. See the table in the Informative Digest for the range of season and bag limits. Lastly, Federal regulations require that California's hunting regulations conform to those of Arizona in the Colorado River Zone and those of Oregon in the North Coast Special Management Area.

The Department recommended changes to Section 502 are:

- 1) Open the duck season on the second Saturday in October and close January 20 in subsection 502(d)(1)(B) for the Northeastern Zone. This recommendation reduces the duck season length to 103 days.
- 2) Open the duck season on the fourth Saturday of October and close January 31 in subsection 502(d)(2)(B) for the Southern San Joaquin Valley Zone, in subsection 502(d)(3)(B) for the Southern California Zone, and in subsection 502(d)(5)(B) for the Balance of State Zone. This recommendation reduces the duck season length to 100 days.
- 3) Open the regular goose season on the fourth Saturday in October and close January 31 in subsection 502(d)(2)(B) for the Southern San Joaquin Valley Zone and in subsection 502(d)(3)(B) for the Southern California Zone. This recommendation reduces the season length to 100 days.
- 4) Open the Late Season for geese on the weekend after the Youth Hunt Days in subsection 502(5)(B) for the Balance of State Zone and in subsection 502(d)(6)(A)9 for the Imperial County Special Management Area. If item 5 (below) is enacted, the Late Season for geese would occur after the Veterans and Active Military Personnel Waterfowl Hunting Days.
- 5) Designate two days as Veterans and Active Military Personnel Waterfowl Hunting Days (VAMP Days hereafter) for the Northeastern, Southern San Joaquin Valley, Southern California, and Balance of State zones. This recommendation creates a new subsection, 502(f)(1)(A)(B)(C)1-4 and renumbering will occur for the subsequent section (Falconry Take of Ducks subsection becomes 502(g)(1)).

- 6) Allow up to five days of falconry-only season in subsection 502(g)(1)(B)2. for the Balance of State Zone, in subsection 502(g)(1)(B)3. for the Southern San Joaquin Valley Zone and in subsection 502(g)(1)(B)4. for the Southern California Zone.

Current regulations in Section 507(a)(4), Title 14, CCR, describe the shotgun size and shot shell type authorized for the taking of migratory game birds.

The Department is recommending deleting the reference to lead and No BB:

- 1) Shotgun shells may not be used or possessed that contain shot size larger than ~~No. BB~~ in lead or T shot in steel or other nontoxic shot approved by the U.S. Fish and Wildlife Service. All shot shall be loose in the shell.

Minor editorial changes are also proposed to clarify and simplify the regulations and to comply with existing federal Frameworks.

#### Benefits of the regulations

The benefits of the proposed regulations are consistency with federal law and the sustainable management of the State's waterfowl resources. Positive impacts to jobs and/or businesses that provide services to waterfowl hunters will be realized with the continued adoption of waterfowl hunting seasons in 2020-21.

#### Non-monetary benefits to the public

The Commission does not anticipate non-monetary benefits to the protection of public health and safety, worker safety, the prevention of discrimination, the promotion of fairness or social equity, and the increase in openness and transparency in business and government.

#### Evaluation of incompatibility with existing regulations

The Commission has reviewed its regulations in Title 14, CCR, and conducted a search of other regulations on this topic and has concluded that the proposed amendments to Sections 502 and 507 are neither inconsistent nor incompatible with existing State regulations. No other State agency has the authority to promulgate waterfowl hunting regulations.

#### Summary of Proposed Waterfowl Hunting Regulations for 2020-21

AREA	SPECIES	SEASONS	DAILY BAG & POSSESSION LIMITS
<b>Statewide</b>	Coots & Moorhens	Concurrent w/duck season	25/day. 75 in possession
<b>Northeastern Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback, Scaup, Dark Geese and White Geese. White geese and dark geese may be split 3-ways.</i>	Ducks	No longer than 105 days	[4-7]/day, which may include: [3-7] mallards no more than [1-2] females. 1 pintail, 2 canvasback, 2 redheads, 2 scaup. Possession limit triple the daily bag.
<b>Northeastern Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback, Scaup, Dark Geese and White Geese. White geese and</i>	Scaup	No longer than 86 days	[4-7]/day, which may include: [3-7] mallards no more than [1-2] females. 1 pintail, 2 canvasback, 2 redheads, 2 scaup. Possession limit triple the daily bag.



AREA	SPECIES	SEASONS	DAILY BAG & POSSESSION LIMITS
<i>dark geese may be split 3-ways.</i>			
<b>Northeastern Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback, Scaup, Dark Geese and White Geese. White geese and dark geese may be split 3-ways.</i>	Geese	No longer than 105 days except for Canada geese which cannot exceed 100 days or beyond Jan 17	30/day, which may include: 20 white geese, 10 dark geese, no more than 2 Large Canada geese. Possession limit triple the daily bag.
<b>Southern San Joaquin Valley Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback and scaup</i>	Ducks	No longer than 105 days	[4-7]/day, which may include: [3-7] mallards no more than [1-2] females. 1 pintail, 2 canvasback, 2 redheads, 2 scaup. Possession limit triple the daily bag. [4-7]/day, which may include: [3-7] mallards no more than [1-2] females. 1 pintail, 2 canvasback, 2 redheads, 2 scaup. Possession limit triple the daily bag.
<b>Southern San Joaquin Valley Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback and scaup</i>	Scaup	No longer than 86 days	
<b>Southern San Joaquin Valley Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback and scaup</i>	Geese	No longer than 105 days	30/day, which may include: 20 white geese, 10 dark geese. Possession limit triple the daily bag.
<b>Southern California Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback and Scaup</i>	Ducks	No longer than 105 days	[4-7]/day, which may include: [3-7] mallards no more than [1-2] females. 1 pintail, 2 canvasback, 2 redheads, 2 scaup. Possession limit triple the daily bag. [4-7]/day, which may include: [3-7] mallards no more than [1-2] females. 1 pintail, 2 canvasback, 2 redheads, 2 scaup. Possession limit triple the daily bag.
<b>Southern California Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback and Scaup</i>	Scaup	No longer than 86 days	
<b>Southern California Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback and Scaup</i>	Geese	No longer than 105 days	23/day, which may include: 20 white geese, 3 dark geese. Possession limit triple the daily bag.
<b>Colorado River Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback and Scaup</i>	Ducks	No longer than 105 days	7/day, which may include: 7 mallards no more than 2 females or Mexican-like ducks. 1 pintail, 2 canvasback, 2 redheads, 2 scaup. Possession limit triple the daily bag. 7/day, which may include: 7 mallards no more than 2 females or Mexican-like ducks. 1 pintail, 2 canvasback, 2 redheads, 2 scaup. Possession limit triple the daily bag.
<b>Colorado River Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback and Scaup</i>	Scaup	No longer than 86 days	

AREA	SPECIES	SEASONS	DAILY BAG & POSSESSION LIMITS
<b>Colorado River Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback and Scaup</i>	Geese	No longer than 105 days	24/day, up to 20 white geese, up to 4 dark geese. Possession limit triple the daily bag.
<b>Balance of State Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback, Scaup and Dark and White Geese.</i>	Ducks	No longer than 105 days	[4-7]/day, which may include: [3-7] mallards no more than [1-2] females. 1 pintail, 2 canvasback, 2 redheads, 2 scaup. Possession limit triple the daily bag.
<b>Balance of State Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback, Scaup and Dark and White Geese.</i>	Scaup	No longer than 86 days	[4-7]/day, which may include: [3-7] mallards no more than [1-2] females. 1 pintail, 2 canvasback, 2 redheads, 2 scaup. Possession limit triple the daily bag.
<b>Balance of State Zone</b> <i>Season may be split for Ducks, Pintail, Canvasback, Scaup and Dark and White Geese.</i>	Geese	Early Season: 5 days (Canada goose only) Regular Season: no longer than 100 days Late Season: 5 days (whitefronts and white geese)	30/day, which may include: 20 white geese, 10 dark geese. Possession limit triple the daily bag.

#### SPECIAL MANAGEMENT

AREAS	SPECIES	SEASON	DAILY BAG & POSSESSION LIMITS
North Coast <i>Season may be split</i>	All Canada Geese	No longer than 105 days except for Large Canada geese which cannot exceed 100 days or extend beyond the last Sunday in Jan	10/day, only 1 may be a Large Canada goose. Possession limit triple the daily bag. Large Canada geese are closed during the Late Season.
Humboldt Bay South Spit (West Side)	All species	Closed during brant season	
Klamath Basin	Dark and white geese	105 days except for Canada geese which cannot exceed 100 days or extend beyond Janu 17	30/day, which may include: 20 white geese, 10 dark geese only 2 may be a Large Canada goose. Possession limit triple the daily bag.
Sacramento Valley	White-fronted geese	Open concurrently with general goose season through Dec 21	3/day. Possession limit triple the daily bag.
Morro Bay	All species	Open in designated areas only	Waterfowl season opens concurrently with brant season.
Martis Creek Lake	All species	Closed until Nov 16	
Northern Brant	Black Brant	No longer than 37 days and closing no later than Dec 14.	[0-2]/day. Possession limit triple the daily bag.
Balance of State Brant	Black Brant	No longer than 37 days and closing no later than Dec 15.	[0-2]/day. Possession limit triple the daily bag.
Imperial County <i>Season may be split</i>	White Geese	No longer than 105 days	20/day. Possession limit triple the daily bag.

**YOUTH WATERFOWL HUNTING DAYS** (NOTE: To participate in these Youth Waterfowl Hunts, federal regulations require that hunters must be 17 years of age or younger and must be accompanied by a non-hunting adult 18 years of age or older.)

AREA	SPECIES	SEASON	DAILY BAG & POSSESSION LIMITS
Northeastern Zone	Same as regular season	The Saturday fourteen days before the opening of waterfowl season extending for 2 days.	Same as regular season
Southern San Joaquin Valley Zone	Same as regular season	The first Saturday in February extending for 2 days.	Same as regular season
Southern California Zone	Same as regular season	The first Saturday in February extending for 2 days.	Same as regular season
Colorado River Zone	Same as regular season	The first Saturday in February extending for 2 days.	Same as regular season
Balance of State Zone	Same as regular season	The first Saturday in February extending for 2 days.	Same as regular season

**VETERANS AND ACTIVE MILITARY PERSONNEL WATERFOWL HUNTING DAYS** (NOTE: Veterans (as defined in Section 101 of Title 38, United States Code) and members of the Armed Forces on active duty, including members of the National Guard and Reserves on active duty (other than training), may participate.)

AREA	SPECIES	SEASON	DAILY BAG & POSSESSION LIMITS
Northeastern Zone	Ducks, Coots, and Moorhens	No longer than 2 days.	Same as regular season
Balance of State Zone	Ducks, Coots, and Moorhens	No longer than 2 days.	Same as regular season
Southern San Joaquin Valley Zone	Same as regular season	No longer than 2 days.	Same as regular season
Southern California Zone	Same as regular season	No longer than 2 days.	Same as regular season

## FALCONRY

AREA	SPECIES	SEASON	DAILY BAG & POSSESSION LIMITS
Northeastern Zone	Ducks, Coots, and Moorhens	No longer than 107 days.	3/day. Possession limit 9
Balance of State Zone	Same as regular season	No longer than 107 days.	3/day. Possession limit 9
Southern San Joaquin Valley Zone	Ducks, Coots, and Moorhens	No longer than 107 days.	3/day. Possession limit 9
Southern California Zone	Same as regular season	No longer than 107 days.	3/day. Possession limit 9
Colorado River Zone	Ducks, Coots, and Moorhens	No longer than 107 days.	3/day. Possession limit 9

Proposed Regulatory Language

Section 502, Title 14 CCR, is amended to read:

**§502. Waterfowl, Migratory; American Coot and Common Moorhen (Common Gallinule).**

. . . [No changes to subsections (a) through (b)]

(c) Seasons and Bag and Possession Limits for American Coots, and Common Moorhens.		
(1) Statewide Provisions.		
(A) Species	(B) Season	(C) Daily Bag and Possession Limits
American Coot and Common Moorhen	Concurrent with duck season(s)	Daily bag limit: 25, either all of one species or a mixture of these species. Possession limit: triple the daily bag limit.
(d) Seasons and Bag and Possession Limits for Ducks and Geese by Zone.		
(1) Northeastern California Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	(B) Season	(C) Daily Bag and Possession Limits
Ducks (including Mergansers)	<del>From the first Saturday in October extending for 105 days.</del> <del>Scaup: from the first Saturday in October extending for a period of 58 days and from the third Saturday in December extending for a period of 28 days.</del> <u>[Opening no earlier than the Saturday closest to October 1 and closing no later than January 31. Season may be split into two segments and no longer than 105 days except for scaup season can be no longer than 86 days.]</u>	Daily bag limit: <del>7</del> <u>[4-7]</u> Daily bag limit may include: • <del>7</del> <u>[3-7]</u> mallards, but not more than <del>2</del> <u>[1-2]</u> females. • 1 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • <del>3</del> <u>2</u> scaup (either sex).  Possession limit: triple the daily bag limit.
Geese	Regular Season: Small and Large Canada Geese: <del>from the first Saturday in October extending for 100 days.</del> <u>[Opening no earlier than the Saturday closest to October 1 and closing no later than January 17. Season will be no longer than 100 days.]</u> White-fronted and white geese <del>from the first Saturday in October extending for a period of 58 days</del>	Daily bag limit: 30 Daily bag limit may include: • 20 white geese. • 10 dark geese but not more than 2 Large Canada geese (see definitions: 502(a)).  Possession limit: triple the daily bag limit.

	<p>and from the first Saturday in January extending for a period of <del>14 days.</del></p> <p><u>[opening no earlier than the Saturday closest to October 1 and closing no later than January 31. Season may be split into two segments and no longer than 100 days.]</u></p> <p>Late Season: White-fronted and white geese from February 7 extending for <del>33 days.</del> <u>[Season will be no longer than 38 days and closing no later than March 10.]</u></p> <p>During the Late Season, hunting is only permitted on Type C wildlife areas listed in Section 550-552, navigable waters, and private lands with the permission of the land owner under provisions of Section 2016, Fish and Game Code. Hunting is prohibited on Type A and Type B wildlife areas, the Klamath Basin National Wildlife Refuge Complex, the Modoc National Wildlife Refuge, and any waters which are on, encompassed by, bounded over, flow over, flow through, or are adjacent to any Type A and Type B wildlife areas, the Klamath Basin National Wildlife Refuge Complex, or the Modoc National Wildlife Refuge.</p>	
(2) Southern San Joaquin Valley Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	(B) Season	(C) Daily Bag and Possession Limits
Ducks (including Mergansers)	<p><del>From the third Saturday in October extending for 105 days.</del></p> <p><del>Scaup: from November 7 extending for 86 days.</del></p> <p><u>[Opening no earlier than the Saturday closest to October 1 and closing no later than January 31. Season may be split into two segments and no longer than 105 days except for scaup season can be no longer than 86 days.]</u></p>	<p>Daily bag limit: <del>7</del><u>[4-7]</u></p> <p>Daily bag limit may include:</p> <ul style="list-style-type: none"> <li>• <del>7</del><u>[3-7]</u> mallards, but not more than <del>2</del><u>[1-2]</u> females.</li> <li>• <del>2</del><u>1</u> pintail (either sex).</li> <li>• 2 canvasback (either sex).</li> <li>• 2 redheads (either sex).</li> <li>• <del>3</del><u>2</u> scaup (either sex).</li> </ul> <p>Possession limit: triple the daily bag limit.</p>

Geese	From the third Saturday in October extending for 105 days. <u>[Opening no earlier than the Saturday closest to October 1 and closing no later than January 31. Season will be no longer than 105 days.]</u>	Daily bag limit: 30 Daily bag limit may include: • 20 white geese. • 10 dark geese (see definitions: 502(a)).  Possession limit: triple the daily bag limit.
(3) Southern California Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		

(A) Species	(B) Season	(C) Daily Bag and Possession Limits
Ducks (including Mergansers)	From the third Saturday in October extending for 105 days. <del>Scaup: from November 7 extending for 86 days.</del> <u>[Opening no earlier than the Saturday closest to October 1 and closing no later than January 31.</u>  <u>Season may be split into two segments and no longer than 105 days except for scaup season can be no longer than 86 days.]</u>	Daily bag limit: 7- <del>[4-7]</del> Daily bag limit may include: • 7- <del>[3-7]</del> mallards, but not more than 2- <del>[1-2]</del> females. • 2-1 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3-2 scaup (either sex).  Possession limit: triple the daily bag limit.
Geese	From the third Saturday in October extending for 105 days. <u>[Opening no earlier than the Saturday closest to October 1 and closing no later than January 31. Season will be no longer than 105 days.]</u>	Daily bag limit: 23 Daily bag limit may include: • 20 white geese. • 3 dark geese (see definitions: 502(a)).  Possession limit: triple the daily bag limit.

(4) Colorado River Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	(B) Season	(C) Daily Bag and Possession Limits
Ducks (including Mergansers).	From the third Friday in October extending for 101 days. <del>Scaup: from the first Saturday in November extending for 86 days.</del> <u>[Opening no earlier than the Saturday closest to October 1 and closing no later than January 31. Season may be split into two segments and no longer than 105 days except for scaup season can be no longer than 86 days.]</u>	Daily bag limit: 7 Daily bag limit may include: • 7 mallards, but not more than 2 females or Mexican-like ducks. • 2 1 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 2 scaup (either sex).  Possession limit: triple the daily bag limit.



Geese	<del>From the third Friday in October extending for 101 days.</del> <u>[Opening no earlier than the Saturday closest to October 1 and closing no later than January 31.</u> <u>Season will be no longer than 105 days.]</u>	Daily bag limit: 24 Daily bag limit may include: • 20 white geese. • 4 dark geese (see definitions: 502(a)).  Possession limit: triple the daily bag limit.
(5) Balance of State Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
<i>(A) Species</i>	<i>(B) Season</i>	<i>(C) Daily Bag and Possession Limits</i>
Ducks (including Mergansers).	<del>From the third Saturday in October extending for 105 days.</del> <del>Scaup: from November 7 extending for 86 days.</del> <u>[Opening no earlier than the Saturday closest to October 1 and closing no later than January 31.</u> <u>Season may be split into two segments and no longer than 105 days except for scaup season can be no longer than 86 days.]</u>	Daily bag limit: <del>7</del> <u>[4-7]</u> Daily bag limit may include: • <del>7</del> <u>[3-7]</u> mallards, but not more than <del>2</del> <u>[1-2]</u> females. • <del>2</del> <u>1</u> pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • <del>3</del> <u>2</u> scaup (either sex).  Possession limit: triple the daily bag limit.
Geese	Early Season: Large Canada geese only from the Saturday closest to October 1 for a period of 5 days EXCEPT in the North Coast Special Management Area where Large Canada geese are closed during the early season.  Regular Season: Dark and white geese <u>[opening no earlier than the Saturday closest to October 1 and closing no later than January 31]</u> <del>from the third Saturday in October extending for 100 days</del> EXCEPT in the Sacramento Valley Special Management Area where the white-fronted goose season will close after December 21.  Late Season: White-fronted and white geese from the <del>second</del> <u>third</u> Saturday in February extending for a period of 5 days EXCEPT in the	Daily bag limit: 30 Daily bag limit may include: • 20 white geese. • 10 dark geese  EXCEPT in the Sacramento Valley Special Management Area where only 3 may be white-fronted geese (see definitions: 502(a)).  Possession limit: triple the daily bag limit.

	Sacramento Valley Special Management Area where the white-fronted goose season is closed. During the Late Season, hunting is not permitted on wildlife areas listed in Sections 550-552 EXCEPT on Type C wildlife areas in the North Central and Central regions.		
(6) Special Management Areas (see descriptions in 502(b)(6))			
	(A) Species	(B) Season	(C) Daily Bag and Possession Limits
1. North Coast	All Canada Geese	<del>From November 6 extending for a period of 87 days (Regular Season) and from February 22 extending for a period of 18 days (Late Season).</del> <u>Season may be split and no longer than 105 days.</u> During the Late Season, hunting is only permitted on private lands with the permission of the landowner under provisions Section 2016, Fish and Game Code.	Daily bag limit: 10 Canada Geese of which only 1 may be a Large Canada goose (see definitions: 502(a)), EXCEPT during the Late Season, the bag limit on Large Canada geese is zero.  Possession limit: triple the daily bag limit.
2. Humboldt Bay South Spit (West Side)	All Species	Closed during brant season	
3. Klamath Basin	Geese	Small and Large Canada Geese <del>from the first Saturday in October</del> extending for 100 days. <u>opening no earlier than the Saturday closest to October 1 and closing no later than January 17]</u> extending for 100 days.  White-fronted and white geese <del>from the first Saturday in October</del> <u>opening no earlier than the Saturday closest to October 1 and closing no later than January 31]</u> extending for 105 days.	Daily bag limit: 30 Daily bag limit may include: <ul style="list-style-type: none"><li>• 20 white geese.</li><li>• 10 dark geese but not more than 2 Large Canada geese (see definitions: 502(a)).</li></ul> Possession limit: triple the daily bag limit.
4. Sacramento Valley	White-Fronted Geese	Open concurrently with the goose season through December 21, and during Youth	Daily bag limit: 3 white-fronted geese.

		Waterfowl Hunting Days.	Possession limit: triple the daily bag limit.
5. Morro Bay	All species	Open in designated area only from the opening day of brant season through the remainder of waterfowl season.	
6. Martis Creek Lake	All species	Closed until November 16.	
7. Northern Brant	Black Brant	<del>From November 8 extending for 37 days.</del> <u>[Season will be between 0 and 37 days, closing no later than December 14.]</u>	Daily bag limit: 2 Possession limit: triple the daily bag limit.
8. Balance of State Brant	Black Brant	<del>From November 9 extending for 37 days.</del> <u>[Season will be between 0 and 37 days, closing no later than December 15.]</u>	Daily bag limit: 2  Possession limit: triple the daily bag limit.
9. Imperial County	White Geese	<del>From November 7 extending for a period of 86 days (Regular Season) and from the second Saturday in February extending for a period of 19 days (Late Season).</del> <u>[Season may be split and no longer than 105 days.]</u> During the Late Season, hunting is only permitted on private lands with the permission of the landowner under provisions of Section 2016, Fish and Game Code.	Daily bag limit: 20  Possession limit: triple the daily bag limit.

(e) Youth Waterfowl Hunting Days Regulations (NOTE: To participate in these Youth Waterfowl Hunts, federal regulations require that hunters must be 17 years of age or younger and must be accompanied by a non-hunting adult 18 years of age or older.)

(1) Statewide Provisions.

(A) Species	(B) Season	(C) Daily Bag Limit
Ducks (including Mergansers), American Coot, Common Moorhen, Black Brant, Geese	1. Northeastern California Zone: The Saturday fourteen days before the opening of waterfowl season extending for 2 days.  2. Southern San Joaquin Valley Zone: The <del>second</del> first Saturday in February	Same as regular season.

<p>extending for 2 days.</p> <p>3. Southern California Zone: The <del>second</del><u>first</u> Saturday in February extending for 2 days.</p> <p>4. Colorado River Zone: The Saturday following the closing of waterfowl season extending for 2 days.</p> <p>5. Balance of State Zone: The <del>second</del><u>first</u> Saturday in February extending for 2 days.</p>		
<p><u>(f) Veterans Active Military Personnel Waterfowl Hunting Days Regulations</u>  <u>NOTE: Veterans (as defined in Section 101 of Title 38, United States Code) and members of the Armed Forces on active duty, including members of the National Guard and Reserves on active duty (other than training), may participate. Persons participating in this special hunt must possess and present upon demand verification of eligibility to participate in this hunt. Verification includes: Veteran's ID Card and/or Military ID Card for active duty, or a State issued driver's license or Identification Card with Veteran Designation.</u></p>		
<u>(1) Statewide Provisions.</u>		
<u>(A) Species</u>	<u>(B) Season</u>	<u>(C) Daily Bag Limit</u>
<u>Ducks (including Mergansers),</u> <u>Geese, American Coot,</u> <u>Common Moorhen</u>	<p>1. <u>Northeastern California Zone: The Saturday following the closing of the regular duck season extending for 2 days. Goose hunting in this zone is not permitted during these days.</u></p> <p>2. <u>Southern San Joaquin Valley Zone: The second Saturday in February extending for 2 days.</u></p> <p>3. <u>Southern California Zone: The second Saturday in February extending for 2 days.</u></p> <p>4. <u>Balance of State Zone: The second</u></p>	Same as regular season.

	<u>Saturday in February</u> <u>extending for 2 days.</u> <u>Goose hunting in this</u> <u>zone is not permitted</u> <u>during these days.</u>	
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~~(f)~~ (g) Falconry Take of Ducks (including Mergansers), Geese, American Coots, and Common Moorhens.

(2) Statewide Provisions

(A) Species	(B) Season	(C) Daily Bag and Possession Limits
Ducks (including Mergansers), Geese, American Coot and Common Moorhen	<p>1. Northeastern California Zone. <del>Open concurrently with duck season through January 12, 2020.</del> <u>[No longer than 107 days.]</u></p> <p>2. Balance of State Zone. <del>Open concurrently with duck season and February 8-9, 2020</del> <u>[No longer than 107 days]</u> EXCEPT in the North Coast Special Management Area where the falconry season for geese runs concurrently with the season for Small Canada geese (see 502(d)(6)).</p> <p>3. Southern San Joaquin Valley Zone. <del>Open concurrently with duck season and February 8-9, 2020.</del> <u>[No longer than 107 days.]</u> Goose hunting in this zone by means of falconry is not permitted.</p> <p>4. Southern California Zone. <del>Open</del></p>	<p>Daily bag limit: 3 Daily bag limit makeup: • Either all of 1 species or a mixture of species allowed for take.</p> <p>Possession limit: 9</p>

~~concurrently with duck season and February 8-9, 2020. [No longer than 107 days]~~

EXCEPT in the Imperial County Special Management Area where the falconry season for geese runs concurrently with the season for white geese.

5. Colorado River Zone. ~~Open concurrently with duck season and January 27-30, 2020. [No longer than 107 days.]~~

Goose hunting in this zone by means of falconry is not permitted. Federal regulations require that California's hunting regulations conform to those of Arizona, where goose hunting by means of falconry is not permitted.

Note: Authority cited: Sections 265 and 355, Fish and Game Code. Reference: Sections 265, 355 and 356, Fish and Game Code.



## Proposed Regulatory Language

Section 507, Title 14 CCR, is amended to read:

### **§ 507. Provisions Related to the Taking of Migratory Game Birds.**

. . . *[No changes to subsections (a)(1) through (3)]*

(4) Shotguns 10 Gauge or Smaller. Shotguns 10 gauge or smaller using shot shells only and incapable of holding more than three shells in the magazine and chamber combined may be used. except no shotgun larger than 12 gauge shall be used in areas open to hunting on, over or adjacent to the waters of Morro Bay, San Luis Obispo County. If a plug is used to reduce the capacity of a magazine to fulfill the requirements of this section, the plug must be of one piece construction incapable of removal without disassembling the gun. Shotgun shells may not be used or possessed that contain shot size larger than No. BB in lead or T shot in steel or other nontoxic shot approved by the U.S. Fish and Wildlife Service. All shot shall be loose in the shell.

. . . *[No changes to subsections (b) through (d)]*

Note: Authority cited: Section 355, Fish and Game Code. Reference: Sections 355, 356 and 3005, Fish and Game Code.

**STATE OF CALIFORNIA  
FISH AND GAME COMMISSION  
INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION  
Amend Sections 550, 550.5, 551, 552, 630, 702  
Title 14, California Code of Regulations (CCR)  
Re: Public Use of Department of Fish and Wildlife Lands**

- I. Date of Initial Statement of Reasons: November 13, 2019
- II. Dates and Locations of Scheduled Hearings
  - (a) Notice Hearing Date: December 11, 2019  
Location: Sacramento, CA
  - (b) Discussion Hearing Date: February 21, 2020  
Location: Sacramento, CA
  - (c) Adoption Hearing Date: April 16, 2020  
Location: Sacramento, CA

III. Description of Regulatory Action

- (a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

The Department proposes designating recently acquired lands; one as a wildlife area pursuant to Fish and Game Code sections 1525 and 1526; and seven as ecological reserves pursuant to Fish and Game Code Section 1580. The Department proposes removing four properties, that it no longer possesses or manages, from the regulations. The general public's use of Department lands is governed by regulations in sections 550, 550.5, 551, 552 and 630; fees are set forth in Section 702.

The purposes of wildlife areas are to conserve wildlife and their associated habitats and to allow for compatible recreation. The main uses of wildlife areas include hunting, fishing, wildlife viewing, photography, environmental education and research. The purposes of ecological reserves are to conserve threatened or endangered plants and/or animals, and/or specialized habitat types, provide opportunities for the public to observe native plants and wildlife, and provide opportunities for environmental research. Recreation on ecological reserves must be compatible with the conservation of the property's biological resources.

A map showing the distribution of the properties being designated in, or removed from, the regulations is included in Attachment 1. More detailed information and maps for the properties are included in the land management summaries provided in Attachment 2.

**Background Information**

The majority of acreage the Department of Fish and Wildlife (the Department) administers is classified as either wildlife areas or ecological reserves. Wildlife areas are acquired for the conservation of wildlife and the habitats on which they depend, and to provide opportunities for recreational uses compatible with those conservation goals

(Fish and Game Code 1525 -1530, 1745). There are currently 110 designated wildlife areas encompassing approximately 712,383 acres. Ecological reserves are acquired primarily for the purpose of protecting rare and/or endangered native plant and animal species and specialized habitat types (Fish and Game Code 1580). Certain public uses, deemed compatible with those goals, are authorized for ecological reserves, typically this includes hiking on established trails to observe native plants and wildlife (Fish and Game Code 1584). Designated ecological reserves currently include 135 properties, encompassing approximately 230,175 acres. Both wildlife areas and ecological reserves are often used for environmental education and scientific research. The designation of Department lands as wildlife areas or ecological reserves, and the authorization of public uses on those lands is the responsibility of the California Fish and Game Commission (the Commission) (Fish and Game Code sections 1526, 1580, 1584).

Existing regulations that govern public uses of lands administered by the Department are in sections 550, 550.5, 551, 552, 630 and 702 of Title 14, CCR. Section 550 contains regulations that pertain to all Department lands. Section 550.5 contains more detailed regulations about reservations, passes, and permits used on Department lands. Section 551 pertains to wildlife areas only. Section 552 pertains to nine National Wildlife Refuges where the Department manages hunting programs, Section 630 pertains to the Department's ecological reserves, and the subsections of concern in Section 702 pertain to the Special Use Permit application and fees.

If approved, these proposed regulation changes would:

- 1) Designate land the Department acquired relatively recently as seven ecological reserves and one wildlife area (subsections 630(b) and 551(b) respectively).
- 2) Remove three wildlife areas and one ecological reserve from subsections 551(b) and 630(b).
- 3) Improve the clarity and consistency of the regulations that govern public use of lands owned and/or managed by the Department.
- 4) Make site-specific regulation changes for certain properties to improve public safety, increase recreational opportunities, provide resource protection and manage staff resources.
- 5) Improve consistency between federal regulations and the state regulations in Section 552 for nine National Wildlife Refuges on which the Department manages hunting programs and remove text that is duplicative or otherwise unnecessary in this section. These refuges are also listed as state wildlife areas in subsection 551(c).
- 6) Update information in the Permit Application for Special Use of Department Lands (DFW 730 (New 01/14)) which is incorporated by reference in Subsection 702(d)(1) and associated subsections of 702 to improve their clarity and consistency.

### **Designate Recently Acquired Properties in Title 14**

The Department proposes new designations of eight recently acquired lands as either wildlife areas pursuant to Fish and Game Code sections 1525 and 1526 or ecological

reserves pursuant to Fish and Game Code Section 1580. Justifications for the designations are provided below. A map showing the distribution of these properties within the State is provided in Attachment 1. More detailed information for the properties are included in the land management summaries provided in Attachment 2.

The purposes of wildlife areas are to conserve wildlife and their associated habitats and to allow for compatible recreation. The main uses of wildlife areas include hunting, fishing, wildlife viewing, photography, environmental education and research. The purposes of ecological reserves are to conserve threatened or endangered plants and/or animals, and/or specialized habitat types, provide opportunities for the public to observe native plants and wildlife, and provide opportunities for environmental research. Recreation on ecological reserves must be compatible with the conservation of the property's biological resources.

## **Wildlife Areas**

### **1. Designate the Round Valley Wildlife Area (RVWA) in subsection 551(b)(81)**

The proposed Round Valley Wildlife Area (RVWA) is composed of two separate management units; the approximately 272-acre Swall Meadows Unit located in southern Mono County at 6,000 feet in elevation, and the approximately 100-acre Pine Creek Unit located 6 miles south in Inyo County (elevation 4,900 ft). The Pine Creek and Swall Meadows Units are located 12 miles and 16 miles northwest of the City of Bishop, California, respectively, with the Pine Creek Unit centrally located in Round Valley proper.

The primary purpose for the RVWA is to provide high quality winter range, migration corridor, and spring holding area habitats for the Round Valley mule deer (*Odocoileus hemionus* ssp. *hemionus*) herd. This herd, which occupies one of the most popular deer hunt zones in the state (X9A), has experienced significant population fluctuations over the last 25-years with habitat loss due to residential development and wildfire identified as significant threats.

The Swall Meadows Unit (Map 1a) is adjacent to lands managed by the Inyo National Forest (INF) to the west and the Bureau of Land Management (BLM) Bishop Field Office to the east. To the south, the land is owned by the City of Los Angeles Department of Water and Power (LADWP) with a single 10-acre private inholding served by a gated private road. To the north and northeast is the residential community of Swall Meadows. In this area the deer migration route between winter range in Round Valley below and the High Sierra above is constrained to only about 1.3 miles in width between the steep Wheeler Ridge of the Sierra Nevada mountain range and the Rock Creek Gorge. Much of Swall Meadows is subdivided into ½-acre parcels with single family homes, which, along with domestic pets, cars, lights, and noise, can impede the natural movement of the deer and provide added stressors in this key connective habitat. The RVWA parcels, along with a number of private conservation easements, have been acquired to help protect the migration corridor.

Management Objectives of the proposed RVWA include:

- a. Management of the Round Valley Deer Herd: Protect and enhance winter range, migration corridor, and spring holding area habitats for the herd.
- b. Biodiversity: Conduct surveys and monitoring to document biodiversity and population trends, identify and track special-status species that utilize the area, and detect potentially harmful introduced plants, animals or pathogens.
- c. Cooperative Partnerships: Continue to partner with non-governmental organizations and government agencies on projects to restore or enhance habitats, monitor species and environmental conditions, conduct research, provide educational activities, and reduce the risk of damaging wildfires.
- d. Public Uses: Based on the experience and expertise of the Department's staff on the biology of the local wildlife and habitats, as well as the management of public uses, walking, hiking, and wildlife viewing from appropriate access points should be encouraged. Hunting is compatible with the purposes of the proposed RVWA; however due to proximity to a residential community hunting will be prohibited on portions of the property under Fish and Game Code Section 3004 (150 yard "safety zone" for buildings and shooting across public roads).

The RVWA is proposed for designation as a Type C wildlife area, therefore, it would be open daily for hunting all legal species (outside of the safety zone) and would not require that hunters purchase a hunting pass for entry. The addition of the RVWA to Section 551(b) clarifies that the primary management purpose of the property is to contribute to a statewide program of ecological conservation, restoration, preservation, development and management of wildlife and wildlife habitat and hunting. The designation also allows the property to be available for public use in a manner that is compatible with the primary purpose.

## **Ecological Reserves**

1. Designate the Cañada de San Vicente Ecological Reserve in subsection 630(b)(32).

The proposed Cañada de San Vicente Ecological Reserve (CSVER), located in the County of San Diego southeast of the town of Ramona, is an approximately 5,014-acre reserve. 392 acres were transferred to the Department as mitigation for San Diego County Water Authority's (SDCWA) Carryover Storage and San Vicente Dam Raise Project. The balance of the acreage was acquired between 2008 and 2014 utilizing federal grant funds to conserve, protect and restore core habitat areas and provide crucial wildlife linkages in the San Diego County Subarea Plan under the Multiple Species Conservation Program (San Diego County, 1997). There are known occurrences of multiple plant and animal species of concern on the property. Among others, there are two animals that are federally-listed as endangered: Arroyo toad (*Anaxyrus californicus*) and Quino checkerspot butterfly (*Euphydryas editha quino*), as well as a plant that is state-listed as endangered, and federally-listed as threatened: San Diego thornmint (*Acanthomintha illicifolia*).

Management objectives for the CSVER include:

- a. Endangered Species/Critical Habitats: Protect, restore, and enhance native habitats, aid the recovery of federally and state-listed endangered and threatened species.
- b. Connectivity: Provide habitat linkages and migration corridors for wildlife in the Department's South Coast Region (Region).
- c. Biodiversity: Protect, manage, and restore the riparian woodlands, oak woodlands, grass lands, and upland habitats representative to support the biological diversity of the Region.
- d. Public Use: Provide limited, safe, and high-quality opportunities for compatible educational and recreational activities that foster public appreciation of the unique natural heritage of the Region. The CSVER would have limited public access for public use/recreation that would include a single trail open from sunrise to sunset for hiking and horseback riding and would allow additional access via occasional special hunts and conditioned special use permits geared toward education or horseback riding.

Based upon the purposes for which the property was acquired, and the management objectives developed during the land management planning process, the Department recommends that this property be designated as an ecological reserve as defined in the Fish and Game Code (FGC), Section 1580-1585. Justification for proposed site-specific regulations that close the property to public use, with the exception of a single trail, and authorization for occasional special hunts are addressed in more detail under the subsection of this document titled: "Changes to Site-Specific Regulations for Ecological Reserves (Section 630)".

## 2. Designate the Cienega Springs Ecological Reserve in subsection 630(b)(39).

The proposed Cienega Springs Ecological Reserve (CSER) is approximately 282 acres located along the Santa Clara River (SCR) in the Santa Clara River Valley, Ventura County. It shares an approximate 0.62-mile boundary with the Department's Fillmore Fish Hatchery, and borders property owned by the Nature Conservancy and private farmland.

The primary purposes for acquiring the property were the protection of threatened and endangered species and riparian floodplain habitat along the SCR, as well as providing for potential wildlife-oriented public use opportunities associated with the fish hatchery.

Federally-listed wildlife species associated with Santa Clara riverine habitat include: Southern steelhead trout (*Oncorhynchus mykiss*), least Bell's vireo (*Vireo bellii pusillus*), Southwestern willow flycatcher (*Empidonax traillii extimus*) and Western yellow-billed cuckoo (*Coccyzus americanus*). The vireo and the cuckoo are also state-listed as endangered.

Various habitat types create a diverse array of vegetation communities providing habitat, refugia, and food for the different species that reside there. Riparian scrub, active river channels, willow-cottonwood forests, and the abandoned agricultural fields are the main habitat types present at the proposed CSER.

Management objectives for CSER include:



- a. Listed Species/Critical Habitats: Protect, restore, and enhance native habitats, and aid the recovery of federally and state-listed endangered and threatened species.
- b. Connectivity: Provide habitat linkage and migration corridors for wildlife in the SCR to adjacent habitats.
- c. Flood Flow Conveyance: Reconnect leveed portions of the property with its historic active floodplain and river channel to facilitate flood flow conveyance and the transportation of additional flows through the CSER in a manner that benefits wildlife.
- d. Biodiversity: Protect, manage, and restore the riparian woodlands, riverine wetlands, and upland habitats to support the biological diversity of the SCR. Support on-site riverine functions. Conserve breeding, foraging, cover and migration habitat for listed wildlife species.
- e. Cooperative Partnerships: Work in cooperation with our restoration, education, and outreach partners at the University of California at Santa Barbara RIVRLAB and the Santa Clara River Conservancy.
- f. Public Use: Based on the experience and expertise of the Department's land management staff, it is appropriate to provide limited, safe, and high-quality opportunities for compatible educational and recreational activities that foster public appreciation of the unique natural heritage of the SCR. This would include perimeter trails open from sunrise to sunset for passive recreation (e.g., bird watching, native plant tours), fishing and occasional, managed special hunts.

The Cienega Springs property is proposed for designation as an ecological reserve. The addition of the Cienega Springs Ecological Reserve to Section 630(b) to these regulations clarifies that the primary management purpose of the property is the conservation of the sensitive natural resources. The designation also allows the property to be available for public use in a manner that is compatible with the primary purpose.

Justification for the proposed site-specific regulation that would authorize occasional, Department-directed, special hunts is addressed in more detail in the subsection of this document titled: "Changes to Site-Specific Regulations for Ecological Reserves (Section 630)".

### 3. Designate the Deep Springs Lake Ecological Reserve in subsection 630(b)(49).

The proposed Deep Springs Lake Ecological Reserve (DSLER) is approximately 719 acres located at an elevation of 4,900 feet in Deep Springs Valley in Inyo County. The property consists of the Deep Springs Lake playa, a seasonal salt lake which typically dries in summer, and portions of wetlands associated with peripheral springs including Bog Mound Spring to the north, and Corral and Buckhorn Springs to the east and south respectively. The springs, spring brooks, freshwater marshes and alkali meadows associated with these springs provide habitat for the black toad (*Anaxyrus exsul*) which is found only in Deep Springs Valley and is State-listed as threatened and is also a Fully Protected species in California Fish and Game Code subsection 5050(b)(5). The seasonal lake is frequented by migratory birds including western snowy plover (*Charadrius alexandrinus nivosus*) a California Species of Special Concern (California Department of Fish and Wildlife, 2018) and federally-listed as threatened.

The primary purpose for acquiring the Deep Spring Lake property was to protect and manage habitat for black toad and western snowy plover. The property was acquired using funds from the State Beach, Park, Recreational and Historical Facilities Fund of 1974 (PRC 5096.71-5096.97) after being identified by the Department as a priority for conservation.

Management objectives for the DSLER include:

- a. Listed Species/ Critical Habitats: Protect, restore, and enhance native habitats, and protect the current stability of the black toad population and the federally-listed snowy plover.
- b. Biodiversity: Survey and monitor native wildlife and plant populations, particularly the western snowy plover. Monitor for early detection of potentially harmful introduced plants, animals or pathogens and respond if necessary.
- c. Cooperative Partnerships: Continue to coordinate with Deep Springs College and the Bureau of Land Management to ensure that management of the neighboring properties are conducted in a cooperative manner that is beneficial to the black toad.
- d. Public Use: Passive recreation such as walking, hiking, and wildlife viewing from appropriate access points is encouraged. An increase in visitors to black toad habitat should be avoided to minimize risks such as trampling or the introduction of pathogens that cause diseases in amphibians, such as Chytrid fungus.

Both access routes to the Department's property from public land (Bureau of Land Management) are extremely rugged dirt roads. Due to the remote location and challenging nature of access to the Deep Springs Lake property, and the fact that the majority of the toad habitat is located on private lands, the Department determined that impacts to black toad habitat from members of the public would be minimal if at all. As a result, the Department determined it is unnecessary to implement a closure or any other special regulations for the site at this time. Furthermore, the Department's Regional Manager can close the area to the public in the future to protect natural resources if conditions change and the habitat is affected by the public (Section 550(i)).

The Deep Springs Lake property is proposed for designation as an ecological reserve. The addition of the DSLER to Section 630(b) of these regulations clarifies that the primary management purpose of the property is the conservation of the sensitive natural resources.

4. Designate the Indian Wells Valley Ecological Reserve in subsection 630(b)(64).

The proposed Indian Wells Valley Ecological Reserve (IWVER) consists of five parcels totaling 200 acres near the city of Ridgecrest and east of the Red Rock Canyon State Park in the western Mojave Desert, Kern County. The parcels were acquired as mitigation for impacts to two species that are state-listed as threatened: desert tortoise (*Gopherus agassizii*) and Mojave ground squirrel (*Xerospermophilus mohavensis*) and have been maintained in their native creosote scrub habitat since their acquisition. It is anticipated that additional mitigation parcels will be added to this ecological reserve in the future.

Management objectives of the proposed IWVER include:

- a. Listed Species/ Critical Habitats: Protect and enhance native habitats within the ecological reserve to benefit special status species such as desert tortoise and Mojave ground squirrel.
- b. Biodiversity: Survey and monitor native wildlife and plant populations to document biodiversity, population trends, and potentially, the occurrence of additional special status species. Monitor for early detection of potentially harmful introduced plants, animals or pathogens and respond if necessary.

Based on the experience and expertise of Department land management staff, general public access would not be compatible with maintaining the IWVER as a mitigation area. Educational and research uses would be compatible with the purpose of the area, as well as occasional, Department-managed special hunts (particularly when the reserve is enlarged as expected). Justification for proposed site-specific regulations that close the property to general public access, and authorize occasional, department-managed special hunts are addressed in more detail under the subsection of this document titled: "Changes to Site-Specific Regulations for Ecological Reserves (Section 630)"

5. Designate the North Carrizo Ecological Reserve in subsection 630(b)(89).

The proposed North Carrizo Ecological Reserve (NCER) surrounds the Topaz Solar Farm, a 3,510-acre installation of photovoltaic modules and related facilities that was constructed in eastern San Luis Obispo County and became fully operational in 2013. Due to the solar farm project impacts to the following native species and habitats, mitigation for the project included the permanent protection and management of the 12,168 acres that comprise the proposed ecological reserve.

- a. San Joaquin kit fox (*Vulpes macrotis mutica*), State-listed: Threatened, federally-listed: Endangered,
- b. Giant kangaroo rat (*Dipodomys ingens*), State-listed: Endangered; federally-listed: Endangered, and
- c. Vernal pool fairy shrimp (*Branchinecta lynchi*), federally-listed: Threatened.

These lands were transferred in fee title to the Department in 2013. The proposed reserve also supports a herd of approximately 200 tule elk (*Cervus elaphus*), as well as a resident herd of pronghorn (*Antilocapra americana*).

Management objectives for the proposed NCER include:

- a. Listed Species/Critical Habitats: Protect, restore, and enhance native habitats, aid the recovery of federally and state-listed endangered and threatened species.
- b. Connectivity: Enhance passage of pronghorn, elk and San Joaquin kit fox through the reserve and to other protected lands in the vicinity, such as the Carrizo Plains Ecological Reserve, and the Carrizo Plains National Monument.
- c. Biodiversity: Protect and enhance native grassland, buckwheat shrub, and vernal pool habitats on-site. Monitor and manage the sensitive native species on site, in addition to those that are state or federally-listed. Conserve diversity of native plant and animal species within the reserve.

- d. Cooperative Partnerships: Continue to work cooperatively with the Bureau of Land Management staff assigned to the Carrizo Plains National Monument to benefit the conservation value of both areas.

The subject lands are proposed to be designated as an ecological reserve because the intent of this acquisition was to conserve endangered species and the overall biodiversity of the area in order to mitigate for the loss of habitat caused by the development of the Topaz Solar Farm. Due to limited staff resources to manage public use, and the likely appeal of this site for illegal uses (e.g., riding off-road vehicles, poaching, target shooting, illegal camping that may lead to wildfires), protection of these resources would not be assured if unsupervised public access were allowed. The Department proposes to offer occasional, chaperoned special hunts to provide a safe, compatible recreational opportunity on the site. Justification for proposed site-specific regulations for this property are addressed in more detail under the subsection of this document titled: "Changes to Site-Specific Regulations for Ecological Reserves (Section 630)".

6. Designate the Santa Margarita River Ecological Reserve in subsection 630(b)(121).

The proposed Santa Margarita River Ecological Reserve (SMRER) consists of 251 acres within the City of Temecula in Riverside County, west of Highway 15. It forms the northeastern end of a much larger, similarly named, cooperatively managed open-space area known as the Santa Margarita Ecological Reserve (SMER). Several entities own land within the SMER, but day-to-day management throughout the reserve is conducted by San Diego State University.

The Santa Margarita River, one of the last nearly free-flowing rivers in Southern California, provides critical habitat for state and/or federally-listed species, such as Stephen's kangaroo rat (*Dipodomys stephensi*), Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) and least Bell's vireo (*Vireo bellii pusillus*). The river also leads to the only passable undercrossing of Interstate 15, a formidable barrier to wildlife movements in the area. The proposed SMRER is practically adjacent to the undercrossing. Human activity here may have a negative effect on use of the undercrossing by carnivores (Clevenger and Waltho, 2000). The Nature Conservancy has preserved the property that includes the opposite side of the undercrossing, east of Highway 15, which improves its likelihood of it being used by wildlife.

Management objectives of the proposed SMRER include

- a. Listed Species/Critical Habitats: Protect, restore, and enhance native habitats, to benefit the recovery of federally and state-listed endangered and threatened species.
- b. Connectivity: Provide habitat linkage and migration corridors for wildlife in the Department's South Coast Region (Region) to adjacent habitats.
- c. Biodiversity: Protect, manage, and restore riparian and upland habitats which support conservation of listed and non-listed native species. This includes providing habitat for breeding, foraging, cover, and migration.

d. Cooperative Partnerships: Continue to work with San Diego State University to protect the biological resources of the SMRER while providing educational and research opportunities.

e. Public Use: Due to the environmental sensitivity of the area, and the need to maintain the integrity of many research sites, the entire SMER is closed to regular public access, but through the cooperative management agreement, organized group hikes and other interpretive activities are provided to the public. School groups of all levels, and researchers also use the SMER.

Because of the listed species and sensitive habitats that are present, and high value of the site as wildlife movement/migration corridor, it is appropriate to designate the Santa Margarita River property as an ecological reserve in Section 630(b) of these regulations.

7. Designate the Tecopa Ecological Reserve in subsection 630(b)(133)

The proposed Tecopa Ecological Reserve (TER) is approximately 84 acres located in extreme southeastern Inyo County at an elevation of 1,400 feet. The property consists of several disjunct parcels managed as a single unit around the community of Tecopa Hot Springs near Death Valley National Park. The TER parcels are part of a larger complex of protected habitat. They are adjacent to, or surrounded by, approximately 250 acres owned by the U.S. Bureau of Land Management (BLM) and near 40 acres owned by the Nature Conservancy. The key natural feature in the area is a system of small marsh patches called the Tecopa Marsh which are fed by natural warm springs in the area.

The primary purpose of the TER will be the protection of habitat for the Amargosa vole (*Microtus californicus scirpensis*) which is both state and federally-listed as endangered. The vole is highly vulnerable due to its limited range, narrow niche, declining habitat quality, and low population size. Between 50 and 500 Amargosa voles remain in the wild. Amargosa voles depend on wetland vegetation dominated by three-square bulrush (*Schoenoplectus americanus*). The small rodent occurs in a single watershed with only 198 acres of habitat occurring in fragmented disjunct patches. The ecological reserve also preserves habitat for the Amargosa niterwort (*Nitrophila mohavensis*), a state and federally endangered plant that occurs only on highly alkaline, moist, salt-encrusted clay soils in the region. Additional rare species of plants and animals are known from the property (see land management summary in Attachment 2).

Management Objectives of the proposed TER include:

a. Listed Species/Critical Habitats: Protect and manage alkali meadow and marsh habitats to benefit the recovery of the Amargosa vole and Amargosa niterwort, and other sensitive species that benefit from the marsh habitat.

b. Connectivity: The proposed TER parcels were acquired as part of an effort to maintain connectivity between the patches of marsh habitat.

c. Biodiversity: Protect and manage the unique complex of alkali marsh, meadow and scrub habitats, which supports the conservation of listed and non-listed native species.

d. Cooperative Partnerships: Continue to partner with BLM, Cal Fire, academic institutions and non-governmental organizations on collaborative management, research, and public education opportunities.

e. Public Use: The parcels of the proposed reserve are inside of, or adjacent to, the town of Tecopa Hot Springs, so it is infeasible to prevent public access. Walking, hiking and wildlife viewing from appropriate access points will be encouraged with signs posted to avoid incompatible uses such as motorized vehicles, camping and campfires.

Because this property was acquired to protect the listed species and sensitive habitats that are present, it is appropriate to designate the Tecopa property as an ecological reserve in Section 630(b) of these regulations.

#### Remove Properties from the List of Wildlife Areas or Ecological Reserves in Title 14

A map showing the approximate locations of the properties proposed to be removed from Title 14 is included in Attachment 1.

##### 1. Remove Lake Berryessa Wildlife Area from subsection 551(b)(55)

The Lake Berryessa Wildlife Area is in Napa County and is comprised of approximately 2000 acres along the eastern shore of Lake Berryessa from Elicuera Creek to Monticello Dam. The land is owned by the U.S. Bureau of Reclamation (BOR), and in 1995, the Department and BOR signed a 30-year Memorandum of Understanding (MOU), under which the Department managed wildlife, habitats and public use on the area. The land was designated as the Lake Berryessa Wildlife Area by the Fish and Game Commission in 1998. In 2015, the BOR and the Department mutually decided to terminate the MOU (see Attachment 3). The termination of the MOU resulted in the Department no longer having management authority over the Lake Berryessa Wildlife Area, and since that time, the BOR has managed the property according to its own regulations. No signs identify the property as a state wildlife area. The BOR has no plan to enter into a new MOU with the Department in the future. Retaining the designation as a Department wildlife area, as well as the site-specific regulations that allow for Department-organized special hunts (subsections 551(o),(q) and (r)) may confuse the public, partner agencies, and Department staff. Removing the designation and site-specific regulations for Lake Berryessa Wildlife Area would clarify the situation and avoid confusion.

##### 2. Remove the South Fork Wildlife Area from Section 551(b)(96)

The South Fork Wildlife Area is located on the South Fork of the Kern River, ten miles east of the town of Lake Isabella, in Kern County. The approximately 1,400 acres were under the jurisdiction of the U.S. Army Corp of Engineers (COE) until 1991 when it was transferred to the U.S. Forest Service (USFS). In 1988, the COE issued a management license to the Department to manage the South Fork property, and it was designated as a wildlife area in 1990. The license expired in 2008, and the USFS notified the Department in 2013 that it did not intend to renew it (Attachment 3). Since that time, the USFS has managed the property according to its own regulations, and no signs identifying the property as a state wildlife area are posted. There is no plan to enter into a new license in the future. Retaining the designation as a Department wildlife area may confuse the public, partner agencies, and Department staff. Removing the



designation for the South Fork Wildlife Area would clarify the situation and avoid confusion.

3. Remove the White Slough Wildlife Area from subsection 551(b)(109)

White Slough Wildlife Area is located about seven (7) miles west of the city of Lodi in San Joaquin County and consists of approximately 880 acres divided among several narrow north/south-oriented units from Thornton-Walnut Grove Road in the north to North Rio Blanco Road in the south. The units include barrow ponds surrounded by a variety of habitats: riparian, marsh, and grassland. The land belongs to the California Department of Water Resources (DWR), and in 1980, the Department received a five-year encroachment permit to manage public uses on the White Slough property. These included hunting, fishing and wildlife-viewing. In that same year, the property was designated as the White Slough Wildlife Area. Draft agreements were written in 1985, 1993, 1995 and 1998 in order to continue the Department's management of recreation on the wildlife area, but none were signed due to a lack of consensus between DWR and the Department. The Department continued to operate a hunting program on the property without a written agreement with DWR but eventually ceased that practice. DWR has recently installed new gates on the property that make certain ponds less accessible to the public, which further detracts from the property's value as a wildlife area. Under the circumstances, retaining the designation as a Department wildlife area may confuse the public, partner agencies, and Department staff. Removing the designation of the White Slough Wildlife Area would clarify the situation and avoid confusion.

4. Remove the Yaudanchi Ecological Reserve from subsection 630(b)(135)

The approximately 166-acre Yaudanchi Ecological Reserve (YER) is located two miles south of the town of Porterville, on Highway 190 in Tulare County. It is adjacent to the Porterville Developmental Center (formerly Porterville State Hospital) and is on land owned by the California Department of Developmental Services (DDS). The YER was designated as an ecological reserve by the Commission in 1977 and was managed by the Department under an agreement with DDS. In 2017, DDS terminated the agreement with the Department due to plans for the property that were not compatible with the operation of an ecological reserve (Attachment 3). Because the Department no longer has legal authority to work on the property, retaining the designation as a Department ecological reserve may confuse the public and staff from public agencies. Removing the designation of the YER from subsection 630(b) would clarify the situation and avoid confusion.

Minor Corrections and Clarifications to Statewide Regulations (sections 550, 550.5, 702)

550(b)(2): Delete the word "visitors" from the definition of "compatible uses" because compatible uses are sometimes conducted by people who are carrying out official duties (e.g. teachers, researchers) and who, therefore, do not meet the definition of "visitor" in Section 550(b)(5). This change is necessary to clarify the applicability of this definition.

550(b)(7) and (8): Replace the upper-case “D” with a lower case “d” in the word “department” in order to be consistent with the convention used in regulatory language for referring to the subject department.

550(b)(11): Move the definition of “non-shooter” to 550(b)(11) from 550.5(a)(1)(E) because all of the other definitions in the land regulations are in 550(b). This improves consistency. “Hunter” replaced “reservation-holder” within the definition of non-shooter, when the definition was moved to 550(b). This is because on Type A wildlife areas, hunters who do not have a reservation often wait until hunters with reservations either do not show up or are done for the day. The vacancies in the hunting blinds are filled by these hunters who have waited, and who are allowed to bring the same number of people in their party as hunters with a reservation, and this often includes a non-shooter. Therefore, not all non-shooters accompany “reservation holders” and to say that a non-shooter may accompany a hunter is more accurate. This change is necessary to improve the clarity of the subject definitions.

550(c)(2)(B): Insert the word “day” into the regulation to correct an omission which was created when subsection 550.5(c)(11) was amended in 2016. The amendment requires visitors to Department properties that require a lands pass, who do not have a hunting or fishing license, to obtain and carry a one-day or seasonal lands pass with them while they are on the property. One-day passes for hunters on Type A or Type B wildlife areas are exchanged at the hunter check-in station for an entry permit, so hunters on those properties never have a one-day hunting pass on their person after they enter beyond the check-in station.

550(cc)(2) and 550(ee): Delete references to trapping on CDFW lands. These deletions are necessary because fur trapping will be prohibited statewide as of January 1, 2020, per AB 273 (Chapter 216, Statutes of 2019).

550.5(a)(1)(A): Delete “or at the address specified on the application” because all applications are now submitted on-line or filled out in-person at Department license sales offices or sales agents. There is no mailing address provided on the application. This is to ensure that all hunting reservation applications are entered into the Department’s Automated License Data System.

550.5(a)(1)(E): Move the definition of “non-shooter” from 550.5(a)(1)(E) to 550(b)(11) because all of the other definitions in the land regulations are in 550(b). Add “(as defined in subsection 550(b)(11))” to the last sentence in this subsection, so it is clear where to find the definition of a “non-shooter”. These changes are necessary to improve consistency within the regulations, provide clarity and to avoid confusion of the public.

550.5(c)(7): Replace the existing first sentence with two new sentences. Change “visitors” in the first amended sentence to “any visitor” because subsections (c)(6) through (c)(8) discuss closely related rules, and the other sentences in these subsections refer to “visitor” in the singular. This change is necessary to make the regulations easier to read and understand.

In the new second sentence, text is proposed that clarifies that visitors who are under 16 years old must be accompanied by an adult to receive an entry permit and hunt.

This is necessary to provide clarification of that requirement, because “junior hunters” who are 16 or older are not required to be accompanied by an adult.

The current upper age of junior hunters is 17 years of age (Fish and Game Code Section 3031). The upper age limit for junior hunters will expire on July 1, 2020, and the age of a junior hunter will return to 16. The proposed regulatory text will remain accurate when the change occurs.

550.5(c)(8): Sixteen and 17-year olds were allowed to hunt without adults prior to being classified as “junior hunters” in 2015. It is suggested that “junior” in the first sentence of 550.5(c)(8) be deleted because 16 and 17-year olds will be able to obtain an entry permit and hunt without an adult present, whether their hunting license is a junior license or if they are required to purchase one of the hunting license options sold to adults (i.e., whether or not the current age limit in Fish and Game Code Section 3031 is retained after July 1, 2020). This change is necessary for the regulation to remain accurate regardless of whether the upper age limit for a junior hunting license remains 17 years old as of July 1 of the licensing year.

550.5(d)(2)(B): A minor revision that explains that the entire special use permit fee must be paid before the special use permit application will begin to be processed was made to this section. Although the application instructs applicants to mail or deliver the application and fee together, the Department has had problems with applications arriving before the fee is paid in-full and applicants expecting the processing to begin as soon as the application is received. This clarification is necessary for the public’s understanding of how to apply for a Special Use Permit and the timing of processing a permit application. Also, for special use permits that include a cost in addition to the permit fee, it has not been clear to some applicants that the additional cost must be sent to the Region before the Regional Manager or their designee approves the permit. This is clarified by the sentence added to the end of this subsection. Corresponding changes will also be recommended for the Special Use Permit application (DFW 730) that is included with this regulation package. Rather than being unnecessarily duplicative, this confirmation between the regulatory language and the permit application is necessary to improve the public and the Department staff’s understanding of the requirements and processing of Special Use Permits.

550.5(d)(2)(B): The application for Special Use Permits (currently form DFW 730(New 01/14) is incorporated by reference into Section 702. It requires that the special use permit fee be submitted with the completed application. This requirement is not clearly stated in this subsection, and that may contribute to the problem that some applicants do not understand when the permit fee is due. It is necessary to state this requirement clearly and consistently in this regulation as well as in the Special Use Permit application.

550.5(d)(2)(B)1.: Add language to clarify the cancellation of special use permits and conditions for obtaining a refund of the special use permit fee.

Special Use Permits can be written to include multiple special uses over 12 months. The permit fee covers the cost of processing a permit application, whether one or multiple events are to take place on a given permit. Occasionally, permittees conduct one or more of the events allowed by the permit, cancel one or more of the remaining

events, and request a partial refund of the permit fee. The proposed change to the regulatory text is necessary because the existing text does not explain that no partial refunds are available.

Existing regulatory language only requires that a cancellation notice be provided in writing for the largest type of special use ("Type 3"). For the other two types of events, not requiring cancellations in writing has led to scheduling conflicts, extra work for staff, and confusion when multiple people are involved in organizing an event. The hardcopy or email format facilitates processing a refund and storing the cancellation notice. It is necessary to amend the regulatory text to clarify that a cancellation for any type of special use be submitted via email or hardcopy in order for it to qualify for a refund.

550.5(d)(2)(B)2.: Clarify that the written notice of cancelation of Type 3 events must be in hardcopy or email before any of the permitted activities have taken place, in order to qualify for a refund of the permit fee. See the preceding justification for adding similar language to subsection (B)1. Subsection (B)2. is separate from (B)1. because it addresses conditions unique to Type 3 Special Use Permits (i.e. the category of the largest events).

550.5(d)(4)(A): In the second sentence, "daily use" was replaced by "lands pass" for internal consistency within the subsection (which refers to "lands passes" multiple times). Additionally, a participant in a special use event occurring on a lands pass property does not need to purchase a daily lands pass if they already own an annual lands pass, a hunting license or a fishing license. This change is necessary to improve the consistency and accuracy of the regulatory text.

550.5(d)(4)(D): The existing text explains that it is prohibited to conduct special use activities or events held for the purpose of generating revenue on Department land without providing adequate compensation for the use of State resources. The Department uses information on Attachment C of the application for Special Use Permits (incorporated by reference into Section 702), to determine the suitable amount of compensation. Often this attachment is improperly left blank because applicants for a Special Use Permit for a revenue-generating event do not understand that it is required by regulation. This unnecessarily delays the Special Use Permit application process. The added text proposed for this section is necessary to clarify this regulatory requirement and expedite the application process.

550.5(d)(6)(A) and (B): The existing text for these subsections lists the payment of the permit fee as one of the items that is necessary for a Special Use Permit to be considered complete. It is incorrect to list the permit fee in this context because it needs to be paid when the Special Use Permit application is submitted. A proposed amendment to (d)(2)(B) clarifies this. The application will not be processed, let alone result in a complete permit, if the entire permit fee is not submitted with the application. It is necessary to replace the word "permit" with the word "additional" to avoid confusing the public about when the permit fee is due.

630(h): Add text following the title of this subsection that explains what is meant by closure to public entry or access.

- Although the property is closed to general public access, the proposed additional text clarifies that the Department may authorize special access to a closed property through written authorization. This is consistent with existing subsection 550(c)(2)(D)2.. 550(c) provides statewide regulations regarding visitor entry on all types of Department lands.
- The other five subsections of 630(b) that apply to multiple properties throughout the state provide this type of clarifying text following their title, and Department experience indicates that adding this text facilitates the public's awareness and understanding of this subsection. The subject text is proposed to be added to provide clarification for the public and consistency within Section 630(b).

#### Changes to Site-Specific Regulations for Wildlife Areas (Section 551)

551(b)(41): Since the previous update of the land regulations, the Gold Hills and Garibaldi units of the Grizzly Island Wildlife Area (GIWA), were exchanged for roughly the same amount of acreage adjacent to the existing Crescent Unit. They will be "Type A" areas because hunters will need to check into the check station to show their day/annual passes to exchange for a permit and then need to check out before leaving. This is consistent with the closest GIWA units. It avoids confusion for the public if access is administrated in a consistent manner.

The names of the "Cordelia" and "Montezuma Slough" units are proposed to be deleted because they are outdated. These were smaller units that were incorporated into larger units as more land was acquired. The Cordelia Unit property is part of the Garibaldi Unit that was transferred to the Pacific Flyway Center, and the Montezuma Slough Unit is managed as part of the Grizzly Island Unit. In summary, the proposed changes to this subsection are necessary to avoid confusion for the public.

551(b)(55): Delete the current subsection for Lake Berryessa Wildlife Area. This property is no longer managed by the Department. See item "1." under the above subheading: "Remove Properties from the List of Wildlife Areas or Ecological Reserves in Title 14".

551(b)(57): Delete the current subsection for Lake Sonoma Wildlife Area because 551(b) is for wildlife areas that are owned by the Department, and that wildlife area is owned by the federal government. It is also correctly listed in 551(c).

551(b)(71): Delete "Coon Island" because it is an outdated name for land that is now part of the Huichica Creek Unit. The Huichica Creek Unit is included in the list of units for the Napa-Sonoma Marshes Wildlife Area.

551(b)(81): Add the proposed text for the Round Valley Wildlife Area. See item "2." under "Wildlife Area", under the above subheading: "Designate Recently Acquired Properties in Title 14".

551(b)(102): Update the list of counties that include units of the Truckee River Wildlife Area (TRWA). Since the last time this subsection was updated, two units were added to this wildlife area. The Canyon and the Grey Creek Canyon units are located in Sierra and Placer Counties, respectively.

551(b)(109): Delete the current subsection for the White Slough Wildlife Area. This property is no longer managed by the Department. See item “3.” under the subheading: “Remove Properties from the List of Wildlife Areas or Ecological Reserves in Title 14”.

551(c)(5): Delete the current subsection for the Lake Berryessa Wildlife Area. This property is no longer managed by the Department. See item “3.” under the subheading: “Remove Properties from the List of Wildlife Areas or Ecological Reserves in Title 14”.

551(d)(6): This change is to add the Bogg’s Bend Unit to the list of units within the Sacramento River National Wildlife Refuge. This is not a new unit, and this was an inadvertent omission of the name. Adding the name improves the accuracy of the information provided in subsection 551(c)(6).

551(j)(4): Under subsection 551(j), the use of bicycles is prohibited on wildlife areas unless allowed within this subsection. The proposed changes for the Napa-Sonoma Marshes Wildlife Area will allow regulated bicycle use on two (2) units of the wildlife area, in accordance with the area’s land management plan. (See Attachment 4):

a. Green Island Unit: Bicycles would be allowed on the designated Bay Trail which runs on top of a perimeter levee on the eastern border of the property. Signs will be posted along the trail to eliminate confusion over wildlife area regulations and Bay Trail users. The Bay Trail was planned in 1989 by the Association of Bay Area Governments in 1989, and currently includes approximately 400 miles, linking cities and nine counties in the Bay Area.

b. Southern Crossing Unit: Bicycles would be allowed on the public access easement which bisects the unit. The easement allows for recreational opportunities and access by Stanly Ranch LLC and the City of Napa to the Napa River. Signs will be posted, and fences erected to keep visitors on the trail and avoid confusion over the prohibition of bicycles on the rest of the unit.

551(o)(17): Delete the existing subsection for Garibaldi Unit because it was transferred to the Pacific Flyway Fund in exchange for land that is adjacent to the existing Crescent Unit. The Unit is no longer part of the Grizzly Island Wildlife Area.

551(o)(18): Delete reference to the Gold Hills Unit because it was transferred to the Pacific Flyway Fund in exchange for land that is adjacent to the existing Crescent Unit. It is no longer part of the Grizzly Island Wildlife area.

551(o)(20): Delete current subsection because the Cordelia Unit was part of the Garibaldi Unit that was transferred to the Pacific Flyway Fund, and the Montezuma Slough Unit is now managed as part of the larger Grizzly Island Unit. For management and public use purposes, there is no longer a separately managed unit named the “Montezuma Slough Unit.”

551(o)(24): Currently, all hunting on the Hollenbeck Canyon Wildlife Area (HCWA) is prohibited between February 1 and August 31. To increase hunting opportunities while minimizing negative effects on nesting wildlife, the Department recommends allowing crow hunting in a designated area until the end of the statewide crow season in early April (per Section 485(a)(1)). This change was requested of the Commission by the San Diego Wildlife Federation in December 2018 (see Attachment 5). Based on the Department’s experience and expertise, crow hunting at this wildlife area is expected to

attract minimal numbers of hunters, particularly later in the season. For that reason, and by restricting this use to one part of the property, the Department's opinion is that this change will not significantly increase disruption to wildlife at the HCWA above what already occurs through existing public uses during the early spring (e.g. hiking, bird-watching, photography).

551(o)(30): Delete the current subsection for Lake Berryessa Wildlife Area. This property is no longer managed by the Department. See item "1." under the above subheading: "Remove Properties from the List of Wildlife Areas or Ecological Reserves in Title 14".

551(o)(39): This subsection includes two recommended changes for the Southern Crossing Unit of the Napa-Sonoma Marshes Wildlife Area:

a. Delete the text that closes the section to all visitor uses during restoration. The original restoration plan was very intensive, and the area was closed for public safety and to maximize the establishment of new vegetation. That plan was cancelled, and there is no longer a need to prohibit all public use of the unit.

b. Prohibit hunting, firearms and archery use. This is a narrowly-shaped property that the Department anticipates will be very popular for walks and bike rides to the Napa River. A public access easement bisects the property. These characteristics make it difficult to ensure safe hunting opportunities, and there are other nearby units of the wildlife area that offer hunting.

551(o)(62): Delete current subsection 551(o)(62) for the White Slough Wildlife Area. This property is no longer managed by the Department. See item "3." under the above subheading: "Remove Properties from the List of Wildlife Areas or Ecological Reserves in Title 14".

551(q)(9): Delete current subsection 551(q)(9) for the Lake Berryessa Wildlife Area. This property is no longer managed by the Department. See item "1." under the above subheading: "Remove Properties from the List of Wildlife Areas or Ecological Reserves in Title 14".

551(r)(20): Delete current subsection 551(r)(20) for the Cordelia and Montezuma Slough units of the Grizzly Island Wildlife Area. These units are no longer managed by the Department. See the justification for the amendments to subsection 551(b)(41).

551(r)(27): Delete current subsection 551(r)(27) for the Lake Berryessa Wildlife Area. This property is no longer managed by the Department. See item "1." under the above subheading: "Remove Properties from the List of Wildlife Areas or Ecological Reserves in Title 14".

551(r)(37): Add the Southern Crossing Unit to the units of the Napa-Sonoma Marshes Wildlife Area on which all firearms and archery equipment are prohibited. Currently the Southern Crossing Unit is closed to public use in subsection (551)(o)(36), but this regulation package includes a proposal to remove that closure. This is a long, narrow property that the Department anticipates will be very popular for walks and bike rides to the Napa River. A public access easement bisects the property. These characteristics make it difficult to ensure safe hunting opportunities, and there are other nearby units of the wildlife area that offer hunting.



551(r)(52): Prohibit all firearms and archery equipment on the Boca, Polaris, and West River Units of the Truckee River Wildlife Area (TRWA). Under the current version of this subsection, three units of the TRWA have a rifle and pistol prohibition. Due to their proximity to the town of Truckee, and ongoing concerns received at the Department's Regional Headquarters by other users and neighbors, we are proposing that the Boca, Polaris and West River Units have a firearm and archery prohibition. These units were purchased for fishing access, and hunting is not a reasonable option here because of the lack of legal distance from occupied dwellings and/or Interstate 80. Hunting will still occur on the other nearby units of the TRWA, and this proposal affects less than 4% of the overall acreage of the TRWA. This regulation change will increase safety for non-shooters, including hikers and anglers, and according to Department law enforcement staff, will help prevent illegal take of game, as well as inappropriate target shooting.

551(r)(54): Delete current subsection 551(r)(54) for the White Slough Wildlife Area. This property is no longer managed by the Department. See item "3." under the above subheading: "Remove Properties from the List of Wildlife Areas or Ecological Reserves in Title 14".

551(s)(4), 551(s)(7), 551(s)(15), 551(s)(17), 551(s)(19), 551(s)(27), 551(s)(29): Delete these seven subsections that provide "extra" pheasant hunt days on the subject Type A wildlife areas. The subsections contain regulations that are very similar to one another. These seven "Type A" wildlife areas include, respectively: Gray Lodge, Grizzly Island, Los Banos, Mendota, North Grasslands, Upper Butte Basin, and Yolo Bypass. Under Section 551(e)(1), during the waterfowl hunting season (early fall to late winter), these wildlife areas are open for hunting on Saturdays, Sundays and Wednesdays. In the above-listed subsections of 551(s), these areas are also open for hunting pheasants for an additional five to twelve consecutive days (depending on the wildlife area) at the beginning of the pheasant season in early November.

However, because of the decline in the pheasant population, the Department has utilized its authority, under subsection 550.5(c)(2)(D), to cancel the extra pheasant hunt days on all seven wildlife areas for the last eight years (with the exception that two of those areas have been open on Veteran's Day).

A major factor in the decline of the pheasant population in California is thought to be habitat lost due to development and changes in farming practices over the last three decades (Coates et al, 2017). Given that most farming is unlikely to revert to practices that are more beneficial to pheasants, and that cities will continue to expand into farmland, it is unlikely that there will be a significant, sustained rebound in the wild pheasant population in the foreseeable future.

At the same time, staff resources on wildlife areas are limited. Department land managers are directed to avoid scheduling staff for overtime, and there is a need to reserve the available staff hours to prepare for and operate during the regular three hunt days per week. For these reasons, the Department recommends deleting the seven subsections listed above.

Pheasant hunting will continue to be available on Saturdays, Sundays and Wednesdays on the Department's Type A and B wildlife areas during the six-week pheasant season. Unless otherwise restricted in Section 551, hunting is available

seven days a week on Type C wildlife areas for all legal species. Colusa, Delevan and Sacramento National Wildlife Refuges (NWRs) offer pheasant hunting on Veteran's Day in addition to the three regular hunt days per week.

551(s)(5): Existing subsection (s)(5), authorizes quail and rabbit hunting on "pheasant hunt days" on Gray Lodge Wildlife Area. This includes the "extra" pheasant hunt days proposed to be eliminated in the preceding justification. If the recommendation to delete the extra pheasant hunt days is adopted (i.e., delete existing 551(s)(4)), then what remains are the regular waterfowl hunt days during the pheasant season (i.e. Saturdays, Sundays and Wednesdays during that six-week period in November and December). This will change the language in renumbered (s)(4) to "waterfowl shoot days during the pheasant season" for the sake of accuracy and internal consistency within the regulations.

551(s)(9): Existing subsection (s)(9), authorizes rabbit hunting daily in July, and on pheasant hunt days during the pheasant season on the Grizzly Island Wildlife Area (Crescent and Grizzly Island Units). As used here, "pheasant hunt days" are the extra, early season, pheasant hunt days that are proposed to be eliminated in this regulation package. If that change is adopted (i.e., delete existing 551(s)(7)), then the rabbit hunt days in the fall will be limited to the regular waterfowl hunt days during the pheasant season, as proposed in renumbered (s)(7). This change will be necessary for the regulations to remain accurate and internally consistent.

551(s)(20): Existing subsection (s)(20) authorizes rabbit hunting during the waterfowl season on waterfowl and pheasant hunt days on the North Grasslands Wildlife Area. As used here, "pheasant hunt days" are the extra, early season, pheasant hunt days that are proposed to be eliminated in this regulation package. If that change is adopted (i.e., delete existing 551(s)(19)), then the rabbit hunt days in the fall will be limited to the regular waterfowl hunt days as proposed in renumbered (s)(15). This change will be necessary for the regulations to remain accurate and internally consistent.

551(s)(25): Existing (s)(25) authorizes rabbit hunting to take place on the Upper Butte Basin Wildlife Area during the late dove season on waterfowl or pheasant hunt days. As used here, "pheasant hunt days" are the extra, early season, pheasant hunt days that are proposed to be eliminated in this regulation package. If that change is adopted (i.e. delete existing 551(s)(27)), then the rabbit hunt days during the late dove season will be limited to the regular waterfowl hunt days as proposed in renumbered (s)(20). This change will be necessary for the regulations to remain accurate and internally consistent.

551(t)(27): Delete current subsection 551(t)(27) for the White Slough Wildlife Area. This property is no longer managed by the Department. See item "3." under the subheading in this document: "Remove Properties from the List of Wildlife Areas or Ecological Reserves in Title 14".

551(u): Delete "and Pheasant" from "Type A Wildlife Areas Which Allow Archery Equipment During Waterfowl and Pheasant Season...". Los Banos is the only wildlife area listed in this subsection. The current text allows archery equipment to be used during the existing "extra" pheasant hunt days that are proposed to be removed from Los Banos (see above discussion for 551(s)(15)). If the extra pheasant hunt days are

deleted, hunting pheasants will only be allowed on waterfowl hunt days during the pheasant season (which is shorter and completely within the waterfowl season). The proposed change will be necessary in order for 551(u) to be consistent with the change proposed for 551(s)(15).

551(w): Delete “trapping” as one of the licenses that provides an exemption from the lands pass requirement on certain wildlife areas. This deletion is necessary because fur trapping will be prohibited statewide as of January 1, 2020, per AB 273 (Chapter 216, Statutes of 2019).

551(x)(2): Per a request from the U.S. Fish and Wildlife Service (USFWS) (Attachment 6), it is proposed to change the time at which hunting reservations expire on the Delevan National Wildlife Refuge. This is to improve the hunter check-in process. The proposed change is from an expiration time of one hour before shoot time, to one and one-half hours before shoot time. This change will improve consistency between the state regulations and federal rules for public uses of National Wildlife Refuges.

#### Improve Consistency with Federal Regulations on National Wildlife Refuges and Remove Duplication (Section 552)

Section 552 contains state regulations for National Wildlife Refuges (NWRs) that are also listed as state wildlife areas in Section 551(c). The Department manages the hunting program on these NWRs under an agreement with the U.S. Fish and Wildlife Service (USFWS). Federal regulations change over time and making associated changes to Section 552 improves the consistency between the state and federal regulations that govern public uses. Improved consistency should minimize confusion for the public and for staff from both agencies who cooperate on managing these refuges. A letter of support for the proposed changes from the USFWS is included with this ISOR as Attachment 7.

552(a), 552(a)(1)(A), (2)(A), (3)(A), (4)(A), (5)(A), (6)(B)(4), (7)(A), (8)(A), (9)(A): Delete references to federal requirement for non-toxic shot. It is unnecessary since non-toxic shot became required for all hunting in California on July 1, 2019, per Section 250.1 of these regulations.

552(a)(1)(B): The proposed text for the Colusa National Wildlife Refuge (CNWR) adds pheasant hunting on the first Monday of pheasant season and adds turkey as a species to be hunted during the fall turkey season on waterfowl hunt days. These changes were made to 50 CFR section 32.24 on October 1, 2018 for pheasant, and on September 10, 2019 for turkey. Changes to make state regulations consistent with federal regulations will avoid confusion for the public and for staff from both agencies who cooperate on managing this refuge.

552(a)(1)(C), (2)(C), (3)(C), (4)(D), (5)(C), (6)(K), (7)(C), (8)(C), (9)(C):

- Following “Authorized Species”, these subsections will add the words “to be Hunted” for the sake of clarification. This change is necessary because the current text, in which “Authorized species”, is followed immediately by a list of species, is inadequate to convey to members of the public that these are the species that are authorized for hunting on the subject wildlife refuge.

- Subsections (1)(C), (2)(C), (5)(C) and (9)(C) add “turkey” to the list of species that are authorized for hunting in these subsections. The justification for adding turkey to the lists within these subsections is for internal consistency with the earlier subsections that introduce the addition of turkey hunting on these refuges: 552(a)(1)(B), (2)(B), (5)(B) and (9)(B).

- In subsections (3)(C) and (4)(D), it is unnecessary to have language prohibiting snipe

hunting because snipe is not listed as a species that is authorized for hunting on these properties, earlier in each of these subsections.

552(a)(1)(F): The proposed text will improve consistency between Section 552 and the federal authorization for bicycling on CNWR. This use is authorized pursuant to 50 CFR sections 32.3 and 25.31 (Oct. 1, 2018). Changes to make Section 552 more consistent with federal regulations will avoid confusion for the public and for staff from both agencies who cooperate on managing this refuge.

552(a)(1)(G): Existing 552(a)(1)(G) is proposed for deletion because it is redundant with subsections 550(c)(2)(E) regarding where visitors may enter and exit Department lands, and 550(y)(2) which prohibits loading and unloading vehicles between designated parking areas. The subsections in 550 are functionally the same as existing 552(1)(G), but they apply to all Department lands in the state. The CNWR meets the definition of Department lands in subsection 550(b)(1), therefore, the regulations in 550 apply to CNWR.

552(a)(1)(H): The proposed addition of the word “turkey” is necessary because turkey may not be hunted in the assigned pond area on the Colusa NWR (50 CFR Section 32.24 (September 10, 2019)). Changes to make state regulations more consistent with federal regulations will avoid confusion for the public and for staff from both agencies who cooperate on managing this refuge

552(a)(1)(I), (2)(G), (4)(G), (5)(G), (7)(F), (9)(I): Delete the existing text at these subsection numbers. Each one addresses the number of visitors allowed to enter on a single hunting reservation. They are redundant with subsections 551(x)(1), (2), (10), (14), (16), (17), (18), (19) and (20). Note that 551(x)(16), (17), (18) and (19) refer to different units of the San Luis NWR. In Section 552(a)(1)(7)(F), those four units are addressed in one subsection, so there are fewer subsections to delete in Section 552. The subject NWRs meet the definition of Department lands in subsection 550(b)(1) and are listed as wildlife areas in subsection 551(c). Therefore, the regulations in 551 apply to these NWRs and the text proposed for deletion is unnecessary.

552(a)(1)(H), (4)(G), (5)(H), (7)(H), (9)(G): If “day use” hours are not added via these proposed subsections, it would imply that the “visitor” hours for state lands in subsection 550(c)(2)(C) (sunrise to sunset) apply to the subject NWRs. These include the Colusa, Merced, Sacramento, San Luis and Sutter NWRs. Depending on the property, the opening and closing hours for these NWRs are either one-half hour or one hour different from the regulation for state lands.

The day use hours are not codified in federal regulations, but they are in effect pursuant to 50 CFR sections 32.3 and 25.31 (Oct. 1, 2018). Both state and federal

regulations provide exceptions to normal visitor hours for authorized uses that may involve hunting, camping or fishing on state lands, and hunting or camping on federal lands. These changes clarify the difference between the standard visitor hours on Department lands and the hours that are available for day-use visitors on the subject NWRs. This reduces confusion for the public, particularly those who visit both Department-owned lands and the NWRs.

552(a)(1)(I), (2)(G), (3)(F), (4)(H), (5)(I) and (9)(H)): Adding these proposed subsections that prohibit fishing on the Colusa, Delevan, Kern, Merced, Sacramento, and Sutter NWRs would increase the consistency of Section 552 with federal regulations for these properties. Fishing is prohibited at these NWRs in 50 CFR 32.24 (October 1, 2018). Greater consistency between the state and federal regulations avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

552(a)(2)(B), (5)(B) and (9)(B): Add turkey as an authorized species for hunting on waterfowl hunt days (i.e. Saturday, Sunday and Wednesday) at, respectively, the Delevan, Sacramento and Sutter NWRs, during the fall turkey season. The fall turkey season occurs entirely within the waterfowl season. Turkey hunting on these refuges was added to 50 CFR 32.24 on September 10, 2019. Changes to make Section 552 consistent with federal regulations will avoid confusion for the public and for staff from both agencies who cooperate on managing these refuges.

552(a)(2)(F) and (9)(F): These prohibitions of bicycles in the existing regulations are redundant with the prohibition in Section (bb) and are therefore, unnecessary. Delevan NWR and Sutter NWR are listed as wildlife areas in subsection 551(c) and qualify as "Department Lands" under the definition in subsection 550(b), therefore the prohibition in Section 550(bb) applies to these properties.

552(a)(2)(I), (5)(I), (7)(H) and (9)(G): These subsections are proposed for deletion because they are redundant with subsection 550(c)(2)(E) regarding where visitors may enter and exit Department lands, and subsection 550(y)(2), which prohibits loading and unloading vehicles between designated parking areas. Subsections 550(c)(2)(E) and 550(y)(2) are functionally the same as these proposed for deletion, but instead of only applying to a specific NWR, they apply to all Department lands in the state. These NWRs (Delevan, Sacramento, San Luis, and Sutter), are listed in subsection 551(c) and meet the definition of Department lands in subsection 550(b)(1), therefore, the regulations in Section 550 also apply to these properties.

552(a)(3)(D), (4)(E) and (8)(D): It is proposed to delete these subsections that prohibit camping and trailers on, respectively, the Kern, Merced and Sonny Bono NWRs. These subsections are redundant with Section 550(p), the statewide regulation that generally prohibits campers and trailers from Department lands, and therefore, they are unnecessary. These NWRs are listed in subsection 551(c) and meet the definition of Department lands in subsection 550(b)(1); therefore, the regulations in Section 550 also apply to these properties.

552(a)(3)(D): This proposed subsection requires that hunters assigned to a spaced blind unit remain within 100 feet of their assigned blind (with certain exceptions) and that pheasant hunting be limited to the free roam unit. This is an existing federal

regulation in 50 CFR 32.24 (Oct. 1, 2018). Consistency between the state and federal regulations avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

552(a)(3)(E): This proposed subsection would only allow nonmotorized boats on the Kern NWR. This is an existing federal regulation in 50 CFR 32.24 (Oct.1, 2018). Consistency between the state and federal regulations avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

552(a)(4)(A): The existing subsection restricts hunters to no more than 25 shot shells per day on the Merced National Wildlife Refuge. USFWS is proposing to replace “per day” with “while in the field” in 50 CFR 32.24 in 2019 (Kempf, personal communication, 2019), and in the meantime, refuge managers are authorized to make changes to uses through public notification (50 CFR sections 32.3 and 25.31 (Oct. 1, 2018)). Changes to make Section 552 more consistent with federal regulations will avoid confusion for the public and for staff from both agencies who cooperate on managing this refuge.

552(a)(4)(H): Additional language is proposed for the Merced NWR that allows hunters to leave assigned blinds to place decoys and travel to and from the parking area. It also prohibits shooting outside of the blind. This is an existing federal regulation in 50 CFR 32.24 (Oct. 1, 2018). Consistency between the state and federal regulations avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

552(a)(5)(F): The proposed change would replace the prohibition of bicycles with authorization for bicycles to be used under specified conditions. This use is not codified in 50 CFR 32.24, but is in effect pursuant to 50 CFR sections 32.3 and 25.31 (Oct. 1, 2018). Consistency between the state and federal regulations avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

552(a)(5)(H): It is proposed to add “turkey” to the list of species that are illegal to hunt from the assigned blind area on the Sacramento NWR, except on the first Monday of pheasant season. This change will be proposed for 50 CFR 32.24 in 2019 (Kempf, personal communication, 2019), and in the meantime, refuge managers are authorized to implement this restriction through public notification (50 CFR sections 32.3 and 25.31 (Oct. 1, 2018)). Adding “turkey” to this subsection will improve consistency with the federal regulations. Consistency between the state and federal regulations avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

552(a)(6)(E): It is proposed to specify that bicycles are only allowed on designated routes during the time of year that bicycle use is already authorized (May 15 through August 15). This use is not codified in 50 CFR 32.24, but is in effect pursuant to 50 CFR sections 32.3 and 25.31 (Oct. 1, 2018). Consistency between the state and federal regulations avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

552(a)(6)(F): Existing subsection (F) is proposed for deletion because it is redundant with subsections 550(m) and 550(n).

552(a)(6)(F): A new subsection (F) is added specifying that dogs cannot be used for hunting wild pig or for hunting deer. This is already prohibited for this property in 50 CFR 32.24 (Oct. 1, 2018). The change will make the state law consistent with the federal law for this NWR and will reduce confusion for the public and for staff from both agencies who cooperatively manage this property.

552(a)(6)(G): Added text is proposed to specify where campers are allowed at night. This is already a requirement in 50 CFR 32.24 (Oct. 1, 2018). The change will make the state law consistent with the federal law for this NWR and will reduce confusion for the public and for staff from both agencies who cooperatively manage this property.

552(a)(6)(H): Existing subsection 552(a)(6)(H) is proposed to be deleted because it is redundant and therefore, unnecessary. Under Section 550(h), fishing is allowed on Department lands unless it is otherwise stated in subsections 551(o), 551(y) or 630(e). Because the Sacramento River National Wildlife Refuge (SRNWR) is listed as a wildlife area in Section 551(c) and meets the definition of Department lands in subsection 550(b)(1), the authorization of fishing in Section 550 applies. There are no exceptions to this allowance of fishing in subsections 551(o), 551(y) or 630(e).

552(a)(6)(H): The new subsection is proposed that restricts where fire is allowed on the property. This is already a requirement in 50 CFR 32.24 (Oct. 1, 2018). The change will make the state law consistent with the federal law for this NWR and will reduce confusion for the public and for staff from both agencies who cooperatively manage this property.

552(a)(6)(J)(3): This subsection is proposed to be added to close hunting on the Ohm Unit except for a designated area in which all authorized species except waterfowl may be taken. This use is not codified in 50 CFR 32.24, but is in effect pursuant to 50 CFR sections 32.3 and 25.31 (Oct. 1, 2018). Consistency between the state and federal regulations avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

552(a)(6)(J)(7): It is proposed to add a subsection that limits hunting on the SRNWR from August 15 to May 31. This restriction on hunting, to occur only between certain dates, is not codified in 50 CFR 32.24, but is in effect pursuant to 50 CFR sections 32.3 and 25.31 (Oct. 1, 2018). Consistency between the state and federal regulations avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

552(a)(6)(K): The proposed changes to this section would add the words “to be Hunted” following “Authorized Species”. See the above justification for adding “to be Hunted” to 552(a)(1)(C). Additionally, text prohibiting the hunting of all other species on the SRNWR is proposed to be deleted. It is unnecessary because the only species allowed to be hunted are already listed in this subsection.

552(a)(7)(B): It is proposed to add text to this subsection that explains that while hunting is allowed 7 days a week on the Freitas Unit of the San Luis NWR, a department-issued permit is required on Saturdays, Sundays, and Wednesdays. The permit is obtained at the on-site hunter check-in station, which is a standard procedure on all areas where hunter entry is restricted during the waterfowl season. This



restriction is not codified in 50 CFR 32.24, but is in effect pursuant to 50 CFR sections 32.3 and 25.31 (Oct. 1, 2018). This change will improve consistency between the state and federal regulations. This avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

552(a)(7)(F): Note this section is currently subsection (7)(G). Proposed text would specify when the Freitas units (and their associated parking lot) are open to the public. This restriction is not codified in 50 CFR 32.24, but is in effect pursuant to 50 CFR sections 32.3 and 25.31 (Oct. 1, 2018). This change will improve consistency between the state and federal regulations. This avoids confusion for the public and for the staff from both agencies who cooperate on managing the San Luis NWR.

552(a)(7)(G): It is proposed to add this subsection which would authorize fishing in designated areas on the San Luis NWR and restrict the method of taking fish to rod and reel. This is already a requirement in 50 CFR 32.24 (Oct. 1, 2018). The change will make the state law consistent with the federal law for this NWR and will reduce confusion for the public and for staff from both agencies who cooperatively manage this property

552(a)(8)(F): It is proposed to add this subsection which authorizes fishing from a boat on the Sonny Bono NWR from April 1 to September 30 and prohibits all fishing from shore. This is already a requirement in 50 CFR 32.24 (Oct. 1, 2018). The change will make the state law consistent with the federal law for this NWR and will reduce confusion for the public and for staff from both agencies who cooperatively manage this property.

552(a)(9)(F): It is proposed to add “turkey” to the list of species that are illegal to hunt from the assigned blind area on the Sutter NWR. This change will be proposed for 50 CFR 32.24 in 2019 (Kempf, personal communication, 2019), and in the meantime, refuge managers are authorized to implement this restriction through public notification (50 CFR sections 32.3 and 25.31 (Oct. 1, 2018)). Adding “turkey” to this text will improve the consistency between the state and federal regulations. This avoids confusion for the public and for the staff from both agencies who cooperate on managing these NWRs.

#### Changes to Site-Specific Regulations for Ecological Reserves (Section 630)

630(a): The second sentence of this section provides an out-of-date address for the Department’s lands inventory files. The address is proposed to be deleted. Members of the public who wish to obtain a legal description or other information about Department properties typically contact the Department by email or telephone.

630(b)(4): The existing subsection does not show that the Allensworth Ecological Reserve now includes property in Kern County, so the name of that county is proposed to be added.

630(c): Deleted “trapping” from the list of licenses that provide the bearer with an exemption from the lands pass requirement on certain ecological reserves. This deletion is necessary because fur trapping will be prohibited statewide as of January 1, 2020, per AB 273 (Chapter 216, Statutes of 2019).

630(d)(10): Adding this subsection would authorize limited hunting on the proposed Cañada de San Vicente Ecological Reserve (CSVER), only on specific dates and times and in the specific location designated by the Department. These would be “special hunts” offered to a limited number of participants via a random drawing. These hunts are often offered to a category of hunters who particularly benefit from the more controlled circumstances of a special hunt, such as youth or disabled hunters. For young hunters in particular, special hunts provide an opportunity for the Department to reinforce important lessons about hunter safety, courtesy and ethics that are taught in the hunter safety class that is required to obtain a hunting license in California. A completed management plan for this property includes limited hunting as described here (California Department of Fish and Wildlife, 2016, excerpt included as Attachment 8).

630(d)(14): Adding this subsection would authorize limited hunting on the proposed Cienega Springs Ecological Reserve, only on specific dates and times and within specific areas designated by the Department. These would be “special hunts” offered on an occasional basis to a limited number of participants via a random drawing. These hunts are often offered to a category of hunters that would particularly benefit from the more controlled circumstances of a special hunt, such as youth or disabled hunters. For young hunters in particular, special hunts provide an opportunity for the Department to reinforce important lessons about hunter safety, courtesy and ethics that are taught in the hunter safety class that is required to obtain a hunting license in California

The Department will be creating a hunting opportunity where one does not currently exist, however bird hunting did take place in the Santa Clara River channel until the mid-1990s.

The Department would organize hunts to target a specific common game species. Based on the Department’s experience, these occasional limited opportunities will not have a significant effect on the target species’ population. It is not anticipated that limited regulated hunting would interfere with the primary purpose for which the Reserve was acquired nor would hunting have an adverse impact on non-hunted species or their habitats due to hunts only occurring outside of the breeding/nesting season.

The Department would provide appropriate signage and barriers to keep hunters outside of sensitive habitats and within designated hunting boundaries. Special hunts will be conducted outside of bird nesting season to avoid impacts to nesting birds.

The Department would hold pre-hunt meetings that provide hunters with safety, regulation, boundary, and other pertinent information needed to ensure protection of the public and non-targeted resources. This would also minimize or avoid any potential impacts to nearby development or agricultural operations.

Based on the Department’s experience and expertise in wildlife and natural lands management, by following the above-mentioned impact guidelines and other measures designed to eliminate or minimize impacts to resources; hunting as described above will have no significant or detrimental impacts. According to Fish and Game Code Section 1585, the department may construct facilities and conduct programs in ecological reserves it selects to provide natural history education and recreation if

those facilities and programs are compatible with the protection of the biological resources of the reserve.

630(d)(23): Adding this subsection would authorize limited hunting on the proposed Indian Wells Valley Ecological Reserve, only on specific dates and times and within specific areas designated by the Department. These would be “special hunts” offered to a limited number of participants via a random drawing. These hunts are often offered to a category of hunters that would particularly benefit from the more controlled circumstances of a special hunt, such as youth or disabled hunters. For young hunters in particular, special hunts provide an opportunity for the Department to reinforce important lessons about hunter safety, courtesy and ethics that are taught in the hunter safety class that is required to obtain a hunting license in California.

The Department would organize hunts to target common upland game species. Based on the Department’s experience, these occasional limited opportunities will not have a significant effect on the target species’ population. It is not anticipated that limited regulated hunting would unduly interfere with the primary purpose for which the Reserve was acquired nor would hunting have an adverse impact on non-hunted species or their habitats.

The Department would provide appropriate signage and barriers to keep hunters within designated hunting boundaries. Special hunts will be conducted outside of bird nesting season to avoid impacts to nesting birds.

The Department would hold pre-hunt meetings that provide hunters with safety, regulation, boundary, and other pertinent information needed to ensure protection of the public and non-targeted resources.

Based on the Department’s experience and expertise in wildlife and natural lands management, by following the above-mentioned impact guidelines and other measures designed to eliminate or minimize impacts to resources; hunting as described above will have no significant or detrimental impacts. According to Fish and Game Code Section 1585: “The department may construct facilities and conduct programs in ecological reserves it selects to provide natural history education and recreation if those facilities and programs are compatible with the protection of the biological resources of the reserve”.

630(d)(28): Adding this subsection would authorize limited hunting on the proposed North Carrizo Ecological Reserve (NCER), only on specific dates and times and in the specific location designated by the Department. According to Fish and Game Code Section 1585: “The department may construct facilities and conduct programs in ecological reserves it selects to provide natural history education and recreation if those facilities and programs are compatible with the protection of the biological resources of the reserve.”

These special hunts are likely to focus on tule elk. They would conform with regulations adopted under Section 364, Title 14: “Elk Hunts, Seasons, and Number of Tags”. The parcels in the proposed NCER were previously privately-owned lands that were enrolled in the Private Lands Management (PLM) hunting program administered by the Department. Since the Department’s acquisition of the property in 2011, no hunting as

occurred because undesignated Department lands are not open to public use (Section 550(a)).

The NCER is located within the La Panza Tule Elk Management Unit. For 15 years prior to the Department's acquisition, approximately 46 elk were harvested each year from the proposed NCER, and adjacent private lands and the herd size remained stable at around 110 animals. Since that time, the allowable elk harvest on the adjacent PLM lands has been 25 elk each year, and the elk population has almost doubled in size to 200 animals. Providing limited and supervised elk hunting opportunities would be consistent with prior hunting activities and with the recently approved elk management plan for California (California Department of Fish and Wildlife, 2018, excerpt included as Attachment 9). The issues identified with general public access to the NCER (see justification below for 630(h)(29)) would not be a problem for the special hunts because Department personnel would supervise any hunting activities.

630(g)(2): Adding this regulation would authorize limited horseback riding on an existing trail within the proposed Cañada de San Vicente Ecological Reserve (CSVER). Horseback riding would be limited to the trail from Holly Oaks Park and the Luelf Pond OSP trail to Southern Oak Road. The trail crosses the boundary into the ecological reserve for approximately one quarter mile before exiting onto adjacent public land. According to Fish and Game Code Section 1585: "The department may construct facilities and conduct programs in ecological reserves it selects to provide natural history education and recreation if those facilities and programs are compatible with the protection of the biological resources of the reserve". The management plan for CSVER envisioned that pedestrian and equestrian use of this trail would be an exception to the general closure to public access on this property, and the associated mitigated negative declaration found that this would have a less than significant effect. (Department of Fish and Wildlife, 2016 (Volume 2, page 16)).

630(h): It is necessary to add text after the title for this subsection to improve clarity and enforceability by explaining that closed ecological reserves shall not be entered by the public. At the same time, the added text also clarifies that there are instances when the Department may allow access through written authorization. Typically, this is for environmental education or research activities. Department staff experience indicates that this clarification will reduce confusion for both the public and some Department staff.

630(h)(10): Delete the two references to "(9)" from the text in this subsection. These references are unnecessary and may create future organizational issues for 630(d) and 630(e).

630(h)(11): Adding this regulation would close the proposed Cañada de San Vicente Ecological Reserve (CSVER) to visitor use with the exception of hiking and horseback riding on the existing trail from Holly Oaks Park and the Luelf Pond OSP trail to Southern Oak Road, and occasional Department-organized special hunts (see above, subsection 630(d)(10)).

This closure is recommended for the following reasons:

- With the exception of the single public hiking and horseback riding connector trail that connects Holly Oaks Park and Luelf Pond Open Space Park (OSP) to Southern Oak Road, CSVER is land-locked on the south, east, and west by Native American Reservation land and/or private property. Because of this situation, other trails on the property would have no 'through-route' capability, only an 'out and-back loop' trail. The Department, based on its expertise and experience, thinks this would cause an over-use of these trails and impacts to surrounding habitat and wildlife.
- Of particular concern is trail use in close proximity to San Vicente Creek, which is known to contain federally-listed species, and trail use within the buffer zone of a nesting site used by a pair of golden eagles.
- Open public trails within the main portion of the Reserve would likely interfere with current and future research and restoration activities within the Reserve.
- There is limited Department staffing available to monitor and patrol the Reserve.

Details regarding special hunts and horseback riding on CSVER, are discussed above in the justifications for changes to subsections 630(d)(10) and 630(g)(10).

630(h)(18): This subsection would be amended to close the Del Mar Mesa/Lopez Ridge Ecological Reserve (DMMER) to visitor access. DMMER was acquired as mitigation for impacts caused by development projects to chamise chaparral, scrub oak chaparral, Diegan coastal sage scrub, and vernal pools habitats. The vernal pools at DMMER include three species that are federally-listed as endangered: San Diego mesa mint (*Pogogyne abramsii*), San Diego button celery (*Eryngium aristulatum* var. *parishii*), and San Diego Fairy Shrimp (*Branchinecta sandiegonensis*). The mesa mint and button celery are also state-listed as endangered. A fourth species, spreading navarretia (*Navarretia fossalis*) is federally-listed as threatened. Other sensitive species on the site include San Diego golden star (*Bloomeria clevelandii*) which exists only in coastal scrub and grassland habitats in a strip running from San Diego County into Baja California; western spadefoot toad (*Spea hammondi*) and San Diego horned lizard (*Phrynosoma coronatum blainvillii*). Much of the surrounding area receives heavy use by hikers, mountain bikers, equestrians, and off-road vehicles. Because of the high sensitivity of the biological resources on-site and the intensive recreational use surrounding the reserve, the Department has kept the DMMER fenced and closed to public use through the Department's authority under subsection 550(c)(2)(D). However, trespass is a frequent problem on this property. It is the Department's opinion, based on its expertise and experience in managing properties for the protection of listed species, that it is necessary to formally close this property through the proposed regulation to clarify its status for the public and provide adequate protection for the sensitive natural resource on-site.

630(h)(22): Adding this regulation would close the proposed Indian Wells Valley Ecological Reserve to visitor use with the exception of occasion Department-managed special hunt opportunities. The property was acquired to mitigate the loss of habitat for desert tortoise (*Gopherus agassizii*), which is state and federally-listed as threatened, and for the Mojave ground squirrel (*Xerospermophilus mohavensis*) which is state-listed as threatened. There is also sensitive desert wash habitat onsite, which tends to have greater bird species diversity than upland desert habitats. According to the land

management summary for this property (Attachment 2), there is possibility that this site will be connected to additional mitigation lands, which would further enhance its habitat value. To maintain the high level of protection that is appropriate for a mitigation site, the Department, based on its experience and expertise in the management of sensitive species and habitats, recommends closing this property to general visitor access. There is a history of hunting in the area, particularly for upland game birds, therefore, the Department recommends allowing occasional, Department-managed special hunts. More details regarding possible special hunts on this property are provided in the above discussion for the addition of subsection 630(d)(23).

630(h)(29): Adding this regulation would close the proposed North Carrizo Ecological Reserve (NCER) to all visitor use except for occasional special hunt opportunities. This site was protected to mitigate for impacts to listed species described above in the justification for the designation of this property as an ecological reserve (proposed subsection 630(b)(89). Based on the Department's experience and expertise in managing sensitive species and habitats, protection of these resources would not be assured if unsupervised public access were allowed. Areas open to public access on the Carrizo Plains National Monument to the south have been subject to illegal OHV use, vandalism, poaching, and habitat degradation. The justification to allow occasional Department-managed special hunts on the proposed is provided above for the addition of subsection 630(d)(28).

630(h)(32): Delete the reference to "(33)" from the text in this subsection. This reference is unnecessary and may create future organizational problems for this subsection.

630(h)(34): Delete the reference to "(25)" from the text in this subsection. This reference is unnecessary and may create future organizational issues for this subsection.

630(h)(37): The 251-acre property that comprises the proposed Santa Margarita River Ecological Reserve is currently closed to the public, and if this proposed regulation is adopted, it would remain closed after its designation. The justification for the closure is that the subject property is part of a larger open space area that is closed to general public use due to the environmental sensitivity of the area and the need to maintain the integrity of many research sites. This area, including the Department's property, is managed primarily by San Diego State University (SDSU) under a cooperative agreement. Through this agreement, there are organized group hikes, school field trips and other interpretive activities on less sensitive portions of the larger reserve. The Department's property is adjacent to a wildlife underpass below Highway 15. Human activity has been associated with reduced use of wildlife underpasses (see Attachment 10).

630(h)(40): The Stone Ridge Ecological Reserve is currently closed to all visitor access and use. In addition to stating the closure, the existing language provides an exemption for department authorized interpretive, educational or research programs. This site-specific exemption for education and research is redundant and is proposed for removal.

Section 550(c)(2)(D)(2) allows entry to closed Department lands with written authorization from the Department. Authorization to conduct educational or research activities on Department lands is addressed in subsections 550(e) and (f).

#### Minor Changes to Special Use Permit Regulations (702)

702(d)(1)(A): This section refers to the application form for Special Use Permits, which is currently “DFW 730 (New 01/14)”. “New 01/14” will be replaced with “REV Month/20” if the Commission adopts the proposed changes to the form. This change will maintain consistency with the standard practice of how state forms are numbered.

Proposed changes to the “Special Use of Department Lands Permit Application” are in Attachment 11, and the justifications for those changes are in Attachment 12.

702(d)(1)(B) through (G): The phasing in of the Special Use Permit fees from 2014 through 2017 is complete and those fee amounts are proposed to be deleted because they are no longer necessary. The subsections of the regulation are re-numbered accordingly. The fees in these subsections are proposed to be made current in accordance with subsection 702(d)(2), pursuant to Section 699, Title 14, CCR and Fish and Game Code Section 713. The latter is the statutory mandate that Department fees shall be annually updated according to the method provided in that section. The application of this requirement has no regulatory effect since no new fee is proposed:

	Fee currently in regulation (starting 1/1/2017)	Updated fee (eff. 1/1/ 2020)
Type 1 Special Use Permit	\$122.50	\$132.75
Type 2 Special Use Permit	\$308.25	\$502.25
Type 2 Special Use Permit	\$462.50375.25	\$582.00

#### (b) Goals and Benefits of the Regulation:

The proposed regulations will allow the Department to pursue its mission to manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public.

#### (c) Authority and Reference

##### Section 550:

Authority cited: Sections 200, 203, 265, 710, 710.5, 710.7, 1050, 1530, 1583, 1745, 1764, 1765, 3003.1, 3004.5, 3039, 4001, 4004, 4150 and 10504, Fish and Game Code.

Reference: Sections 355, 711, 713, 1050, 1055.3, 1301, 1526, 1528, 1530, 1570, 1571, 1572, 1580, 1581, 1582, 1583, 1584, 1585, 1745, 1761, 1764, 1765, 1907, 2006 and 10504, Fish and Game Code; and Sections 25455, 26150 and 26155, Penal Code.

Code.

##### Section 550.5:

Authority: Sections 200, 1050, 1530, 1764, 1765, 3031 and 10504, Fish and Game Code. Reference: Sections 355, 711, 713, 1050, 1055.3, 1526, 1528, 1530, 1764,



1765, 2006, 2020, 10504 and 12000, Fish and Game Code; and Section 14998, Government Code.

Section 550.5:

Authority: Sections 200, 203, 205, 265, 355, 710, 710.5, 710.7, 1050, 1530, 1583, 1745, 1764, 1765, 3003, 1, 3039, 4001, 4004, 4150 and 10504, Fish and Game Code.

Reference: Sections 355, 711, 713, 1050, 1055.3, 1301, 1526, 1528, 1530, 1570, 1571, 1572, 1580, 1581, 1582, 1583, 1584, 1585, 1745, 1761, 1764, 1765, 2006 and 10504, Fish and Game Code; Sections 5003 and 5010, Public Resources Code; and Sections 25455, 26150 and 26155, Penal Code.

Section 552:

Authority: Sections 200, 203, 265, 710, 710.5, 710.7, 1050, 1530, 1764, 1765 and 10504, Fish and Game Code.

Reference: Sections 355, 711, 713, 1050, 1055.3, 1526, 1528, 1530, 1570, 1571, 1572, 1761, 1764, 1765, 1907, 2006 and 10504, Fish and Game Code.

Section 630:

Note: Authority cited: Sections 200, 203, 265, 710, 710.5, 710.7, 1050, 1530, 1583, 1587, 1745, 1764, 1765 and 10504, Fish and Game Code.

Reference: Sections 355, 711, 713, 1050, 1055.3, 1526, 1528, 1530, 1570, 1571, 1572, 1580, 1581, 1582, 1583, 1584, 1585, 1745, 1761, 1764, 1765, 1907, 2006 and 10504, Fish and Game Code.

Section 702:

Authority cited: Sections 200, 203, 265, 331, 332 and 1050, Fish and Game Code.

Reference: Sections 200, 203, 203.1, 265, 331, 332, 713, 1050, 1055, 1055.1, 1570, 1571, 1572, 1573, 1745, 3950, 3951, 4302, 4330, 4331, 4332, 4333, 4336, 4340, 4341, 4652, 4653, 4654, 4655, 4657, 4750, 4751, 4752, 4753, 4754, 4755, 4902, 10500 and 10502, Fish and Game Code.

(d) Specific Technology or Equipment Required by Regulatory Change: None

(e) Identification of Reports or Documents Supporting Regulation Change:

Attachment 1: California Department of Fish and Wildlife. 2019. Map indicating the approximate location of CDFW lands that are proposed in this ISOR to be added to, or deleted from, Title 14, California Code of Regulations.

Attachment 2: California Department of Fish and Wildlife. 2019. Department of Fish and Game Land Management Summaries September 2019. This document is a compilation of unpublished reports on-file at the Department of Fish and Game Lands Program, Sacramento, CA. For current contact information: <http://www.dfg.ca.gov/lands/>

Attachment 3: Documents related to the termination of land management by the Department of Fish and Wildlife on the Lake Berryessa Wildlife Area, Yaudanchi Ecological Reserve, and South Fork Wildlife Area.

Attachment 4: California Department of Fish and Wildlife. October 2011. Final Napa-Sonoma Marshes Land Management Plan. Excerpted page 3-116.

<https://www.wildlife.ca.gov/Lands/Planning/Napa-Sonoma-Marshes-WA>

Attachment 5: San Diego Wildlife Federation. 2018. Letter/Petition to the California Fish and Game Commission. December 5, 2018.

Attachment 6: Garrett Spaan, 2019. Email correspondence from Garrett Spann, Visitor Services Specialist, Sacramento National Wildlife Refuge Complex, U.S. Fish and Wildlife Service, to Glenn Underwood, Staff Services Manager, License and Revenue Branch, California Department of Fish and Wildlife. May 24, 2019, regarding the expiration time for hunting reservations on the Delevan National Wildlife Refuge.

Attachment 7: United States Fish and Wildlife Service. October, 2019. Letter and enclosures from Anthony Merrill, Regional Chief, Division of Refuge Law Enforcement, Pacific Southwest Region-8, National Wildlife Refuge System, U.S. Fish and Wildlife Service, to Julie Horenstein, Lands Program California Department of Fish and Wildlife, Sacramento CA.

Attachment 8: California Department of Fish and Wildlife. 2016. Cañada de San Vicente Vol 1: Final Land Management Plan. Prepared by the Southern Service Center, California Department of Parks and Recreation. State Clearinghouse #2015051017. Feb 2016. Excerpted pages 4-44 – 4-46. <https://www.wildlife.ca.gov/Lands/Planning/Canada-de-San-Vicente>

Attachment 9: Elk Conservation and Management Plan, December 2018, Appendix E: La Panza Tule Elk Management Unit. Excerpted pp E260-E262, E266-267. <https://www.wildlife.ca.gov/Conservation/Mammals/Elk>

Attachment 10: Clevenger, Anthony & Waltho, Nigel. 2000. Factors Influencing the Effectiveness of Wildlife Underpasses in Banff National Park, Alberta, Canada. Conservation Biology. Vol. 14. DOI: 10.1046/j.1523-1739.2000.00099-085.x. Excerpted abstract.

Attachment 11: Proposed updates to the “Special Use of Department Lands Permit Application” (currently DFW-730 (New – 01/2014))

Attachment 12: Justifications for the proposed updates to the “Special Use of Department Lands Permit Application”.

#### Additional References:

California Department of Fish and Wildlife, Natural Diversity Database. August 2019. Special Animals List. Periodic publication. 67 pp. <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>

Coats, P.S., Brussee, B.E., Howe, K.B., Fleskes, J.P., Dwight, I.A., Connelly, D.P., Meshriy, M.G. and Gardner, S.C. 2017. Long-term and widespread changes in agricultural practices influence ring-necked pheasant abundance in California. Ecology and Evolution. 7: 2546 – 2559. DOI:10.1002/ece3.2675

San Diego County. 1997. Multiple Species Conservation Program. County of San Diego Subarea Plan. 156pp.

[https://www.sandiegocounty.gov/content/dam/sdc/pds/mscp/docs/SCMSCP/MSCP\\_CountySubarea\\_Plan.pdf](https://www.sandiegocounty.gov/content/dam/sdc/pds/mscp/docs/SCMSCP/MSCP_CountySubarea_Plan.pdf)

(f) Public Discussions of Proposed Regulations Prior to Notice Publication:

Four public outreach meetings to discuss the possible changes to the lands regulations and how to participate in the rulemaking process were held in June 2019. They were held from 6:00 to 8:00 p.m. on the following dates and locations:

Tuesday, June 18	Monday, June 24
California Department of Fish and Wildlife	Grassland Environmental Education Center
South Coast Region Headquarters	Los Banos Wildlife Area
3883 Ruffin Road	18110 Henry Miller Ave.
San Diego, CA 92123	Los Banos, CA 93635
Wednesday, June 19	Tuesday, June 25
Oroville Branch Library	Yolo Bypass Wildlife Area
1820 Mitchell Ave.	45211 County Road 32B (Chiles Road)
Oroville, CA 95966	Davis, CA 95618

San Diego Meeting: Fifty people signed the sign-in sheets, but approximately 60 people attended. About one-third of the group were concerned with opening more Department lands to mountain biking, one third of the group were interested in having greater hunting opportunities on Department lands, and the remainder represented a variety of other interests, or mentioned that they had attended just to listen.

Oroville Branch Library Meeting: One person attended. He was a representative from the California Rifle and Pistol Association and was interested in opportunities for more shooting sports on Department lands, particularly hunting.

Grassland Environmental Education Center Meeting: Two people attended, both hunters who were interested in learning about what changes were being considered for the land regulations.

Yolo Bypass Wildlife Area Meeting: Eight people attended. Two were supportive of bike riding being proposed at Napa-Sonoma Marsh Wildlife Area. Several supported more access for hunting, and one was concerned about whether there would be negative impacts to natural resources as a result of the Department no longer managing certain properties (due to the end of management agreements, or land exchanges).

#### IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change:

No alternatives were identified by or brought to the attention of the Commission staff that would have the same desired regulatory effect. No adverse impact is anticipated for small businesses.

(b) No Change Alternative:

Without the proposed changes, the designation of seven ecological reserves and one wildlife area would not take place. Through designating these properties, four will offer at least occasional public use opportunities, such as special hunts and educational activities. Three will generally be open to authorized public uses. Additional public uses that would be added in this regulation package on specific properties would not be allowed. The Bolsa, XYZ and ABC units of the Truckee River Wildlife Area will continue to be used for shooting sports, even though these units are far less appropriate for these uses from a public safety standpoint than the nearby larger units of that wildlife area.

(c) Description of Reasonable Alternatives That Would Lessen Adverse Impact on Small Business:

No adverse impact on small business is expected as a result of the proposed changes to the subject regulations.

V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed. Please refer to the Negative Declaration enclosed with this regulation package.

VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States:

The proposed action will not have significant statewide adverse economic impacts directly affecting business, including the ability of California businesses to compete with businesses in other states because the regulatory actions affect undeveloped land and are not anticipated to have any net impact on recreational uses.

(b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment:

The proposed action will not impact the creation or elimination of jobs within the state, the creation of new businesses or the elimination of existing businesses, or the expansion of businesses in California because the regulatory actions affect undeveloped land and are not anticipated to have any net impact on recreational uses. No benefits to worker safety are anticipated because this regulatory action will not impact working conditions. The proposed site-specific regulation changes for certain properties are expected to benefit the health and welfare of California residents by increasing public safety and recreational opportunities and benefit the environment by improving resource protection and the management of staff resources.

(c) Cost Impacts on a Representative Private Person or Business:

The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:

The California Department of Fish and Wildlife (Department) may experience a small increase in draw application fees for additional special hunts that have been proposed, as well as a small decrease in one-day or two-day hunting passes because some pheasant hunts are proposed to be no longer permitted in certain Type A wildlife area lands. The net revenue change is estimated to be \$149.52 per budget year.

The proposed changes are to designate seven ecological reserves and one wildlife area. Through designating these properties, four will offer at least occasional public use opportunities, such as special hunts and educational activities. Three will generally be open to authorized public uses.

The proposed regulation changes would increase special hunt opportunities offered to a limited number of participants via a random drawing. These hunts are often offered to a category of hunters that would particularly benefit from the more controlled circumstances of a special hunt, such as youth or disabled hunters.

Most of the proposed special hunt opportunities would be for upland game. One would be for tule elk. The anticipated number of applicants for each new special hunt and potential new revenue is shown in Table 1. The draw application fee for an upland game special hunt is \$2.42, and the application fee for tule elk is \$8.13. The estimated new revenue for the proposed upland game bird and tule elk special hunts is estimated to be as much as \$653.40.

Some proposed changes would decrease public use opportunities such as the elimination of early season pheasant hunting days on seven Central Valley Type A wildlife areas. Regular shoot days for the Type A wildlife areas during the waterfowl hunting season (basically September through January) are Saturday, Sunday, and Wednesday. No hunting occurs outside of those days for waterfowl or any other species, except for the possibility that pheasant could be permitted. In the current regulations (subsections within 551(s)) there are exceptions to the regular shoot days on seven Type A wildlife areas. Depending on the property, five to twelve consecutive days of pheasant hunting are allowed at the beginning of the six-week pheasant season which begins in early November.

However, starting approximately nine years ago, because of the steep decline in the wild pheasant population, the Department has annually issued a press release that excluded nearly all those extra pheasant hunt days. The Department had to exercise its authority to restrict or close a public use for conservation purposes. Only one extra day was retained on two properties via the press releases: the first Monday of pheasant season on Gray Lodge and Upper Butte Basin. In practice, this one day on two areas have been the only extra opportunity available, regardless of the current language in Section 551(s). So functionally, the proposed regulatory change would be a very small change from the current practices over the last nine years.

In order to hunt on a Type A wildlife area, people must purchase a hunting pass. One-day, two-day, and season-long hunting passes are sold through the Department's online license sales program. The current fee for a one-day Type A hunting pass is \$21.42. The current fee for a two-day hunting pass is \$36.21.

The hunter participation on "pheasant Mondays" in recent years at Gray Lodge and Upper Butte Basin has been very low compared to regular weekend shoot days. The Department estimates that five one-day passes are sold for each property for the first Monday, and four two-day passes are sold for each property for hunting on Sunday and Monday. If this day is no longer available for upland game hunting on those two properties, this could result in a total loss of \$503.88 in hunting pass sales.

The Department estimates that removing this one-day from two properties will not affect the sale of season-long hunting passes, hunting licenses or upland game stamps.

In sum, the proposed rulemaking could result in \$653.40 in new revenue to the Department along with a reduction in revenue estimated to be about \$503.88, resulting in a \$149.52 net revenue change for the Department that is absorbable within existing budgets and resources.

(e) Nondiscretionary Costs/Savings to Local Agencies: None.

(f) Programs Mandated on Local Agencies or School Districts: None.

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None.

(h) Effect on Housing Costs: None.

## VII. Economic Impact Assessment

(a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State:

No impacts to the creation or elimination of jobs within the state is anticipated because the regulatory actions affect undeveloped land and are not anticipated to have any net impact on recreational uses.

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State:

No impacts to the creation of new businesses or the elimination of existing businesses within the state is anticipated because the regulatory actions affect undeveloped land and relate solely to recreational uses. However, any increase in compatible recreational opportunities could provide some benefit to businesses that provide recreational equipment, and supplies, and local businesses that sell food or other goods to people who recreate on Department lands.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

No impacts to the expansion of businesses currently doing business within the state is anticipated because the regulatory actions affect undeveloped land and relate solely to

recreational uses. However, any increase in compatible recreational opportunities could provide some benefit to businesses that provide recreational equipment, and supplies, and local businesses that sell food or other goods to people who recreate on Department lands.

(d) Benefits of the Regulation to the Health and Welfare of California Residents:

The site-specific regulation changes for certain properties are proposed to improve public safety and increase recreational opportunities, thus benefitting the health and welfare of California residents.

(e) Benefits of the Regulation to Worker Safety:

No benefits to worker safety are anticipated because this regulatory action will not impact working conditions

(f) Benefits of the Regulation to the State's Environment:

The site-specific regulation changes for certain properties are anticipated to benefit the State's environment through the improvement of resource protection and the management of staff resources.

(g) Other Benefits of the Regulation:

Ecological reserves and wildlife areas provide venues for science education and scientific research.



## Regulatory Language

**Section 550, Title 14, CCR, is amended to read:**

**§ 550. General Regulations for Public Use on All Department of Fish and Wildlife Lands.**

(a) All department land, except for fishing access and public access lands, is closed to visitor access and use until and unless the land is opened for a use or uses through regulations adopted by the commission in sections 550, 550.5, 551, 552, 630, and 702 of these regulations. The commission determines whether proposed designations and uses are consistent with the authorizing and reference statutes listed at the end of this section and the purposes for which the lands were acquired. Each proposed designation or use is subject to review pursuant to state and federal regulatory requirements prior to being authorized.

(b) Definitions.

(1) "Department land" is defined as:

(A) any state-owned real property over which the department has jurisdiction and management authority;

(B) real property over which the department has management authority through a current lease, memorandum of understanding, management agreement, or similar document;

(C) real property designated by the commission as a wildlife area (Section 551 of these regulations);

(D) real property designated by the commission as an ecological reserve (Section 630 of these regulations);

(E) real property held or administered by the department as a fishing access;

(F) real property held or administered by the department as a public access;

(G) real property designated by the commission as a public shooting area.

(2) "Compatible uses" is defined as ~~visitor~~-uses that are consistent with the purposes and management of a particular department land. Predominant compatible uses on department lands are hunting, fishing, wildlife viewing, wildlife photography, environmental education and/or environmental research.

(3) "Environmental education" is defined as:

(A) department administered or sponsored interpretive programs offered to the public; or

(B) activities to increase the understanding and appreciation of wildlife and the natural environment conducted by organized youth or school groups.

(4) "Environmental research" is defined as the field study of biological, physical, or cultural processes or values with the primary purpose of improving the understanding of the natural environment.

(5) "Visitor" is defined as any person, other than a department employee or designee performing official duties, who enters department land.

(6) "Entry permit" is defined as a permit which allows entry to specified department land for department-authorized activities where general access is restricted per subsection 550(c)(2)(D). Entry permits may require payment of a fee to the department.

(7) "Hunting Pass" is defined as a proof of payment of a fee that must be presented by a visitor in order to obtain an entry permit to hunt on specified ~~Department~~department lands.

(8) "Lands Pass" is defined as a proof of payment of a fee for entry for authorized uses other than hunting that is required of visitors who are not carrying a valid hunting, fishing or trapping license on ~~Department~~department lands listed in subsections 551(w) and 630(c).

(9) "Special use" is defined as an activity, use, event or gathering on department land that is not authorized in sections 550, 551 or 630 of these regulations but which may be allowed with written authorization from the department; typically in the form of a Special Use Permit. When allowed, special uses occur on a limited basis as defined in the Special Use Permit or other authorizing document. An authorized special use on department land shall not conflict with the normal uses, purposes or management of the department land.

(10) "Reservation" is defined as a randomly drawn application that assures entry onto a wildlife area, when presented with the appropriate entry pass as specified in Section 550.5(c), if applicable.

(11) "Non-shooter" is defined as a visitor who accompanies a hunter in the field or remains at a designated parking area.

~~(11)~~(12) "Fishing" for the purposes of department land is defined as angling as defined in Section 1.05 of these regulations, or as taking fish on department wildlife areas using bow and arrow fishing tackle as defined in Section 1.23 of these regulations.

~~(12)~~(13) "Hunting" for the purposes of department land is defined as the legal take (as take is defined in Fish and Game Code Section 86) of wildlife species pursuant to sections 550, 550.5, 551, 552, and 630 of these regulations, in addition to the general hunting regulations for seasons and method of take. The provisions of sections 550, 550.5, 551, 552, and 630 shall have precedence over general hunting regulations on department land where there may be differences between them.

~~(13)~~(14) "Camping" for the purposes of department land is defined as an overnight or after-hours visitor stay which may include a vehicle, trailer, motor home, boat, tent, or any other type of vehicle or shelter.

~~(14)~~(15) "Wildlife viewing" for the purposes of department land is defined as pedestrian use of roads or designated trails when and where authorized by the department.

~~(15)~~(16) "Dog training" for the purposes of department land is defined as the noncommercial act of training a hunting dog to improve the dog's performance in hunting migratory or upland game birds and retrieval of downed game, and to enhance the hunting experience.

~~(16)~~(17) "Dog trial" for the purposes of department land is defined as an organized competitive or scored event for testing hunting dog performance.

~~(17)~~(18) "Upland game birds" for the purpose of department land is defined as the upland game bird species listed in Fish and Game Code Section 3683.

#### (c) Visitor Entry and Responsibilities.

(1) Visitors are responsible for knowing and complying with all regulations pertaining to fishing, hunting, and use of department land. These regulations are incorporated by reference into and become a condition of all visitor entry, passes, entry permits, and

special use permits. Failure to comply with any such regulations is a violation of this section.

(2) Visitor entry onto department land is at the discretion of the department, which may limit entry as it deems appropriate, to manage and protect fish, wildlife, native plants, habitats and other natural resources. Entry may require payment of a fee, a pass and/or an entry permit as provided in subsection 550.5(c).

(A) Visitor entry, where authorized or designated, is for activities authorized according to sections 550, 550.5, 551, 552, or 630 of these regulations. It shall be unlawful to enter or use department land without complying with the applicable sections of these regulations.

(B) All visitors shall present and show valid entry permits; day, season or annual passes, licenses; and all fish and game taken on department land at the checking station or upon the request of any department employee. Visitors shall return all entry permits to the checking station or point of entry upon leaving department land.

**[No changes to subsections (c)(2)(C) through (cc)(1)]**

(2) Possession, discharge, and use of firearms or archery equipment is prohibited on department lands except within department-designated hunting areas or shooting sites, or with a permit issued by the department, or as authorized for dog training in a designated area, or when fishing with bow and arrow tackle as defined in subsection 550(b)(11) and allowed in subsection 550(h), ~~or when dispatching a trapped animal per subsections 465.5(g)(1) and 550(cc) of these regulations.~~ This prohibition includes air or gas operated devices or guns and all other propulsive devices.

**[No changes to subsections (cc)(3) through (dd)]**

~~(ee) Trapping: Trapping is allowed on Type C wildlife areas, subject to furbearer and trapping provisions in sections 460 through 467 and property-specific closures or restrictions in subsections 551(o) and 551(r) of these regulations.~~

Note: Authority cited: Sections 200, 203, 265, 710, 710.5, 710.7, 1050, 1530, 1583, 1745, 1764, 1765, 3003.1, 3004.5, 3039, 4001, 4004, 4150 and 10504, Fish and Game Code. Reference: Sections 355, 711, 713, 1050, 1055.3, 1301, 1526, 1528, 1530, 1570, 1571, 1572, 1580, 1581, 1582, 1583, 1584, 1585, 1745, 1761, 1764, 1765, 1907, 2006 and 10504, Fish and Game Code; and Sections 25455, 26150 and 26155, Penal Code. Code; and Sections 25455, 26150 and 26155, Penal Code.

**Section 550.5, Title 14, CCR, is amended to read:**

**§ 550.5. Reservations, Entry Permits, Fees, Passes, and Special Use Permits.**

(a) Reservations for Hunting Activities.

(1) Reservations for waterfowl and pheasant hunting are available for Type A wildlife areas for all authorized shoot days of the season. On Type B wildlife areas, reservations are required for the opening weekend of waterfowl season and may be required for the opening of pheasant season.

(A) Reservations shall be issued by random drawing. Applications are available through the Automated License Data System at license agents, department license offices and online. To find the locations of department license agents, department license offices or to apply for a reservation on-line, go to the department's website at [www.wildlife.ca.gov](http://www.wildlife.ca.gov). Applicants must possess an annual or lifetime hunting license valid for the hunting season for which they are applying. Two-day nonresident hunting licenses shall not be used to apply for reservation drawings. To be included in a reservation drawing, applications must be received by the department through the Automated License Data System ~~or at the address specified on the application~~ at least 17 days prior to the hunt date. Late, incomplete, or incorrect applications will not be included in the drawing. The fee to apply for a reservation is specified in Section 702 of these regulations. The application fee is non-refundable.

**[No changes to subsection (a)(1)(B) through (a)(1)(D)]**

(E) Except as provided in subsection 550.5(a)(1)(F) or subsection 551(x) of these regulations, a reservation shall be valid for entry for up to six visitors who must hunt as a party. No more than two visitors in a hunting party may be adult hunters (18 years of age or older as of July 1 of the licensing year). Each adult may be accompanied by up to two hunters holding junior hunting licenses or two non-shooters irrespective of age, or one of each. All hunters must be in possession of a valid hunting license. ~~Non-shooters are defined as visitors who accompany a reservation holder in the field or remain at a designated parking area.~~ Non-shooters (as defined in subsection 550(b)(11)) shall not discharge or possess ammunition or a firearm on the wildlife area.

(F) When hunting a designated hunting zone, assigned pond, or blind area, a reservation will assure entry only for the number of visitors (adult hunters, junior hunters, and/or non-shooters) that does not exceed the capacity of the designated zone, assigned pond or blind area.

(b) Reservations for Wildlife Viewing. Reservations for wildlife viewing may be available for certain department lands during peak viewing periods or when guided tours are offered. The department may limit the number of reservations available for each of these opportunities.

(c) Entry Permits, Fees, and Passes.

(1) Where the department has determined that entry permits are required per subsection 550(c)(2) of these regulations and/or that fees are necessary to offset the department's costs of providing public recreational opportunities, an appropriate pass

must first be purchased for a fee through the department's Automated License Data System at a license agent, department license office or on the department's website at [www.wildlife.ca.gov](http://www.wildlife.ca.gov). An entry permit will be issued only when an appropriate hunting pass is presented at the checking station or point of entry.

(2) Passes for hunting during the waterfowl season are sold as one day, two day, or Type A or Type B season hunting passes. Applicable fees are listed in subsection 702(b) of these regulations.

(3) Entry permits and hunting passes are required for waterfowl hunting on all Type A wildlife areas.

(4) Entry permits and proof of either a Type A or Type B season hunting pass are required for waterfowl hunting on all Type B wildlife areas. One or two day passes are not accepted at Type B wildlife areas.

(5) Entry permits and/or passes or special drawings may be required for hunting on Type C wildlife areas where the department has determined that restricted access is necessary per subsection 550(c) of these regulations (see subsection 551(q) of these regulations).

(6) Each visitor must have a valid entry permit in their immediate possession while on department lands that require an entry permit.

~~(7) Visitors with a valid junior hunting license are exempt from purchasing a daily or annual hunting pass but will only be issued an entry permit when accompanied by an adult and upon~~ Any visitor with a valid junior hunting license in their own name is exempt from purchasing a daily or annual hunting pass. A visitor who is under the age of 16 will only be issued an entry permit and allowed to hunt when carrying a valid hunting license in their own name and is accompanied by an adult. An adult is defined as a person 18 years old or older. An adult hunter or non-shooter may accompany up to two junior hunters on department lands.

8) Any visitor 16 or 17 years of age, in possession of a valid hunting license in that visitor's own name and a valid entry permit, ~~presenting a valid junior hunting license issued in his or her own name will be issued an entry permit and~~ may hunt independently. Hunters 16 or 17 years of age who hunt without an adult shall not be accompanied by any visitor under the age of 16. ~~15 years of age or younger.~~

#### **[No changes to subsection (c)(9) through (c)(12)]**

(d) Special Use Permits. Special uses, as defined in subsection 550(b)(9) of these regulations, on department lands require written authorization from the department. Such authorization will typically be in the form of a Special Use Permit (per subsections 550(d) and 550(n)(2) of these regulations). The department shall not issue Special Use Permits for activities or uses that conflict with the current uses, management or purposes of a department land, would have a significant environmental effect, or would constitute an unlawful use of state resources under Government Code Section 8314.

(1) Types of Special Use.

(A) Type 1 Special Use. A Type 1 special use is an activity that meets all of the following criteria:

1. involves 30 or fewer visitors on site;

2. involves ten or fewer (0-10) animals (such as dogs or horses) or bicycles (or other pedaled vehicles) in total;
3. does not require the use of animals, bicycles, vehicles, or large equipment outside of designated parking areas, roads, trails, or other areas authorized for visitor use; and
4. does not require use of the site for more than one calendar day during normal operating hours of the department land.

(B) Type 2 Special Use. A Type 2 special use is a hunting dog trial or testing event or activity.

(C) Type 3 Special Use. A Type 3 special use is an activity that meets any one of the following criteria:

1. involves more than 30 visitors on site;
2. involves more than ten animals or bicycles in total;
3. requires the use of animals, bicycles, vehicles, or large equipment outside of designated parking areas, roads, trails, or other areas authorized for visitor use; or
4. requires use of the site for more than one calendar day or outside of normal operating hours of the department land.

(2) Application Process for Special Use Permits.

(A) Application for a Special Use Permit shall be made on the "Permit Application for Special Use of Department Lands", as specified in Section 702 of these regulations. Failure to disclose fund-raising or commercial activities or other information per the instructions on the application may result in a citation and fine.

(B) Applications and Special Use Permit fees shall be submitted at least 45 days prior to the date of the requested activity or event to the appropriate regional office. The permit fees for Type 1, Type 2, and Type 3 Special Uses are specified in Section 702 of these regulations. ~~The entire permit fee must be paid before the application will begin to be processed. Additional fees or deposits, if any, will be due before the permit is approved.~~ Applications will not be processed unless they are complete, and the entire permit fee is paid.

~~1. If a special use event or activity is entirely canceled, Type 1 and Type 2 permit fees are refundable. After a Special Use Permit is approved, the Special use permit fees are refundable only if none of the approved activities have taken place and all of the activities and dates covered by the permit are cancelled in writing, in an email or hardcopy, submitted to the area manager or their designee.~~

2. Type 3 permit fees are only refundable until 10 calendar days prior to the scheduled start of any of the permitted activities the special use, after which the permit fee will be forfeited if the permittee cancels the special use. Cancellations prior to 10 calendar days before the start of a Type 3 special use must be provided to the area manager in writing as an email or hardcopy.

~~2-3.~~ All Special Use Permit fees are refundable if the department does not approve a special use permit application or does not have adequate staff available to review an application.

**[No changes to subsection 550.5(d)(3)]**

(4) Possible Costs In Addition to the Special Use Permit Fee.

(A) For department lands that normally require a fee for a Lands Pass or entry permit, the Lands Pass or entry fee will be required in addition to the Special Use Permit fee. Whether the ~~daily-use~~lands pass or entry fee for each special use participant will be paid directly to the department by the participants or by the permittee will be determined as part of the development of the Special Use Permit

(B) Additional Anticipated Costs. If the regional manager or his designee determines in advance that department staff will need to conduct work outside of normal duties or hours to prepare for the special use, monitor or assist with the special use, or return department land to its previous condition following the special use, payment of the additional anticipated cost to the department will be added to the Special Use Permit fee specified in Section 702 of these regulations and required to be paid as a condition of the department issuing a Special Use Permit. The additional cost shall be based on the estimated number of hours, the job classification of state personnel required to conduct the work, and the department's costs for employee benefits, overhead, mileage, and use of department equipment and supplies.

(C) Cleaning or Damage Deposit. Depending on the anticipated need for cleaning or repair to department property, including land, infrastructure and/or equipment, the department may charge the applicant a cleaning or damage deposit in an amount determined by the regional manager or his designee. Costs to return department property to its previous condition following the special use shall be deducted from this deposit. The regional manager or his designee shall determine whether all, a portion or none of the deposit is refunded based on department costs to clean up or repair damage.

(D) For-Profit or Fund Raising Activities. Any person, entity, or organization is prohibited from holding, sponsoring, leading, or otherwise conducting a recreational, educational, or other activity occurring wholly or partially within or on any department land for the purpose of generating revenue or fund raising without adequate compensation for the use of State resources. Applications for such events or activities are incomplete and will not be processed unless Attachment C (incorporated by reference in subsection 702) is complete and included with the application. Unless an event is sponsored or co-sponsored by the department, payment to the department of a guaranteed minimum fee or percentage of the gross revenue of the event shall be a condition of any Special Use Permit that authorizes activities on department land that are intended to generate revenue or raise funds. The rate or amount of compensation shall be specified in the draft Special Use Permit. The criteria used to determine the rate or amount of compensation shall include, without limitation:

1. the extent of the department land to be used;
2. the duration, size and scope of the event;
3. the anticipated impact on department resources and facilities;
4. prevailing fees for comparable facilities in the locality;
5. amount and type of permittee's equipment and materials to be used on the department land;
6. the number of people, vehicles, bicycles, and/or domestic animals on the department land because of the special use;



7. the amount of gross revenue the permittee expects to generate from the event;
8. the cost of services or time required of or by the department;
9. whether the applicant is a non-profit organization with tax-exempt status under section 501(c), Subtitle A of the U.S. Internal Revenue Code; and
10. any other considerations as appropriate.

(5) Terms and Conditions of Special Use Permits.

(A) To protect human health and safety, natural or cultural resources, or department facilities, the regional manager or his designee may impose special conditions in addition to the standard terms and conditions included in the Permit Application for Special Use of Department Lands as specified in Section 702. The department must provide notice of any special conditions as part of the notification of approval referenced in subsection 550.5(d)(3)(B) of these regulations.

(6) Acceptance of the Terms and Conditions of Special Use Permits and Payment of Fees.

(A) Type 1 or Type 2 Special Use Permit. The notification of approval for a Type 1 or Type 2 Special Use Permit will include a Special Use Permit signed by the wildlife area or ecological reserve manager and the regional manager or his designee. The Special Use Permit will include an attachment titled: Attachment B: Applicant Acceptance of Terms, Conditions and Costs as specified in Section 702. The Special Use Permit is not valid unless the permittee accepts the terms and conditions of the Special Use Permit by signing and submitting the signed original of Attachment B and the full payment of ~~the permit fee and all other costs~~ any additional fees, costs, charges or deposits indicated on the permit to the appropriate regional office at least five calendar days before the beginning of the event or activity. The permittee should make and keep a copy of the signed Attachment B with the Special Use Permit. Conducting a special use event or activity without a valid permit is a violation of subsections 550(c)(2)(A) and 550.5(d)(8) of these regulations.

(B) Type 3 Special Use Permit. The notification of approval for a Type 3 Special Use Permit will include a draft permit (not valid). The draft Special Use Permit will include an attachment titled: Attachment B: Applicant Acceptance of Terms, Conditions and Costs as specified in Section 702. In order to receive a final, valid Special Use Permit, the applicant must accept the terms and conditions of the Special Use Permit by signing Attachment B, and sending the signed original draft permit and the full payment of ~~the permit fee and all other costs~~ any additional fees, costs, charges or deposits indicated on the permit to the appropriate regional office at least ten calendar days before the beginning of the event or activity. After the Special Use Permit is signed by the wildlife area or ecological reserve manager and the regional manager or his designee, it will be mailed back to the permittee as the valid permit. Conducting a special use event or activity without a valid permit is a violation of subsections 550(c)(2)(A) and 550.5(d)(8) of these regulations.

(7) Valid Special Use Permit. A valid Special Use Permit includes the completed application, including the permit section of the form signed by the wildlife area or ecological reserve manager and the regional manager or his designee, and any and all attachments referenced in the Special Use Permit. In order for a Special Use Permit to

be valid, all costs that are required to be paid in advance, as indicated on the permit, must be paid-in-full by the permittee.

**[No changes to subsection 550.5(d)(8) through (d)(11)]**

Note: Authority cited: Sections 200, 1050, 1530, 1764, 1765, 3031 and 10504, Fish and Game Code. Reference: Sections 355, 711, 713, 1050, 1055.3, 1526, 1528, 1530, 1764, 1765, 2006, 2020, 10504 and 12000, Fish and Game Code; and Section 14998, Government Code.

**Section 551, Title 14, CCR, is amended to read:**

**§ 551. Additional Visitor Use Regulations on Department Lands Designated as Wildlife Areas.**

(a) The areas listed in Section 551 have been designated by the commission as wildlife areas. All wildlife areas are maintained for the primary purposes of developing a statewide program of ecological conservation, restoration, preservation, development and management of wildlife and wildlife habitat and hunting. A legal description of the boundaries of each wildlife area is on file at the department's headquarters, 1416 9th Street, Sacramento. Visitor use is subject to the regulations below and in sections 550 and 550.5, as well as any other sections of Title 14, CCR, and the Fish and Game Code that may apply. These regulations are incorporated by reference into and become a condition of entry and/or permits. Visitors are responsible for knowing and understanding these regulations prior to entry.

(b) Wildlife areas owned and operated by the department (Types A, B and C as defined in Section 551(e)) are as follows:

**[No changes to subsections (b)(1) through (b)(40)]**

- (41) Grizzly Island Wildlife Area (Solano County), including the Crescent (Type A), Crescent Family (Type A), ~~Gold Hills (Type B)~~, Goodyear Slough (Type B), Grey Goose (Type C), Grizzly Island (Type A), Island Slough (Type B), Joice Island (Type A), Long Point (Type A), West Family (Type B) and ~~Garibaldi, Cordelia and Montezuma Slough~~ management units;
- (42) Hallelujah Junction Wildlife Area (Lassen and Sierra counties) (Type C);
- (43) Heenan Lake Wildlife Area (Alpine County) (Type C);
- (44) Hill Slough Wildlife Area (Solano County) (Type C);
- (45) Hollenbeck Canyon Wildlife Area (San Diego County) (Type C);
- (46) Honey Lake Wildlife Area (Lassen County) (Type B);
- (47) Hope Valley Wildlife Area (Alpine County) (Type C);
- (48) Horseshoe Ranch Wildlife Area (Siskiyou County) (Type C);
- (49) Imperial Wildlife Area (Imperial County), including the Wister ~~Management Unit (Type A)~~ and Finney Ramer (Type C) Management Units ~~(Type G)~~;
- (50) Indian Valley Wildlife Area (Lake County) (Type C);
- (51) Kelso Peak and Old Dad Mountains Wildlife Area (San Bernardino County) (Type C);
- (52) Kinsman Flat Wildlife Area (Madera County) (Type C);
- (53) Knoxville Wildlife Area (Napa and Yolo counties) (Type C);
- (54) Laguna Wildlife Area (Sonoma County) (Type C);
- ~~(55) Lake Berryessa Wildlife Area (Napa County) (Type C);~~
- ~~(56)~~(55) Lake Earl Wildlife Area (Del Norte County) (Type C);
- ~~(57) Lake Sonoma Wildlife Area (Sonoma County) (Type C);~~
- ~~(58)~~(56) Little Panoche Reservoir Wildlife Area (Fresno County) (Type C);
- ~~(59)~~(57) Los Banos Wildlife Area (Merced County) (Type A);
- ~~(60)~~(58) Lower Sherman Island Wildlife Area (Sacramento County) (Type C);
- ~~(61)~~(59) Mad River Slough Wildlife Area (Humboldt County) (Type C);
- ~~(62)~~(60) Marble Mountains Wildlife Area (San Bernardino County) (Type C);
- ~~(63)~~(61) Mendota Wildlife Area (Fresno County) (Type A);
- ~~(64)~~(62) Merrill's Landing Wildlife Area (Tehama County) (Type C);
- ~~(65)~~(63) Miner Slough Wildlife Area (Solano County) (Type C);

~~(66)~~(64) Monache Meadows Wildlife Area (Tulare County) (Type C);  
~~(67)~~(65) Morro Bay Wildlife Area (San Luis Obispo County) (Type C);  
~~(68)~~(66) Moss Landing Wildlife Area (Monterey County) (Type C);  
~~(69)~~(67) Mouth of Cottonwood Creek Wildlife Area (Shasta and Tehama counties) (Type C);  
~~(70)~~(68) Mud Lake Wildlife Area (Siskiyou County) (Type C);  
~~(71)~~(69) Napa-Sonoma Marshes Wildlife Area (Solano, Napa, and Sonoma counties), including the American Canyon, ~~Green Island~~, Dutchman Slough, Huichica Creek, Napa River, Ringstrom Bay, Sonoma Creek, Tolay Creek, and Wingo management units (Type C); and Green Island, Southern Crossing, and White Slough management units;  
~~(72)~~(70) North Grasslands Wildlife Area (Merced and Stanislaus counties), including the China Island, Gadwall, and Salt Slough management units (Type A);  
~~(73)~~(71) O'Neill Forebay Wildlife Area (Merced County) (Type C);  
~~(74)~~(72) Oroville Wildlife Area (Butte County), including the Thermalito Afterbay Management Unit (Type C);  
~~(75)~~(73) Petaluma Marsh Wildlife Area (Marin and Sonoma counties), including the Black John Slough, Burdell, and Petaluma River management units (Type C); and Bahia, Day Island, Green Point, Novato Creek, Point Sonoma, and Rush Creek management units;  
~~(76)~~(74) Pickel Meadow Wildlife Area (Mono County) (Type C);  
~~(77)~~(75) Pine Creek Wildlife Area (Modoc County) (Type C);  
~~(78)~~(76) Point Edith Wildlife Area (Contra Costa County) (Type C);  
~~(79)~~(77) Putah Creek Wildlife Area (Solano County) (Type C);  
~~(80)~~(78) Rector Reservoir Wildlife Area (Napa County) (Type C);  
~~(81)~~(79) Red Lake Wildlife Area (Alpine County) (Type C);  
~~(82)~~(80) Rhode Island Wildlife Area (Contra Costa County) (Type C);  
~~(83)~~(81) Round Valley Wildlife Area (Inyo and Mono counties) (Type C);  
~~(84)~~(82) Sacramento Bypass Wildlife Area (Yolo County) (Type C);  
~~(85)~~(83) Sacramento River Wildlife Area (Butte, Colusa, and Glenn counties) (Type C);  
~~(86)~~(84) San Felipe Valley Wildlife Area (San Diego County) (Type C);  
~~(87)~~(85) San Jacinto Wildlife Area (Riverside County), including the Davis Road Unit and the Potrero Unit (Type A);  
~~(88)~~(86) San Luis Obispo Wildlife Area (San Luis Obispo County) (Type C);  
~~(89)~~(87) San Luis Reservoir Wildlife Area (Merced County) (Type C);  
~~(90)~~(88) San Pablo Bay Wildlife Area (Marin and Sonoma counties) (Type C);  
~~(91)~~(89) Santa Rosa Wildlife Area (Riverside County) (Type C);  
~~(92)~~(90) Shasta Valley Wildlife Area (Siskiyou County) (Type B);  
~~(93)~~(91) Sheepy Ridge Wildlife Area (Siskiyou County) (Type C);  
~~(94)~~(92) Silver Creek Wildlife Area (Lassen County) (Type C);  
~~(95)~~(93) Slinkard-Little Antelope Wildlife Area (Mono County) (Type C);  
~~(96)~~(94) Smithneck Creek Wildlife Area (Sierra County) (Type C);  
~~(97)~~(95) South Fork Wildlife Area (Kern County) (Type C);  
~~(98)~~(96) South Spit Wildlife Area (Humboldt County) (Type C);  
~~(99)~~(97) Spenceville Wildlife Area (Yuba and Nevada counties) (Type C);  
~~(100)~~(98) Surprise Valley Wildlife Area (Modoc County) (Type C);  
~~(101)~~(99) Sutter Bypass Wildlife Area (Sutter County) (Type C);  
~~(102)~~(100) Tehama Wildlife Area (Tehama County) (Type C);

~~(402)~~(100) Truckee River Wildlife Area (~~Placer and Nevada~~, Placer and Sierra counties); including the Boca, Canyon, Grey Creek Canyon, Polaris, Union Ice, and West River management units (Type C);

~~(403)~~(101) Upper Butte Basin Wildlife Area (Butte and Glenn counties), including the Howard Slough, Little Dry Creek, and Llano Seco management units (Type A);

~~(404)~~(102) Volta Wildlife Area (Merced County) (Type A);

~~(405)~~(103) Waukell Creek Wildlife Area (Del Norte County) (Type C);

~~(406)~~(104) Warner Valley Wildlife Area (Plumas County) (Type C);

~~(407)~~(105) West Hilmar Wildlife Area (Merced and Stanislaus counties) (Type C);

~~(408)~~(106) West Walker River Wildlife Area (Mono County) (Type C);

~~(409)~~ White Slough Wildlife Area (San Joaquin County) (Type C);

~~(410)~~(107) Willow Creek Wildlife Area (Lassen County) (Type B); and

~~(414)~~(108) Yolo Bypass Wildlife Area (Yolo County) (Type A).

(c) Areas owned and operated by federal agencies where public hunting opportunities are administered by the department are listed in this subsection. Additional regulations for the areas listed in this subsection are in Section 552 of these regulations.

(1) Baldwin Lake (San Bernardino County) (Type C);

(2) Colusa National Wildlife Refuge (Colusa County) (Type A);

(3) Delevan National Wildlife Refuge (Colusa County) (Type A);

(4) Kern National Wildlife Refuge (Kern County) (Type A);

~~(5)~~ Lake Berryessa Wildlife Area (Napa County) (Type C);

~~(6)~~(5) Lake Sonoma Wildlife Area (Sonoma County) (Type C);

~~(7)~~(6) Merced National Wildlife Refuge (Merced County) (Type A);

~~(8)~~(7) Sacramento National Wildlife Refuge (Glenn and Colusa counties) (Type A);

~~(9)~~(8) San Luis National Wildlife Refuge (Merced County) (Type A), including the San Luis, Kesterson, West Bear Creek, Freitas, and Blue Goose Units;

~~(40)~~(9) Sonny Bono Salton Sea National Wildlife Refuge (Imperial County) (Type A) (operated with the Imperial Wildlife Area); and

~~(44)~~(10) Sutter National Wildlife Refuge (Sutter County) (Type A).

(d) Areas operated by the department in cooperation with other state or federal agencies are:

(1) Clifton Court Forebay (Contra Costa County) (Type C);

(2) Little Panoche Reservoir Wildlife Area (Fresno County) (Type C);

(3) O'Neill Forebay Wildlife Area (Merced County) (Type C);

(4) Perris Reservoir State Recreation Area, area day use fee (Riverside County);

(5) Rector Reservoir Wildlife Area (Napa County) (Type C);

(6) Sacramento River National Wildlife Refuge, including the La BARRANCA Unit, Blackberry Island Unit, Mooney Unit, Ohm Unit, Flynn Unit, Heron Island Unit, and Rio Vista Unit (Tehama County); Pine Creek Unit, Dead Man's Reach Unit, North Llano Seco Island 1 & 2 Units, and Llano Seco Riparian Sanctuary Unit (Butte County); and McIntosh Landing North and South Units, Capay Unit, Phelan Island Unit, Jacinto Unit, Ord Unit, Ord Bend Unit, South Ord Unit, Hartley Island Unit, Sul Norte Unit, Codora Unit, Packer Unit, Afton Unit, North Drumheller Slough Unit, and Drumheller Slough Unit (Glenn County); Bogg's Bend Unit (Colusa County) (Type C).

(A) Additional regulations for the Sacramento River National Wildlife Refuge are in Section 552 of these regulations.

**[No changes to subsections (d)(7) through (i)]**

(j) Bicycles: Except for their use on roads or levees for transportation between parking lots and hunting areas during the waterfowl season on Type A or B wildlife areas, or as provided in this subsection, the use of bicycles by visitors is prohibited on wildlife areas (also see subsection 550(bb) of these regulations).

	AREA	BICYCLES
(1)	Cache Creek Wildlife Area	Allowed only on the Harley Gulch Unit from the third Saturday in April through the third Saturday in November.
(2)	Daugherty Hill Wildlife Area	Allowed only on the Daugherty Hill Unit from May 10 through September 15. Prohibited on other units.
(3)	Hollenbeck Canyon Wildlife Area	Allowed only on designated trails or routes.
<u>(4)</u>	<u>Napa-Sonoma Marshes Wildlife Area</u>	<u>Allowed only on the designated Bay Trail (designated trail and road) on the Green Island Unit, and the posted public access easement on the Southern Crossing Unit.</u>
<del>(4)</del> <u>(5)</u>	Oroville Wildlife Area	Allowed only on roads open to vehicles.
<del>(5)</del> <u>(6)</u>	San Felipe Valley Wildlife Area	Allowed only on designated trails or routes.
<del>(6)</del> <u>(7)</u>	San Jacinto Wildlife Area (Potrero Unit)	Allowed only on designated trails.
<del>(7)</del> <u>(8)</u>	Spenceville Wildlife Area	Allowed only on designated trails and roads.
<del>(8)</del> <u>(9)</u>	Upper Butte Basin Wildlife Area	Allowed only from one week after the end of waterfowl season until two weeks prior to opening of waterfowl season.
<del>(9)</del> <u>(10)</u>	Yolo Bypass Wildlife Area	Allowed only in designated areas.

**[No changes to subsections (k) through (n)]**

(o) Designated Closures and Restrictions on Wildlife Areas:

Nothing in this subsection shall prohibit the lawful possession of a concealed firearm as provided in subsection 550(cc)(1) of these regulations.

	AREA	DESCRIPTION OF CLOSURE OR RESTRICTION
(1)	Antelope Valley Wildlife Area	Closed to hunting from February 1 through June 30.

(2)	Ash Creek Wildlife Area	Portions of the area may be closed to all visitor entry from March 1 through August 15.
(3)	Baldwin Lake Wildlife Area	A hunter shall not possess more than 25 shot shells while in the field.
(4)	Battle Creek Wildlife Area	No hunting or possession of firearms or archery equipment. Dog training and trials are prohibited.
(5)	Butte Valley Wildlife Area	Closed to boating and water-related activity from March 1 through September 1.
(6)	Cache Creek Wildlife Area	The use of dogs for wild pig hunting is prohibited.
(7)	Cottonwood Creek Wildlife Area	Closed to hunting after the last Sunday in January to the opening of Zone A archery deer season. Dog training and trials are prohibited. The use of dogs for wild pig hunting is prohibited.
(8)	Crescent City Marsh Wildlife Area	No hunting or possession of firearms or archery equipment.
(9)	Daugherty Hill Wildlife Area	Closed to hunting February 1 through June 30 except for the spring turkey season when only turkeys may be hunted. Closed to all visitor entry during the first nine days of the spring turkey season except for special turkey permit holders.
(10)	Eel River Wildlife Area	Portions of the area are closed to vehicle entry from March 1 through September 15. Cannibal Island Unit is closed to all visitor use from the Monday following the end of youth hunting day (subsection 502(e)(1)(B)(5) of these regulations) through April 1.
(11)	Elk Creek Wetlands Wildlife Area	No hunting or possession of firearms or archery equipment.
(12)	Elk River Wildlife Area	Closed to all visitor use from the Monday following the end of youth hunting day (subsection 502(e)(1)(B)(5) of these regulations) through April 1.
(13)	Fay Slough Wildlife Area	Closed to all visitor use from the Monday following the end of youth hunting day (subsection 502(e)(1)(B)(5) of these regulations) through April 1.
(14)	Feather River Wildlife Area	Closed to hunting February 1 through June 30 except for the spring turkey season when only turkeys may be hunted. The Shanghai Bend Unit is closed to hunting. No person shall enter



		that portion of the O'Connor Lakes Management Unit marked as closed to entry from March 1 through June 30.
(15)	Fremont Weir Wildlife Area	Closed to hunting February 1 through June 30 except for the spring turkey season when only turkeys may be hunted.
(16)	Gray Lodge Wildlife Area	Closed to all non-hunting uses from two weeks prior to opening of waterfowl season through one week after end of waterfowl season except those areas designated for wildlife viewing purposes. The west side of the area is closed to falconry. Dove hunting allowed only in designated areas.
<del>(17)</del>	<del>Grizzly Island Wildlife Area (Garibaldi Unit)</del>	<del>Closed to the public</del>
<del>(18)</del> <u>(17)</u>	Grizzly Island Wildlife Area (Gold Hills, Goodyear Slough, Island Slough, West Family and Grey Goose Units)	A hunter shall not possess more than 25 shot shells while in the field during waterfowl season. Closed to all public use from the end of waterfowl season to September 30. Access to the Grey Goose Unit and the Goodyear Slough Unit to the south of Lake Herman Road and east of the eastern most railroad tracks is by boat only. <del>Gold Hills and Island Slough units are</del> <u>The Island Slough Unit is</u> open to hunting on Christmas Day when Christmas falls on a Saturday, Sunday or Wednesday.
<del>(19)</del> <u>(18)</u>	Grizzly Island Wildlife Area (Joice Island Unit)	Closed to public use except when permits are issued for waterfowl hunting, special wild pig hunts, and during the special season open to fishing from mid-May to mid-August (contact area headquarters for details).
<del>(20)</del>	<del>Grizzly Island Wildlife Area (Cordelia and Montezuma Slough units)</del>	<del>No hunting or possession of firearms or archery equipment.</del>
<del>(24)</del> <u>(19)</u>	Grizzly Island Wildlife Area (Grizzly Island Unit)	Dogs are prohibited from March 1 to June 30, all of August, and during the tule elk hunting season in September. Dogs may be used to assist in the take of game which is in season, authorized by area regulations and in portions of the area open to such take. Dogs are otherwise prohibited during October and through the end of waterfowl season. Closed to uses other than hunting from the last Monday in July to the end of the Grizzly Island tule elk season and from October 1 through the end of waterfowl season.
<del>(22)</del> <u>(20)</u>	Hallelujah Junction Wildlife Area	Closed to all visitor use from February 1 through June 30. Dogs are prohibited except for hunting.

<del>(23)</del> <u>(21)</u>	Hill Slough Wildlife Area	No hunting or possession of firearms or archery equipment.
<del>(24)</del> <u>(22)</u>	Hollenbeck Canyon Wildlife Area	Hunting is allowed in designated areas only. Closed to hunting February 1 through August 31, <u>except for crow hunting, which is allowed after January 31 until the end of the crow season in designated area(s) only.</u>
<del>(25)</del> <u>(23)</u>	Honey Lake Wildlife Area (Fleming and Dakin Units)	Portions of the area may be closed to all visitor use from March 1 through August 15.
<del>(26)</del> <u>(24)</u>	Hope Valley Wildlife Area	Closed to hunting from February 1 until the opening of archery deer season.
<del>(27)</del> <u>(25)</u>	Imperial Wildlife Area (Finney Ramer Unit)	A hunter shall not possess more than 25 shot shells while in the field during waterfowl season. Waterfowl hunting allowed only from boats and islands. Closed to hunting from February 1 through June 30.
<del>(28)</del> <u>(26)</u>	Imperial Wildlife Area (Wister Unit)	Closed to all non-hunting public uses from one week before the opening of waterfowl season through the end of waterfowl season, except for designated wildlife viewing sites and designated fishing areas.
<del>(29)</del> <u>(27)</u>	Laguna Wildlife Area	The Timber Hill, Blucher Creek, and Cooper Road units are closed to hunting. Only the wetland portions of the Occidental Road Unit associated with the Laguna de Santa Rosa are open to hunting, and hunting is allowed only when the Laguna de Santa Rosa is navigable and the wetlands are accessible by boat. Foot or terrestrial access to the Occidental Road Unit is prohibited because there is no visitor right-of-way. Dogs are prohibited from March 2 through June 30.
<del>(30)</del>	<del>Lake Berryessa Wildlife Area</del>	<del>Dogs are prohibited from February 15 through July 15.</del>
<del>(31)</del> <u>(28)</u>	Lake Earl Wildlife Area	Bush Creek public access is closed to all visitor use from the Monday following the end of youth waterfowl hunting days (subsection 502(e)(1)(B)(5) of these regulations) through April 1. Dogs are prohibited except for hunting.
<del>(32)</del> <u>(29)</u>	Lake Sonoma Wildlife Area	Closed to hunting except through special drawings. The portion of the area posted as "Critical Habitat" is closed to all visitor use and entry from February 1 through August 1. Dogs are prohibited.

<del>(33)</del> <u>(30)</u>	Little Panoche Reservoir Wildlife Area	The use of dogs for wild pig hunting is prohibited.
<del>(34)</del> <u>(31)</u>	Los Banos Wildlife Area	Closed to all visitor use from September 15 until the opening of waterfowl season. Closed to non-hunting uses during the waterfowl season on Saturdays, Sundays, and Wednesdays. A hunter shall not possess more than 25 shot shells while in the field during waterfowl season, except on days when only upland game may be taken, and on special "youth only" waterfowl hunt days when there shall be no restrictions on the number of shot shells taken into the field. Dogs are prohibited in the interpretive viewing area.
<del>(35)</del> <u>(32)</u>	Mad River Slough Wildlife Area	Closed to all visitor use from the Monday following the end of youth hunting days (subsection 502(e)(1)(B)(5) of these regulations) through April 1. Dogs are prohibited except for hunting.
<del>(36)</del> <u>(33)</u>	Mendota Wildlife Area	Closed to all visitor use from September 16 until the opening of waterfowl season except for the designated tour route and fishing site. Closed to non-hunting uses during the waterfowl season.
<del>(37)</del> <u>(34)</u>	Morro Bay Wildlife Area	Closed to hunting from the day after the end of waterfowl season until the opening day of brant season. A hunter shall not possess more than 25 shot shells while in the field.
<del>(38)</del> <u>(35)</u>	Moss Landing Wildlife Area	Closed to hunting on New Year's Day. The Salt Ponds are closed to hunting.
<del>(39)</del> <u>(36)</u>	Napa-Sonoma Marshes Wildlife Area	The following units are closed to all hunting, firearms and archery use: The White Slough Unit, the Green Island Unit, <u>the Southern Crossing Unit</u> and the portion of the American Canyon Unit south of the PG&E lines. <del>The Southern Crossing unit is closed to all visitor uses during restoration.</del> Dogs are prohibited from March 2 through June 30.
<del>(40)</del> <u>(37)</u>	North Grasslands Wildlife Area	A hunter shall not possess more than 25 shot shells while in the field during waterfowl season, except on days when only upland game may be taken and on special "youth only" waterfowl hunt days when there shall be no restrictions on the number of shot shells taken into the field.
<del>(41)</del> <u>(38)</u>	O'Neill Forebay Wildlife Area	Closed to all visitor use the day of and day after designated special apprentice pheasant hunts except for special apprentice pheasant hunt permit holders.

<del>(42)</del> (39)	Oroville Wildlife Area	Closed to hunting February 1 through August 31 except during the spring turkey season when only turkeys may be hunted through a special drawing. Dogs are prohibited from March 2 through June 30.
<del>(43)</del> (40)	Perris Reservoir State Recreation Area	Shore hunting for waterfowl, coots, and moorhens is prohibited. Upland game may be taken only in designated areas. Fishing is permitted in the designated waterfowl hunting area only on non-shoot days.
<del>(44)</del> (41)	Petaluma Marsh Wildlife Area	The Bahia, Day Island, Green Point, Novato Creek, Point Sonoma, and Rush Creek units are closed to hunting, firearms, and archery use. Dogs are prohibited on all units from March 2 through June 30.
<del>(45)</del> <u>(42)</u>	Putah Creek Wildlife Area	Closed to hunting February 1 until the opening weekend of Zone A deer archery season which is defined in Section 360 of these regulations.
<del>(46)</del> <u>(43)</u>	Rector Reservoir Wildlife Area	Closed to hunting from the day after spring turkey season closes to the opening of archery deer season.
<del>(47)</del> <u>(44)</u>	Red Lake Wildlife Area	Closed to hunting February 1 through August 31 except during archery deer season.
<del>(48)</del> <u>(45)</u>	Sacramento Bypass Wildlife Area	Closed to hunting February 1 through August 31.
<del>(49)</del> <u>(46)</u>	Sacramento River Wildlife Area	Closed to hunting February 1 through August 31 except during the spring turkey season when only turkeys may be hunted. Boat-in Only Access Units: Colusa South, Colusa North, Moulton South, Moulton North, Stegeman, Princeton South, Beehive Bend, Oxbow, Jacinto, Ord Bend, Shannon Slough, Pine Creek North, Wilson Landing, Dicus Slough, Merrills Landing.
<del>(50)</del> <u>(47)</u>	San Felipe Valley Wildlife Area	Closed to hunting February 1 through August 31 except during the spring turkey season when only turkeys may be hunted. D-16 general deer zone tags may not be used west of Highway S-2.
<del>(51)</del> <u>(48)</u>	San Jacinto Wildlife Area (Davis Road Unit)	Upland game (doves, pheasants, quail, snipe, and rabbits) may be taken only in designated areas. A self-issued permit, acquired on-site, is required to enter the upland game hunting area.
<del>(52)</del> <u>(49)</u>	San Jacinto Wildlife Area (Potrero Unit)	Only upland game birds and resident small game within designated areas may be taken, unless otherwise restricted or limited within the unit.

<del>(53)</del> <u>(50)</u>	San Luis Obispo Wildlife Area	Closed to all visitor uses except for the shooting area/range.
<del>(54)</del> <u>(51)</u>	San Luis Reservoir Wildlife Area	The use of dogs for wild pig hunting is prohibited. Motor vehicles are allowed in the parking lot only.
<del>(55)</del> <u>(52)</u>	Santa Rosa Wildlife Area	Closed to hunting on the portion of the area that lies within Fish and Game Refuge 4D (see Fish and Game Code Section 10837).
<del>(56)</del> <u>(53)</u>	Shasta Valley Wildlife Area	Only individuals possessing a "Type A" or "Type B" season pass and their guests (nonhunting guests or junior hunters) may enter the wildlife area on Wednesdays, Saturdays, and Sundays during the waterfowl season.
<del>(57)</del> <u>(54)</u>	Spenceville Wildlife Area	Closed to hunting February 1 through August 31 except during the spring turkey season when only turkeys may be hunted. Closed to all visitor entry during the first nine days of the spring turkey season except for special turkey permit holders. The posted area around the Spenceville Mine is closed to visitor entry.
<del>(58)</del> <u>(55)</u>	Sutter Bypass Wildlife Area	Those portions of the east and west levees of the area adjacent to the Sutter National Wildlife Refuge (SNWR) are closed to hunting. The west levee of the area is closed to hunting from the northern boundary of the SNWR south to Oswald/Hughes Road. The east levee of the area is closed to hunting from the northern boundary of the SNWR south to the SNWR checking station parking lot. The remaining portion of the east levee from the SNWR parking lot south to the southern boundary of the SNWR is closed to hunting pursuant to Section 625 of these regulations.
<del>(59)</del> <u>(56)</u>	Tehama Wildlife Area	The portion of the area south of Antelope Creek is closed to all visitor use and entry from the first Monday in December through the last Friday in March. The use of dogs for wild pig hunting is prohibited.
<del>(60)</del> <u>(57)</u>	Upper Butte Basin Wildlife Area	Closed to all non-hunting uses from two weeks prior to opening of waterfowl season through one week after the end of waterfowl season. Dogs are prohibited except for hunting.
<del>(61)</del> <u>(58)</u>	Volta Wildlife Area (U.S. Bureau of Reclamation Lands)	Closed to all visitor uses from August 15 until the opening of waterfowl season except that fishing in the Volta Wasteway Channel is allowed. Fishing is restricted to the Volta Wasteway Channel for a distance of one mile downstream from the Ingomar Grade from September 15 until the end of waterfowl season. Closed to non-hunting uses during the waterfowl season. A hunter shall not possess more than 25 shot shells

		while in the field during waterfowl season, except on days when only upland game may be taken and on special “youth only” waterfowl hunt days when there shall be no restrictions on the number of shot shells taken into the field.
(62)	White Slough Wildlife Area	Closed to hunting February 1 through August 31.
(63)(59)	Yolo Bypass Wildlife Area	Closed to all non-hunting uses from two weeks prior to opening of waterfowl season through one week after the end of waterfowl season except those areas designated for wildlife viewing purposes. Pheasant hunting is prohibited in assigned blind areas.

**[No changes to subsection (p)]**

(q) Type C Wildlife Areas with Shoot Day Restrictions and/or Special Drawing Requirements: Unless identified with specific shoot days, seasonal closures or special drawing requirements below, or with closures identified in subsection 551(o), Type C wildlife areas are open daily. Information about special drawings is available at [www.wildlife.ca.gov](http://www.wildlife.ca.gov).

	AREA	DESCRIPTION OF RESTRICTION OR REQUIREMENT
(1)	Baldwin Lake	Hunting is allowed only during waterfowl season and only on Saturdays and Wednesdays. Hunting is allowed only from a waterfowl season.boat. Special draw entry permits are required for the first seven hunt days of
(2)	Clifton Court Forebay	Hunting is allowed only on Saturdays, Sundays, and Wednesdays and only during waterfowl season. Self-registration is required.
(3)	Cottonwood Creek Wildlife Area	Special draw entry permits are required for all visitor entry during the opening weekend of the Zone A general deer season. Self-registration required all other times of year.
(4)	Daugherty Hill Wildlife Area	Special draw entry permits are required for the first nine days of the spring turkey season.
(5)	Fay Slough Wildlife Area	Hunting is allowed only on Saturdays, Sundays, and Wednesdays and only during waterfowl season.
(6)	Grizzly Island Wildlife Area (Gray Goose Unit)	Hunting is allowed only on Saturdays, Sundays, and Wednesdays and only during waterfowl season.

(7)	Imperial Wildlife Area (Finney Ramer Unit)	A daily entry permit and self-registration are required. Entry permits are available at self-registration booths at Finney and Ramer lakes on a first-come, first-served basis.
(8)	Laguna Wildlife Area (Occidental Road Unit)	Hunting is allowed only on Saturdays, Sundays, and Wednesdays and only during waterfowl season.
<del>(9)</del>	<del>Lake Berryessa Wildlife Area</del>	<del>Special draw entry permits are required.</del>
<del>(10)</del> <u>(9)</u>	Lake Sonoma Wildlife Area	Hunting is only allowed during department-authorized special hunts for deer, turkey and wild pigs. Deer hunting is only allowed with a J-1 or A-25 deer tag available through the big game drawing.
<del>(11)</del> <u>(10)</u>	Little Panoche Reservoir Wildlife Area	Self-registration is required on site.
<del>(12)</del> <u>(11)</u>	Morro Bay Wildlife Area	Shooting hours are from 7:00 a.m. until sunset.
<del>(13)</del> <u>(12)</u>	Moss Landing Wildlife Area	Hunting is allowed only on Saturdays, Sundays, and Wednesdays and only during waterfowl season. Closed to hunting on New Year's Day.
<del>(14)</del> <u>(13)</u>	Napa-Sonoma Marshes Wildlife Area	Hunting is allowed only on Saturdays, Sundays, and Wednesdays during open season for authorized species except that dove and rabbits may be hunted daily during the September dove season.
<del>(15)</del> <u>(14)</u>	O'Neill Forebay Wildlife Area	Self-registration is required at the parking lot except for junior pheasant hunts and the day following junior hunts when entry is controlled through special drawings.
<del>(16)</del> <u>(15)</u>	Oroville Wildlife Area	Special draw entry permits are required for the spring turkey season.
<del>(17)</del> <u>(16)</u>	Perris Reservoir	Hunting for waterfowl is allowed until noon on Saturdays and Wednesdays. Hunting is allowed daily for upland game from the first Saturday after Labor Day through January 31.
<del>(18)</del> <u>(17)</u>	San Luis Reservoir Wildlife Area	Special draw entry permits are required for all visitor entry during the opening weekend of the Zone A deer season. Self-registration is required at the parking lot on Dinosaur Point Road at all other times of year.



<del>(19)</del> (18)	San Pablo Bay Wildlife Area	Blinds shall be available on a first come-first served basis.
<del>(20)</del> (19)	Spenceville Wildlife Area	Special draw entry permits are required for the first nine days of the spring turkey season.

(r) Firearm Restrictions on Type C Wildlife Areas: The regulations in this subsection are in addition to the regulations regarding firearms in subsection 550(cc) of these regulations. The restrictions in this subsection do not prohibit the lawful possession of a concealed firearm as provided in subsection 550(cc)(1) of these regulations.

	AREA	DESCRIPTION OF RESTRICTION
(1)	Baldwin Lake	Rifles and pistols are prohibited.
(2)	Bass Hill Wildlife Area	Only shotguns, archery equipment, or muzzle loaders may be used on the Egan Management Unit.
(3)	Battle Creek Wildlife Area	All firearms and archery equipment are prohibited.
(4)	Big Sandy Wildlife Area	Rifles and pistols are prohibited.
(5)	Clifton Court Forebay	Rifles and pistols are prohibited.
(6)	Collins Eddy Wildlife Area	Rifles, pistols, and archery equipment are prohibited.
(7)	Colusa Bypass Wildlife Area	Rifles and pistols are prohibited.
(8)	Cottonwood Creek Wildlife Area (Lower Cottonwood Creek Unit)	Only shotguns and archery equipment may be used. Only archery equipment may be used from the start of the Zone A archery deer season until the start of Zone A general deer season.
(9)	Cottonwood Creek Wildlife Area (Upper Cottonwood Creek Unit)	Firearms may be used or possessed only from the opening of the Zone A general deer season through the last Sunday in January. Only archery equipment may be used from the start of the Zone A archery deer season until the start of the Zone A general deer season.
(10)	Crescent City Marsh Wildlife Area	All firearms and archery equipment are prohibited.
(11)	Daugherty Hill Wildlife Area	During spring turkey season, only shotguns, archery equipment, and air rifles firing pellets of a minimum 0.177 caliber and powered by compressed air or gas may be used.

(12)	Decker Island Wildlife Area	Rifles and pistols are prohibited.
(13)	Eel River Wildlife Area	Rifles and pistols are prohibited.
(14)	Elk Creek Wetlands Wildlife Area	All firearms and archery equipment are prohibited.
(15)	Elk River Wildlife Area	Rifles and pistols are prohibited.
(16)	Fay Slough Wildlife Area	Rifles and pistols are prohibited.
(17)	Feather River Wildlife Area	Rifles and pistols are prohibited.
(18)	Fremont Weir Wildlife Area	Rifles and pistols are prohibited.
(19)	Grizzly Island Wildlife Area (Grey Goose Unit)	Rifles and pistols are prohibited.
<del>(20)</del>	<del>Grizzly Island Wildlife Area (Cordelia and Montezuma Slough Units)</del>	<del>All firearms and archery equipment are prohibited.</del>
<del>(21)</del> <u>(20)</u>	Hill Slough Wildlife Area	All firearms and archery equipment are prohibited.
<del>(22)</del> <u>(21)</u>	Hollenbeck Canyon Wildlife Area	Rifles and pistols are prohibited.
<del>(23)</del> <u>(22)</u>	Horseshoe Ranch Wildlife Area	During spring turkey season only shotguns and archery equipment may be used.
<del>(24)</del> <u>(23)</u>	Imperial Wildlife Area (Finney-Ramer Unit)	Rifles and pistols are prohibited.
<del>(25)</del> <u>(24)</u>	Kinsman Flat Wildlife Area	During spring turkey season only shotguns and archery equipment may be used.
<del>(26)</del> <u>(25)</u>	Laguna Wildlife Area	Rifles and pistols are prohibited.
<del>(27)</del>	<del>Lake Berryessa Wildlife Area</del>	<del>Firearms are allowed only for special hunts.</del>

<del>(28)</del> <u>(26)</u>	Lake Earl Wildlife Area	Rifles and pistols are prohibited. Possession of firearms or archery equipment for waterfowl hunting is permitted only during waterfowl season and only within the first 100 feet inland from the shoreline and on the water surface of Lake Earl and Lake Tolowa.
<del>(29)</del> <u>(27)</u>	Lake Sonoma Wildlife Area	Firearms are allowed only for special hunts.
<del>(30)</del> <u>(28)</u>	Little Panoche Reservoir Wildlife Area	Rifles and pistols are prohibited.
<del>(31)</del> <u>(29)</u>	Lower Sherman Island Wildlife Area	Rifles and pistols are prohibited.
<del>(32)</del> <u>(30)</u>	Mad River Slough Wildlife Area	Rifles and pistols are prohibited.
<del>(33)</del> <u>(31)</u>	Miner Slough Wildlife Area	Rifles and pistols are prohibited.
<del>(34)</del> <u>(32)</u>	Morro Bay Wildlife Area	Rifles and pistols are prohibited.
<del>(35)</del> <u>(33)</u>	Moss Landing Wildlife Area	Rifles and pistols are prohibited.
<del>(36)</del> <u>(34)</u>	Mouth of Cottonwood Creek Wildlife Area	Rifles and pistols are prohibited.
<del>(37)</del> <u>(35)</u>	Napa-Sonoma Marshes Wildlife Area	Rifles and pistols are prohibited. All firearms and archery equipment are prohibited on the White Slough Unit, the Green Island Unit, <u>the Southern Crossing Unit</u> and the portion of the American Canyon Unit that is south of the PG&E lines.
<del>(38)</del> <u>(36)</u>	O'Neill Forebay Wildlife Area	Rifles, pistols, and shotgun slugs are prohibited.
<del>(39)</del> <u>(37)</u>	Oroville Wildlife Area	Rifles and pistols are prohibited except at the portion of the area designated as a shooting range.
<del>(40)</del> <u>(38)</u>	Perris Reservoir	Rifles and pistols are prohibited.
<del>(41)</del> <u>(39)</u>	Petaluma Marsh Wildlife Area	Rifles and pistols are prohibited. All firearms and archery equipment are prohibited on the Bahia, Day Island, Green Point, Novato Creek, Point Sonoma, and Rush Creek units.

<del>(42)</del> <u>(40)</u>	Point Edith Wildlife Area	Rifles and pistols are prohibited.
<del>(43)</del> <u>(41)</u>	Rhode Island Wildlife Area	Rifles and pistols are prohibited.
<del>(44)</del> <u>(42)</u>	Sacramento Bypass Wildlife Area	Rifles, pistols, and archery equipment are prohibited. Buckshot and slugs are prohibited.
<del>(45)</del> <u>(43)</u>	Sacramento River Wildlife Area	Rifles and pistols are prohibited.
<del>(46)</del> <u>(44)</u>	San Felipe Valley Wildlife Area	Rifles and pistols are prohibited in designated areas.
<del>(47)</del> <u>(45)</u>	San Luis Reservoir Wildlife Area	Rifles and pistols are prohibited.
<del>(48)</del> <u>(46)</u>	San Pablo Bay Wildlife Area	Rifles and pistols are prohibited.
<del>(49)</del> <u>(47)</u>	Santa Rosa Wildlife Area	All firearms, archery equipment, air and gas guns, spear guns, and other propulsive devices are prohibited on the portion of the area that lies within Fish and Game Refuge 4D (see Fish and Game Code Section 10837).
<del>(50)</del> <u>(48)</u>	South Spit Wildlife Area	Rifles, pistols, and archery equipment are prohibited.
<del>(51)</del> <u>(49)</u>	Sutter Bypass Wildlife Area	Rifles and pistols are prohibited.
<del>(52)</del> <u>(50)</u>	Truckee River Wildlife Area	Rifles and pistols are prohibited. <u>All firearms and archery equipment are prohibited on the Boca, Polaris and West River units.</u>
<del>(53)</del> <u>(51)</u>	West Hilmar Wildlife Area	Rifles and pistols are prohibited.
<del>(54)</del>	<del>White Slough Wildlife Area</del>	<del>Rifles and pistols are prohibited. All firearms and archery equipment are prohibited in the portion of the area designated as Pond 9.</del>

(s) Additional Hunter Opportunities on Type A and Type B Wildlife Areas: Information about the special drawings and big game drawings referred to in this subsection is available at [www.wildlife.ca.gov](http://www.wildlife.ca.gov).

	AREA	SPECIES	HUNT REQUIREMENTS
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(1)	Ash Creek Wildlife Area	Pronghorn antelope	Allowed only with an Apprentice Zone 5 - Big Valley tag available through the big game drawing.
(2)	Butte Valley Wildlife Area	Pronghorn antelope	Allowed only with an apprentice tag available through the big game drawing.
(3)	Gray Lodge Wildlife Area	Deer	Allowed only with a G-12 deer tag available through the big game drawing.
(4)	<del>Gray Lodge Wildlife Area</del>	<del>Pheasant</del>	<del>Pheasant hunting open daily for the first nine days of the pheasant season and on waterfowl hunt days for the remainder of the pheasant season.</del>
<del>(5)</del> (4)	Gray Lodge Wildlife Area	Quail and Rabbit	Allowed only on <u>pheasant hunt waterfowl shoot days during the pheasant season.</u>
<del>(6)</del> (5)	Gray Lodge Wildlife Area	Turkey	Allowed only through a special drawing during the spring season.
(7)	<del>Grizzly Island Wildlife Area</del>	<del>Pheasant</del>	<del>Pheasant hunting open daily for the first twelve days of the pheasant season and on waterfowl hunt days for the remainder of the pheasant season.</del>
<del>(8)</del> (6)	Grizzly Island Wildlife Area	Tule elk	Allowed only with an elk tag available through the big game drawing. Methods of take for big game are authorized per Section 353 of these regulations.
<del>(9)</del> (7)	Grizzly Island Wildlife Area (Crescent and Grizzly Island units)	Rabbits	Allowed daily in July and on <u>pheasant hunt waterfowl shoot days during the pheasant season.</u>
<del>(10)</del> (8)	Grizzly Island Wildlife Area	Wild Pigs	Allowed only with a tag obtained through a special drawing. Only shotguns with slugs and archery equipment are authorized. Rifles and pistols are prohibited.
<del>(11)</del> (9)	Honey Lake Wildlife Area	Quail and rabbit	Allowed only on waterfowl shoot days that occur during the pheasant season.
<del>(12)</del> (10)	Imperial Wildlife Area	Quail	Allowed only on pheasant hunt days.
<del>(13)</del> (11)	Imperial Wildlife Area (Wister Unit)	Rabbits	Allowed daily during the rabbit season except during the waterfowl season, when

			rabbits may be taken only on pheasant hunt days.
<del>(14)</del> <u>(12)</u>	Imperial Wildlife Area (Wister Unit)	Raccoons	Allowed daily from August 1 through one week before opening of waterfowl season.
<del>(15)</del>	Los Banos Wildlife Area	Pheasant	<del>Pheasant hunting is open daily for the first nine days of the pheasant season, on waterfowl hunt days for the remainder of the pheasant season and on the day after Thanksgiving.</del>
<del>(16)</del> <u>(13)</u>	Los Banos Wildlife Area	Raccoons and rabbits	Self-registration is required. Raccoons may not be taken during waterfowl season.
<del>(17)</del>	Mendota Wildlife Area	Pheasant	<del>Pheasant hunting is open daily for the first nine days of the pheasant season, on waterfowl hunt days for the remainder of the pheasant season and on the day after Thanksgiving.</del>
<del>(18)</del> <u>(14)</u>	Mendota Wildlife Area	Raccoons, rabbits, and crows	Self-registration is required. Raccoons may not be taken during waterfowl season.
<del>(19)</del>	North Grasslands Wildlife Area	Pheasant	<del>Pheasant hunting is open daily for the first nine days of the pheasant season, on waterfowl hunt days for the remainder of the pheasant season and on the day after Thanksgiving.</del>
<del>(20)</del> <u>(15)</u>	North Grasslands Wildlife Area	Raccoons and rabbits	Self-registration required. Raccoons may not be taken during waterfowl season. Rabbits may be hunted daily from July 1 through September 15 and from the day after the end of waterfowl season until the end of the rabbit season. During the waterfowl season, rabbit hunting is allowed only on waterfowl and pheasant hunt days.
<del>(21)</del> <u>(16)</u>	Shasta Valley Wildlife Area	Quail	Self-register at area. Quail shoot days are limited to waterfowl shoot days only.
<del>(22)</del> <u>(17)</u>	Tehama Wildlife Area	Deer	During the G-1 deer season, only persons with department issued entry permits may enter.

<del>(23)</del> <u>(18)</u>	Tehama Wildlife Area	Deer	Allowed only with a J-3 apprentice tag available through the big game drawing
<del>(24)</del> <u>(19)</u>	Tehama Wildlife Area	Wild Pigs	Allowed only with a tag obtained through a special drawing. No dogs permitted.
<del>(25)</del> <u>(20)</u>	Upper Butte Basin Wildlife Area	Rabbits	Allowed only during the September dove season, and on waterfowl <del>or pheasant</del> hunt days during the late dove season.
<del>(26)</del> <u>(21)</u>	Upper Butte Basin Wildlife Area (Little Dry Creek Unit)	Deer	Allowed only with a J-9 apprentice tag available through the big game drawing
<del>(27)</del>	<del>Upper Butte Basin Wildlife Area</del>	<del>Pheasant</del>	<del>Pheasant hunting is open daily for the first five days of the pheasant season and on waterfowl hunt days for the remainder of the pheasant season.</del>
<del>(28)</del> <u>(22)</u>	Volta Wildlife Area	Rabbits	Allowed except during waterfowl season. Self-registration required.
<del>(29)</del>	<del>Yolo Bypass Wildlife Area</del>	<del>Pheasant</del>	<del>Pheasant hunting is open daily for the first nine days of the pheasant season and on waterfowl hunt days for the remainder of the pheasant season.</del>

(t) Species Restrictions for Hunting on Type C Wildlife Areas: Only the species listed for each of the wildlife areas in the table below may be hunted on those areas.

	AREA	SPECIES
(1)	Baldwin Lake Wildlife Area	Waterfowl, coots, and moorhens only.
(2)	Clifton Court Forebay	Waterfowl, coots, and moorhens only.
(3)	Collins Eddy Wildlife Area	Waterfowl, coots, moorhens, and upland game only.
(4)	Eel River Wildlife Area	Waterfowl, coots, snipe, and pheasant only.
(5)	Elk River Wildlife Area	Waterfowl, coots, and snipe only.
(6)	Fay Slough Wildlife Area	Waterfowl, coots, and snipe only.
(7)	Grizzly Island Wildlife Area (Grey Goose Unit)	Waterfowl, snipe, coots, moorhens, and pheasants only on Saturdays, Sundays and Wednesdays and only during open seasons.



(8)	Hollenbeck Canyon Wildlife Area	Crow, coyote, upland game birds, and resident small game only.
(9)	Laguna Wildlife Area	Waterfowl, coots, and moorhens only.
(10)	Lake Earl Wildlife Area	Waterfowl, coots, snipe, and moorhens only.
(11)	Lake Sonoma Wildlife Area	Deer, wild pigs, and turkeys only. May require a permit from the U.S. Army Corps of Engineers.
(12)	Lower Sherman Island Wildlife Area	Waterfowl, coots, moorhens, pheasant, dove, and rabbits only.
(13)	Mad River Slough Wildlife Area	Waterfowl, coots, and snipe only.
(14)	Miner Slough Wildlife Area	Waterfowl only.
(15)	Moss Landing Wildlife Area	Waterfowl, coots, and moorhens only.
(16)	Napa-Sonoma Marshes Wildlife Area	Waterfowl, coots, moorhens, snipe, rabbits, quail, pheasants, and dove only.
(17)	O'Neill Forebay Wildlife Area	Waterfowl, pheasants, quail, dove, rabbits, and crows only.
(18)	Perris Reservoir	Waterfowl, coots, moorhens, dove, pheasants, quail, and rabbits only.
(19)	Petaluma Marsh Wildlife Area	Waterfowl, coots, moorhens, and rabbits only.
(20)	Point Edith Wildlife Area	Waterfowl, coots, and moorhens only.
(21)	Rhode Island Wildlife Area	Waterfowl, coots, and moorhens only.
(22)	Sacramento Bypass Wildlife Area	All legal species except big game.
(23)	San Pablo Bay Wildlife Area	Waterfowl, coots, and moorhens only.
(24)	Santa Rosa Wildlife Area	Deer, rabbits, and quail only.
(25)	South Spit Wildlife Area	Waterfowl, coots, and snipe only.
(26)	West Hilmar Wildlife Area	Waterfowl, quail, doves, pheasants, and rabbits only.

(27)	White Slough Wildlife Area	Waterfowl, pheasants, quail, and dove only.
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(u) Type A Wildlife Areas Which Allow Archery Equipment During Waterfowl and Pheasant Season per subsection 550(cc)(4):

(1) Los Banos Wildlife Area

**[No changes to subsection (v)]**

(w) Wildlife Areas That Require a Daily or Annual Lands Pass for Authorized Uses Other than Hunting (Lands Pass): Pursuant to subsection 550(c) and 550.5(c) of these regulations, it shall be unlawful for a visitor to enter any wildlife area, or portion thereof listed in this section, without carrying a valid Lands Pass or a valid hunting, or fishing or trapping license on their person. A Lands Pass must be purchased in advance. Information on how to purchase a Lands Pass and exceptions to this requirement are provided in subsection 550.5(c).

**[No changes to subsections (w)(1) through (w)(33)]**

(x) Additional Waterfowl Reservation Regulations:

	Area	Number of Hunters Per Reservation	Reservation Expires
(1)	Colusa National Wildlife Refuge	Four persons, but not more than two junior hunters or non-shooters.	One hour before shoot time.
(2)	Delevan National Wildlife Refuge	Four persons, but not more than two junior hunters or non-shooters.	One <u>and one-half hours</u> <del>hour</del> before shoot time.

**[No changes to subsections (x)(3) through (z)]**

Note: Authority cited: Sections 200, 203, 205, 265, 355, 710, 710.5, 710.7, 1050, 1530, 1583, 1745, 1764, 1765, ~~3003, 1, 3039, 4001, 4004, 4150~~ and 10504, Fish and Game Code.

Reference: Sections 355, 711, 713, 1050, 1055.3, 1301, 1526, 1528, 1530, 1570, 1571, 1572, 1580, 1581, 1582, 1583, 1584, 1585, 1745, 1761, 1764, 1765, 2006 and 10504, Fish and Game Code; Sections 5003 and 5010, Public Resources Code; and Sections 25455, 26150 and 26155, Penal Code.

**Section 552, Title 14, CCR, is amended to read:**

**§ 552. Public Use Regulations for National Wildlife Refuges That Are Also Designated as Wildlife Areas by the Commission.**

(a) The power to control entry on the National Wildlife Refuges that are also designated as wildlife areas in subsections 551(c) and (d) is at the discretion of the Director of the U.S. Fish and Wildlife Service. The hunting programs for the "Type A" areas listed below are administered by the department. ~~Requirements in this section for steel or other non-toxic shot approved by the U.S. Fish and Wildlife Service are in accordance with Title 50 of the Code of Federal Regulations (CFR), Section 32.2(k), October 1, 2012 edition.~~

(1) Colusa National Wildlife Refuge, Type A.

(A) Area Firearms Restrictions: Only shotguns ~~and steel or other nontoxic shot approved by the U.S. Fish and Wildlife Service~~ are permitted. A hunter shall not possess more than 25 shot shells while in the field. It shall be unlawful to possess a loaded firearm, defined as a firearm with an unexpended shell in the firing chamber until hunters are in designated free roam or assigned pond areas.

(B) Hunt Days: Waterfowl, coots, moorhens, and snipe: Saturdays, Sundays, and Wednesdays during open seasons. Pheasant: First Monday of pheasant season and on waterfowl~~Waterfowl~~ hunt days during the pheasant season. Turkey: Waterfowl hunt days during the fall turkey season.

(C) Authorized Species to be Hunted: Waterfowl, coots, moorhens, snipe, turkey, and pheasants.

(D) It shall be unlawful to retain an entry permit or remain on the wildlife refuge later than one and one half hours after sunset, unless participating in overnight stay in accordance with subsection (a)(1)(E).

(E) Camping is prohibited, except on the night before each waterfowl shoot day, when camping in a vehicle, motorhome or trailer within the check station parking area is allowed. Tents are prohibited. No person may build or maintain fires, except in portable gas stoves.

(F) Bicycles: ~~Prohibited.~~ Allowed from May 15 through August 15 on the designated auto tour road.

~~(G) Hunters may enter or exit only at designated locations. Stopping vehicles between designated parking areas to drop off passengers or hunting equipment is prohibited.~~

~~(H)~~(G) Special Restrictions: When hunting from assigned hunting sites, it shall be unlawful to hunt outside the assigned pond boundary or to hunt from levee roads. Pheasant, turkey and snipe hunting are not permitted in the assigned pond area with the exception of pheasant hunting on the first Monday of pheasant season.

~~(I) Reservations: Each reservation assures entry of up to four individuals with no more than two junior hunters or non-shooters per one adult hunter.~~

(H) Day Use Hours: Day use hours are from one hour before sunrise to one hour after sunset, except for those participating in authorized hunting and camping opportunities.

(I) Fishing: Prohibited

(2) Delevan National Wildlife Refuge, Type A.

(A) Area Firearms Restrictions: Only shotguns ~~and steel or other nontoxic shot approved by the U.S. Fish and Wildlife Service~~ are permitted. A hunter shall not possess more than 25 shot shells while in the field. It shall be unlawful to possess a loaded firearm, defined as a firearm with an unexpended shell in the firing chamber, until hunters are in designated free roam or assigned pond/spaced blind areas.

(B) Hunt Days: Waterfowl, coots, moorhens, and snipe: Saturdays, Sundays, and Wednesdays during open seasons. Pheasant: First Monday of pheasant season and on waterfowl hunt days during the pheasant season. Turkey: Waterfowl hunt days during the fall turkey season.

(C) Authorized Species to be Hunted: Waterfowl, coots, moorhens, snipe, turkey, and pheasants.

(D) It shall be unlawful to retain an entry permit or remain on the wildlife refuge later than one and one half hours after sunset, unless participating in overnight stay in accordance with subsection (a)(2)(E).

(E) Camping is prohibited, except on the night before each waterfowl shoot day, when camping in a vehicle, motorhome or trailer within the check station parking area is allowed. Tents are prohibited. No person may build or maintain fires, except in portable gas stoves.

~~(F) Bicycles: Prohibited.~~

~~(G) Reservations: Each reservation assures entry of up to four individuals with no more than two junior hunters or non-shooters per one adult hunter.~~

~~(H)~~(F) Special Restrictions: When assigned hunting sites, hunters shall hunt only within 100 feet of their assigned sites, except to retrieve downed birds. Pheasant and snipe hunting are not permitted in the assigned blind area except on the first Monday of pheasant season.

~~(I) Hunters may enter or exit only at designated locations. Stopping vehicles between designated parking areas to drop off passengers or hunting equipment is prohibited.~~

(G) Fishing: Prohibited

(3) Kern National Wildlife Refuge, Type A.

(A) Area Firearms Restrictions: Only shotguns ~~and steel or other nontoxic shot approved by the U.S. Fish and Wildlife Service~~ are permitted. A hunter shall not possess more than 25 shot shells while in the field.

(B) Hunt Days: Waterfowl, coots, and moorhens: Saturdays and Wednesdays during open seasons. Pheasant: Waterfowl hunt days during the regular pheasant season.

(C) Authorized Species to be Hunted: Waterfowl, coots, moorhens, and pheasants. ~~Hunting of common snipe is prohibited.~~

~~(D) Camping and Trailers: Prohibited.~~

(D) Special Restrictions: Hunters assigned to the spaced blind unit must remain within 100 feet of the numbered steel post (blind site) except when pursuing cripples, placing decoys, or traveling to and from the parking area. Pheasant hunting is only permitted in the free roam unit.

(E) Boats: Only nonmotorized boats are permitted.

(F) Fishing: Prohibited.

(4) Merced National Wildlife Refuge, Type A.

- (A) Area Firearms Restrictions: Only shotguns ~~and steel or other nontoxic shot approved by the U.S. Fish and Wildlife Service~~ are permitted. A hunter shall not possess more than 25 shot shells ~~per day~~ while in the field.
- (B) Hunt Days: Saturdays and Wednesdays during waterfowl season.
- (C) Shooting Hours: Waterfowl shooting hours will be from one-half hour before sunrise until 12:00 noon.
- (D) Authorized Species to be Hunted: Waterfowl, coots, and moorhens. ~~Hunting of common snipe is prohibited.~~
- ~~(E) Camping and Trailers: Prohibited.~~
- ~~(F)~~(E) Bicycles: Allowed.
- ~~(G) Reservations: Each reservation assures entry of no more than three persons if three-person blinds are available, or no more than two persons, if two-person blinds are available. All persons entering on the same reservation will receive the same hunt assignment.~~
- ~~(H)~~(F) Special Restrictions: Hunters must hunt from assigned blinds, except to retrieve downed birds, placing decoys, and traveling to and from the parking area. Shooting from outside of the blind is prohibited.
- (G) Day Use Hours: Day use hours are from one half-hour before sunrise to one half-hour after sunset, except for those participating in authorized hunting opportunities.
- (H) Fishing: Prohibited.
- (5) Sacramento National Wildlife Refuge, Type A.
- (A) Area Firearms Restrictions: Only shotguns ~~and steel or other nontoxic shot approved by the U.S. Fish and Wildlife Service~~ are permitted. A hunter shall not possess more than 25 shot shells while in the field. It shall be unlawful to possess a loaded firearm, defined as a firearm with an unexpended shell in the firing chamber, until hunters are in designated free roam or assigned pond/spaced blind areas.
- (B) Hunt Days: Waterfowl, coots, moorhens, and snipe: Saturdays, Sundays, and Wednesdays during open seasons. Pheasants: The first Monday of pheasant season and on waterfowl hunt days during the pheasant season. Turkey: Waterfowl hunt days during the fall turkey season.
- (C) Authorized Species to be Hunted: Waterfowl, coots, moorhens, snipe, turkey, and pheasants.
- (D) It shall be unlawful to retain an entry permit or remain on the wildlife refuge later than one and one half hours after sunset, unless participating in overnight stay in accordance with subsection (a)(5)(E).
- (E) Camping is prohibited, except on the night before each waterfowl shoot day, when camping in a vehicle, motorhome or trailer within the check station parking area is allowed. Tents are prohibited. No person may build or maintain fires, except in portable gas stoves.
- (F) Bicycles: ~~Prohibited.~~ Allowed May 15 through August 15 on the designated auto tour road.
- ~~(G) Reservations: Each reservation assures entry of up to four individuals with no more than two junior hunters or non-shooters per one adult hunter.~~
- ~~(H)~~(G) Special Restrictions: When assigned hunting sites, hunters shall hunt only within 100 feet of their assigned sites, except to retrieve downed birds. Pheasant, turkey and

snipe hunting are not permitted in the assigned blind area except on the first Monday of pheasant season.

~~(I) Hunters may enter or exit only at designated locations. Stopping vehicles between designated parking areas to drop off passengers or hunting equipment is prohibited.~~

(H) Day Use Hours: Day use hours are from one hour before sunrise to one hour after sunset, except for those participating in authorized hunting and camping opportunities.

(I) Fishing: Prohibited.

(6) Sacramento River National Wildlife Refuge, Type C.

(A) Units: The refuge includes the La Barranca Unit, Blackberry Island Unit, Todd Island Unit, Mooney Unit, Ohm Unit, Flynn Unit, Heron Island Unit, Rio Vista Unit, Foster Island Unit (Tehama Co.); Pine Creek Unit, Dead Man's Reach Unit, Llano Seco Island 1 & 2 Units, and Llano Seco Riparian Sanctuary Unit, (Butte Co.); and McIntosh Landing North and South Units, Capay Unit, Phelan Island Unit, Jacinto Unit, North Ord Unit, Ord Bend Unit, South Ord Unit, Hartley Island Unit, Sul Norte Unit, Codora Unit, Packer Unit, Afton Unit, Drumheller North Unit, Drumheller Slough Unit (Glenn Co.), and Bogg's Bend Unit (Colusa Co.).

(B) Area Firearm Restrictions:

1. Only shotguns and archery equipment are allowed. No rifles, crossbows, air guns, paintball guns or pistols may be used or possessed.

2. Target shooting is prohibited.

3. No firearms or archery equipment are allowed in areas closed to hunting.

~~4. Ammunition is restricted to only federally approved nontoxic shot while in the field except for hunting deer or wild pigs. For hunting deer or wild pigs, hunters may possess nonlead shotgun slugs in accordance with Section 250.1 of these regulations.~~

~~5-4.~~ Firearms must be unloaded before transporting them between parking areas and hunting areas. "Unloaded" means that no unexpended cartridge or shell is in the chamber of the firearm. This is in addition to the requirement in subsection 550(cc) of these regulations that requires firearms to be unloaded in parking lots, check-in stations and other facilities.

(C) Public Access:

1. The following units are closed to public access: Ohm, McIntosh Landing North and South, North Ord, Llano Seco Riparian Sanctuary, and Hartley Island.

2. Access is allowed by boat only on the following units: La Barranca, Blackberry Island, Todd Island, Mooney, Flynn, Heron Island, Foster Island, Phelan Island, Jacinto, Dead Man's Reach, South Ord, Lano Seco Island 1 & 2, and Afton.

3. Access is allowed on foot or by boat only on the following units: Rio Vista, Pine Creek, Capay, Ord Bend, Sul Norte, Codora, Packer, Drumheller North, Drumheller Slough and Bogg's Bend.

a. On Packer and Drumheller North, only boats up to 14 feet in length are allowed.

4. All units that are open to public hunting may only be accessed by boat, except for Sul Norte, Codora, Drumheller North, Drumheller Slough, Capay and Bogg's Bend, which may be accessed only on foot or by boat.

(D) Day Use Hours: Day use hours are from 2 hours before sunrise to one and one half hours after sunset.

(E) Bicycles: Bicycles are allowed May 15 through August 15 on designated routes. Other conveyances are prohibited. Mobility-impaired hunters should contact the refuge manager for allowed conveyances.

~~(F) Dogs and Pets In General: Dogs are prohibited for the take and pursuit of wild pigs~~  
~~1. Pets shall be controlled in accordance with subsection 550(m) of these regulations, and hunting dogs shall be controlled in accordance with subsection 550(n) of these regulations.~~

~~2. Dogs are prohibited for the take and pursuit of wild pigs.~~

(F) Dogs: Dogs are prohibited for the take and pursuit of wild pigs and deer.

(G) Camping: Camping is allowed only on gravel bars up to 7 days during a 30 day period. Individuals camping on the refuge must remain on the gravel bars from one and one half hours after sunset to 2 hours before sunrise.

~~(H) Sport Fishing: Sport fishing is allowed on designated areas of the refuge in accordance with State regulations.~~

(H) Fires are prohibited except for portable gas stoves on gravel bars.

~~(I) Falconry is prohibited.~~

(J) Areas Open for Hunting In Accordance with State and Federal Regulations:

1. Units open to hunting of authorized species are: La Barranca, Todd Island, Mooney, Ohm, Heron Island, Flynn, Rio Vista, Foster Island, Pine Creek, Capay, Phelan Island, Jacinto, Dead Man's Reach, South Ord, Llano Seco Island 1 & 2, Sul Norte, Codora, Afton, Drumheller North, Drumheller Slough, and Bogg's Bend.

2. The Mooney Unit is open to hunting for authorized species except that waterfowl hunting is prohibited.

3. The Ohm Unit is closed to hunting except for the designated area in the northern portion of the unit where all authorized species except for waterfowl may be taken.

~~3-4.~~ The Codora Unit is open for hunting only for hunters holding a junior hunting license who are accompanied by a non-hunting adult and only on Saturdays and Sundays.

a. Waterfowl hunting is prohibited on the Codora Unit

~~4-5.~~ All other units are closed to hunting.

~~5-6.~~ Hunting is prohibited within 50 feet of any landward boundary adjacent to private property.

7. Hunting is allowed from August 15 to May 31.

(K) Authorized Species to be Hunted: (unless otherwise stated in subsection (J) or restricted in this subsection): goose, duck, coot, moorhen, dove, snipe, turkey, pheasant, quail, deer, and wild pig. ~~Hunting of all other species is prohibited.~~

1. Wild Pigs may be hunted only from September 1 through March 15.

(L) Commercial Guiding: Commercial guiding is prohibited.

(M) Personal Property: Permanent blinds, ladders and screw-in foot pegs are prohibited. All personal property, including tree stands, decoys and boats must be removed by one and one-half hours after sunset.

(7) San Luis National Wildlife Refuge, Type A.

(A) Area Firearms Restrictions: Only ~~shotguns and steel or other nontoxic shot~~ approved by the U.S. Fish and Wildlife Service are permitted. A hunter shall not possess more than 25 shot shells while in the field.



(B) Hunt Days: Saturdays, Sundays, and Wednesdays during waterfowl season. Waterfowl hunting is prohibited on the West Bear Creek Unit prior to the third Saturday in November. Hunting is allowed on the Freitas Unit 7 days per week; however, a department-issued permit is required on Saturdays, Sundays and Wednesdays.

(C) Authorized Species to be hunted: Waterfowl, coots, and moorhens. Hunting for pheasants will be allowed with an entry permit and only in a special zone on the Kesterson Unit on the first Saturday and Sunday of pheasant season and in the San Luis Unit free roam area on waterfowl shoot days for the duration of pheasant season. Pheasant hunting may also be allowed on the first Monday of pheasant season, but only within the spaced blind area of the Kesterson Unit. Snipe hunting is allowed only within the San Luis Unit free roam area, and only on waterfowl shoot days when the area is open to hunting by adult license holders.

(D) Camping and Trailers: Prohibited on the San Luis, Blue Goose, and the West Bear Creek Units.

(E) Bicycles: Allowed.

~~(F) Reservations: For the Kesterson and Blue Goose units, each reservation assures entry of no more than three persons if three-person blinds are available, or no more than two persons if two-person blinds are available. For the Freitas units (north and south), each reservation assures entry of one boat with up to four persons. All persons entering on the same reservation will receive the same hunt assignment.~~

~~(G)~~(F) Special Restrictions: Hunters in the Kesterson and Blue Goose units must hunt from assigned blinds, except to retrieve downed birds. Hunters in free roam areas are not restricted to blinds. Access to the Freitas units is by boat only after 2 a.m., the unit and its parking lot is closed between the hours of 8 p.m. and 2 a.m. Maximum boat speed may not exceed 5 mph. Inboard water thrust and air-thrust boats are prohibited. Construction of permanent blinds is prohibited. Cutting or breaking of woody vegetation is prohibited. All blinds and equipment must be removed following each day's hunt.

~~(H) Hunters may enter or exit only at designated locations. Stopping vehicles between designated parking areas to drop off passengers or hunting equipment is prohibited.~~

(G) Fishing

1. Fishing is permitted in designated areas.

2. Fish may only be taken by rod and reel.

(H) Day Use Hours: Day use hours are from one-half hour before sunrise to one-half hour after sunset, except for those participating in authorized hunting and camping opportunities.

(8) Sonny Bono Salton Sea National Wildlife Refuge, Type A.

(A) Area Firearms Restrictions: ~~Only shotguns and steel or other nontoxic shot approved by the U.S. Fish and Wildlife Service are permitted.~~ A hunter shall not possess more than 25 shot shells while in the field. Firearms must be unloaded when being transported between parking areas and blind sites.

(B) Hunt days: Saturdays, Sundays, and Wednesdays during open seasons.

(C) Authorized Species to be Hunted: Waterfowl, coots, and moorhens.

~~(D) Camping and Trailers: Prohibited.~~

~~(E)~~(D) Special Restrictions: Hunters in the Hazard Unit shall hunt only from within 100 feet of their assigned blind sites or stakes, except to retrieve downed birds. Hunters in the Union Tract shall hunt only from within their blinds, except to retrieve downed birds.

~~(F)~~(E) Blind Limitation: Not more than four individuals may occupy a blind site.

(F) Fishing:

1. Fishing from boats is permitted from April 1 to September 30.

2. Fishing from the bank is prohibited year round.

(9) Sutter National Wildlife Refuge, Type A.

(A) Area Firearms Restrictions: Only shotguns ~~and steel or other nontoxic shot approved by the U.S. Fish and Wildlife Service~~ are permitted. A hunter shall not possess more than 25 shot shells while in the field. It shall be unlawful to possess a loaded firearm, defined as a firearm with an unexpended shell in the firing chamber, until hunters are in designated free roam or assigned pond areas.

(B) Hunt Days: Waterfowl, coots, moorhens, and snipe: Saturdays, Sundays, and Wednesdays during open seasons. Pheasant: Waterfowl hunt days during the pheasant season. Turkey: Waterfowl hunt days during the fall turkey season.

(C) Authorized Species to be Hunted: Waterfowl, coots, moorhens, snipe, turkey and pheasants.

(D) It shall be unlawful to retain an entry permit or remain on the wildlife refuge later than one and one half hours after sunset, unless participating in overnight stay in accordance with subsection (a)(9)(E).

(E) Camping is prohibited, except on the night before each waterfowl shoot day, when camping in a vehicle, motorhome or trailer within the check station parking area is allowed. Tents are prohibited. No person may build or maintain fires, except in portable gas stoves.

~~(F) Bicycles: Prohibited.~~

~~(G) Hunters may enter or exit only at designated locations. Stopping vehicles between designated parking areas to drop off passengers or hunting equipment is prohibited.~~

~~(H)~~(F) Special Restrictions: When hunting from assigned hunting sites, it shall be unlawful to hunt outside the assigned pond boundary or to hunt from levee roads. Pheasant, turkey, and snipe hunting are not permitted in the assigned pond area.

~~(I) Reservations: Each reservation assures entry of up to four individuals with no more than two junior hunters or non-shooters per one adult hunter.~~

(G) Day Use Hours: Day use hours are from one hour before sunrise to one hour after sunset, except for those participating in hunting and camping opportunities.

(H) Fishing: Prohibited.

Note: Authority cited: Sections 200, 203, 265, 710, 710.5, 710.7, 1050, 1530, 1764, 1765 and 10504, Fish and Game Code. Reference: Sections 355, 711, 713, 1050, 1055.3, 1526, 1528, 1530, 1570, 1571, 1572, 1761, 1764, 1765, 1907, 2006 and 10504, Fish and Game Code.

**Section 630, Title 14, CCR, is amended to read:**

**§ 630. Additional Visitor Use Regulations on Department Lands Designated as Ecological Reserves.**

(a) The areas listed in this section have been designated by the commission as ecological reserves. A legal description of the boundaries of each ecological reserve is on file at the department's headquarters, ~~1416 Ninth Street, Sacramento~~. All ecological reserves are maintained for the primary purpose of developing a statewide program for protection of rare, threatened, or endangered native plants, wildlife, aquatic organisms, and specialized terrestrial or aquatic habitat types. Visitor uses are dependent upon the provisions of applicable laws and upon a determination by the commission that opening an area to such visitor use is compatible with the purposes of the property. Visitor use is subject to the regulations below, in sections 550 and 550.5 of these regulations, as well as any other commission regulations that may apply. These regulations are incorporated by reference into and become a condition of entry, passes, and/or permits. It is the responsibility of all visitors to know and understand these regulations prior to entry. Ecological reserves that are marked with an asterisk (\*) in subsection 630(b) are adjacent to or share sensitive marine environments with Marine Protected Areas (MPAs), Marine Managed Areas (MMAs), and/or Special Closures that are defined in Section 632 of these regulations. The general regulations for MPAs, MMAs, and Special Closures are in subsection 632(a) of these regulations, and site-specific regulations for each area are in subsection 632(b) of these regulations. The designated names of the MPAs in subsection 632(b) of these regulations generally correspond with the names of adjacent or overlapping ecological reserves. For example, Fagan Marsh Ecological Reserve shares marine waters with the Fagan Marsh State Marine Park and Moro Cojo Ecological Reserve is adjacent to the Moro Cojo State Marine Reserve.

(b) Ecological Reserves owned and operated by the department:

- (1) Agua Hedionda Lagoon Ecological Reserve, San Diego County\*;
- (2) Albany Mudflats Ecological Reserve, Alameda County\*;
- (3) Alkali Sink Ecological Reserve, Fresno County;
- (4) Allensworth Ecological Reserve, ~~Kern and Tulare County~~ counties;
- (5) Apricum Hill Ecological Reserve, Amador County;
- (6) Atascadero Creek Marsh Ecological Reserve, Sonoma County;
- (7) Bair Island Ecological Reserve, San Mateo County\*;
- (8) Bakersfield Cactus Ecological Reserve, Kern County;
- (9) Baldwin Lake Ecological Reserve, San Bernardino County;
- (10) Ballona Wetlands Ecological Reserve, Los Angeles County;
- (11) Batiquitos Lagoon Ecological Reserve, San Diego County\*;
- (12) Big Table Mountain Ecological Reserve, Fresno County;
- (13) Blue Ridge Ecological Reserve, Tulare County;
- (14) Blue Sky Ecological Reserve, San Diego County;
- (15) Bobelaine Ecological Reserve, Sutter County;
- (16) Boden Canyon Ecological Reserve, San Diego County;
- (17) Boggs Lake Ecological Reserve, Lake County;
- (18) Bolsa Chica Ecological Reserve, Orange County\*;

- (19) Bonny Doon Ecological Reserve, Santa Cruz County;
- (20) Boulder Creek/Rutherford Ranch Ecological Reserve, San Diego County;
- (21) Buena Vista Creek Ecological Reserve, San Diego County;
- (22) Buena Vista Lagoon Ecological Reserve, San Diego County\*;
- (23) Burton Mesa Ecological Reserve, Santa Barbara County;
- (24) Butler Slough Ecological Reserve, Tehama County;
- (25) Butte Creek Canyon Ecological Reserve, Butte County;
- (26) Butte Creek House Ecological Reserve, Butte County;
- (27) Buttonwillow Ecological Reserve, Kern County;
- (28) By-Day Creek Ecological Reserve, Mono County;
- (29) Calhoun Cut Ecological Reserve, Solano County;
- (30) Cambria Pines Ecological Reserve, San Luis Obispo County;
- (31) Cañada de los Osos Ecological Reserve, Santa Clara County;
- (32) Cañada de San Vicente Ecological Reserve, San Diego County;
- ~~(32)~~(33) Canebrake Ecological Reserve, Kern County;
- ~~(33)~~(34) Carlsbad Highlands Ecological Reserve, San Diego County;
- ~~(34)~~(35) Carrizo Canyon Ecological Reserve, Riverside County;
- ~~(35)~~(36) Carrizo Plains Ecological Reserve, San Luis Obispo County, including the American, Panorama, Elkhorn Plain, North Chimineas, and South Chimineas Units;
- ~~(36)~~(37) China Point Ecological Reserve, Siskiyou County;
- ~~(37)~~(38) Chorro Creek Ecological Reserve, San Luis Obispo County;
- (39) Cienega Springs Ecological Reserve, Ventura County
- ~~(38)~~(40) Clover Creek Ecological Reserve, Shasta County;
- ~~(39)~~(41) Coachella Valley Ecological Reserve, Riverside County;
- ~~(40)~~(42) Coal Canyon Ecological Reserve, Orange County;
- ~~(41)~~(43) Coldwater Canyon Ecological Reserve, Ventura County;
- ~~(42)~~(44) Corral Hollow Ecological Reserve, San Joaquin County;
- ~~(43)~~(45) Corte Madera Marsh Ecological Reserve, Marin County\*;
- ~~(44)~~(46) Cosumnes River Ecological Reserve, Sacramento County;
- ~~(45)~~(47) Crestridge Ecological Reserve, San Diego County;
- ~~(46)~~(48) Dales Lake Ecological Reserve, Tehama County;
- (49) Deep Springs Lake Ecological Reserve, Inyo County;
- ~~(47)~~(50) Del Mar Mesa/Lopez Ridge Ecological Reserve, San Diego County;
- ~~(48)~~(51) Del Monte Dunes Ecological Reserve, Monterey County;
- ~~(49)~~(52) Eden Landing Ecological Reserve, Alameda County;
- ~~(50)~~(53) Elkhorn Slough Ecological Reserve (National Estuarine Research Reserve), Monterey County\*;
- ~~(51)~~(54) Estelle Mountain Ecological Reserve, Riverside County;
- ~~(52)~~(55) Fagan Marsh Ecological Reserve, Napa County\*;
- ~~(53)~~(56) Fall River Mills Ecological Reserve, Shasta County;
- ~~(54)~~(57) Fish Slough Ecological Reserve, Inyo and Mono counties;
- ~~(55)~~(58) Fremont Valley Ecological Reserve, Kern County;
- ~~(56)~~(59) Goleta Slough Ecological Reserve, Santa Barbara County\*;
- ~~(57)~~(60) Harrison Grade Ecological Reserve, Sonoma County;
- ~~(58)~~(61) Headwaters Forest Ecological Reserve, Humboldt County;

~~(59)~~ (62) Hidden Palms Ecological Reserve, Riverside County;  
~~(60)~~ (63) Indian Joe Springs Ecological Reserve, Inyo County;  
(64) Indian Wells Valley Ecological Reserve, Kern County;  
~~(61)~~ (65) Joshua Creek Canyon Ecological Reserve, Monterey County;  
~~(62)~~ (66) Kaweah Ecological Reserve, Tulare County;  
~~(63)~~ (67) Kerman Ecological Reserve, Fresno County;  
~~(64)~~ (68) King Clone Ecological Reserve, San Bernardino County;  
~~(65)~~ (69) Laguna Laurel Ecological Reserve, Orange County;  
~~(66)~~ (70) Lake Hodges Ecological Reserve, San Diego County;  
~~(67)~~ (71) Lake Mathews Ecological Reserve, Riverside County;  
~~(68)~~ (72) Leek Springs Ecological Reserve, El Dorado County;  
~~(69)~~ (73) Liberty Island Ecological Reserve, Solano County;  
~~(70)~~ (74) Limestone Salamander Ecological Reserve, Mariposa County;  
~~(71)~~ (75) Little Butte Ecological Reserve, Mendocino County;  
~~(72)~~ (76) Little Red Mountain Ecological Reserve, Mendocino County;  
~~(73)~~ (77) Loch Lomond Vernal Pool Ecological Reserve, Lake County;  
~~(74)~~ (78) Lokern Ecological Reserve, Kern County;  
~~(75)~~ (79) Macklin Creek Ecological Reserve, Nevada County;  
~~(76)~~ (80) Magnesia Spring Ecological Reserve, Riverside County;  
~~(77)~~ (81) Marin Islands Ecological Reserve, Marin County\*;  
~~(78)~~ (82) Mattole River Ecological Reserve, Mendocino County;  
~~(79)~~ (83) McGinty Mountain Ecological Reserve, San Diego County;  
~~(80)~~ (84) Meadowbrook Ecological Reserve, San Diego County;  
~~(81)~~ (85) Moro Cojo Ecological Reserve, Monterey County\*;  
~~(82)~~ (86) Morro Dunes Ecological Reserve, including the Bayview Unit, San Luis Obispo County;  
~~(83)~~ (87) Morro Rock Ecological Reserve, San Luis Obispo County;  
~~(84)~~ (88) Napa River Ecological Reserve, Napa County;  
(89) North Carrizo Ecological Reserve, San Luis Obispo County;  
~~(85)~~ (90) North Table Mountain Ecological Reserve, Butte County;  
~~(86)~~ (91) Oasis Springs Ecological Reserve, Riverside County;  
~~(87)~~ (92) Offshore Rocks and Pinnacles, coastal counties;  
~~(88)~~ (93) Otay Mountain Ecological Reserve, San Diego County;  
~~(89)~~ (94) Owl Creek Ecological Reserve, Humboldt County;  
~~(90)~~ (95) Palo Verde Ecological Reserve, Riverside County;  
~~(91)~~ (96) Panoche Hills Ecological Reserve, Fresno County;  
~~(92)~~ (97) Peninsular Ranges Ecological Reserve, Riverside County;  
~~(93)~~ (98) Peytonia Slough Ecological Reserve, Solano County;  
~~(94)~~ (99) Phoenix Field Ecological Reserve, Sacramento County;  
~~(95)~~ (100) Pilgrim Creek Ecological Reserve, San Diego County;  
~~(96)~~ (101) Pine Hill Ecological Reserve, including the Salmon Falls Unit, El Dorado County;  
~~(97)~~ (102) Piute Creek Ecological Reserve, San Bernardino County;  
~~(98)~~ (103) Plaisted Creek Ecological Reserve, San Diego County;  
~~(99)~~ (104) Pleasant Valley Ecological Reserve, Fresno County;

~~(400)~~ (105) Quail Hollow Ecological Reserve, Santa Cruz County;  
~~(401)~~ (106) Quail Ridge Ecological Reserve, Napa County;  
~~(402)~~ (107) Rancho Jamul Ecological Reserve, including the Headquarters Unit, San Diego County;  
~~(403)~~ (108) Redwood Shores Ecological Reserve, San Mateo County;  
~~(404)~~ (109) River Springs Lakes Ecological Reserve, Mono County;  
~~(405)~~ (110) Saline Valley Ecological Reserve, Inyo County;  
~~(406)~~ (111) San Antonio Valley Ecological Reserve, Santa Clara County;  
~~(407)~~ (112) San Bruno Mountain Ecological Reserve, San Mateo County;  
~~(408)~~ (113) San Diego River Ecological Reserve, San Diego County;  
~~(409)~~ (114) San Dieguito Lagoon Ecological Reserve, San Diego County\*;  
~~(410)~~ (115) San Elijo Lagoon Ecological Reserve, San Diego County\*;  
~~(411)~~ (116) San Felipe Creek Ecological Reserve, Imperial County;  
~~(412)~~ (117) San Joaquin River Ecological Reserve, Fresno and Madera counties;  
~~(413)~~ (118) San Luis Rey River Ecological Reserve, San Diego County;  
~~(414)~~ (119) Sands Meadow Ecological Reserve, Tuolumne County;  
~~(415)~~ (120) Santa Cruz Long-toed Salamander Ecological Reserve, Santa Cruz County;  
~~(121)~~ Santa Margarita River Ecological Reserve, Riverside County;  
~~(416)~~ (122) Santa Rosa Plain Vernal Pool Ecological Reserve, including the Hall Road, Todd Road, Wikiup and Yuba Drive units, Sonoma County;  
~~(417)~~ (123) Santa Rosa Plateau Ecological Reserve, Riverside County;  
~~(418)~~ (124) Semitropic Ecological Reserve, Kern County;  
~~(419)~~ (125) Sky Valley Ecological Reserve, Riverside County;  
~~(420)~~ (126) Springville Ecological Reserve, Tulare County;  
~~(421)~~ (127) Stone Corral Ecological Reserve, Tulare County;  
~~(422)~~ (128) Stone Ridge Ecological Reserve, Butte County;  
~~(423)~~ (129) Sycamore Canyon Ecological Reserve, Riverside County;  
~~(424)~~ (130) Sycuan Peak Ecological Reserve, San Diego County;  
~~(425)~~ (131) Table Bluff Ecological Reserve, Humboldt County;  
(132) Tecopa Ecological Reserve, Inyo County  
~~(426)~~ (133) Theiller Sebastopol Meadowfoam Ecological Reserve, Sonoma County;  
~~(427)~~ (134) Thomes Creek Ecological Reserve, Tehama County;  
~~(428)~~ (135) Tomales Bay Ecological Reserve, Marin County;  
~~(429)~~ (136) Upper Newport Bay Ecological Reserve, Orange County\*;  
~~(430)~~ (137) Vernalis Ecological Reserve, San Joaquin County;  
~~(431)~~ (138) Walker Canyon Ecological Reserve, San Diego County;  
~~(432)~~ (139) Watsonville Slough Ecological Reserve, Santa Cruz County;  
~~(433)~~ (140) West Mojave Desert Ecological Reserve, San Bernardino County;  
~~(434)~~ (141) Woodbridge Ecological Reserve, San Joaquin County; and  
~~(435)~~ Yaudanchi Ecological Reserve, Tulare County; and  
~~(436)~~ (142) Yorkville Ecological Reserve, Mendocino County.

(c) Ecological Reserves That Require a Daily or Annual Lands Pass for Authorized Uses other than Hunting: Pursuant to subsection 550(c) and 550.5(c) of these regulations, it shall be unlawful for a visitor to enter any ecological reserve or portion thereof listed in this section without carrying a valid Lands Pass or a valid hunting; or

fishing, ~~or trapping license~~ on their person. A Lands Pass must be purchased in advance. Information on how to purchase a Lands Pass and exceptions to this requirement are provided in subsection 550.5(c).

- (1) Batiquitos Lagoon Ecological Reserve
- (2) Boden Canyon Ecological Reserve
- (3) Bolsa Chica Ecological Reserve
- (4) Buena Vista Lagoon Ecological Reserve
- (5) Canebrake Ecological Reserve
- (6) Elkhorn Slough Ecological Reserve

A. Lands Passes may be purchased at the visitor center during business hours.

- (7) North Table Mountain Ecological Reserve
- (8) San Elijo Lagoon Ecological Reserve
- (9) Upper Newport Bay Ecological Reserve
- (10) Woodbridge Ecological Reserve

(d) Ecological Reserves with Hunting as a Designated Public Use: Unless listed and specified as allowed in the table below, hunting is prohibited on ecological reserves. Where hunting is allowed, it shall be subject to all applicable general hunting regulations and the area-specific regulations set forth in this subsection.

	<i>AREA</i>	<i>HUNTING DESCRIPTIONS</i>
(1)	Allensworth Ecological Reserve	Allowed only at such times and in the specific areas designated by the department.
(2)	Bair Island Ecological Reserve	Waterfowl hunting only.
(3)	Baldwin Lake Ecological Reserve	Waterfowl and upland game only. Waterfowl hunting shall be from boats only.
(4)	Blue Ridge Ecological Reserve	Allowed only as part of department special hunting opportunities at such times and in the specific areas designated by the department.
(5)	Boden Canyon Ecological Reserve	Upland game allowed but only at such times and in the specific areas designated by the department.
(6)	Buttonwillow Ecological Reserve	Allowed only at such times and in the specific areas designated by the department.
(7)	By-Day Creek Ecological Reserve	Allowed.



(8)	Calhoun Cut Ecological Reserve	Waterfowl allowed only from a boat on the waters within the reserve that are accessible only from Lindsey Slough. There are no launch sites on the reserve.
(9)	Cañada de los Osos Ecological Reserve	Allowed but only as part of department special opportunities at such times and in the specific areas designated by the department.
<u>(10)</u>	<u>Cañada de San Vicente Ecological Reserve</u>	<u>Allowed only at such times and in the specific areas designated by the department.</u>
<del>(40)</del> <u>(11)</u>	Canebrake Ecological Reserve	Allowed only at such times and in the specific areas designated by the department.
<del>(41)</del> <u>(12)</u>	Carrizo Plains Ecological Reserve	Allowed only at such times and in the specific areas designated by the department. Hunting of coyotes and ground squirrels is prohibited on the North and South Chimineas units.
<del>(42)</del> <u>(13)</u>	China Point Ecological Reserve	Allowed from August 1 through February 14.
<u>(14)</u>	<u>Cienega Springs Ecological Reserve</u>	<u>Allowed only at such times and in the specific areas designated by the department.</u>
<del>(43)</del> <u>(15)</u>	Coal Canyon Ecological Reserve	Allowed only at such times and in the specific areas designated by the department. Shotguns and archery equipment only.
<del>(44)</del> <u>(16)</u>	Cosumnes River Ecological Reserve	Allowed only at such times and in the specific areas designated by the department.
<del>(45)</del> <u>(17)</u>	Dales Lake Ecological Reserve	Waterfowl only.
<del>(46)</del> <u>(18)</u>	Eden Landing Ecological Reserve	Waterfowl allowed, but only at such times and in the specific areas designated by the department.

<del>(17)</del> <u>(19)</u>	Elkhorn Slough Ecological Reserve	Allowed only at such times and in the specific areas designated by the department.
<del>(18)</del> <u>(20)</u>	Estelle Mountain Ecological Reserve	Upland game only.
<del>(19)</del> <u>(21)</u>	Fish Slough Ecological Reserve	Allowed.
<del>(20)</del> <u>(22)</u>	Indian Joe Springs Ecological Reserve	Upland game only.
<u>(23)</u>	<u>Indian Wells Valley Ecological Reserve</u>	<u>Allowed only at such times and in the specific areas designated by the department.</u>
<del>(21)</del> <u>(24)</u>	Kaweah Ecological Reserve	Allowed only at such times and in the specific areas designated by the department.
<del>(22)</del> <u>(25)</u>	Kerman Ecological Reserve	Allowed from July 1 through January 31. Only licensed hunters are allowed to possess firearms. Shotguns only.
<del>(23)</del> <u>(26)</u>	Liberty Island Ecological Reserve	Allowed only at such times and in the specific areas designated by the department.
<del>(24)</del> <u>(27)</u>	Lokern Ecological Reserve	Allowed only at such times and in the specific areas designated by the department.
<u>(28)</u>	<u>North Carrizo Ecological Reserve</u>	<u>Allowed but only as part of department special opportunities at such times and in the specific areas designated by the department.</u>
<del>(25)</del> <u>(29)</u>	North Table Mountain Ecological Reserve	Deer and upland game allowed from the day after spring turkey season through November 15.
<del>(26)</del> <u>(30)</u>	Oasis Springs Ecological Reserve	Allowed.

<del>(27)</del> <u>(31)</u>	Otay Mountain Ecological Reserve	Allowed in accordance with the Bureau of Land Management's Wilderness Area regulations (43 CFR 6300, Oct. 1, 2012).
<del>(28)</del> <u>(32)</u>	Palo Verde Ecological Reserve	Deer, rabbits, dove, quail, and waterfowl only and allowed only at such times and in the specific areas designated by the department. Deer hunting is by archery only. Rabbit, dove, quail, and waterfowl hunting is by shotgun only.
<del>(29)</del> <u>(33)</u>	Panoche Hills Ecological Reserve	Allowed from July 1 through January 31.
<del>(30)</del> <u>(34)</u>	Peninsular Ranges Ecological Reserve	Upland game only.
<del>(31)</del> <u>(35)</u>	Piute Creek Ecological Reserve	Allowed.
<del>(32)</del> <u>(36)</u>	Pleasant Valley Ecological Reserve	Allowed only at such times and in the specific areas designated by the department.
<del>(33)</del> <u>(37)</u>	Quail Ridge Ecological Reserve	Allowed but only as part of department special opportunities at such times and in the specific areas designated by the department.
<del>(34)</del> <u>(38)</u>	Rancho Jamul Ecological Reserve	Allowed only at the times and in the specific areas designated by the department.
<del>(35)</del> <u>(39)</u>	River Springs Lakes Ecological Reserve	Allowed.
<del>(36)</del> <u>(40)</u>	Saline Valley Ecological Reserve	Allowed.
<del>(37)</del> <u>(41)</u>	San Antonio Valley Ecological Reserve	Allowed, but only as part of department special opportunities at such times and in the specific areas designated by the department.
<del>(38)</del> <u>(42)</u>	San Felipe Creek Ecological Reserve	Allowed.

<del>(39)</del> <u>(43)</u>	Sky Valley Ecological Reserve	Upland game only.
<del>(40)</del> <u>(44)</u>	Stone Corral Ecological Reserve	Allowed only at such times and in the specific areas designated by the department.
<del>(41)</del> <u>(45)</u>	Tomales Bay Ecological Reserve	Waterfowl only.
<del>(42)</del> <u>(46)</u>	Vernalis Ecological Reserve	Upland game only and only on the Vernalis Unit at such times and in the specific areas designated by the department.
<del>(43)</del> <u>(47)</u>	Walker Canyon Ecological Reserve	Allowed.
<del>(44)</del> <u>(48)</u>	West Mojave Desert Ecological Reserve	Allowed from July 1 through January 31.

**[No changes to subsections (e) or (f)]**

(g) Bicycles, Horses, Pack Stock, and/or Horseback Riding: Except as listed and specified in the columns below, bicycles and other pedaled vehicles, horses, pack stock and horseback riding are prohibited on ecological reserves, per subsections 550(bb) and 550(o) of these regulations.

	<i>AREA</i>	<i>BICYCLE DESCRIPTION</i>	<i>HORSE/PACK-STOCK DESCRIPTION</i>
(1)	Ballona Wetlands Ecological Reserve	Allowed only on the designated path on the north side of the Ballona Creek flood control channel.	Prohibited.
<u>(2)</u>	<u>Cañada de San Vicente</u>	<u>Prohibited</u>	<u>Allowed only on the trail from Holly Oaks Park and the Luelf Pond OSP</u>

	<u>Ecological Reserve</u>		<u>trail to Southern Oak Road.</u>
<del>(2)</del> <u>(3)</u>	Canebrake Ecological Reserve	Prohibited.	Allowed only on established trails in designated areas.
<del>(3)</del> <u>(4)</u>	Coal Canyon Ecological Reserve	Allowed on designated trails only, excluding dates within 72 hours after any weather event that produces 1/4 inch of precipitation in any 24 hour period, or any such event that produces 1/2 inch of precipitation in any 72 hour period.	Allowed only on designated trails, excluding dates within 72 hours after any weather event that produces 1/4 inch of precipitation in any 24 hour period, or any such event that produces 1/2 inch of precipitation in any 72 hour period.
<del>(4)</del> <u>(5)</u>	Crestridge Ecological Reserve	May be allowed on designated roads during designated seasons as determined by the department. Closures may be implemented at the discretion of the department.	Allowed only
<del>(5)</del> <u>(6)</u>	Eden Landing Ecological Reserve	Allowed only on designated trails.	Allowed only on designated trails.
<del>(6)</del> <u>(7)</u>	Headwaters Forest Ecological Reserve	Allowed only on the northern 3.5 mile designated corridor.	Prohibited.
<del>(7)</del> <u>(8)</u>	Magnesia Spring	Year round access is allowed only on that portion of the Mike Schuler Trail in the	Year round access is allowed only on that portion of the Mike Schuler Trail in the

	Ecological Reserve	northeast corner of Section 24, and the Lower Mirage Trail where it enters Section 24 in the north and continues south until the trail becomes the Herb Jeffries Trail which continues south and then east and exits the Ecological Reserve at the eastern border of Section 24. Access is also allowed year round on the Hopalong Cassidy Trail in the eastern portion of Section 35. Those portions of the Art Smith Trail in Sections 35 and 27 are open from October 1 through June 30 and closed from July 1 through September 30.	northeast corner of Section 24, and the Lower Mirage Trail where it enters Section 24 in the north and continues south until the trail becomes the Herb Jeffries Trail which continues south and then east and exits the Ecological Reserve at the eastern border of Section 24. Access is also allowed year round on the Hopalong Cassidy Trail in the eastern portion of Section 35. Those portions of the Art Smith Trail in Sections 35 and 27 are open from October 1 through June 30 and closed from July 1 through September 30.
<del>(8)</del> (9)	Redwood Shores Ecological Reserve	Allowed only along the levee-top road system.	Prohibited.
<del>(9)</del> (10)	Upper Newport Bay Ecological Reserve	Allowed only on paved Back Bay Drive.	Allowed only on established trails in designated areas.

(h) Designated Closures and Restrictions on Ecological Reserves: No visitor(s), other than those possessing written authorization from the Department, shall enter or access an ecological reserve which is closed.

	AREA	DESCRIPTION OF CLOSURE OR RESTRICTION
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(1)	Apricum Hill Ecological Reserve	Closed to all visitor use/access.
(2)	Bair Island Ecological Reserve	Closed to all visitor use/access from February 15 through May 20.
(3)	Ballona Wetlands Ecological Reserve	Pets, including dogs and cats, are prohibited. Unless the department determines that restoration or other uses in the following areas is more appropriate, existing recreational uses may be allowed under license agreement with Playa Vista Little League in that portion of Area C identified in the license agreement and existing parking areas may be allowed under leases to the County of Los Angeles.
(4)	Bobelaine Ecological Reserve	Closed to all visitor use/access.
(5)	Bolsa Chica Ecological Reserve	Pets are prohibited, except when they remain inside a motor vehicle. Visitors must stay on established trails, paths or other designated areas. The reserve is closed to visitor access and use from 8:00 p.m. to 6:00 a.m.
(6)	Burton Mesa Ecological Reserve	Motor vehicle use by visitors is prohibited.
(7)	Butte Creek Canyon Ecological Reserve	Motor vehicle use by visitors is prohibited.
(8)	Butte Creek House Ecological Reserve	Motor vehicle use by visitors is prohibited.



(9)	Calhoun Cut Ecological Reserve	The land portions of the reserve are closed to all visitor use/access. The navigable portions of Calhoun Cut and associated sloughs are accessible only by boat from Lindsey Slough.
(10)	Cañada de los Osos Ecological Reserve	Closed to all visitor use/access except for special opportunities as provided in subsections 630(d)(9) and 630(e)(9) of these regulations.
<u>(11)</u>	<u>Cañada de San Vicente Ecological Reserve</u>	<u>Closed to all visitor use/access except for the trail from Holly Oaks Park and the Luelf Pond OSP trail to Southern Oak Road and for special hunting opportunities as provided in subsection 630(d) of these regulations.</u>
<del>(11)</del> <u>(12)</u>	Canebrake Ecological Reserve	Pets are prohibited except for hunting dogs at such times and in the specific areas designated by the department.
<del>(12)</del> <u>(13)</u>	Carrizo Canyon Ecological Reserve	Closed to all visitor use/access from January 1 through September 30. Pets are prohibited, except when they remain inside a motor vehicle.
<del>(13)</del> <u>(14)</u>	Carrizo Plains Ecological Reserve	Access to the South Chimineas Unit requires an entry permit issued by the department. Permits must be filled out and returned to the department upon leaving the area.
<del>(14)</del> <u>(15)</u>	Coldwater Canyon Ecological Reserve	Closed to all visitor use/access except for pedestrian use of the existing travel corridor through the reserve.
<del>(15)</del> <u>(16)</u>	Corral Hollow Ecological Reserve	Closed to all visitor use/access.
<del>(16)</del> <u>(17)</u>	Cosumnes River Ecological Reserve	Pets are prohibited, except when they remain inside a motor vehicle.

<u>(18)</u>	Del Mar Mesa/Lopez Ridge Ecological Reserve	<u>Closed to all visitor use/access.</u>
<del>(17)</del> <u>(19)</u>	Goleta Slough Ecological Reserve	Visitors must stay on established trails, paths or other designated areas.
<del>(18)</del> <u>(20)</u>	Headwaters Forest Ecological Reserve	Pets are prohibited except for dogs on a leash on the northern 3.5 mile designated corridor.
<del>(19)</del> <u>(21)</u>	Hidden Palms Ecological Reserve	Closed to all visitor use/access.
<u>(22)</u>	<u>Indian Wells Valley Ecological Reserve</u>	<u>Closed to all visitor use/access except for special hunting opportunities as provided in subsection 630(d) of these regulations.</u>
<del>(20)</del> <u>(23)</u>	Lake Mathews Ecological Reserve	Closed to all visitor use/access.
<del>(21)</del> <u>(24)</u>	Leek Springs Ecological Reserve	Closed to all visitor use/access.
<del>(22)</del> <u>(25)</u>	Limestone Salamander Ecological Reserve	Closed to all visitor use/access.
<del>(23)</del> <u>(26)</u>	Macklin Creek Ecological Reserve	Closed to all visitor use/access.

<del>(24)</del> <u>(27)</u>	Magnesia Spring Ecological Reserve	Year round access is allowed only on that portion of the Mike Schuler Trail in the northeast corner of Section 24, and the Lower Mirage Trail where it enters Section 24 in the north and continues south until the trail becomes the Herb Jeffries Trail which continues south and then east and exits the Ecological Reserve at the eastern border of Section 24. Access is also allowed year round on the Hopalong Cassidy Trail in the eastern portion of Section 35. The Mirage Trail, located above the gate and west of the intersection with the Herb Jefferies trail, is open only for pedestrian use from May 1 through January 31, and is closed to all visitor use from February 1 through April 30. Those portions of the Art Smith Trail in Sections 35 and 27 are open from October 1 through June 30 and closed from July 1 through September 30.B□
<del>(25)</del> <u>(28)</u>	Morro Rock Ecological Reserve	Visitor access/use allowed only for that portion of Morro Rock between the low tide mark and a point ten (10) feet in elevation above the mean high tide mark.
<u>(29)</u>	<u>North Carrizo Ecological Reserve</u>	<u>Closed to all visitor/use access except for special opportunities as provided in Section 630(d) of these regulations.</u>
<del>(26)</del> <u>(30)</u>	Phoenix Field Ecological Reserve	Closed to all visitor use/access.
<del>(27)</del> <u>(31)</u>	Pine Hill Ecological Reserve	Closed to all visitor use/access.
<del>(28)</del> <u>(32)</u>	Quail Ridge Ecological Reserve	Closed to all visitor use/access except for special opportunities as provided in subsection 630(d) <del>(33)</del> of these regulations

<del>(29)</del> <u>(33)</u>	San Dieguito Lagoon Ecological Reserve	The California least tern nesting island is closed to all visitor use/access.
<del>(30)</del> <u>(34)</u>	San Joaquin River Ecological Reserve	Closed to all visitor use/access except for special opportunities as provided in subsection 630(e) <del>(25)</del> of these regulations.
<del>(31)</del> <u>(35)</u>	Santa Cruz Long-toed Salamander Ecological Reserve	Closed to all visitor use/access.
<u>(36)</u>	<u>Santa Margarita River Ecological Reserve</u>	<u>Closed to all visitor use/access</u>
<del>(32)</del> <u>(37)</u>	Santa Rosa Plain Vernal Pool Ecological Reserve	Closed to all visitor use/access.
<del>(33)</del> <u>(38)</u>	Santa Rosa Plateau Ecological Reserve	Pets are prohibited. Smoking is prohibited, except inside a motor vehicle.
<del>(34)</del> <u>(39)</u>	Stone Ridge Ecological Reserve	Closed to all visitor use/access <del>except for department authorized interpretive, educational, or research programs.</del>
<del>(35)</del> <u>(40)</u>	Table Bluff Ecological Reserve	The fenced western lily area is closed to all visitor use/access.
<del>(36)</del> <u>(41)</u>	Tomales Bay Ecological Reserve	The land area of the reserve is closed to all visitor use/access from March 1 through June 30.

<del>(37)</del>	Woodbridge Ecological Reserve	Closed to all visitor use/access except for the viewing area.
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(i) Ecological Reserves Authorized for Dog Training:

(1) Rancho Jamul Ecological Reserve.

(A) Retriever training allowed in the designated area only, and only with written authorization from the area manager.

(j) Shooting Areas: Ecological Reserve, pursuant to subsection 550(cc) of these regulations, with designated shooting area (i.e., range) and additional regulations:

(1) Carrizo Plains Ecological Reserve.

(A) Target shooting is allowed in designated areas only.

Note: Authority cited: Sections 200, 203, 265, 710, 710.5, 710.7, 1050, 1530, 1583, 1587, 1745, 1764, 1765 and 10504, Fish and Game Code. Reference: Sections 355, 711, 713, 1050, 1055.3, 1526, 1528, 1530, 1570, 1571, 1572, 1580, 1581, 1582, 1583, 1584, 1585, 1745, 1761, 1764, 1765, 1907, 2006 and 10504, Fish and Game Code.

**Section 702, Title 14, CCR, is amended to read:**

**§ 702. Hunting Applications, Tags, Seals, Permits, Reservations and Fees; Department Lands Applications, Passes, Special Use Permits, and Fees.**

**[No changes to 702(a) through 702(c)]**

(d) Permits for Special Use of Department Lands

(1)	<i>Permits/Application</i>	<i>Permit Fees (US\$)</i>
(A)	Permit Application for Special Use of Department Lands (DFW 730 ( <del>New 01/14REV. XX/20</del> )), incorporated by reference herein. The following attachments are parts of this permit application:	No fee
1.	Attachment A: Special Use Permits - Terms and Conditions (DFW 730a ( <del>New 01/14REV. XX/20</del> )), incorporated by reference herein;	
2.	Attachment B: Applicant Acceptance of Terms, Conditions and Costs (DFW 730b( <del>New 01/14REV. XX/20</del> )), incorporated by reference herein; and	
3.	Attachment C: Supplement (DFW 730c ( <del>New 01/14REV. XX/20</del> )), incorporated by reference herein	
<del>(B)</del>	<del>Type 1 Special Use Permit from January 1, 2016 through December 31, 2016.</del>	<del>\$81.75</del>
<del>(C)</del> <u>B</u>	Type 1 Special Use Permit starting January 1, 2017.	<del>\$122.50</del> <u>\$132.75</u>
<del>(D)</del>	<del>Type 2 Special Use Permit from January 1, 2016 through December 31, 2016.</del>	<del>\$308.25</del>
<del>(E)</del> <u>C</u>	Type 2 Special Use Permit starting January 1, 2017.	<del>\$462.50</del> <u>\$502.25</u>
<del>(F)</del>	<del>Type 3 Special Use Permit from January 1, 2016 through December 31, 2016.</del>	<del>\$375.25</del>

(GD)	Type 3 Special Use Permit <del>starting January 1, 2017.</del>	<del>\$536.00</del> <u>\$582.00</u>
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(2) Special Use Permit fees shall be subject to annual adjustment pursuant to Section 699 of these regulations ~~starting on January 1, 2018.~~

Note: Authority cited: Sections 200, 203, 265, 331, 332 and 1050, Fish and Game Code. Reference: Sections 200, 203, 203.1, 265, 331, 332, 713, 1050, 1055, 1055.1, 1570, 1571, 1572, 1573, 1745, 3950, 3951, 4302, 4330, 4331, 4332, 4333, 4336, 4340, 4341, 4652, 4653, 4654, 4655, 4657, 4750, 4751, 4752, 4753, 4754, 4755, 4902, 10500 and 10502, Fish and Game Code.



## Memorandum

**Date:** November 19, 2019

**To:** Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

**From:** Charles H. Bonham  
Director

**Subject:** **Submittal of Initial Statement of Reasons to Amend Central Valley Sport Fishing Regulations**

Please find attached the Initial Statement of Reasons (ISOR) to amend sections 2.35 and 7.00, and subsections (b)(5), (b)(68), (b)(124), and (b)(156.5) of Section 7.50, Title 14, California Code of Regulations, for sport fishing regulations in the Central Valley.

Similar to last year, the California Department of Fish and Wildlife (Department) is presenting three regulatory options for the 2020 Central Valley sport fishing regulations for the Fish and Game Commission's (Commission) consideration. The three options encompass possible Pacific Fishery Management Council (PFMC) 2020 recommendations for Sacramento River fall-run Chinook Salmon (SRFC) stocks. The purpose for providing options is to increase flexibility for development of the final Central Valley sport fishing regulations. The Department's preferred option is Option 1 – any size Chinook Salmon fishery, given the 2020 SRFC stock abundance forecast is sufficiently high to avoid the need to constrain in-river SRFC harvest. Specific bag and possession limits for SRFC will be presented to the Commission after the PFMC adopts its final recommendations at its April 2020 meeting.

The attached ISOR includes three additional proposed changes that are different from the 2019 regulations: (1) extend the fishing season by two weeks on the upper Sacramento River from Deschutes Road bridge to the Red Bluff Diversion Dam (RBDD); (2) remove obsolete regulations concerning take of Coho Salmon in the Feather River; and (3) prohibit fishing below concrete flood control weirs. The first change stemmed from a petition submitted for consideration to the Commission to extend the season on the Sacramento River downstream of the RBDD. After the Commission referred the petition to the Department for consideration, the Department evaluated the request in the ISOR, and found that an extension downstream of the RBDD was not warranted biologically, but that an extension upstream of the RBDD to the Deschutes Road bridge was warranted.

The draft negative declaration for compliance with the California Environmental Quality Act will be provided to the Commission prior to the discussion hearing.

The Department asks that the Commission request that the Office of Administrative Law make the regulations effective on or before July 16, 2020.

If you have any questions or need additional information, please contact Kevin Shaffer, Chief, Fisheries Branch, by telephone at (916) 327-8841 or by e-mail at

Melissa Miller-Henson, Executive Director  
Fish and Game Commission  
November 19, 2019  
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[Kevin.Shaffer@wildlife.ca.gov](mailto:Kevin.Shaffer@wildlife.ca.gov).

The public notice should identify Senior Environmental Scientist, Karen Mitchell, as the Department's point of contact for this rulemaking. Ms. Mitchell can be reached at (916) 445-0826 or by e-mail at [Karen.Mitchell@wildlife.ca.gov](mailto:Karen.Mitchell@wildlife.ca.gov).

Attachment

ec: Stafford Lehr, Deputy Director  
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State of California  
Fish and Game Commission  
Initial Statement of Reasons for Regulatory Action

Amend Sections 2.35 and 7.00, and Subsections (b)(5), (b)(68), (b)(124),  
and (b)(156.5) of Section 7.50  
Title 14, California Code of Regulations  
Re: Central Valley Sport Fishing Regulations

I. Date of Initial Statement of Reasons: November 18, 2019

II. Dates and Locations of Scheduled Hearings

(a) Notice Hearing

Date: December 11, 2019

Location: Sacramento, CA

(b) Discussion Hearing

Date: February 6, 2020

Location: Sacramento, CA

(c) Discussion Hearing

Date: April 16, 2020

Location: Sacramento, CA

(d) Adoption Hearing

Date: May 14, 2020

Location: Teleconference

III. Description of Regulatory Action

(a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations (CCR).

Current regulations in subsections (b)(5), (b)(68), (b)(124), and (b)(156.5) of Section 7.50 prescribe the 2019 seasons and daily bag and possession limits for Sacramento River fall-run Chinook Salmon (*Oncorhynchus tshawytscha*; SRFC) sport fishing in the American, Feather, Mokelumne, and Sacramento rivers, respectively. Collectively, these four rivers constitute the “Central Valley fishery” for SRFC for purposes of this document (Figure 1). Each year, the Department of Fish and Wildlife (Department) recommends new Chinook Salmon bag and possession limits for consideration by the Fish and Game Commission (Commission) to align the fishing limits with up-to-date management goals, as set forth below.

The Pacific Fishery Management Council (PFMC) is responsible for adopting recommendations for the management of recreational and commercial ocean salmon fisheries in the Exclusive Economic Zone (three to 200 miles offshore) off the coasts of Washington, Oregon, and California. When approved by the Secretary of Commerce, these recommendations are implemented as ocean salmon fishing regulations by the National Marine Fisheries Service (NMFS).

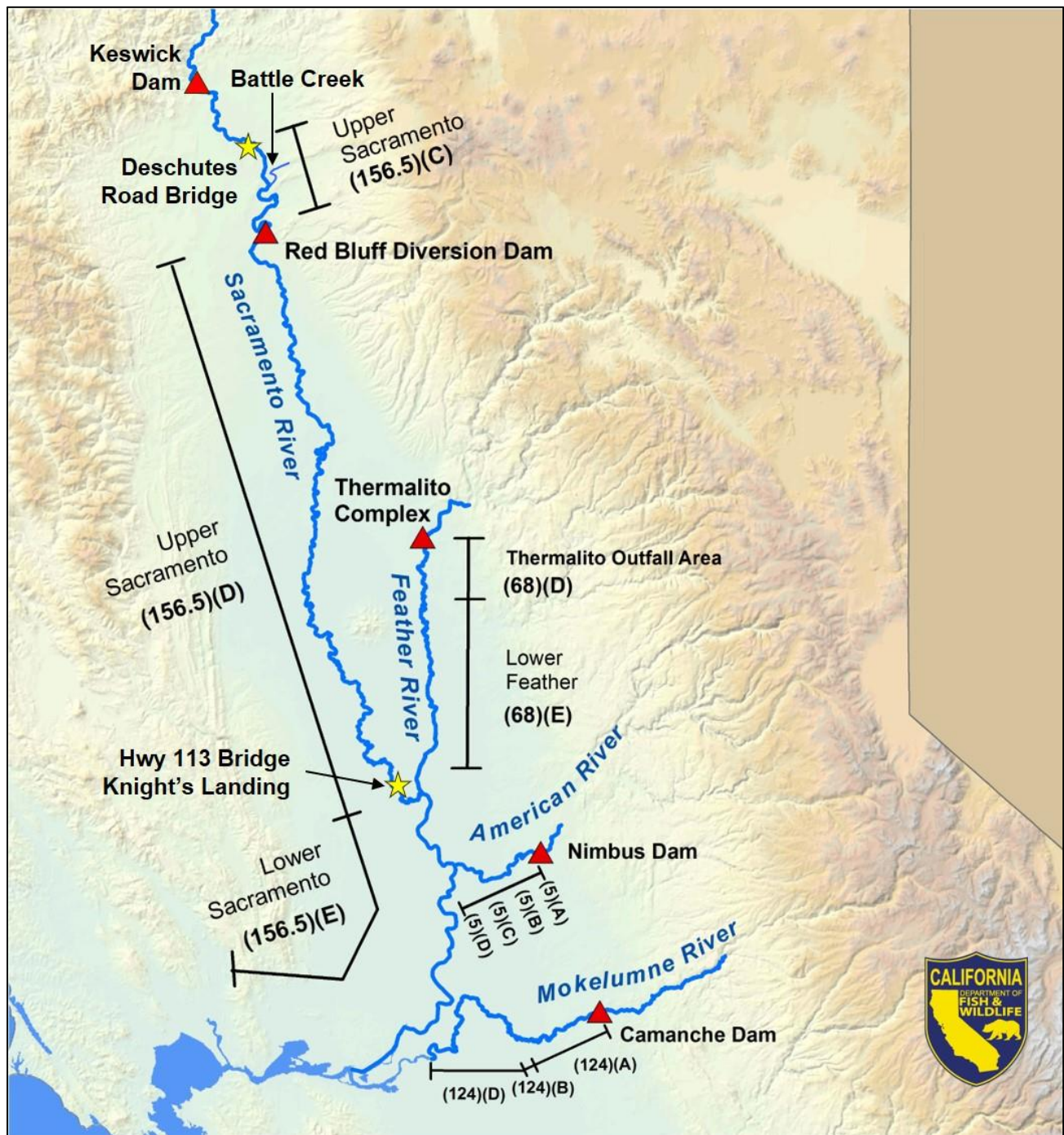


Figure 1. Map of the “Central Valley fishery” for Sacramento River fall-run Chinook Salmon, encompassing the following rivers and their respective subsections of Section 7.50: American (b)(5), Feather (b)(68), Mokelumne (b)(124), and Sacramento (b)(156.5).

The PFMC will develop the annual Pacific coast ocean salmon fisheries regulatory options for public review at its March 2020 meeting and will adopt its final regulatory recommendations at its April 2020 meeting based on the PFMC salmon abundance estimates and recommendations for ocean harvest for the coming season. Based on the April 2020 recommendation by PFMC, the Department will recommend specific bag and possession limit regulations for the Central Valley fishery to the Commission at its April 16, 2020 meeting. The

Commission will then consider adoption of the Central Valley sport fishing regulations at its May 14, 2020 teleconference.

## **Proposed Regulations**

### **CHINOOK SALMON BAG AND POSSESSION LIMITS**

The Department recognizes the uncertainty of SRFC in-river harvest projections. Therefore, for the 2020 Central Valley fishery, the Department is presenting three regulatory options for the Commission's consideration to tailor 2020 Central Valley fishery management to target 2020 in-river fisheries harvest projections.

- Option 1 is the most liberal of the three options, and allows take of any size Chinook Salmon up to the daily bag and possession limits.
- Option 2 allows for take of a limited number of adult Chinook Salmon, with grilse Chinook Salmon making up the remainder of the daily bag and possession limits.
- Option 3 is the most conservative option, and allows for a grilse-only Chinook Salmon fishery.

All three options will also increase fishing opportunities on Chinook Salmon by extending the Chinook Salmon sport fishing season on the Sacramento River from the Deschutes Road bridge to the Red Bluff Diversion Dam from a closure date of December 16 to a closure date of December 31. The rationale for this proposal is discussed in greater detail below.

A minor correction will also be made to subsections 7.50(b)(124)(A), (B), and (D), to ensure consistency in the format in which the daily bag and possession limit for hatchery trout or hatchery steelhead is displayed in the regulatory text.

#### **Key to Proposed Regulatory Changes:**

Because the PFMC recommendations are not known at this time, a range shown in [brackets] in the text below of bag and possession limits is indicated where it is desirable to continue Chinook Salmon fishing in the American, Feather, Mokelumne, and Sacramento rivers.

**Bold** text indicates changes to the in-river season or boundary.

The following options are provided for Commission consideration:

#### **Option 1 – Any Size Chinook Salmon Fishery**

This option would allow anglers to take up to [0-4] Chinook Salmon of any size per day. This option is the Department's preferred option if the 2020 SRFC stock abundance forecast is sufficiently high to avoid the need to constrain in-river SRFC harvest.

American River, subsection 7.50(b)(5):

- (B) From the USGS gauging station cable crossing near Nimbus Hatchery to the SMUD power line crossing the southwest boundary of Ancil Hoffman Park.

July 16 through October 31 with a bag limit of [0-4] Chinook Salmon.

Possession limit - [0-12] Chinook Salmon.

- (C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park to the Jibboom Street bridge.

July 16 through December 31 with a bag limit of [0-4] Chinook Salmon.

Possession limit - [0-12] Chinook Salmon.

- (D) From the Jibboom Street bridge to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon.

Possession limit - [0-12] Chinook Salmon.

Feather River, subsection 7.50(b)(68):

- (D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to 200 yards above the Live Oak boat ramp.

July 16 through October 31 with a daily bag limit of [0-4] Chinook Salmon.

Possession limit - [0-12] Chinook Salmon.

- (E) From 200 yards above the Live Oak boat ramp to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

Mokelumne River, subsection 7.50(b)(124):

- (A) From Camanche Dam to Elliott Road.

July 16 through October 15 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

- (B) From Elliott Road to the Woodbridge Irrigation District Dam and including Lodi Lake.

From July 16 through December 31 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

- (D) From the Lower Sacramento Road bridge to the mouth.

From July 16 through December 16 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

Sacramento River below Keswick Dam, subsection 7.50(b)(156.5):

- (C) From Deschutes Road bridge to the Red Bluff Diversion Dam.

August 1 through **December 31** with a bag limit of [0-4] Chinook Salmon

Possession limit – [0-12] Chinook Salmon.



- (D) From the Red Bluff Diversion Dam to the Highway 113 bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

- (E) From the Highway 113 bridge to the Carquinez Bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

### **Option 2 – Limited Adult and Grilse Salmon Fishery**

This option would allow the take of a limited number of adult Chinook Salmon, with grilse Chinook Salmon making up the remainder of the daily bag and possession limits. Should a reduction in the adult component of the stock be imposed by PFMC harvest projections, the Department is recommending specifying angling opportunities on the smaller, and possibly more numerous grilse salmon to increase angling harvest opportunities. Grilse returns from the previous season are included in pre-season stock abundance forecasts, but are not included in the current season adult returns used for evaluating conservation targets for SRFC. Due to their smaller size and immaturity, grilse are typically outcompeted by larger adults, and do not significantly contribute to the spawning population, and so they would be available for harvest without impacting the juvenile recruitment for the current season. Take of adult salmon would be limited under regulation, and the subsequent juvenile production would help rebuild the depressed stock size at a time when there is the need to restrict harvest of adult salmon.

The Department recommends a grilse salmon size limit of less than or equal to 27 inches total length based on an analysis of grilse data conducted by Department staff in 2019 (refer to Section III(e) below). A 27-inch total length grilse salmon cutoff is the best balance between angling harvest opportunity of possibly abundant smaller, two-year old male salmon and preserving the limited number of females available to spawn.

American River, subsection 7.50(b)(5):

- (B) From the USGS gauging station cable crossing near Nimbus Hatchery to the SMUD power line crossing the southwest boundary of Ancil Hoffman Park.

July 16 through October 31 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit - [0-12] Chinook Salmon of which no more than [0–4] fish may be over 27 inches total length.

- (C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park to the Jibboom Street bridge.

July 16 through December 31 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit - [0-12] Chinook Salmon of which no more than [0–4] fish may be over 27 inches total length.

- (D) From the Jibboom Street bridge to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit - [0-12] Chinook Salmon of which no more than [0-4] fish may be over 27 inches total length.

Feather River, subsection 7.50(b)(68):

- (D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to 200 yards above the Live Oak boat ramp.

July 16 through October 31 with a daily bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit - [0-12] Chinook Salmon of which no more than [0-4] fish may be over 27 inches total length.

- (E) From 200 yards above the Live Oak boat ramp to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over 27 inches total length.

Mokelumne River, subsection 7.50(b)(124)

- (A) From Camanche Dam to Elliott Road.

July 16 through October 15 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over 27 inches total length.

- (B) From Elliott Road to the Woodbridge Irrigation District Dam and including Lodi Lake.

From July 16 through December 31 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over 27 inches total length.

- (D) From the Lower Sacramento Road bridge to the mouth.

From July 16 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over 27 inches total length.

Sacramento River below Keswick Dam, subsection 7.50(b)(156.5):

- (C) From Deschutes Road bridge to the Red Bluff Diversion Dam.

August 1 through **December 31** with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over 27 inches total length.

- (D) From the Red Bluff Diversion Dam to the Highway 113 bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over 27 inches total length.

- (E) From the Highway 113 bridge to the Carquinez Bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over 27 inches total length.

### **Option 3 – Grilse-only Salmon Fishery**

This option would allow for a grilse-only salmon fishery. Should a reduction in the adult component of the stock be imposed by PFM harvest projections, the Department is recommending specifying angling opportunities on the smaller, and possibly more numerous grilse salmon to increase angling harvest opportunities. Grilse returns from the previous season are included in pre-season stock abundance forecasts, but are not included in the current season adult returns used for evaluating conservation targets for SRFC. Due to their smaller size and immaturity, grilse are typically outcompeted by larger adults, and do not significantly contribute to the spawning population, and so they would be available for harvest without impacting the juvenile recruitment for the current season. Take of adult salmon would be prohibited under regulation, and the subsequent juvenile production would help rebuild the depressed stock size at a time when there is the need to restrict harvest of adult salmon.

The Department recommends a grilse salmon size limit of less than or equal to 27 inches total length based on an analysis of grilse data conducted by Department staff in 2019 (refer to Section III(e) below). A 27-inch-total length grilse salmon cutoff is the best balance between angling harvest opportunity of possibly abundant smaller, two-year old male salmon and preserving the limited number of female salmon available to spawn.

American River, subsection 7.50(b)(5):

- (B) From the USGS gauging station cable crossing near Nimbus Hatchery to the SMUD power line crossing the southwest boundary of Ancil Hoffman Park.

July 16 through October 31 with a bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

- (C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park to

the Jibboom Street bridge.

July 16 through December 31 with a bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

- (D) From the Jibboom Street bridge to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

Feather River, subsection 7.50(b)(68):

- (D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to the Live Oak boat ramp.

July 16 through October 31 with a daily bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

- (E) From 200 yards above the Live Oak boat ramp to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

Mokelumne River, subsection 7.50(b)(124):

- (A) From Camanche Dam to Elliott Road.

July 16 through October 15 with a bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

- (B) From Elliott Road to the Woodbridge Irrigation District Dam and including lake Lodi.

From July 16 through December 31 with a bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

- (D) From the Lower Sacramento Road bridge to the mouth.

From July 16 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

Sacramento River below Keswick Dam, subsection 7.50(b)(156.5):

- (C) From Deschutes Road bridge to the Red Bluff Diversion Dam.

August 1 through **December 31** with a bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

- (D) From the Red Bluff Diversion Dam to the Highway 113 bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

- (E) From the Highway 113 bridge to the Carquinez Bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

### **EXTEND CHINOOK SALMON SPORT FISHING SEASON ON THE SACRAMENTO RIVER**

Sport fishing interests have requested the Chinook Salmon sport fishing season on the Sacramento River be extended from the current December 16 closure date to December 31 to enhance late-season fishing opportunity on the river. The current sport fishing regulations for Chinook Salmon on the Sacramento River extend approximately 300 miles from the Deschutes Road bridge downstream to the Carquinez bridge. At issue is regulating the closure date to minimize contact in the fishery with federally and state-listed endangered winter-run Chinook Salmon.

In 2002, the Department provided evidence to support a shortened salmon fishing season in the lower Sacramento River system to protect winter-run Chinook Salmon, which resulted in the current December 16 season closure date. Since 2006, when the Central Valley Angler Survey program was reinstated, four winter-run Chinook Salmon coded-wire tag (CWT) recoveries have been made in Sacramento River sport fishery monitoring (Table 1). Two of the four recoveries occurred after the current season closure date of December 16 and both occurred upstream of Knights Landing. The other two recoveries occurred in December prior to the current season closure date, and both were again at or above Knights Landing. While the number of recoveries is modest and scattered among years, expansions of the CWT recoveries may suggest a more appreciable impact to winter-run Chinook Salmon at the population level than what the raw numbers do alone.

**Table 1.** Coded-wire tag recoveries of winter-run Chinook Salmon in the Sacramento River sport fishery, 2006 – 2018, as seen in monitoring conducted by the Central Valley Angler Survey. RM = river mile, F = female, M = male

<b>Collection Date</b>	<b>Collection Location</b>	<b>Brood Year</b>	<b>Age</b>	<b>Sex</b>	<b>Fork Length (mm)</b>
12/20/2008	3 river miles above Knights Landing RM 93	2006	3	F	792
12/06/2009	At Knights Landing RM 90	2007	3	M	751
12/26/2009	1 river mile below Butte City RM 168	2007	3	M	770

Late-fall-run Chinook Salmon spawning begins in December, peaks in late January, and continues into March. Late-fall-run Chinook Salmon have two main areas in which they spawn in the upper Sacramento River: the main stem river from Red Bluff up to Keswick Dam supports a population, and Battle Creek supports a hatchery population at Coleman National Fish Hatchery.

Based on the CWT information presented in Table 1, the Department does not support extending the Chinook Salmon fishing season in the Sacramento River downstream of the Red Bluff Diversion Dam (RBDD). With contact being made with winter-run Chinook Salmon both before and after the current closure date in this area, adding 2 weeks of fishing is not warranted.

However, the Department *does* support extending the fishing season upstream of the RBDD (RM 243), because most late season fishing for late-fall-run Chinook Salmon would occur near the mouth of Battle Creek (RM 275). This would provide an approximately 80-mile buffer from where the most upstream winter-run Chinook Salmon was recovered (RM 190). This will provide additional fishing opportunity on late-fall-run Chinook Salmon, with anglers primarily targeting hatchery fish going into Battle Creek, while continuing to protect state and federally-listed endangered winter-run Chinook Salmon. The Department will continue to monitor for winter-run Chinook Salmon recoveries to assess this regulation change.

**Proposal: Amend subsection 7.50(b)(156.5)(C), Sacramento River**

Extend the Chinook Salmon sport fishing season on the Sacramento River from the Deschutes Road bridge to the Red Bluff Diversion Dam to December 31.

**REMOVE EXCEPTION FOR TAKE OF COHO SALMON IN THE FEATHER RIVER**

Section 7.00 includes an exception for the take of Coho Salmon in Lake Oroville and Oroville-Thermalito Complex, and the Feather River from the Diversion Pool Dam to the Fish Barrier Dam. Section 7.00 also includes an exception for incidentally hooked Coho Salmon in the same area. Coho Salmon have not been stocked in Lake Oroville since 2013. Coho Salmon are no longer planted in the Feather River water impoundments. Therefore, the exceptions for take and incidentally hooked Coho Salmon stated in Section 7.00 should be removed.

**Proposal: Amend Section 7.00, Re: Take of Coho Salmon in the Feather River**

Remove exception for take and incidentally hooked Coho Salmon in Lake Oroville and Oroville-Thermalito Complex, and the Feather River from the Diversion Pool Dam to the Fish Barrier Dam.

Section 7.00 also currently lists Fish and Game Code (FGC) Section 110 as a reference citation. FGC Section 110 was renumbered from FGC Section 206 in 2006, and the content of FGC Section 110 is no longer relevant to Section 7.00. For this reason, FGC Section 110 will be removed from the list of reference citations.

**PROHIBIT FISHING AT CONCRETE FLOOD CONTROL WEIRS**

Annually, during the rainy season, fish often get trapped below the concrete flood control weirs on the Sacramento River. Fish trapped in these areas are often state or federally-listed as endangered or threatened species and, therefore, should not be exposed to angling opportunity. Subsections 7.50(b)(156.5)(D) and (E) include a “Note” which states that it is unlawful to take fish 0-250 feet downstream from the overflow side of the Moulton, Colusa, Tisdale, Fremont, and Sacramento weirs. However, there is no regulation in place that makes angling near flood control weirs unlawful. Consequently, Department law enforcement officers cannot issue citations to anglers who fish these areas. Section 2.35 prohibits angling near fishways and egg-taking stations, dams, weirs or racks with fishways or egg-taking stations, and the upstream side of fish screens; but does not apply to areas, excluding the Fremont Weir, described in the notes in subsections 7.50(b)(156.5)(D) and (E). Except for the Fremont Weir, there are no fishways at the weirs listed above. Even if a fishway exists, the closure only extends to 250 feet around the fishway and the flood weirs can be up to two miles across and several miles long, leaving uncertainty and difficulty in enforcing regulations. The 250 feet ruling is at or below the weir itself regardless of how far across it is.

Colusa Weir is an earthen weir and does not trap fish like the other concrete flood control weirs. It also does not have clearly delineated boundaries, which makes enforcement difficult. Therefore, the Colusa Weir is not included in the list of concrete flood control weirs proposed to be closed to fishing.

#### **Proposal 1: Amend Section 2.35, Regarding Take of Fish at Weirs**

Amend Section 2.35 to include and differentiate flood control weirs in the Central Valley from other types of weirs, and include a fishing closure of 0-250 feet downstream from the overflow side of Moulton, Tisdale, Fremont, and Sacramento weirs. Fremont Weir is added to this requirement in order to provide protection for fish in this important migration corridor.

The reference within Section 2.35 to FGC Section 5502 will also be removed, as this statute was repealed in 2007 per Assembly Bill 1729, Fish and Wildlife. The related authority citation of FGC Section 219 will also be removed from Section 2.35. Lastly, the reference to Section 201 is removed, because the proposed regulation is not trying to implement, interpret, or make specific anything with reference to the Commission’s power to regulate natural resources, commercial, or other activity.

#### **Proposal 2: Amend subsections 7.50(b)(156.5)(D) and (E), Sacramento River**

Remove Note which states it is unlawful to take fish 0-250 feet downstream from the overflow side of the Moulton, Colusa, Tisdale, Fremont, and Sacramento weirs. These fishing closures will now be stipulated in Title 14, Section 2.35, with the exception of the Colusa Weir.

#### **Necessity of the Proposed Regulation Changes**

The proposed regulations are necessary to adjust Chinook Salmon bag and possession limits, size limits, and open seasons for the American, Feather, Mokelumne, and Sacramento rivers for consistency with PFMC salmon abundance estimates and recommendations for ocean harvest for the coming season. The proposed regulatory changes will maximize sport fishing opportunity where possible through the proposed extension of the season end date on the Sacramento River above RBDD without adversely affecting SRFC or winter-run Chinook



Salmon. In addition, it is necessary to prohibit fishing near flood control weirs where fish can become trapped to protect federally and state-listed endangered or threatened species.

(b) Goals and Benefits of the Regulation

It is the policy of this State to encourage the conservation, maintenance, and utilization of the living resources of the ocean and other waters under the jurisdiction and influence of the State for the benefit of all the citizens of the State and to promote the development of local fisheries and distant water fisheries based in California in harmony with international law, respecting fishing and the conservation of the living resources of the ocean and other waters under the jurisdiction and influence of the State. The objectives of this policy include, but are not limited to, the maintenance of sufficient populations of all species of aquatic organisms to ensure their continued existence, and the maintenance of a sufficient resource to support a reasonable sport use.

Adoption of scientifically-based SRFC bag and possession limits provides for the maintenance of sufficient populations of Chinook Salmon to ensure their continued existence. The extension of the fishing season on the upper Sacramento River provides additional angler opportunity while minimizing potential contact with federally and state-listed endangered winter-run Chinook Salmon. The prohibition of take at flood control weirs helps to provide protection for fish in important migration corridors. Removing the mention of prohibition of Coho salmon take in the Feather River removes a potential clarity concern for anglers.

The benefits of the proposed regulations are consistency with federal fishery management goals, sustainable management of the SRFC fishery, general health and welfare of California residents, and promotion of businesses that rely on sport fishing in the Central Valley.

(c) Authority and Reference Sections from Fish and Game Code for Regulation

**Section 2.35**

Authority cited: Sections 200, 205, 265 and 275, Fish and Game Code.

Reference: Sections 200, 205, 255, 265, 270 and 275, Fish and Game Code.

**Section 7.00**

Authority cited: Sections 200, 205, 265 and 275, Fish and Game Code.

Reference: Sections 200 and 205, Fish and Game Code.

**Section 7.50**

Authority: Sections 200, 205, 265, 270, 315, 316.5, 399 and 2084, Fish and Game Code.

Reference: Sections 200, 205, 265, 270, 316.5 and 2084, Fish and Game Code.

(d) Specific Technology or Equipment Required by Regulatory Change

None.

(e) Identification of Reports or Documents Supporting Regulation Change

*Initial Statement of Reasons for Regulatory Action. Amendments to Section 7.50, Title 14, California Code of Regulations, Re: Central Valley Salmon Sport Fishing. November 2018*

(f) Public Discussions of Proposed Regulations Prior to Notice Publication

The Department presented the proposed amendments to the SRFC bag and possession limits at the Commission's Wildlife Resources Committee meeting on September 10, 2019.

IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change

No alternatives were identified by or brought to the attention of Commission staff that would have the same desired regulatory effect.

(b) No Change Alternative

**Chinook Salmon Bag and Possession Limits**

The no change alternative would leave existing 2019 regulations in place. The no change alternative would not allow for appropriate harvest rates, while the proposed regulations will allow the state to harmonize its bag and possession limits with NMFS' regulations.

**Extend Chinook Salmon Sport Fishing Season on the Sacramento River**

The no change alternative would leave existing 2019 regulations in place, and current fishing opportunity on the Sacramento River would not change.

**Remove Exception for Take of Coho Salmon in the Feather River**

The no change alternative would leave the existing regulation in place, which is no longer relevant and, therefore, could be confusing to anglers.

**Prohibit Fishing at Concrete Flood Control Weirs**

The no change alternative would leave existing regulations in place, exposing state or federally-listed as endangered or threatened species to angling opportunity.

V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. The proposed changes are necessary for the continued preservation of the

resource, while providing inland sport fishing opportunities and thus, the prevention of adverse economic impacts.

- (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment

The Commission does not anticipate significant adverse economic impacts but acknowledges the potential for short-term negative impacts on the creation or elimination of jobs within the state. The Commission anticipates no adverse impacts on the creation of new business, the elimination of existing businesses or the expansion of businesses in California (see Table 2). Minor variations in the bag and possession limits and/or the implementation of a size limit are unlikely to significantly impact the volume of business activity. The loss of up to 27 jobs with Option 3 is not expected to eliminate businesses because reduced fishing days will be partially offset by the extension of the salmon fishing season by two weeks on a portion of the Sacramento River from the Deschutes Road bridge to the Red Bluff Diversion Dam, and by opportunities to fish for grilse Chinook Salmon and other species.

The Commission anticipates benefits to the health and welfare of California residents. Providing opportunities for a Chinook Salmon sport fishery encourages consumption of a nutritious food. The Commission anticipates benefits to the environment by the sustainable management of Chinook Salmon resources in the Central Valley.

The Commission does not anticipate any benefits to worker safety.

Other benefits of the proposed regulations are concurrence with federal fishery management goals and promotion of businesses that rely on Central Valley sport fishing.

- (c) Cost Impacts on a Representative Private Person or Business

The Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

- (d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State

None.

- (e) Nondiscretionary Costs/Savings to Local Agencies

None.

- (f) Programs Mandated on Local Agencies or School Districts

None.

- (g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code

None.

- (h) Effect on Housing Costs

None.

## VII. Economic Impact Assessment

This action is expected to sustain fishery activity within the range of historically typical seasons. Lower PFMC allocations can result in a smaller bag and possession limit, (more conservative), whereas larger PFMC allocations can result in a higher bag and possession limit (more liberal), both of which can skew the average fishing activity over seasons. The potential difference between a typical season and the options under consideration range from \$1.9 - \$3.9 M as shown in Table 2 below.

A typical season for the Central Valley fishery experiences an average of 179,550 sport salmon angler days in which anglers spend an average of \$83 -114 per day contributing a total of \$13.8 M (2019\$) in direct expenditures to California businesses. This expenditure is received by area businesses that spend a share on inputs and payroll. As employees receive income, their household spending again circulates in the local economy and statewide. These multiplier effects result in an estimated total economic impact of \$19.4 M (2019\$), and up to 136 jobs.

The regional and statewide economic impacts factor into the effort to balance the maintenance of the recreational fishery with resource preservation, while complying with PFMC allocations. The potential economic impacts that may result from each in-river harvest projection as specified in Option 1, Option 2, and Option 3 are evaluated in terms of each scenario's probable impact on the number of angler days, and thus area spending.

Table 2. Central Valley Fishery Economic Impacts (2019\$)

Regulation	Angler Days	Angler Expenditures	Total Econ Impact	Jobs
Option 1	179,550	\$ 13,801,889	\$ 19,407,577	136
Option 2	161,595	\$ 12,421,700	\$ 17,466,819	122
Option 3	143,640	\$ 11,041,511	\$ 15,526,062	109
Difference	Angler Day Loss	Expenditure Loss	Total Impact Loss	Job Loss
Option 1	0	\$ -	\$ -	0
Option 2	17,955	\$ 1,380,189	\$ 1,940,758	14
Option 3	35,910	\$ 2,760,378	\$ 3,881,515	27

Sources: California Department of Fish and Wildlife, Fisheries Branch economic analysis; U.S. Fish and Wildlife Service, 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation; dollar figures adjusted for inflation with Implicit Price Deflator for Personal Consumption Expenditures, Bureau of Economic Analysis.

Historical correlations between catch limits and fishery participation levels suggest that Option 1 could enable a historically typical number of angler days for the 2019 Chinook Salmon season on the American, Feather, Mokelumne, and Sacramento rivers. Option 2 may result in declines in angler days of 17,955 below a typical year. Option 3 may result in larger declines, or an estimated 35,910 fewer angler days.

For all options, the proposed extension of the season end date for a portion of the Sacramento River would extend the period of angler regional economic contributions. Additionally, anglers may pursue other in-river sport fish aside from Chinook Salmon, such as steelhead (*Oncorhynchus mykiss*), striped bass (*Morone saxatilis*), largemouth bass (*Micropterus*

*salmoides*), sturgeon (*Acipenser transmontanus*) and catfish (*Ictalurus spp.*), that may mitigate any adverse impacts from any reductions in salmon fishing. In sum, the options presented to the Commission were conceived with the goal of enabling levels of recreational SRFC fishing in the range of historical averages, and thus should not be a source of significant adverse economic impacts.

(a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

The Commission does not anticipate that any of the proposed options would induce substantial impacts on the creation or elimination of jobs. For the preferred Option 1, no change in job creation or elimination is anticipated. Option 2 and Option 3 have the potential to result in fewer angler visits, and absent substitution toward other sportfish and/or activities in the affected areas, the reduction in angler spending could reduce the support for 14 - 27 jobs statewide. These job impacts are statewide and may be moderated by the proposed season extension on a portion of the Sacramento River, from Deschutes Road bridge to Red Bluff Diversion Dam.

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The Commission does not anticipate that any of the proposed options would induce substantial impacts on the creation of new business or the elimination of existing businesses, because the proposed economic impacts of the regulations are unlikely to be substantial enough to stimulate the creation of new businesses or cause the elimination of existing businesses. The proposed season extension for a portion of the Sacramento river is expected to sustain the number of fishing trips and the level of economic stimulus within historical averages.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

The Commission does not anticipate that any of the proposed options would induce substantial impacts on the expansion of businesses currently doing business within the state. The proposed regulations are not anticipated to increase demand for services or products from the existing businesses that serve inland sport fishermen. The number of fishing trips and angler economic contributions are expected to remain within the range of historical averages.

(d) Benefits of the Regulation to the Health and Welfare of California Residents

The Commission anticipates benefits to the health and welfare of California residents. Chinook Salmon is a nutritious food source and providing inland sport fishery opportunities encourages consumption of this nutritious food. Sport fishing also contributes to increased mental health of its practitioners, as fishing is a hobby and form of relaxation for many. Sport fishing also provides opportunities for multi-generational family activities and promotes respect for California's environment by younger generations, the future stewards of California's natural resources.

(e) Benefits of the Regulation to Worker Safety

The Commission does not anticipate any benefits to worker safety from the proposed regulations because inland sport fishing does not impact working conditions.

(f) Benefits of the Regulation to the State's Environment

Under all Options 1-3, the Commission anticipates benefits to the environment in the sustainable management of SRFC. It is the policy of this State to encourage the conservation, maintenance, and utilization of the living resources of the ocean and other waters under the jurisdiction and influence of the State for the benefit of all the citizens of the State and to promote the development of local fisheries and distant water fisheries based in California in harmony with international law, respecting fishing and the conservation of the living resources of the ocean and other waters under the jurisdiction and influence of the State. The objectives of this policy include, but are not limited to, the maintenance of sufficient populations of all species of aquatic organisms to ensure their continued existence, and the maintenance of a sufficient resource to support a reasonable sport use.

In accordance with this policy, adoption of scientifically-based inland Chinook Salmon bag and possession limits provides for the maintenance of sufficient populations of salmon to ensure their continued existence and thus continued economic stimulus. The extension of the fishing season on the upper Sacramento River provides additional angler opportunity while minimizing potential contact with federally and state-listed endangered winter-run Chinook Salmon. The prohibition of take at weirs helps to provide protection for fish in important migration corridors. Removing the mention of prohibition of Coho Salmon take in the Feather River removes a potential clarity concern for anglers.

(g) Other Benefits of the Regulation

Other benefits of the regulation include consistency with federal fishery management goals, and the promotion of businesses that rely on Central Valley sport fishing.

## **Informative Digest/Policy Statement Overview**

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations.

Current regulations in subsections (b)(5), (b)(68), (b)(124), and (b)(156.5) of Section 7.50 prescribe the 2019 seasons and daily bag and possession limits for Sacramento River fall-run Chinook Salmon (*Oncorhynchus tshawytscha*; SRFC) sport fishing in the American, Feather, Mokelumne, and Sacramento rivers, respectively. Collectively, these four rivers constitute the “Central Valley fishery” for SRFC for purposes of this document. Each year, the Department of Fish and Wildlife (Department) recommends new Chinook Salmon bag and possession limits for consideration by the Fish and Game Commission (Commission) to align the fishing limits with up-to-date management goals, as set forth below.

The Pacific Fishery Management Council (PFMC) is responsible for adopting recommendations for the management of recreational and commercial ocean salmon fisheries in the Exclusive Economic Zone (three to 200 miles offshore) off the coasts of Washington, Oregon, and California. When approved by the Secretary of Commerce, these recommendations are implemented as ocean salmon fishing regulations by the National Marine Fisheries Service (NMFS).

The PFMC will develop the annual Pacific coast ocean salmon fisheries regulatory options for public review at its March 2020 meeting and will adopt its final regulatory recommendations at its April 2020 meeting based on the PFMC salmon abundance estimates and recommendations for ocean harvest for the coming season. Based on the April 2020 recommendation by PFMC, the Department will recommend specific bag and possession limit regulations to the Commission at its April 16, 2020 meeting. The Commission will then consider adoption of the Central Valley sport fishing regulations at its May 14, 2020 teleconference.

### **Proposed Regulations**

#### **CHINOOK SALMON BAG AND POSSESSION LIMITS**

The Department recognizes the uncertainty of SRFC in-river harvest projections. Therefore, for the 2020 Central Valley fishery, the Department is presenting three regulatory options for the Commission’s consideration to tailor 2020 Central Valley fishery management to target 2020 in-river fisheries harvest projections.

- Option 1 is the most liberal of the three options, and allows take of any size Chinook Salmon up to the daily bag and possession limits.
- Option 2 allows for take of a limited number of adult Chinook Salmon, with grilse Chinook Salmon making up the remainder of the daily bag and possession limits.
- Option 3 is the most conservative option, and allows for a grilse-only Chinook Salmon fishery.

All three options will also increase fishing opportunities on Chinook Salmon by extending the Chinook Salmon sport fishing season on the Sacramento River from the Deschutes Road bridge to the Red Bluff Diversion Dam from a closure date of December 16 to a closure date of December 31.

A minor correction will also be made to subsections 7.50(b)(124)(A), (B), and (D), to ensure consistency in the format in which the daily bag and possession limit for hatchery trout or hatchery steelhead is displayed in the regulatory text.



All options would be applicable to the following river segments and time periods:

American River, subsection 7.50(b)(5):

- (B) From the USGS gauging station cable crossing near Nimbus Hatchery to the SMUD power line crossing the southwest boundary of Ancil Hoffman Park, July 16 through October 31
- (C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park to the Jibboom Street bridge, July 16 through December 31
- (D) From the Jibboom Street bridge to the mouth, July 16 through December 16

Feather River, subsection 7.50(b)(68):

- (D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to 200 yards above the Live Oak boat ramp, July 16 through October 31
- (E) From 200 yards above the Live Oak boat ramp to the mouth, July 16 through December 16

Mokelumne River, subsection 7.50(b)(124):

- (A) From Comanche Dam to Elliott Road, July 16 through October 15
- (B) From Elliott Road to the Woodbridge Irrigation District Dam and including Lodi Lake, July 16 through December 31
- (D) From the Lower Sacramento Road bridge to the mouth, July 16 through December 16

Sacramento River below Keswick Dam, subsection 7.50(b)(156.5):

- (C) From Deschutes Road bridge to the Red Bluff Diversion Dam, August 1 through December 31
- (D) From the Red Bluff Diversion Dam to the Highway 113 bridge, July 16 through December 16.
- (E) From the Highway 113 bridge to the Carquinez Bridge, July 16 through December 16.

The following options are provided for Commission consideration:

### **Option 1 – Any Size Chinook Salmon Fishery**

This option is the Department's preferred option if the 2019 SRFC stock abundance forecast is sufficiently high to avoid the need to constrain inland SRFC harvest.

Bag limit of [0-4] Chinook Salmon.

Possession limit - [0-12] Chinook Salmon.

### **Option 2 – Limited Adult and Grilse Salmon Fishery**

Bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over 27 inches total length may be retained.

Possession limit - [0-12] Chinook Salmon of which no more than [0-4] fish may be over 27 inches total length.

### **Option 3 – Grilse Salmon Fishery Only**

Bag limit of [0-4] Chinook Salmon less than or equal to 27 inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to 27 inches total length.

### **EXTEND CHINOOK SALMON SPORT FISHING SEASON ON THE SACRAMENTO RIVER**

Sport fishing interests have requested the Chinook Salmon sport fishing season on the Sacramento River be extended from the current December 16 closure date to December 31 to enhance late-season fishing opportunity on the river. At issue is regulating the closure date to minimize contact in the fishery with federally and state-listed as endangered winter-run Chinook Salmon.

The Department supports extending the fishing season from December 16 to December 31 upstream of the Red Bluff Diversion Dam (River Mile (RM) 243), which will provide late season fishing for late-fall-run Chinook Salmon without negatively impacting winter-run Chinook Salmon.

#### **Proposal: Amend subsection 7.50(b)(156.5)(C), Sacramento River**

Extend the Chinook Salmon sport fishing season on the Sacramento River from the Deschutes Road bridge to the Red Bluff Diversion Dam to December 31.

### **REMOVE EXCEPTION FOR TAKE OF COHO SALMON IN THE FEATHER RIVER**

Section 7.00 includes an exception for the take of Coho Salmon in Lake Oroville and Oroville-Thermalito Complex, and the Feather River from the Diversion Pool Dam to the Fish Barrier Dam. Section 7.00 also includes an exception for incidentally hooked Coho Salmon in the same area. Coho Salmon have not been stocked in Lake Oroville since 2013. Coho Salmon are no longer planted in the Feather River water impoundments. Therefore, the exceptions for take and incidentally hooked Coho Salmon stated in Section 7.00 should be removed.

#### **Proposal: Amend Section 7.00, Re: Take of Coho Salmon in the Feather River**

Remove exception for take and incidentally hooked Coho Salmon in Lake Oroville and Oroville-Thermalito Complex, and the Feather River from the Diversion Pool Dam to the Fish Barrier Dam.

### **PROHIBIT FISHING AT CONCRETE FLOOD CONTROL WEIRS**

Annually, during the rainy season, fish often get trapped below the concrete flood control weirs on the Sacramento River. Fish trapped in these areas are often state or federally-listed as endangered or threatened species and, therefore, should not be exposed to angling opportunity. Subsections 7.50(b)(156.5)(D) and (E) include a “Note” which states that it is unlawful to take fish 0-250 feet downstream from the overflow side of the Moulton, Colusa, Tisdale, Fremont, and Sacramento weirs. However, there is no regulation in place that makes angling near flood control weirs unlawful. Section 2.35 prohibits angling near fishways and egg-taking stations, dams, weirs or racks with fishways or egg-taking stations, and the upstream side of fish screens; but does not apply to areas, except for Fremont Weir, described in the notes in subsections 7.50(b)(156.5)(D) and (E).

#### **Proposal 1: Amend Section 2.35, Regarding Take of Fish at Weirs**

Amend Section 2.35 to include and differentiate flood control weirs in the Central Valley from other types of weirs and include a fishing closure of 0-250 feet downstream from the overflow side of Moulton, Tisdale, Fremont, and Sacramento weirs.

## **Proposal 2: Amend subsections 7.50(b)(156.5)(D) and (E), Sacramento River**

Remove Note which states it is unlawful to take fish 0-250 feet downstream from the overflow side of the Moulton, Colusa, Tisdale, Fremont, and Sacramento weirs. These fishing closures will now be stipulated in Title 14, Section 2.35, with the exception of the Colusa Weir.

### **Benefits of the Proposed Regulations**

The Commission anticipates benefits to the environment in the sustainable management of Central Valley Chinook Salmon resources. Other benefits of the proposed regulations are consistency with federal fishery management goals, health and welfare of California residents, and promotion of businesses that rely on Central Valley Chinook Salmon sport fishing.

### **Consistency and Compatibility with Existing Regulations**

Article IV, Section 20 of the State Constitution specifies that the Legislature may delegate to the Fish and Game Commission such powers relating to the protection and propagation of fish and game as the Legislature sees fit. The Legislature has delegated to the Commission the power to regulate recreational fishing in waters of the state (Fish and Game Code sections 200, 205, 315 and 316.5). The Commission has reviewed its own regulations and finds that the proposed regulations are neither inconsistent nor incompatible with existing state regulations. The Commission has searched the California Code of Regulations and finds no other state agency regulations pertaining to Chinook Salmon recreational fishing seasons, bag, and possession limits for Central Valley sport fishing.

## Proposed Regulatory Language

Section 2.35, Title 14, CCR is amended to read:

**§ 2.35. Taking Fish ~~near~~Near Dams, Fishways, ~~Screens and Egg-Taking~~Screens, Egg Taking-  
Stations, and Flood Control Weirs.**

(a) No fish may be taken within 250 feet of:

~~(a)~~(1) Any fishway or any egg-taking station.

~~(b)~~(2) Any dam or any weir or rack which has a fishway or an egg-taking station.

~~(c)~~(3) The upstream side of any fish screen.

(4) The overflow side of Moulton, Tisdale, Fremont, and Sacramento flood control weirs.

(b) Fish may be taken upstream or downstream from any dam that does not have a fishway or egg-taking station ~~(this supersedes Section 5502 of the Fish and Game Code).~~

Note: Authority cited: Sections 200, 205, ~~249~~, 265 and 275, Fish and Game Code. Reference: Sections 200, ~~204~~, 205, 255, 265, 270 and 275, Fish and Game Code.

## Proposed Regulatory Language

### Section 7.00, Title 14, CCR is amended to read:

#### § 7.00. District General Regulations.

Unless otherwise provided, waters shown as open to trout fishing in subsections (a) through (g) below, are open to fishing for other species. Gear restrictions listed in this section apply to the take of all species of fish unless otherwise noted. Every body of water listed in subsections (a) through (g) of Section 7.00 (below) is closed to all fishing, except during the open season as shown. Unless otherwise provided, waters closed to trout fishing are closed to fishing for all other species, except that these closures do not apply to fishing for amphibians (see Section 5.05), freshwater clams (see Section 5.20), crayfish (see Section 5.35), and lamprey (see Section 5.40), using legal fishing methods other than hook-and-line fishing, and saltwater clams, crabs, ghost shrimp, and blue mud shrimp (see Ocean Regulations Booklet Sections 29.20 to 29.87). Crabs may only be taken using hoop nets or by hand, and Dungeness crab may only be taken within the North Coast District and Sonoma and Mendocino counties.

Daily bag and possession limits, unless otherwise provided, mean the total number of trout. Unless otherwise provided, no more than one daily bag limit may be possessed. Coho (silver) ~~salmon~~Salmon may not be taken in any of the waters of the State, ~~except in Lake Oroville and Oroville-Thermalito Complex (Diversion Pool, Forebay, and Afterbay) and the Feather River from the Diversion Pool Dam to the Fish Barrier Dam.~~ Incidentally hooked Coho (silver) ~~salmon~~Salmon, ~~except those in Lake Oroville and Oroville-Thermalito Complex (Diversion Pool, Forebay, and Afterbay) and the Feather River from the Diversion Pool Dam to the Fish Barrier Dam,~~ must be immediately released unharmed to the waters where they are hooked. In waters where the bag limit for trout is zero, fish for which the bag limit is zero must be released unharmed, and should not be removed from the water.

These waters may also be subject to restrictions on fishing methods and gear (sections 2.00 through 2.45), fishing hours (section 3.00), and the use of bait (sections 4.00 through 4.30).

. . . [No changes to subsections (a) through (g)]

Note: Authority cited: Sections 200, 205, 265 and 275, Fish and Game Code. Reference: Sections 440, 200, and 205, Fish and Game Code.

## Proposed Regulatory Language – Option 1 (Any Size Chinook Salmon Fishery)

**Section 7.50, Title 14, CCR is amended to read:**

### **§ 7.50. Alphabetical List of Waters with Special Fishing Regulations.**

. . . [No changes to subsections (a) through (b)(4)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(5) American River (Sacramento Co.).		
(A) From Nimbus Dam to the U.S. Geological Survey gauging station cable crossing about 300 yards downstream from the Nimbus Hatchery fish rack site.	Closed to all fishing all year.	
(B) From the U.S. Geological Survey gauging station cable crossing about 300 yards downstream from the Nimbus Hatchery fish rack site to the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park.	Jan. 1 through July 15. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Oct. 31. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  2[0-4] Chinook Salmon.  4[0-12] Chinook Salmon in possession.
(C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.

downstream to the Jibboom Street bridge.		4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Dec. 31.	2 hatchery trout or hatchery steelhead**  4 hatchery trout or hatchery steelhead** in possession.  <u>2[0-4]</u> Chinook Salmon.  <u>4[0-12]</u> Chinook Salmon in possession.
(D) From the Jibboom Street bridge to the mouth.	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Dec. 16.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  <u>2[0-4]</u> Chinook Salmon.  <u>4[0-12]</u> Chinook Salmon in possession.
	Dec. 17 through Dec. 31.	2 hatchery trout or hatchery steelhead**.

		4 hatchery trout or hatchery steelhead** in possession.
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. . . [No changes to subsections (b)(6) through (b)(67)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(68) Feather River below Fish Barrier Dam (Butte, Sutter and Yuba cos.).		
(A) From Fish Barrier Dam to Table Mountain bicycle bridge in Oroville.	Closed to all fishing all year.	
(B) From Table Mountain bicycle bridge to Highway 70 bridge.	Jan. 1 through July 15. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(C) From Highway 70 bridge to the unimproved boat ramp above the Thermalito Afterbay Outfall.	All year.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to 200 yards above the Live Oak boat ramp.	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.



		4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Oct. 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  2[0-4] Chinook Salmon.  4[0-12] Chinook Salmon in possession.
	Nov. 1 through Dec. 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(E) From 200 yards above Live Oak boat ramp to the mouth. For purposes of this regulation, the lower boundary is defined as a straight line drawn from the peninsula point on the west bank to the Verona Marine boat ramp.	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Dec. 16.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.

		<p>2[0-4] Chinook Salmon.</p> <p>4[0-12] Chinook Salmon in possession.</p>
	Dec. 17 to Dec. 31.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>

. . . [No changes to subsections (b)(68.1) through (b)(122)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(124) Mokelumne River (San Joaquin Co.).		
(A) From Camanche Dam to Elliott Road.	Jan. 1 through Mar. 31.	1 hatchery trout or 4 hatchery steelhead**.
	Fourth Saturday in May through July 15.	1 hatchery trout or 4 hatchery steelhead**.
	July 16 through Oct. 15.	<p>1 hatchery trout or hatchery steelhead**.</p> <p>2[0-4] Chinook Salmon.</p> <p>4[0-12] Chinook Salmon in possession.</p>

(B) From Elliott Road to the Woodbridge Irrigation District Dam including Lodi Lake.	Jan. 1 through July 15.	1 hatchery trout or 4 hatchery steelhead**.
	July 16 through Dec. 31.	1 hatchery trout or hatchery steelhead**.  2[0-4] Chinook Salmon.  4[0-12] Chinook Salmon in possession.
(C) Between the Woodbridge Irrigation District Dam and the Lower Sacramento Road bridge.	Closed to all fishing all year.	
(D) From the Lower Sacramento Road bridge to the mouth. For purposes of this regulation, this river segment is defined as Mokelumne River and its tributary sloughs downstream of the Lower Sacramento Road bridge and east of Highway 160 and north of Highway 12.	Jan. 1 through July 15.	1 hatchery trout or hatchery steelhead**.
	July 16 through Dec. 16.	1 hatchery trout or 4 hatchery steelhead**.  2[0-4] Chinook Salmon.  4[0-12] Chinook Salmon in possession.
	Dec. 17 through Dec. 31.	1 hatchery trout or 4 hatchery steelhead**.

. . . [No changes to subsections (b)(125) through (b)(156)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
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(156.5) Sacramento River and tributaries below Keswick Dam (Butte, Colusa, Contra Costa, Glenn, Sacramento, Shasta, Solano, Sutter, Tehama and Yolo cos.).	Also see Sierra District General Regulations (See Section 7.00(b)).	
(A) Sacramento River from Keswick Dam to 650 feet below Keswick Dam.	Closed to all fishing all year.	
(B) Sacramento River from 650 feet below Keswick Dam to the Deschutes Road bridge.		
1. Sacramento River from 650 feet below Keswick Dam to the Highway 44 bridge.	Jan. 1 to Mar. 31. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	Closed to all fishing from Apr. 1 through July 31.	
	Aug. 1 through Dec. 31. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
2. Sacramento River from the Highway 44 bridge to the Deschutes Road bridge.	All year. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(C) Sacramento River from the Deschutes Road bridge to the Red Bluff Diversion Dam.	Jan. 1 through July 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	Aug. 1 through Dec. 4631.	2 hatchery trout or hatchery steelhead**.

		4 hatchery trout or hatchery steelhead** in possession.  2[0-4] Chinook Salmon.  4[0-12] Chinook Salmon in possession.
	Dec. 17 through Dec. 31.	<del>2 hatchery trout or hatchery steelhead**.</del>  4 hatchery trout or hatchery steelhead** in possession.
(D) Sacramento River from the Red Bluff Diversion Dam to the Hwy 113 bridge near Knights Landing. <del>Note: It is unlawful to take fish 0-250 feet downstream from the overflow side of the Moulton, Colusa and Tisdale Weirs.</del>	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Dec. 16.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  2[0-4] Chinook Salmon.  4[0-12] Chinook Salmon in possession.
	Dec. 17 through Dec. 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(E) Sacramento River from the Hwy 113 bridge near Knights Landing to the Carquinez Bridge	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.

(includes Suisun Bay, Grizzly Bay and all tributary sloughs west of Highway 160). <del>Note: It is unlawful to take fish 0-250 feet downstream from the overflow side of the Fremont and Sacramento Weirs.</del>		4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Dec. 16.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  2[0-4] Chinook Salmon.  4[0-12] Chinook Salmon in possession.
	Dec. 17 through Dec. 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.

. . . [No changes subsections 7.50(b)(157) through (b)(212)]

\* Wild Chinook Salmon are those not showing a healed adipose fin clip and not showing a healed left ventral fin clip.

\*\*Hatchery trout or steelhead in anadromous waters are those showing a healed adipose fin clip (adipose fin is absent). Unless otherwise provided, all other trout and steelhead must be immediately released. Wild trout or steelhead are those not showing a healed adipose fin clip (adipose fin is present).

Note: Authority cited: Sections 200, 205, 265, 270, 315, 316.5, 399 and 2084, Fish and Game Code.  
Reference: Sections 200, 205, 265, 270, 316.5 and 2084, Fish and Game Code.

**Proposed Regulatory Language – Option 2 (Limited Adult, Grilse Chinook Salmon Fishery)**

**Section 7.50, Title 14, CCR is amended to read:**

**§ 7.50. Alphabetical List of Waters with Special Fishing Regulations.**

. . . [No changes to subsections (a) through (b)(4)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(5) American River (Sacramento Co.).		
(A) From Nimbus Dam to the U.S. Geological Survey gauging station cable crossing about 300 yards downstream from the Nimbus Hatchery fish rack site.	Closed to all fishing all year.	
(B) From the U.S. Geological Survey gauging station cable crossing about 300 yards downstream from the Nimbus Hatchery fish rack site to the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park.	Jan. 1 through July 15. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Oct. 31. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del>  <u>[0-4] Chinook Salmon – no more than [0-4] salmon</u>

		<p><u>over 27 inches total length.</u></p> <p><u>[0-12] Chinook Salmon in possession of which no more than [0-4] salmon may be over 27 inches total length.</u></p>
(C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park downstream to the Jibboom Street bridge.	Jan. 1 through July 15.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>
	July 16 through Dec. 31.	<p>2 hatchery trout or hatchery steelhead**</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p> <p><del>2 Chinook Salmon.</del></p> <p><del>4 Chinook Salmon in possession.</del></p> <p><u>[0-4] Chinook Salmon – no more than [0-4] salmon over 27 inches total length.</u></p> <p><u>[0-12] Chinook Salmon in possession of which no more than [0-4] salmon may be over 27 inches total length.</u></p>



(D) From the Jibboom Street bridge to the mouth.	Jan. 1 through July 15.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>
	July 16 through Dec. 16.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p> <p><del>2 Chinook Salmon.</del></p> <p><del>4 Chinook Salmon in possession.</del></p> <p><u>[0-4] Chinook Salmon – no more than [0-4] salmon over 27 inches total length.</u></p> <p><u>[0-12] Chinook Salmon in possession of which no more than [0-4] salmon may be over 27 inches total length.</u></p>
	Dec. 17 through Dec. 31.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>

. . . [No changes to subsections (b)(6) through (b)(67)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(68) Feather River below Fish Barrier Dam (Butte, Sutter and Yuba cos.).		
(A) From Fish Barrier Dam to Table Mountain bicycle bridge in Oroville.	Closed to all fishing all year.	
(B) From Table Mountain bicycle bridge to Highway 70 bridge.	Jan. 1 through July 15. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(C) From Highway 70 bridge to the unimproved boat ramp above the Thermalito Afterbay Outfall.	All year.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to 200 yards above the Live Oak boat ramp.	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Oct. 31.	2 hatchery trout or hatchery steelhead**.

		<p>4 hatchery trout or hatchery steelhead** in possession.</p> <p>2 Chinook Salmon.</p> <p>4 Chinook Salmon in possession.</p> <p><u>[0-4] Chinook Salmon – no more than [0-4] salmon over 27 inches total length.</u></p> <p><u>[0-12] Chinook Salmon in possession of which no more than [0-4] salmon may be over 27 inches total length.</u></p>
	Nov. 1 through Dec. 31.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>
(E) From 200 yards above Live Oak boat ramp to the mouth. For purposes of this regulation, the lower boundary is defined as a straight line drawn from the peninsula point on the west bank to the Verona Marine boat ramp.	Jan. 1 through July 15.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>
	July 16 through Dec. 16.	<p>2 hatchery trout or hatchery steelhead**.</p>

		<p>4 hatchery trout or hatchery steelhead** in possession.</p> <p><del>2 Chinook Salmon.</del></p> <p><del>4 Chinook Salmon in possession.</del></p> <p><u>[0-4] Chinook Salmon – no more than [0-4] salmon over 27 inches total length.</u></p> <p><u>[0-12] Chinook Salmon in possession of which no more than [0-4] salmon may be over 27 inches total length.</u></p>
	Dec. 17 to Dec. 31.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>

. . . [No changes to subsections (b)(68.1) through (b)(122)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(124) Mokelumne River (San Joaquin Co.).		
(A) From Camanche Dam to Elliott Road.	Jan. 1 through Mar. 31.	1 hatchery trout or 4 hatchery steelhead**.

	Fourth Saturday in May through July 15.	1 hatchery trout or 4 hatchery steelhead**.
	July 16 through Oct. 15.	1 hatchery trout or hatchery steelhead**. <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del> <u>[0-4] Chinook Salmon – no more than [0-4] salmon over 27 inches total length.</u> <u>[0-12] Chinook Salmon in possession of which no more than [0-4] salmon may be over 27 inches total length.</u>
(B) From Elliott Road to the Woodbridge Irrigation District Dam including Lodi Lake.	Jan. 1 through July 15.	1 hatchery trout or 4 hatchery steelhead**.
	July 16 through Dec. 31.	1 hatchery trout or hatchery steelhead**. <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del> <u>[0-4] Chinook Salmon – no more than [0-4] salmon over 27 inches total length.</u> <u>[0-12] Chinook Salmon in</u>

		<u>possession of which no more than [0-4] salmon may be over 27 inches total length.</u>
(C) Between the Woodbridge Irrigation District Dam and the Lower Sacramento Road bridge.	Closed to all fishing all year.	
(D) From the Lower Sacramento Road bridge to the mouth. For purposes of this regulation, this river segment is defined as Mokelumne River and its tributary sloughs downstream of the Lower Sacramento Road bridge and east of Highway 160 and north of Highway 12.	Jan. 1 through July 15.	1 hatchery trout or hatchery steelhead**.
	July 16 through Dec. 16.	1 hatchery trout or 4 hatchery steelhead**.  <del>2 Chinook Salmon.</del>  <del>4 Chinook Salmon in possession.</del>  <u>[0-4] Chinook Salmon – no more than [0-4] salmon over 27 inches total length.</u>  <u>[0-12] Chinook Salmon in possession of which no more than [0-4] salmon may be over 27 inches total length.</u>
	Dec. 17 through Dec. 31.	1 hatchery trout or 4 hatchery steelhead**.

. . . [No changes to subsections (b)(125) through (b)(156)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(156.5) Sacramento River and tributaries below Keswick Dam (Butte, Colusa, Contra Costa, Glenn, Sacramento, Shasta, Solano, Sutter, Tehama and Yolo cos.).	Also see Sierra District General Regulations (See Section 7.00(b)).	
(A) Sacramento River from Keswick Dam to 650 feet below Keswick Dam.	Closed to all fishing all year.	
(B) Sacramento River from 650 feet below Keswick Dam to the Deschutes Road bridge.		
1. Sacramento River from 650 feet below Keswick Dam to the Highway 44 bridge.	Jan. 1 to Mar. 31. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	Closed to all fishing from Apr. 1 through July 31.	
	Aug. 1 through Dec. 31. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
2. Sacramento River from the Highway 44 bridge to the Deschutes Road bridge.	All year. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(C) Sacramento River from the Deschutes Road bridge to the Red Bluff Diversion Dam.	Jan. 1 through July 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	Aug. 1 through Dec. 4631.	2 hatchery trout or hatchery steelhead**.

		<p>4 hatchery trout or hatchery steelhead** in possession.</p> <p><del>2 Chinook Salmon.</del></p> <p>4 Chinook Salmon in possession.</p> <p><u>[0-4] Chinook Salmon – no more than [0-4] salmon over 27 inches total length.</u></p> <p><u>[0-12] Chinook Salmon in possession of which no more than [0-4] salmon may be over 27 inches total length.</u></p>
	<del>Dec. 17 through Dec. 31.</del>	<p><del>2 hatchery trout or hatchery steelhead**.</del></p> <p><del>4 hatchery trout or hatchery steelhead** in possession.</del></p>
(D) Sacramento River from the Red Bluff Diversion Dam to the Hwy 113 bridge near Knights Landing. <del>Note: It is unlawful to take fish 0-250 feet downstream from the overflow side of the Moulton, Colusa and Tisdale Weirs.</del>	Jan. 1 through July 15.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>
	July 16 through Dec. 16.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p> <p><del>2 Chinook Salmon.</del></p> <p>4 Chinook Salmon in possession.</p>



		<u>[0-4] Chinook Salmon – no more than [0-4] salmon over 27 inches total length.</u>  <u>[0-12] Chinook Salmon in possession of which no more than [0-4] salmon may be over 27 inches total length.</u>
	Dec. 17 through Dec. 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(E) Sacramento River from the Hwy 113 bridge near Knights Landing to the Carquinez Bridge (includes Suisun Bay, Grizzly Bay and all tributary sloughs west of Highway 160). <del>Note: It is unlawful to take fish 0-250 feet downstream from the overflow side of the Fremont and Sacramento Weirs.</del>	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Dec. 16.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del>  <u>[0-4] Chinook Salmon – no more than [0-4] salmon over 27 inches total length.</u>

		<u>[0-12] Chinook Salmon in possession of which no more than [0-4] salmon may be over 27 inches total length.</u>
	Dec. 17 through Dec. 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.

. . . [No changes subsections 7.50(b)(157) through (b)(212)]

\* Wild Chinook Salmon are those not showing a healed adipose fin clip and not showing a healed left ventral fin clip.

\*\*Hatchery trout or steelhead in anadromous waters are those showing a healed adipose fin clip (adipose fin is absent). Unless otherwise provided, all other trout and steelhead must be immediately released. Wild trout or steelhead are those not showing a healed adipose fin clip (adipose fin is present).

Note: Authority cited: Sections 200, 205, 265, 270, 315, 316.5, 399 and 2084, Fish and Game Code.  
Reference: Sections 200, 205, 265, 270, 316.5 and 2084, Fish and Game Code.

## Proposed Regulatory Language – Option 3 (Grilse Chinook Salmon Fishery)

**Section 7.50, Title 14, CCR is amended to read:**

### **§ 7.50. Alphabetical List of Waters with Special Fishing Regulations.**

. . . [No changes to subsections (a) through (b)(4)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(5) American River (Sacramento Co.).		
(A) From Nimbus Dam to the U.S. Geological Survey gauging station cable crossing about 300 yards downstream from the Nimbus Hatchery fish rack site.	Closed to all fishing all year.	
(B) From the U.S. Geological Survey gauging station cable crossing about 300 yards downstream from the Nimbus Hatchery fish rack site to the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park.	Jan. 1 through July 15. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Oct. 31. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del>  <u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u>  <u>[0-12] Chinook Salmon in</u>

		<u>possession.</u> <u>Maximum size 27</u> <u>inches total length.</u>
(C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park downstream to the Jibboom Street bridge.	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Dec. 31.	2 hatchery trout or hatchery steelhead**  4 hatchery trout or hatchery steelhead** in possession.  <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del>  <u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u>  <u>[0-12] Chinook Salmon in possession.</u> <u>Maximum size 27 inches total length.</u>
(D) From the Jibboom Street bridge to the mouth.	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Dec. 16.	2 hatchery trout or hatchery steelhead**.

		<p>4 hatchery trout or hatchery steelhead** in possession.</p> <p><del>2 Chinook Salmon.</del></p> <p><del>4 Chinook Salmon in possession.</del></p> <p><u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u></p> <p><u>[0-12] Chinook Salmon in possession. Maximum size 27 inches total length.</u></p>
	Dec. 17 through Dec. 31.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>

. . . [No changes to subsections (b)(6) through (b)(67)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(68) Feather River below Fish Barrier Dam (Butte, Sutter and Yuba cos.).		
(A) From Fish Barrier Dam to Table Mountain bicycle bridge in Oroville.	Closed to all fishing all year.	

(B) From Table Mountain bicycle bridge to Highway 70 bridge.	Jan. 1 through July 15. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(C) From Highway 70 bridge to the unimproved boat ramp above the Thermalito Afterbay Outfall.	All year.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to 200 yards above the Live Oak boat ramp.	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Oct. 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del>  <u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u>  <u>[0-12] Chinook Salmon in possession.</u>

		<u>Maximum size 27 inches total length.</u>
	Nov. 1 through Dec. 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(E) From 200 yards above Live Oak boat ramp to the mouth. For purposes of this regulation, the lower boundary is defined as a straight line drawn from the peninsula point on the west bank to the Verona Marine boat ramp.	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	July 16 through Dec. 16.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del>  <u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u>  <u>[0-12] Chinook Salmon in possession.</u> <u>Maximum size 27 inches total length.</u>

	Dec. 17 to Dec. 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
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. . . [No changes to subsections (b)(68.1) through (b)(122)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(124) Mokelumne River (San Joaquin Co.).		
(A) From Camanche Dam to Elliott Road.	Jan. 1 through Mar. 31.	1 hatchery trout or 4 hatchery steelhead**.
	Fourth Saturday in May through July 15.	1 hatchery trout or 4 hatchery steelhead**.
	July 16 through Oct. 15.	1 hatchery trout or hatchery steelhead**. <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del> <u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u> <u>[0-12] Chinook Salmon in possession. Maximum size 27 inches total length.</u>



(B) From Elliott Road to the Woodbridge Irrigation District Dam including Lodi Lake.	Jan. 1 through July 15.	1 hatchery trout or 4 hatchery steelhead**.
	July 16 through Dec. 31.	1 hatchery trout or hatchery steelhead**. <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del> <u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u> <u>[0-12] Chinook Salmon in possession. Maximum size 27 inches total length.</u>
(C) Between the Woodbridge Irrigation District Dam and the Lower Sacramento Road bridge.	Closed to all fishing all year.	
(D) From the Lower Sacramento Road bridge to the mouth. For purposes of this regulation, this river segment is defined as Mokelumne River and its tributary sloughs downstream of the Lower Sacramento Road bridge and east of Highway 160 and north of Highway 12.	Jan. 1 through July 15.	1 hatchery trout or hatchery steelhead**.
	July 16 through Dec. 16.	1 hatchery trout or 4 hatchery steelhead**. <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del> <u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u> <u>[0-12] Chinook Salmon in</u>

		<u>possession.</u> <u>Maximum size 27</u> <u>inches total length.</u>
	Dec. 17 through Dec. 31.	1 hatchery trout or 4 hatchery steelhead**.

. . . [No changes to subsections (b)(125) through (b)(156)]

<i>Body of Water</i>	<i>Open Season and Special Regulations</i>	<i>Daily Bag and Possession Limit</i>
(156.5) Sacramento River and tributaries below Keswick Dam (Butte, Colusa, Contra Costa, Glenn, Sacramento, Shasta, Solano, Sutter, Tehama and Yolo cos.).	Also see Sierra District General Regulations (See Section 7.00(b)).	
(A) Sacramento River from Keswick Dam to 650 feet below Keswick Dam.	Closed to all fishing all year.	
(B) Sacramento River from 650 feet below Keswick Dam to the Deschutes Road bridge.		
1. Sacramento River from 650 feet below Keswick Dam to the Highway 44 bridge.	Jan. 1 to Mar. 31. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	Closed to all fishing from Apr. 1 through July 31.	
	Aug. 1 through Dec. 31. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.

2. Sacramento River from the Highway 44 bridge to the Deschutes Road bridge.	All year. Only barbless hooks may be used.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
(C) Sacramento River from the Deschutes Road bridge to the Red Bluff Diversion Dam.	Jan. 1 through July 31.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.
	Aug. 1 through Dec. <del>4</del> <u>31</u> .	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.  <del>2 Chinook Salmon.</del> <del>4 Chinook Salmon in possession.</del>  <u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u>  <u>[0-12] Chinook Salmon in possession.</u> <u>Maximum size 27 inches total length.</u>
	<del>Dec. 17 through Dec. 31.</del>	<del>2 hatchery trout or hatchery steelhead**.</del>  <del>4 hatchery trout or hatchery steelhead** in possession.</del>
(D) Sacramento River from the Red Bluff Diversion Dam to the Hwy 113 bridge near Knights Landing. <del>Note: It is unlawful to take fish 0-250 feet downstream from the overflow side of the</del>	Jan. 1 through July 15.	2 hatchery trout or hatchery steelhead**.  4 hatchery trout or hatchery steelhead** in possession.

Moulton, Colusa and Tisdale Weirs.		
	July 16 through Dec. 16.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p> <p><del>2 Chinook Salmon.</del></p> <p><del>4 Chinook Salmon in possession.</del></p> <p><u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u></p> <p><u>[0-12] Chinook Salmon in possession.</u></p> <p><u>Maximum size 27 inches total length.</u></p>
	Dec. 17 through Dec. 31.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>
(E) Sacramento River from the Hwy 113 bridge near Knights Landing to the Carquinez Bridge (includes Suisun Bay, Grizzly Bay and all tributary sloughs west of Highway 160). <del>Note: It is unlawful to take fish 0-250 feet downstream from the overflow side of the Fremont and Sacramento Weirs.</del>	Jan. 1 through July 15.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>
	July 16 through Dec. 16.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p> <p><del>2 Chinook Salmon.</del></p>

		<p>4 Chinook Salmon in possession.</p> <p><u>[0-4] Chinook Salmon. Maximum size 27 inches total length.</u></p> <p><u>[0-12] Chinook Salmon in possession. Maximum size 27 inches total length.</u></p>
	Dec. 17 through Dec. 31.	<p>2 hatchery trout or hatchery steelhead**.</p> <p>4 hatchery trout or hatchery steelhead** in possession.</p>

. . . [No changes subsections 7.50(b)(157) through (b)(212)]

\* Wild Chinook Salmon are those not showing a healed adipose fin clip and not showing a healed left ventral fin clip.

\*\*Hatchery trout or steelhead in anadromous waters are those showing a healed adipose fin clip (adipose fin is absent). Unless otherwise provided, all other trout and steelhead must be immediately released. Wild trout or steelhead are those not showing a healed adipose fin clip (adipose fin is present).

Note: Authority cited: Sections 200, 205, 265, 270, 315, 316.5, 399 and 2084, Fish and Game Code.  
Reference: Sections 200, 205, 265, 270, 316.5 and 2084, Fish and Game Code.

STATE OF CALIFORNIA  
FISH AND GAME COMMISSION  
INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION

Amend Subsections (b)(5), (b)(68), (b)(124), and (b)(156.5) of Section 7.50,  
Title 14, California Code of Regulations  
Re: Central Valley Salmon Sport Fishing

I. Date of Initial Statement of Reasons: November 20, 2018

II. Dates and Locations of Scheduled Hearings

- |                         |           |                   |
|-------------------------|-----------|-------------------|
| (a) Notice Hearing:     | Date:     | December 13, 2018 |
|                         | Location: | Oceanside, CA     |
|                         |           |                   |
| (b) Discussion Hearing: | Date:     | February 6, 2019  |
|                         | Location: | Sacramento, CA    |
|                         |           |                   |
| (c) Discussion Hearing: | Date:     | April 17, 2019    |
|                         | Location: | Santa Monica, CA  |
|                         |           |                   |
| (d) Adoption Hearing:   | Date:     | May 16, 2019      |
|                         | Location: | Teleconference    |

III. Description of Regulatory Action

- (a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations.

Current regulations in subsections (b)(5), (b)(68), (b)(124) and (b)(156.5) of Section 7.50 prescribe the 2018 seasons and daily bag and possession limits for Sacramento River fall-run Chinook Salmon (*Oncorhynchus tshawytscha*; SRFC) sport fishing in the American, Feather, Mokelumne, and Sacramento rivers, respectively. Collectively, these four rivers constitute the “Central Valley fishery” for SRFC for purposes of this document. Each year, the Department of Fish and Wildlife (Department) recommends new Chinook Salmon bag and possession limits for consideration by the Fish and Game Commission (Commission) to align the fishing limits with up-to-date management goals, as set forth below.

The Pacific Fishery Management Council (PFMC) is responsible for adopting recommendations for the management of recreational and commercial ocean salmon fisheries in the Exclusive Economic Zone (three to 200 miles offshore) off the coasts of Washington, Oregon, and California. When approved by the Secretary of Commerce, these recommendations are implemented as ocean salmon fishing regulations by the National Marine Fisheries Service (NMFS).

The PFMC will develop the annual Pacific coast ocean salmon fisheries regulatory options for public review at its March 2019 meeting, and will adopt its final regulatory recommendations at its April 2019 meeting based on the PFMC salmon abundance estimates and recommendations for ocean harvest for the coming season. Based on the April 2019 recommendation by PFMC, the Department will recommend specific bag and possession limit regulations to the Commission at its April 17, 2019 meeting. The Commission will then consider adoption of the Central Valley salmon sport fishing regulations at its May 16, 2019 teleconference.

For the purpose of PFMC mixed-stock fishery modeling and salmon stock assessment, adult salmon are generally those considered three to five years in age, and grilse salmon are those approximately two years of age. The age classes are distinguished by a cutoff of salmon total length measurement, depending on the inland (in-river) fishery. For purposes of the proposed regulation, this cutoff is presented as a range of 26 to 28 inches total length, as outlined under the options for the proposed regulations (below).

### Current Regulations

In 2018, salmon sport fishing in the Central Valley was constrained for the first time since 2010 due to a low SRFC stock abundance forecast. At its March 2018 meeting, the PFMC determined it would be necessary to specify an ocean/inland sharing arrangement for the limited SRFC available for harvest (take) in 2018 for ocean sport and commercial fisheries, and in-river recreational fisheries in the Central Valley. As a result, the Department agreed to a one-time limit of the in-river harvest to 15 percent of the total available SRFC harvest.

In December 2017, the Commission provided notice of a range of alternatives for the 2018 Central Valley fishery, including a suite of bag and possession limit alternatives that were area-specific. However, because the Department did not anticipate the impending SRFC stock collapse, this range of alternatives did not include a number of other measures that might have been used to constrain inland SRFC catches to stay within the federal harvest projections. Consequently, the only management measure the Department could recommend to the Commission to target the federal in-river harvest projection was a reduction in the daily bag limit from two fish to one fish in all areas that would be open to retention during 2018.

### Proposed Regulations

The Department recognizes the uncertainty of SRFC in-river harvest projections. Therefore, for the 2019 Central Valley fishery, the Department is presenting three regulatory options for the Commission's consideration to tailor 2019 Central Valley fishery management to target 2019 in-river fisheries harvest projections.

- Option 1 is the most liberal of the three options and allows take of any size Chinook Salmon up to the daily bag and possession limits.
- Option 2 allows for take of a limited number of adult Chinook Salmon, with grilse Chinook Salmon making up the remainder of the daily bag and possession limits.

- Option 3 is the most conservative option and allows for a grilse-only Chinook Salmon fishery.

All three options increase fishing opportunities on the Feather and Mokelumne rivers by: (1) extending the salmon fishing season by two weeks on the Feather River between the Thermalito Afterbay Outfall and the Live Oak boat ramp; and (2) by extending the salmon and hatchery steelhead fishing season on approximately 10 miles of the Mokelumne River between the Highway 99 Bridge and Elliott Road. The expansion of fishing opportunity on 10 miles on the Mokelumne River for hatchery steelhead is buffered by the overall large run of hatchery steelhead, and because spawning occurs outside this stretch of river.

### *Grilse Chinook Salmon Fishery Size Considerations*

Grilse salmon are salmon that spend two years in the ocean before returning to their natal streams to spawn. These fish are generally smaller in size and contribute less to the overall salmon population than adult salmon, which typically spend three to five years in the ocean before returning to freshwater to spawn. Typically, age-two salmon (grilse) are mostly males (jacks) with relatively few female (jills). Should a reduction in the adult component of the stock be imposed by PFMC harvest projections, the Department is recommending specifying angling opportunities on the smaller, and possibly more numerous grilse salmon. Take of adult salmon would be limited (Option 2) or prohibited (Option 3) under regulation, and the subsequent juvenile production would help rebuild the depressed stock size.

When considering a grilse fishery, determining a size cutoff that balances angling harvest opportunity for jacks versus preserving the limited number of females available to spawn is important. If the total length size cutoff is too short (conservative), too few jacks will be caught by anglers, and they will be underutilized because jacks are infrequently used as hatchery broodstock, or because jacks are out-competed by larger males in-river. If the cutoff is too large (liberal), then angling catch of the smaller females will increase, reducing the hatchery and in-river spawners, since the limiting factor for spawning is egg availability from jills and adult females. Therefore, the Department is proposing a grilse salmon size limit range of less than or equal to 26 to 28 inches total length (TL) for discussion before the Department makes a final recommendation. Considered in this context, the cutoff size discussion is a trade-off between restricting take of the available adult female salmon versus increasing harvest of possibly abundant smaller, two-year old male salmon.

A review of brood year 2008-2015 Central Valley Angler Survey coded wire tag recovery data (2,329 age three and 789 age two Chinook Salmon) shows a grilse to adult cutoff at approximately 27-inch fork length (FL). Using the adult spawning Chinook Salmon fork length to total length conversion formula developed in Pahlke 1988<sup>a</sup>, 27-inch FL converts to 28.3-inch TL. Below are the percentages of adult SRFC that would be prohibited from harvest at a 26, 27, and 28-inch TL cutoff for grilse salmon.

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<sup>a</sup> Pahlke, K, 1988. Length Conversion Equations for Sockeye, Chinook, and Coho salmon in southeast Alaska. Regional Information Report No. IJ88-03. Alaska Department of Fish and Game Division of Commercial Fisheries, Southeast Region.



- On average, a grilse fishery with a 26-inch TL cutoff (i.e., less than or equal to 26 inches TL) would allow harvest of 65 percent of age-two Chinook Salmon, while not allowing harvest on 98.9 percent of age-three Chinook Salmon. It would prevent harvest on 99 percent of adult males and 98.9 percent of adult females, where the majority of harvested fish would be grilse.
- On average, a grilse fishery with a 27-inch TL cutoff (i.e., less than or equal to 27 inches TL) would allow harvest of 81 percent of age-two Chinook Salmon, while not allowing harvest on 97.3 percent of age-three Chinook Salmon. It would prevent harvest on 97.3 percent of adult males and 97.9 percent of adult females, where the majority of harvested fish would be grilse.
- On average, a grilse fishery with a 28-inch TL cutoff (i.e., less than or equal to 28 inches TL) would allow harvest of 93.4 percent of age-two Chinook Salmon, while not allowing harvest on 94.5 percent of age-three Chinook Salmon. It would prevent harvest on 95 percent of adult males and 96 percent of adult females, where the majority of harvested fish would be grilse.

Predicting the abundance of grilse for any given year is currently not possible because they are not susceptible to angling harvest prior to becoming grilse, and ocean abundance of pre-grilse sized fish is not monitored. The first indication of a large Central Valley grilse population is usually from in-river recreational fishing beginning in mid-July. Grilse numbers compared to adult numbers for a given year are usually not fully known until the following January, when spawner survey results are completed. For this reason, using an average of previous grilse data is a reasonable method of setting regulatory limits for future years.

#### **Key to Proposed Regulatory Changes:**

Because the PFMC recommendations are not known at this time, a range shown in [brackets] in the text below of bag and possession limits is indicated where it is desirable to continue Chinook Salmon fishing in the American, Feather, Mokelumne, and Sacramento rivers.

**Bold** text indicates changes to the in-river season or boundary.

The following options are provided for Commission consideration:

#### **Option 1 – Any Size Chinook Salmon Fishery**

This option would allow anglers to take up to [0-4] Chinook Salmon of any size per day. This option is the Department's preferred option if the 2019 SRFC stock abundance forecast is sufficiently high to avoid the need to constrain in-river SRFC harvest.

In addition, this option would extend the salmon fishing season by two weeks (to October 31) on the Feather River between the Thermalito Afterbay Outfall and the Live Oak boat ramp to allow for additional fishing opportunity. This section of the Feather River used to

provide spawning habitat for SRFC, but adult spawning has not been observed in this section of the Feather River for approximately 10 years. Allowing the take of salmon in this section of the Feather River during this time period will provide additional sport fishing opportunity without adversely impacting SRFC populations. Lastly, this option would provide additional fishing opportunity by extending the salmon season by two and one-half months (to December 31) and allowing year-round fishing on hatchery steelhead on approximately 10 miles of the Mokelumne River between the Highway 99 Bridge and Elliott Road. This would allow anglers to continue to fish lower in the river where no spawning is occurring. In addition, the Mokelumne River supports a large run of hatchery origin steelhead. Allowing the take of salmon and hatchery steelhead in this section of the Mokelumne River during this time period will provide additional sport fishing opportunity without adversely impacting populations of SRFC or wild steelhead.

American River, subsection 7.50(b)(5):

- (B) From the USGS gauging station cable crossing near Nimbus Hatchery to the SMUD power line crossing the southwest boundary of Ancil Hoffman Park.

July 16 through October 31 with a bag limit of [0-4] Chinook Salmon.

Possession limit - [0-12] Chinook Salmon.

- (C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park to the Jibboom Street bridge.

July 16 through December 31 with a bag limit of [0-4] Chinook Salmon.

Possession limit - [0-12] Chinook Salmon.

- (D) From the Jibboom Street bridge to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon.

Possession limit - [0-12] Chinook Salmon.

Feather River, subsection 7.50(b)(68):

- (D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to 200 yards above the Live Oak boat ramp.

July 16 through **October 31** with a daily bag limit of [0-4] Chinook Salmon.

Possession limit - [0-12] Chinook Salmon.

- (E) From 200 yards above the Live Oak boat ramp to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

Mokelumne River, subsection 7.50(b)(124):

- (A) From Camanche Dam to **Elliott Road**.

July 16 through October 15 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

- (B) From **Elliott Road** to the Woodbridge Irrigation District Dam and including Lodi Lake.

From July 16 through December 31 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

- (D) From the Lower Sacramento Road bridge to the mouth.

From July 16 through December 16 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

Sacramento River below Keswick Dam, subsection 7.50(b)(156.5):

- (C) From Deschutes Road bridge to the Red Bluff Diversion Dam.

August 1 through December 16 with a bag limit of [0-4] Chinook Salmon

Possession limit – [0-12] Chinook Salmon.

- (D) From the Red Bluff Diversion Dam to the Highway 113 bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

- (E) From the Highway 113 bridge to the Carquinez Bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon.

Possession limit – [0-12] Chinook Salmon.

## Option 2 – Limited Adult and Grilse Salmon Fishery

This option would allow the take of a limited number of adult Chinook Salmon, with grilse Chinook Salmon making up the remainder of the daily bag and possession limits. Should a reduction in the adult component of the stock be imposed by PFMC harvest projections, the Department is recommending specifying angling opportunities on the smaller, and possibly more numerous grilse salmon to increase angling harvest opportunities. Take of adult salmon would be limited under regulation, and the subsequent juvenile production would help rebuild the depressed stock size at a time when there is the need to restrict harvest of adult salmon.

As with Option 1, Option 2 would extend the salmon fishing season by two weeks (to October 31) on the Feather River between the Thermalito Afterbay Outfall and the Live Oak boat ramp to allow for additional fishing opportunity. This section of the Feather River used to provide spawning habitat for SRFC, but adult spawning has not been observed in this section of the Feather River for approximately 10 years. Allowing the take of salmon in this section of the Feather River during this time period will provide additional sport fishing opportunity without adversely impacting SRFC populations. Lastly, this option would provide additional fishing opportunity by extending the salmon season by two and one-half months (to December 31) and allowing year-round fishing on hatchery steelhead on approximately 10 miles of the Mokelumne River between the Highway 99 Bridge and Elliott Road. This would allow anglers to continue to fish lower in the river where no spawning is occurring. In addition, the Mokelumne River supports a large run of hatchery origin steelhead. Allowing the take of salmon and hatchery steelhead in this section of the Mokelumne River during this time period will provide additional sport fishing opportunity without adversely impacting populations of SRFC or wild steelhead.

### American River, subsection 7.50(b)(5):

- (B) From the USGS gauging station cable crossing near Nimbus Hatchery to the SMUD power line crossing the southwest boundary of Ancil Hoffman Park.

July 16 through October 31 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit - [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

- (C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park to the Jibboom Street bridge.

July 16 through December 31 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit - [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

- (D) From the Jibboom Street bridge to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit - [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

Feather River, subsection 7.50(b)(68):

- (D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to 200 yards above the Live Oak boat ramp.

July 16 through **October 31** with a daily bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit - [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

- (E) From 200 yards above the Live Oak boat ramp to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

Mokelumne River, subsection 7.50(b)(124)

- (A) From Camanche Dam **to Elliott Road**.

July 16 through October 15 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

- (B) From **Elliott Road** to the Woodbridge Irrigation District Dam and including Lodi Lake.

From July 16 through December 31 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

- (D) From the Lower Sacramento Road bridge to the mouth.

From July 16 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

Sacramento River below Keswick Dam, subsection 7.50(b)(156.5):

(C) From Deschutes Road bridge to the Red Bluff Diversion Dam.

August 1 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

(D) From the Red Bluff Diversion Dam to the Highway 113 bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

(E) From the Highway 113 bridge to the Carquinez Bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit – [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

**Option 3 – Grilse-only Salmon Fishery**

This option would allow for a grilse-only salmon fishery. Should a reduction in the adult component of the stock be imposed by PFMC harvest projections, the Department is recommending specifying angling opportunities on the smaller, and possibly more numerous grilse salmon to increase angling harvest opportunities. Take of adult salmon would be prohibited under regulation, and the subsequent juvenile production would help rebuild the depressed stock size at a time when there is the need to restrict harvest of adult salmon.

As with Options 1 and 2, Option 3 would extend the salmon fishing season by two weeks (to October 31) on the Feather River between the Thermalito Afterbay Outfall and the Live Oak boat ramp to allow for additional fishing opportunity. This section of the Feather River used to provide spawning habitat for SRFC, but adult spawning has not been observed in this section of the Feather River for approximately 10 years. Allowing the take of salmon in

this section of the Feather River during this time period will provide additional sport fishing opportunity without adversely impacting SRFC populations. Lastly, this option would provide additional fishing opportunity by extending the salmon season by two and one-half months (to December 31) and allowing year-round fishing on hatchery steelhead on approximately 10 miles of the Mokelumne River between the Highway 99 Bridge and Elliott Road. This would allow anglers to continue to fish lower in the river where no spawning is occurring. In addition, the Mokelumne River supports a large run of hatchery origin steelhead. Allowing the take of salmon and hatchery steelhead in this section of the Mokelumne River during this time period will provide additional sport fishing opportunity without adversely impacting populations of SRFC or wild steelhead.

American River, subsection 7.50(b)(5):

- (B) From the USGS gauging station cable crossing near Nimbus Hatchery to the SMUD power line crossing the southwest boundary of Ancil Hoffman Park.

July 16 through October 31 with a bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

- (C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park to the Jibboom Street bridge.

July 16 through December 31 with a bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

- (D) From the Jibboom Street bridge to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

Feather River, subsection 7.50(b)(68):

- (D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to the Live Oak boat ramp.

July 16 through **October 31** with a daily bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

- (E) From 200 yards above the Live Oak boat ramp to the mouth.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

Mokelumne River, subsection 7.50(b)(124):

- (A) From Camanche Dam to **Elliott Road**

July 16 through October 15 with a bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

- (B) From **Elliott Road** to the Woodbridge Irrigation District Dam and including lake Lodi.

From July 16 through December 31 with a bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

- (D) From the Lower Sacramento Road bridge to the mouth.

From July 16 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

Sacramento River below Keswick Dam, subsection 7.50(b)(156.5):

- (C) From Deschutes Road bridge to the Red Bluff Diversion Dam.

August 1 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.



(D) From the Red Bluff Diversion Dam to the Highway 113 bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

(E) From the Highway 113 bridge to the Carquinez Bridge.

July 16 through December 16 with a bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

#### Necessity of the Proposed Regulation Changes

The proposed regulations are necessary to adjust Chinook Salmon bag and possession limits, size limits, and open seasons for the American, Feather, Mokelumne, and Sacramento rivers for consistency with PFMC salmon abundance estimates and recommendations for ocean harvest for the coming season. The proposed regulatory changes will maximize salmon and steelhead fishing opportunity where possible through the proposed extensions of season end dates for portions of the Feather and Mokelumne Rivers, without adversely affecting SRFC or wild steelhead.

#### OTHER CHANGES:

Under all options, changes are proposed to fix punctuation and to remove the extra word "in" in subsection 7.50(b)(124)(A).

#### (b) Goals and Benefits of the Regulation:

It is the policy of this State to encourage the conservation, maintenance, and utilization of the living resources of the ocean and other waters under the jurisdiction and influence of the State for the benefit of all the citizens of the State and to promote the development of local fisheries and distant water fisheries based in California in harmony with international law, respecting fishing and the conservation of the living resources of the ocean and other waters under the jurisdiction and influence of the State. The objectives of this policy include, but are not limited to, the maintenance of sufficient populations of all species of aquatic organisms to ensure their continued existence, and the maintenance of a sufficient resource to support a reasonable sport use.

Adoption of scientifically-based SRFC bag and possession limits provides for the maintenance of sufficient populations of Chinook Salmon to ensure their continued existence.

The benefits of the proposed regulations are consistency with federal fishery management goals, sustainable management of Central Valley Chinook Salmon resources, general

health and welfare of California residents, and promotion of businesses that rely on Central Valley Chinook Salmon sport fishing.

(c) Authority and Reference Sections from Fish and Game Code for Regulation:

Authority: Sections 200, 205, 265, 270, 315, 316.5, and 399 Fish and Game Code.

Reference: Sections 200, 205, 265, 270 and 316.5, Fish and Game Code.

(d) Specific Technology or Equipment Required by Regulatory Change: None.

(e) Identification of Reports or Documents Supporting Regulation Change:

Pahlke, K, 1988. Length Conversion Equations for Sockeye, Chinook, and Coho salmon in southeast Alaska. Regional Information Report No. Ij88-03. Alaska Department of Fish and Game Division of Commercial Fisheries, Southeast Region.

(f) Public Discussions of Proposed Regulations Prior to Notice Publication:

No public meetings are being held prior to the notice publication. The 45-day comment period provides adequate time for review of the proposed amendments.

IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change:

No alternatives were identified by or brought to the attention of Commission staff that would have the same desired regulatory effect.

(b) No Change Alternative:

The no change alternative would leave existing 2018 regulations in place. The no-change alternative would not allow for appropriate harvest rates, while the proposed regulations will allow the state to harmonize its bag and possession limits with NMFS' regulations.

V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States:

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. The proposed changes are necessary for the continued preservation of the resource, while providing inland sport fishing opportunities and thus, the prevention of adverse economic impacts.

- (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment:

The Commission does not anticipate adverse impacts, but acknowledges the potential for short-term negative impacts on the creation or elimination of jobs within the state. The Commission anticipates no adverse impacts on the creation of new business, the elimination of existing businesses or the expansion of businesses in California (see Table 1). Minor variations in the bag and possession limits and/or the implementation of a size limit are unlikely to significantly impact the volume of business activity. The loss of up to 20 jobs with Option 3 is not expected to eliminate businesses because reduced fishing days will be partially offset by the extension of the salmon fishing season on portions of the Feather and Mokelumne rivers and by opportunities to fish for grilse Chinook Salmon and other species.

The Commission anticipates benefits to the health and welfare of California residents. Providing opportunities for a Chinook Salmon sport fishery encourages consumption of a nutritious food. The Commission anticipates benefits to the environment by the sustainable management of California's Chinook Salmon resources in the Central Valley.

The Commission does not anticipate any benefits to worker safety.

Other benefits of the proposed regulations are concurrence with federal fishery management goals and promotion of businesses that rely on Central Valley Chinook Salmon sport fishing.

- (c) Cost Impacts on a Representative Private Person or Business:

The Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

- (d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None.
- (e) Nondiscretionary Costs/Savings to Local Agencies: None.
- (f) Programs Mandated on Local Agencies or School Districts: None.
- (g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None.

(h) Effect on Housing Costs: None.

## VII. Economic Impact Assessment

The regulatory amendments of subsections (b)(5), (b)(68), (b)(124), and (b)(156.5) of Section 7.50 under consideration will set the 2019 sport fishing regulations for Chinook Salmon in the American, Feather, Mokelumne, and Sacramento rivers, respectively, for consistency with PFMC in-river harvest projections.

**Option 1** would allow anglers to take any size Chinook Salmon up to the daily bag limit [0-4] and possession limit [0-12] (most liberal option).

**Option 2** would allow for take of a limited number of adult Chinook Salmon, with grilse Chinook Salmon making up the remainder of the daily bag limit [0-4] and possession limit [0-12].

**Option 3** is the most conservative option and allows for take of only grilse Chinook Salmon up to the daily bag limit [0-4] and possession limit [0-12]. Take of adult salmon would not be allowed.

All three options increase fishing opportunities on the Feather and Mokelumne rivers by: (1) extending the salmon fishing season by two weeks on the Feather River between the Thermalito Afterbay Outfall and the Live Oak boat ramp; and (2) by extending the salmon and hatchery steelhead fishing season on approximately 10 miles of the Mokelumne River between the Highway 99 Bridge and Elliott Road.

In a normal season, the Central Valley fall Chinook Salmon fishery generates \$18,536,979 in total economic output and supports 130 jobs. The regional and statewide economic impacts factor into the effort to balance the maintenance of the recreational fishery with resource preservation, while complying with PFMC recommendations. The potential economic impacts that may result from each in-river harvest projection as specified in Option 1, Option 2, and Option 3 are evaluated in terms of each scenario's probable impact on the number of angler days, and thus area spending.

Table 1. Central Valley Salmon Fishery Economic Impacts (2017\$)

Regulation	Angler Days	Angler Expenditures	Total Econ Impact	Jobs
Option 1	179,550	\$ 13,182,320	\$ 18,536,979	130
Option 2	161,595	\$ 11,864,088	\$ 16,682,731	120
Option 3	143,640	\$ 10,545,856	\$ 14,829,094	110
Difference	Angler Day Loss	Expenditure Loss	Total Impact Loss	Job Loss
Option 1	0	\$ -	\$ -	0
Option 2	17,955	\$ 1,318,232	\$ 1,854,248	10
Option 3	35,910	\$ 2,636,464	\$ 3,707,885	20

Sources: CDFW Fisheries Branch economic analysis; U.S. Fish and Wildlife Service, 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation; dollar figures adjusted for inflation with Implicit Price Deflator for Personal Consumption Expenditures, Bureau of Economic Analysis.

Historical correlations between catch limits and fishery participation levels suggest that Option 1 could enable a historically average number of angler days for the 2019 Chinook Salmon season on the American, Feather, Mokelumne, and Sacramento rivers. Option 2 may result in declines in angler days of 17,955 below an average year. Option 3 may result in larger declines or about 35,910 fewer angler days.

For all options, the proposed extensions of season end dates for portions of the Feather and Mokelumne Rivers would extend the period of angler regional economic contributions. Additionally, anglers may pursue other in-river sport fish aside from Chinook salmon, such as steelhead (*Oncorhynchus mykiss*), striped bass (*Morone saxatilis*), largemouth bass (*Micropterus salmoides*), sturgeon (*Acipenser transmontanus*) and catfish (*Ictalurus spp.*), that may mitigate any adverse impacts from any reductions in salmon fishing. In sum, the options presented to the Commission were conceived with the goal of enabling levels of recreational SRFC fishing in the range of historical averages, and thus should not be a source of significant adverse economic impacts.

(a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

The Commission does not anticipate that any of the proposed options would induce substantial impacts on the creation or elimination of jobs. For Option 1, no change in job creation or elimination is anticipated. Option 2 and Option 3 have the potential to result in fewer angler visits, and absent substitution toward other sportfish and/or activities in the affected areas, the reduction in angler spending could reduce the support for 10 - 20 jobs statewide. These job impacts are statewide and may be moderated by the additional two and one-half months of fishing opportunity on approximately 10 miles of the Mokelumne River between the Highway 99 bridge and Elliott Road, and by the additional two weeks of fishing opportunity on the Feather River between the Thermalito Afterbay Outfall and the Live Oak boat ramp.

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The Commission does not anticipate that any of the proposed options would induce substantial impacts on the creation of new business or the elimination of existing businesses, because the proposed changes to the regulations are unlikely to be substantial enough to stimulate the creation of new businesses or cause the elimination of existing businesses. The season extensions for portions of the Mokelumne and Feather rivers are expected to sustain the number of fishing trips and the level of economic stimulus within historical averages.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

The Commission does not anticipate that any of the proposed options would induce substantial impacts on the expansion of businesses currently doing business within the state. The proposed regulations are not anticipated to increase demand for services or products from the existing businesses that serve inland sport fishermen. The number of

fishing trips and angler economic contributions are expected to remain within the range of historical averages.

(d) Benefits of the Regulation to the Health and Welfare of California Residents

The Commission anticipates benefits to the health and welfare of California residents. Chinook Salmon is a nutritious food source and providing inland sport fishery opportunities encourages consumption of this nutritious food. Sport fishing also contributes to increased mental health of its practitioners, as fishing is a hobby and form of relaxation for many. Sport fishing also provides opportunities for multi-generational family activities and promotes respect for California's environment by younger generations, the future stewards of California's natural resources.

(e) Benefits of the Regulation to Worker Safety

The Commission does not anticipate any benefits to worker safety from the proposed regulations because inland sport fishing does not impact working conditions.

(f) Benefits of the Regulation to the State's Environment

Under all Options 1-3, the Commission anticipates benefits to the environment in the sustainable management of Central Valley Chinook Salmon. It is the policy of this State to encourage the conservation, maintenance, and utilization of the living resources of the ocean and other waters under the jurisdiction and influence of the State for the benefit of all the citizens of the State and to promote the development of local fisheries and distant water fisheries based in California in harmony with international law, respecting fishing and the conservation of the living resources of the ocean and other waters under the jurisdiction and influence of the State. The objectives of this policy include, but are not limited to, the maintenance of sufficient populations of all species of aquatic organisms to ensure their continued existence, and the maintenance of a sufficient resource to support a reasonable sport use.

In accordance with this policy, adoption of scientifically-based inland Chinook Salmon bag and possession limits provides for the maintenance of sufficient populations of salmon to ensure their continued existence and thus continued economic stimulus.

(g) Other Benefits of the Regulation

Other benefits of the regulation include consistency with federal fishery management goals and the promotion of businesses that rely on Central Valley Salmon sport fishing.

## Informative Digest/Policy Statement Overview

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations.

Current regulations in subsections (b)(5), (b)(68), (b)(124) and (b)(156.5) of Section 7.50 prescribe the 2018 seasons and daily bag and possession limits for Sacramento River fall-run Chinook Salmon (*Oncorhynchus tshawytscha*; SRFC) sport fishing in the American, Feather, Mokelumne, and Sacramento rivers, respectively. Collectively, these four rivers constitute the “Central Valley fishery” for SRFC. Each year, the Department of Fish and Wildlife (Department) recommends new Chinook Salmon bag and possession limits for consideration by the Fish and Game Commission (Commission) to align fishing limits with up-to-date management goals, as set forth below.

The Pacific Fishery Management Council (PFMC) is responsible for adopting recommendations for the management of recreational and commercial ocean salmon fisheries in the Exclusive Economic Zone (three to 200 miles offshore) off the coasts of Washington, Oregon, and California. When approved by the Secretary of Commerce, these recommendations are implemented as ocean salmon fishing regulations by the National Marine Fisheries Service (NMFS).

The PFMC will develop the annual Pacific coast ocean salmon fisheries regulatory options for public review at its March 2019 meeting and will adopt its final regulatory recommendations at its April 2019 meeting based on the PFMC salmon abundance estimates and recommendations for ocean harvest (take) for the coming season. Based on the April 2019 recommendations by PFMC, the Department will recommend specific bag and possession limit regulations to the Commission at its April 17, 2019 meeting. The Commission will then consider adoption of the regulations at its May 16, 2019 teleconference.

For the purpose of PFMC mixed-stock fishery modeling and salmon stock assessment, adult salmon are generally those considered three to five years in age, and grilse salmon are those approximately two years of age. The age classes are distinguished by a cutoff of salmon total length measurement, depending on the in-river fishery. For purposes of the proposed regulation, this cutoff is presented as a range of 26 to 28 inches total length, as outlined under the options for the proposed regulations (below).

### Proposed Regulations

The Department recognizes the uncertainty of Sacramento River fall-run Chinook Salmon (SRFC) inland (in-river) harvest projections. Therefore, the Department is presenting three regulatory options for the Commission’s consideration to tailor 2019 Central Valley fishery management to target 2019 in-river fisheries harvest projections.

- Option 1 is the most liberal of the three options and allows take of any size Chinook Salmon up to the daily bag and possession limits.

- Option 2 allows for take of a limited number of adult Chinook Salmon, with grilse Chinook Salmon making up the remainder of the daily bag and possession limits.
- Option 3 is the most conservative option and allows for a grilse-only Chinook Salmon fishery.

All three options increase fishing opportunities on the Feather and Mokelumne rivers by: (1) extending the salmon fishing season by two weeks on the Feather River between the Thermalito Afterbay Outfall and the Live Oak boat ramp; and (2) by extending the salmon and hatchery steelhead fishing season on approximately 10 miles of the Mokelumne River between the Highway 99 Bridge and Elliott Road.

All options would be applicable to the following river segments and time periods:

American River, subsection 7.50(b)(5):

- (B) From the USGS gauging station cable crossing near Nimbus Hatchery to the SMUD power line crossing the southwest boundary of Ancil Hoffman Park, July 16 through October 31
- (C) From the SMUD power line crossing at the southwest boundary of Ancil Hoffman Park to the Jibboom Street bridge, July 16 through December 31
- (D) From the Jibboom Street bridge to the mouth, July 16 through December 16

Feather River, subsection 7.50(b)(68):

- (D) From the unimproved boat ramp above the Thermalito Afterbay Outfall to 200 yards above the Live Oak boat ramp, July 16 through October 31
- (E) From 200 yards above the Live Oak boat ramp to the mouth, July 16 through December 16

Mokelumne River, subsection 7.50(b)(124):

- (A) From Comanche Dam to Elliott Road, July 16 through October 15
- (B) From Elliott Road to the Woodbridge Irrigation District Dam and including Lodi Lake, July 16 through December 31
- (D) From the Lower Sacramento Road bridge to the mouth, July 16 through December 16

Sacramento River below Keswick Dam, subsection 7.50(b)(156.5):

- (C) From Deschutes Road bridge to the Red Bluff Diversion Dam, August 1 through December 16
- (D) From the Red Bluff Diversion Dam to the Highway 113 bridge, July 16 through December 16.
- (E) From the Highway 113 bridge to the Carquinez Bridge, July 16 through December 16.

The following options are provided for Commission consideration:

**Option 1 – Any Size Chinook Salmon Fishery**

This option is the Department's preferred option if the 2019 SRFC stock abundance forecast is sufficiently high to avoid the need to constrain inland SRFC harvest.



Bag limit of [0-4] Chinook Salmon.

Possession limit - [0-12] Chinook Salmon.

### **Option 2 – Limited Adult and Grilse Salmon Fishery**

Bag limit of [0-4] Chinook Salmon of which no more than [0-4] fish over [26-28] inches total length may be retained.

Possession limit - [0-12] Chinook Salmon of which no more than [0-4] fish may be over [26-28] inches total length.

### **Option 3 – Grilse Salmon Fishery Only**

Bag limit of [0-4] Chinook Salmon less than or equal to [26-28] inches total length.

Possession limit - [0-12] Chinook Salmon less than or equal to [26-28] inches total length.

#### **OTHER CHANGES:**

Under all options, changes are proposed to fix punctuation and to remove the extra word “in” in subsection 7.50(b)(124(A)).

### **Benefits of the Proposed Regulations**

The Commission anticipates benefits to the environment in the sustainable management of Central Valley Chinook Salmon resources. Other benefits of the proposed regulations are consistency with federal fishery management goals, health and welfare of California residents, and promotion of businesses that rely on Central Valley Chinook Salmon sport fishing.

### **Consistency and Compatibility with Existing Regulations**

Article IV, Section 20 of the State Constitution specifies that the Legislature may delegate to the Fish and Game Commission such powers relating to the protection and propagation of fish and game as the Legislature sees fit. The Legislature has delegated to the Commission the power to regulate recreational fishing in waters of the state (Fish and Game Code sections 200, 205, 315 and 316.5). The Commission has reviewed its own regulations and finds that the proposed regulations are neither inconsistent nor incompatible with existing state regulations. The Commission has searched the California Code of Regulations and finds no other state agency regulations pertaining to Chinook Salmon recreational fishing seasons, bag and possession limits for Central Valley sport fishing.

## Memorandum

**Date:** November 19, 2019

**To:** Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

**From:** Charles H. Bonham  
Director

**Subject:** **Initial Statement of Reasons to Amend Subsection (b)(91.1) of Section 7.50, Title 14, California Code of Regulations, Re: Klamath River Basin Sport Fishing Regulations 2020**

Please find attached the Initial Statement of Reasons (ISOR) package for the 2020 Klamath River Basin sport fishing regulations. As in the past, the California Department of Fish and Wildlife (Department) is proposing a range of bag and possession limits for adult Klamath River fall-run Chinook Salmon (KRFC) until after federal review of west coast salmon stocks has been completed and fishery allocations have been proposed. The 2020 Klamath River Basin allocation of adult KRFC will be recommended by the Pacific Fishery Management Council in April 2020 and presented to the Fish and Game Commission (Commission) for adoption at its May 14, 2020 teleconference.

Aside from minor changes for clarity, the Department is proposing two additional changes to the Klamath River Basin sport fishing regulations:

1. A potential change in the size limit of grilse KRFC (range presented is 22 to 23 inches total length); and
2. Increase in the daily bag and possession limit for Brown Trout on the main stem of the Trinity River from a five fish daily bag/10 fish possession limit to a 10 fish daily bag/20 fish possession limit.

The Department asks that the Commission request that the Office of Administrative Law make the regulations effective on or before August 15, 2020.

If you have any questions or need additional information, please contact Kevin Shaffer, Chief, Fisheries Branch, by telephone at (916) 327-8841 or by e-mail at [Kevin.Shaffer@wildlife.ca.gov](mailto:Kevin.Shaffer@wildlife.ca.gov). The public notice should identify Senior Environmental Scientist, Wade Sinnen, as the Department's point of contact for this rulemaking. Mr. Sinnen can be reached at (707) 822-5119, or by email at [Wade.Sinnen@wildlife.ca.gov](mailto:Wade.Sinnen@wildlife.ca.gov).

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Fish and Game Commission  
November 19, 2019  
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State of California  
Fish and Game Commission  
Initial Statement of Reasons for Regulatory Action

Amend Subsection (f) of Section 5.87 and Subsection (b)(91.1) of Section 7.50  
Title 14, California Code of Regulations  
Re: Klamath River Basin Sport Fishing

I. Date of Initial Statement of Reasons: December 17, 2019

II. Dates and Locations of Scheduled Hearings

(a) Notice Hearing

Date: December 11, 2019

Location: Sacramento, CA

(b) Discussion Hearing

Date: February 21, 2020

Location: Sacramento, CA

(c) Discussion Hearing

Date: April 16, 2020

Location: Sacramento, CA

(d) Adoption Hearing

Date: May 14, 2020

Location: Teleconference

III. Description of Regulatory Action

(a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations (CCR).

The Klamath River Basin, which consists of the Klamath River and Trinity River systems, is managed for fall-run Chinook Salmon (*Oncorhynchus tshawytscha*) through a cooperative system of State, federal, and tribal management agencies. Salmonid regulations are designed to meet natural and hatchery escapement needs for salmonid stocks, while providing equitable harvest opportunities for ocean sport, ocean commercial, river sport, and tribal fisheries.

The Pacific Fishery Management Council (PFMC) is responsible for adopting recommendations for the management of sport and commercial ocean salmon fisheries in the Exclusive Economic Zone (three to 200 miles offshore) off the coasts of Washington, Oregon, and California. When approved by the Secretary of Commerce, these recommendations are implemented as ocean salmon fishing regulations by the National Marine Fisheries Service (NMFS).

The California Fish and Game Commission (Commission) adopts regulations for the ocean salmon sport (inside three miles) and the Klamath River Basin (in-river) sport fisheries, which are consistent with federal fishery management goals.

Tribal entities within the Klamath River Basin maintain fishing rights for ceremonial, subsistence, and commercial fisheries that are managed consistent with federal fishery management goals. Tribal fishing regulations are promulgated by the tribes.

### **Klamath River Fall-Run Chinook Salmon**

Adult Klamath River fall-run Chinook Salmon (KRFC) harvest allocations and natural spawning escapement goals are established by the PFMC. The KRFC harvest allocation between tribal and non-tribal fisheries is based on court decisions and allocation agreements between the various fishery representatives.

The Klamath River Basin in-river sport salmon fishery is managed using adult quotas. For the purpose of implementing PFMC adult allocation and California Department of Fish and Wildlife (Department) salmon fishery harvest assessment, within the Klamath River Basin the Department currently considers 22 inches total length as a provisional cutoff. Salmon greater than 22 inches total length are defined as adult salmon (ages 3-5), and salmon less than or equal to 22 inches total length are defined as grilse salmon (age-two).

### **PFMC Overfishing Review**

KRFC stocks have been designated as “overfished” by the PFMC. This designation is the result of not meeting conservation objectives for this stock. Management objectives and criteria for KRFC are defined in the PFMC Salmon Fishery Management Plan (FMP). The threshold for overfished status of KRFC is a three-year geometric mean less than or equal to 30,525 natural area adult spawners. This threshold was not met for KRFC during the 2015-2017 period. The 30,525 KRFC natural area adult spawners is considered the minimum stock size threshold, per the FMP. The KRFC adult natural area spawning escapement for 2018 was 53,624 natural area adult spawners, which exceeded the one-year conservation threshold of 40,700 natural area adult spawners. The three-year geometric mean is still less than the required 40,700 natural area adult spawners, therefore the KRFC are still considered as an “overfished” stock.

Accordingly, the FMP outlines a process for preparing a “rebuilding plan” that includes assessment of the factors that led to the decline of the stock, including fishing, environmental factors, model errors, etc. The rebuilding plan includes recommendations to address conservation of KRFC, with the goal of achieving rebuilt status. Rebuilt status requires meeting a three-year geometric mean of 40,700 adult natural area KRFC spawner escapement. The plan developed by representatives of NMFS, PFMC, U.S. Fish and Wildlife Service, California Department of Fish and Wildlife (Department), and Tribal entities, was submitted to the PFMC in February 2019, adopted by the PFMC in June 2019, and submitted to the NMFS in August 2019. Forthcoming recommendations from the rebuilding plan may alter how KRFC are managed in the future, including changing the in-river allocation number, and/or allocating less than the normal target number.

### **Klamath River Spring-Run Chinook Salmon**

The Klamath River Basin also supports Klamath River spring-run Chinook Salmon (KRSC). Naturally produced KRSC are both temporally and spatially separated from KRFC in most cases.

Presently, KRSC stocks are not managed or allocated by the PFMC. This in-river sport fishery is managed by general basin seasons, daily bag limit, and possession limit regulations. KRSC harvest will be monitored on the Klamath River below the Highway 96 bridge at Weitchpec to the mouth of the Klamath River in 2020 and ensuing years by creel survey. The upper Trinity River, upstream of Junction City, will be monitored using tag returns from anglers in 2020 and future years.

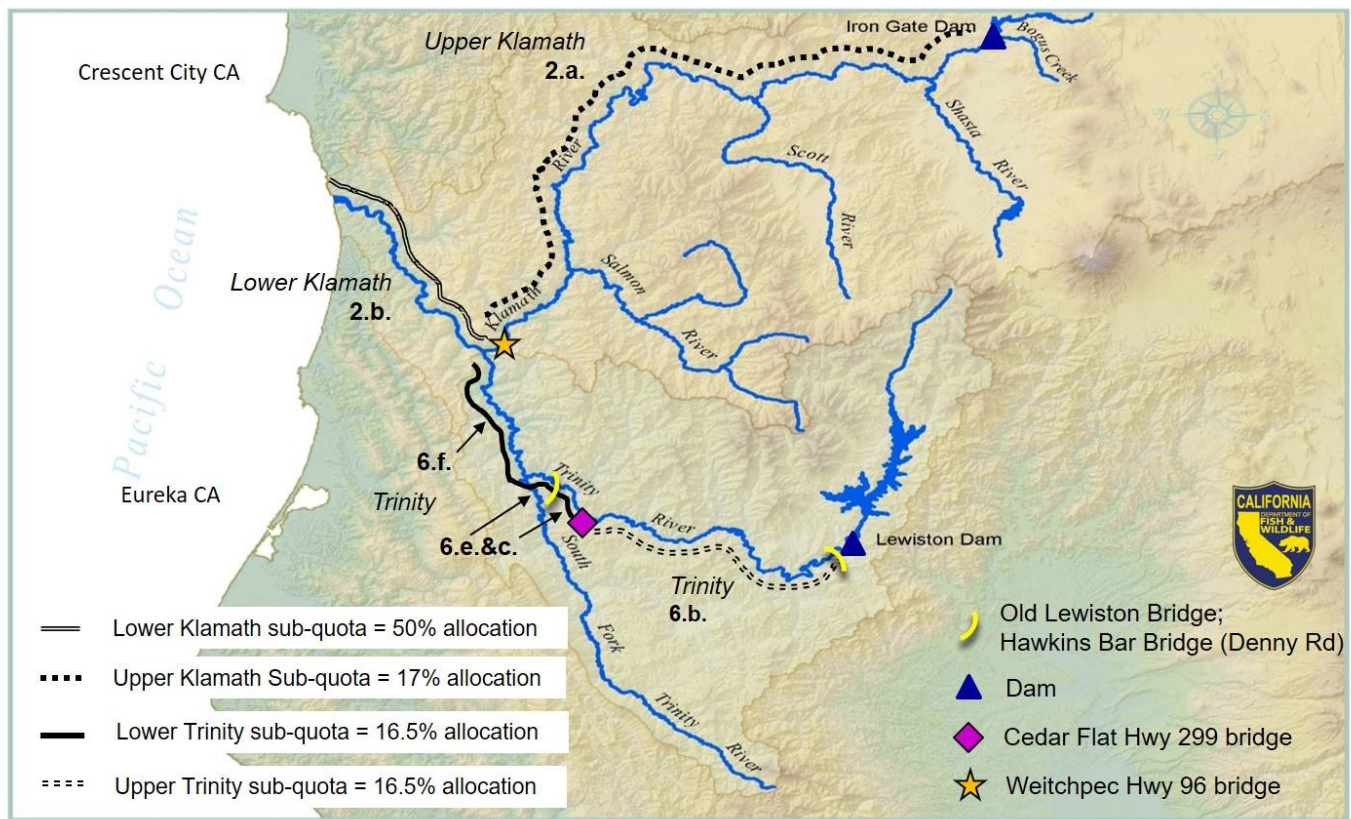
### **KRFC Allocation Management**

The PFMC 2019 allocation for the Klamath River Basin sport harvest was 7,637 adult KRFC. Preseason stock projections of 2020 adult KRFC abundance will not be available from the PFMC until March 2020. The 2020 basin allocation will be recommended by the PFMC in April 2020 and presented to the Commission for adoption as a quota for the in-river sport harvest at its May 2020 teleconference meeting.

The Commission may modify the KRFC in-river sport harvest quota, which is normally a minimum of 15 percent of the non-tribal PFMC harvest allocation. Commission modifications need to meet biological and fishery allocation goals specified in law or established in the FMP.

The annual KRFC in-river sport harvest quota is specified in subsection 7.50(b)(91.1)(D)1. The quota is split between four geographic areas with a subquota for each area, expressed as a percentage of the total in-river quota, specified in subsection 7.50(b)(91.1)(D)2. For angler convenience, the subquotas, expressed as the number of fish, are listed for the affected river segments in subsection 7.50(b)(91.1)(E). The in-river sport subquota percentages are shown in Figure 1, and are as follows:

1. for the main stem Klamath River from 3,500 feet downstream of the Iron Gate Dam to the Highway 96 bridge at Weitchpec -- 17 percent of the in-river sport quota;
2. for the main stem Klamath River from downstream of the Highway 96 bridge at Weitchpec to the mouth -- 50 percent of the in-river sport quota;
3. for the Trinity River downstream of the Old Lewiston Bridge to the Highway 299 West bridge at Cedar Flat -- 16.5 percent of the in-river sport quota; and
4. for the Trinity River downstream from the Denny Road bridge at Hawkins Bar to the confluence with the Klamath River -- 16.5 percent of the in-river sport fishery quota.



**Figure 1.** Map of the Klamath River Basin, showing the sub-quotas by reach of Trinity and Klamath rivers, and the associated subsections of 7.50(b)(91.1), Title 14, CCR.

The spit area (within 100 yards of the channel through the sand spit formed at the Klamath River mouth) closes to all fishing after 15 percent of the total Klamath River Basin quota has been taken downstream of the Highway 101 bridge.

These geographic areas are based upon the historical distribution of angler effort to ensure equitable harvest of adult KRFC in the Klamath River and Trinity River. The subquota system requires the Department to monitor or assess angler harvest of adult KRFC in each geographic area. All areas will be monitored on a real time basis, except for the following:

Klamath River upstream of Weitchpec and the Trinity River – Due to funding and personnel reductions, the Department will be unable to deploy adequate personnel to conduct real time harvest monitoring in the Klamath River upstream of Weitchpec and in the Trinity River for the 2020 season. The Department has developed Harvest Predictor Models (HPM), which incorporate historic creel survey data from the Klamath River downstream of Iron Gate Dam to the confluence with the Pacific Ocean, and the Trinity River downstream of Lewiston Dam to the confluence with the Klamath River. Each HPM is driven by the positive relationship between KRFC harvested in the respective lower and upper subquota areas of the Klamath River and the Trinity River. The HPMs will be used by the Department to implement fishing closures to ensure that anglers do not exceed established subquota targets. Using this method, the upper Klamath River subquota area generally closes between 28-30 days after the lower Klamath River subquota is reached. Similarly, the upper Trinity River subquota area

generally closes 28-30 days after the lower Trinity River subquota has been met. The Department also takes into consideration several other factors when implementing closure dates for subquota areas, including angler effort, KRFC run timing, weir counts, and ongoing recreational creel surveys performed by the Hoopa Valley Tribe in the lower Trinity River below Willow Creek.

### **Sport Fishery Management**

The KRFC in-river sport harvest quota is divided into geographic areas, and harvest is monitored under real time subquota management. The KRSC in-river sport harvest is managed by general season, daily bag limit, and possession limit regulations. Season dates have been adjusted for the 2019 year in light of another regulatory action by the Commission for protection of KRSC as a candidate under the California Endangered Species Act (CESA).

The Department presently differentiates the two stocks by the following sport fish season in each sub-area:

#### **Klamath River**

January 1 through August 14 – General Season KRSC.

For purposes of clarity, daily bag and possession limits apply to that section of the Klamath River downstream of the Highway 96 bridge at Weitchpec to the mouth.

August 15 to December 31 – KRFC quota management.

#### **Trinity River**

January 1 through August 31 – General Season KRSC.

For purposes of clarity, daily bag and possession limits apply to that section of the Trinity River downstream of the Old Lewiston Bridge to the confluence with the South Fork Trinity River.

September 1 through December 31 – KRFC quota management.

The daily bag and possession limits apply to both stocks within the same sub-area and time period. Current regulations in subsections 7.50(b)(91.1)(E)2.a. and b. specify bag limits for KRFC stocks in the Klamath River. Current regulations in subsections 7.50(b)(91.1)(E)6.b., e., and f. specify bag limits for KRFC stocks in the Trinity River. Current regulations in subsection 7.50(b)(91.1)(C)2.b. specify KRFC possession limits.

### **Proposed Changes**

#### **Key to Proposed Regulatory Changes:**

Because the PFMC recommendations are not known at this time, ranges are shown in [brackets] in the proposed regulatory text below of bag and possession limits which encompass historical quotas. A range is also shown for the Department's grilse salmon size limit delineating between adult and grilse salmon. All are proposed for the 2020 KRFC fishery in the Klamath and Trinity rivers.



The final KRFC bag and possession limits will align with the final federal regulations to meet biological and fishery allocation goals specified in law, or established in the FMP.

#### KRFC ADULT STOCKS (SPORT FISHERY QUOTA MANAGEMENT):

Quota: For public notice requirements, the Department recommends the Commission consider a quota range of 0–67,600 adult KRFC in the Klamath River Basin for the in-river sport fishery. This recommended range encompasses the historical range of the Klamath River Basin allocations and allows the PFMC and Commission to make adjustments during the 2020 regulatory cycle.

Subquotas: The proposed subquotas for KRFC stocks are as follows:

- Main stem Klamath River from 3,500 feet downstream of the Iron Gate Dam to the Highway 96 bridge at Weitchpec -- 17 percent of the total quota equates to [0-11,492];
- Main stem Klamath River from downstream of the Highway 96 bridge at Weitchpec to the mouth -- 50 percent of the total quota equates to [0-33,800];
- Trinity River downstream of the Old Lewiston Bridge to the Highway 299 West bridge at Cedar Flat -- 16.5 percent of the total quota equates to [0-11,154]; and
- Trinity River downstream from the Denny Road bridge at Hawkins Bar to the confluence with the Klamath River -- 16.5 percent of the total quota equates to [0-11,154].

Seasons: No changes are proposed for the Klamath River and Trinity River KRFC seasons:

- Klamath River - August 15 to December 31
- Trinity River - September 1 to December 31

Bag and Possession Limits: As in previous years, no retention of adult KRFC is proposed once the subquota has been met.

The range of proposed bag and possession limits for KRFC stocks are as follows:

- Bag Limit - [0-4] Chinook Salmon – of which no more than [0-4] fish over [22-23] inches total length may be retained until the subquota is met, then 0 fish over [22-23] inches total length.
- Possession limit - [0-12] Chinook Salmon of which no more than [0–4] fish over [22-23] inches total length may be retained when the take of salmon over [22-23] inches total length is allowed.

#### KRSC SPORT FISHERY:

No regulatory changes are proposed for the general KRSC opening and closing season dates, and bag, possession, and size limits.

## OTHER CHANGES

### ***KRFC Size Limit (Grilse Size Considerations)***

Grilse salmon are salmon that spend two years in the ocean before returning to their natal streams to spawn. These fish are generally smaller in size and contribute less to the overall salmon population than adult salmon, which typically spend three to five years in the ocean before returning to freshwater to spawn. Typically, age-two salmon (grilse) are mostly males (jacks) with relatively few females (jills). KRFC recreational fishery bag and possession limits generally contain an adult and grilse component. In years when the adult quota is met, angling is still allowed for KRFC less than or equal to 22 inches total length (TL). Current management in the Klamath River assumes an adult size limit of greater than 22 inches (55.9 cm) TL for recreational harvest, whereas the preliminary adult size cutoff for research and monitoring is typically 55 cm (21.7 in) fork length (FL). Fork length is used for research and monitoring of salmon and steelhead because it provides a more consistent measurement across the range of conditions encountered in a scientific context (e.g., fin erosion due to spawning, especially postmortem). These size limits are used to separate grilse from adults *during* the season because the true age of individual fish cannot be determined until well after the time of harvest.

Predicting the abundance and size at return of grilse for any given year is currently not possible because grilse are not susceptible to angling harvest prior to becoming grilse, and ocean abundance of pre-grilse sized fish is not monitored. The first indication of a large Klamath River Basin grilse population is usually from in-river recreational fishing beginning in mid-August. Grilse numbers and size compared to adult numbers and size for a given year are usually not fully known until the following January, when spawner escapement and harvest survey results are completed. For this reason, using an average of previous grilse data is a reasonable method of setting regulatory limits for future years.

When considering a grilse fishery, it is important to determine a size cutoff that balances angling harvest opportunity for grilse with protecting adult spawners and not exceeding adult quotas. If the TL size cutoff is too short (conservative), fewer grilse will be caught by anglers, and they will be underutilized because grilse are infrequently used as hatchery broodstock, or because jacks are out-competed by larger males in-river. If the cutoff is too large (liberal), then angling catch of the smaller adults will increase, reducing the hatchery and in-river spawners, and potentially causing exceedance of the adult quota.

The Department has used a provisional standard of 55 centimeters (cm) FL to estimate the grilse harvest of KRFC during the season. This equates to 21.7 inches when converted to FL, and 23.2 inches when converted to TL. Post season analyses of scale aged and known aged (coded-wire tag data) KRFC are used to determine the annual actual size cut-off between grilse and adults. Because the Klamath River Basin is managed on adult (ages 3-5) KRFC quotas, the Department believes it is prudent to be conservative when establishing maximum size for the grilse (age-two) fishery. As an example, in 1998 the Department raised the cutoff of grilse to 24 inches TL. That same year, over 20 percent of age-three fish were less than 24 inches TL, and the adult quota was greatly exceeded, in part due to this size change for the year. The size limit cutoff was changed back in Title 14, CCR to 22 inches TL the following year. In preparation for the proposed regulatory changes for the 2020 KRFC in-river recreational fishing season, the Department has completed an evaluation of the potential

impacts to KRFC from increasing the size limit cutoff distinguishing age-two fish from age-three fish for in-river recreational harvest (Appendix A; refer to Section III(e) below).

Review of brood years 1998, and 2008-2018 KRFC size at age data, including hatchery coded wire tag (CWT) recovery data (Appendix A), shows that KRFC vary in size annually and that the size separating age two and age-three KRFC also varies annually. Additionally, a size overlap between age two fish and age-three fish exists in all years as illustrated in Figures 1-4 in Appendix A. For the purpose of evaluating potential regulatory change to the current size limit cutoff the Department uses to define grilse KRFC (22 inches TL), the Department evaluated the proportions of age two fish and age-three fish greater or less than a range of 21 to 24 inches TL. Tables 1-3 in Appendix A demonstrate that a cutoff size limit of 21 inches TL is highly conservative, with few adults less than this size in all years and a large proportion of grilse larger than this size in some years. The current size limit cutoff of 22 inches TL used to separate grilse from adults protects the majority of age-three fish, while allowing a larger proportion of grilse to be available for recreational harvest. A 23 inch TL cutoff size limit has a more variable impact to age-three fish, particularly in recent years, however impacts are still relatively low (<5%). At 24 inches TL, the proportion of age-three fish less than this size is highly variable and has also increased in recent years. Potential impacts to age-three fish are observed in all years and locations, and impact rates have exceeded 10% in the Trinity River on two occasions (1998, 2016). Recent proportions of age-three fish less than 24 inches TL at all sites examined exceeded 4.86% during the 2016 -2018 return years. As indicated in the case study year of 1998, abnormally small adults in any given year can lead to large proportions of adult KRFC becoming vulnerable to grilse fisheries.

For the reasons discussed above, the Department is proposing a grilse salmon size limit cutoff range of less than or equal to 22 inches (55.9 cm) to 23 inches (58.4 cm) TL for discussion before the Department makes a final recommendation. Considered in this context, the size limit cutoff discussion is a trade-off between restricting take of the available adult salmon and quota management versus increasing harvest of two-year-old grilse salmon.

### ***Brown Trout Bag and Possession Limit Increase on the Main Stem Trinity River***

The Department is proposing to increase the daily bag and possession limit for Brown Trout on the main stem of the Trinity River from a five fish daily bag/10 fish possession limit to a 10 fish daily bag/20 fish possession limit. This proposed change will increase fishing opportunity on a non-native trout species. As the focus for the Trinity River is on native fish production, a reduction of brown trout may help enhance habitat availability for native fish, consistent with the goals of the federally-administered Trinity River Restoration Program.

### ***Other Changes for Clarity***

The Department is proposing additional changes for clarity, as follows:

1. Amend subsection 5.87(f) to ensure that the size limit cutoff between a grilse and adult Chinook Salmon in the Klamath River Basin is consistent with the size limit cutoff listed in subsection 7.50(b)(91.1). This change will ensure clarity in the regulations and help anglers understand the size limit cutoff that distinguishes a grilse salmon from an adult salmon in the Klamath River Basin.

2. Add paragraph (3) to subsection 7.50(b)(91.1)(A) to include a reference to Section 1.74, Title 14, CCR for sport fish report card requirements. This addition is necessary to help anglers understand that a North Coast Salmon Report Card is required for fishing in the Klamath River Basin.
3. Amend the heading of subsection 7.50(b)(91.1)(A) to read, "Restrictions and Requirements." This change is necessary to broaden the heading of this subsection with the inclusion of reference to Section 1.74 for the sport fish report card requirement.
4. Throughout the regulatory text in subsection 7.50(b)(91.1), update the year from 2019 to 2020 for the upcoming season.

(b) Goals and Benefits of the Regulation

It is the policy of this State to encourage the conservation, maintenance, and utilization of the living resources of the ocean and other waters under the jurisdiction and influence of the State for the benefit of all the citizens of the State and to promote the development of local fisheries and distant water fisheries based in California in harmony with international law, respecting fishing and the conservation of the living resources of the ocean and other waters under the jurisdiction and influence of the State. The objectives of this policy include, but are not limited to, the maintenance of sufficient populations of all species of aquatic organisms to ensure their continued existence, and the maintenance of a sufficient resource to support a reasonable sport use. Adoption of scientifically-based Klamath River Basin salmon seasons, size limits, and bag and possession limits provides for the maintenance of sufficient populations of salmon to ensure their continued existence.

The benefits of the proposed regulations are consistency with federal fishery management goals, sustainable management of Klamath River Basin fish resources, health and welfare of California residents, and promotion of businesses that rely on salmon sport fishing in the Klamath River Basin.

(c) Authority and Reference Sections from Fish and Game Code for Regulation

Authority: Sections 200, 205, 265, 270, 315, 316.5, 399, and 2084, Fish and Game Code

Reference: Sections 200, 205, 265, 270, 316.5, and 2084, Fish and Game Code

(d) Specific Technology or Equipment Required by Regulatory Change

None.

(e) Identification of Reports or Documents Supporting Regulation Change

*In-River Sport Fishing Economics Technical Report*, National Oceanographic and Atmospheric Administration, National Marine Fisheries Service, September 2011.

Appendix A: Evaluation of Alternative Size Limits for Klamath River Fall Chinook Salmon Harvest, California Department of Fish and Wildlife, October 2019.

(f) Public Discussions of Proposed Regulations Prior to Notice Publication

The Department presented the proposed amendments to the KRFC and Brown Trout bag and

possession limits at the Commission's Wildlife Resources Committee meeting on September 10, 2019. At this meeting, fishing interests requested that the Department include a grilse size limit range in the ISOR for the 2020 KRFC fishery.

#### IV. Description of Reasonable Alternatives to Regulatory Action

##### (a) Alternatives to Regulation Change

###### **KRFC Adult Stocks**

The use of more liberal regulations for KRFC bag limits, possession limits, and minimum adult salmon size (Alternative 1 in the STD 399; Economic and Fiscal Impact Statement) would be less desirable than those proposed, because they could create risk of an intense fishery, reaching or exceeding the quota in a very short time. Reaching the quota in a very short time could be damaging to the local economy, and exceeding the allowable harvest could damage the KRFC stocks.

###### **KRFC Size Limit**

The Department analyzed a range of grilse size limits between 21-24 inches total length (see Appendix A referenced in Section III(e)). A 21 inch total length size limit was considered overly conservative, and would prevent fishing opportunity on grilse KRFC with little benefit to adult stocks. Raising the maximum grilse size to 24 inches total length was considered too liberal at this time for several reasons:

1. Three-year-old KRFC would be vulnerable to grilse fisheries all years;
2. In some years a significant portion (>20%) of age-three KRFC would be vulnerable to grilse fisheries; and
3. Recent data suggests that the proportion of smaller age-three KRFC has increased.

Therefore, the Department has proposed a range of 22-23 inches total length for consideration. If future data suggests that current conditions have changed, the Department will re-evaluate grilse size limits.

###### **KRSC Stocks**

No changes are proposed for KRSC stocks in this rulemaking; however, should changes be necessary, they would be considered in a separate rulemaking.

###### **Brown Trout**

The proposed change to the Brown Trout bag and possession limit is based on a petition from the Hoopa Valley Tribe. No alternatives were identified by or brought to the attention of Commission staff concerning Brown Trout that would have the same desired regulatory effect.

###### **Other Changes for Clarity**

No alternatives were identified by or brought to the attention of Commission staff concerning amendments for clarity that would have the same desired regulatory effect.

##### (b) No Change Alternative

## **KRFC Adult Stocks**

The No Change Alternative (Alternative 2 in the STD 399; Economic and Fiscal Impact Statement) would leave the current 2019 daily bag and possession limit regulations in place and would not allow flexibility to develop bag and possession limits based on 2020 PPMC allocations. The proposed regulatory change for 2020 is necessary to continue appropriate harvest rates and an equitable distribution of the harvestable surplus.

## **KRFC Size Limit**

The No Change Alternative for the grilse Chinook Salmon fishery would leave in place the current size limit cutoff for grilse salmon at less than or equal to 22 inches TL. This would prevent the opportunity for anglers to potentially harvest age two fish greater than 22 inches TL and would protect potentially smaller adults in the fishery from harvest.

## **Brown Trout**

The No Change Alternative for increasing the daily bag and possession limit for Brown Trout would leave the existing 2019 regulations in place. As a result, angling opportunity for Brown Trout on the mainstem Trinity River would not change and, thus, would not contribute to enhancing habitat availability for native fish.

## **Other Changes for Clarity**

The No Change Alternative for including amendments for clarity would leave the existing 2019 regulations in place. This may mean that anglers may not fully understand that a North Coast Salmon Report Card is required for fishing in the Klamath River Basin, and may not fully understand the size limit cutoff that distinguishes a grilse salmon from an adult salmon in the Klamath River Basin. Additionally, the No Change Alternative would mean that the year for 2019 would not be updated for the 2020 season, which could cause confusion for anglers on the validity of the regulations.

## **V. Mitigation Measures Required by Regulatory Action**

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

## **VI. Impact of Regulatory Action**

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

### **(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States**

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. The proposed regulations are projected to range from minor to no impact on the net revenues to local businesses servicing sport fishermen. If the 2020 KRFC quota is reduced, visitor spending may correspondingly be reduced, and in the absence of alternative

visitor activities, the drop in spending could induce some business contraction. If the 2020 KRFC quota remains similar to the KRFC quotas allocated in previous years, then local economic impacts are expected to be unchanged. Neither scenario is expected to directly affect the ability of California businesses to compete with businesses in other states.

(b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment

An estimated 30-50 businesses that serve sport fishing activities are expected to be directly and/or indirectly affected depending on the final KRFC quota. The impacts range from no impact (Projection 1 under the Economic Impact Assessment (EIA), below) to small adverse impacts (Projection 3, EIA, below).

Depending on the final KRFC quota, the Commission anticipates the potential for some impact on the creation or elimination of jobs in California. The potential adverse employment impacts range from no impact to the loss of 22 jobs. Under all alternatives, due to the limited time period of this regulation's impact, the Commission anticipates no impact on the creation of new businesses, the elimination of existing businesses, or the expansion of businesses in California.

For all of the proposed scenarios, the possibility of growth of businesses to serve alternative recreational activities exists. Adverse impacts to jobs and/or businesses would be less if fishing of other species and grilse KRFC is permitted, than under a complete closure to all fishing. The impacted businesses are generally small businesses employing few individuals and, like all small businesses, are subject to failure for a variety of causes. Additionally, the long-term intent of the proposed regulatory action is to increase sustainability in fishable salmon stocks and, consequently promote the long-term viability of these same small businesses.

The Commission anticipates benefits to the health and welfare of California residents. Providing opportunities for a salmon sport fishery encourages a healthy outdoor activity and the consumption of a nutritious food.

The Commission anticipates benefits to the environment by the sustainable management of California's salmonid resources.

The Commission does not anticipate any benefits to worker safety because the proposed action does not affect working conditions.

(c) Cost Impacts on a Representative Private Person or Business

The Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State

None.

(e) Nondiscretionary Costs/Savings to Local Agencies

None.

(f) Programs Mandated on Local Agencies or School Districts

None.

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code

None.

(h) Effect on Housing Costs

None.

VII. Economic Impact Assessment

The proposed regulatory amendments of subsection 7.50(b)(91.1) under consideration will set the 2020 Klamath River Basin salmon sport fishing regulations to conform to the PFMC KRFC allocation. The Klamath River Basin is anticipated to be open for salmon sport fishing at levels similar to the levels in the 2019 sport fishing seasons; however, the possibility of marine fishery area closures still exists. Ocean closures may in turn result in PFMC recommendations for Klamath River Basin salmon sport fishery closures for the take of adult KRFC. Adverse or positive impacts to jobs and businesses will depend on the 2020 KRFC allocation ultimately adopted by the PFMC, and the specific regulations promulgated by the Commission, in conjunction with the Department.

The proposed quota of 0 to 67,600 adult KRFC in 2020 represents a range from 0 percent or no salmon fishing on adult KRFC to greater than 100 percent of the 2019 Klamath River Basin KRFC quota. The Department is also proposing to increase the daily bag and possession limit for Brown Trout on the main stem of the Trinity River from a five fish daily bag/10 fish possession limit to a 10 fish daily bag/20 fish possession limit. This proposed change will increase fishing opportunity and thus will also help to mitigate any potential reductions in the adult KRFC quota that may have to be accommodated. Under all scenarios, sport fishing may be allowed for other sportfish species and most likely for grilse KRFC, regardless of PFMC allocation. Thus, any adverse impacts to businesses could be less severe than under a complete closure of fishing.

**KRFC Size Limit (Grilse Size Considerations)**

Grilse salmon are salmon that spend two years in the ocean before returning to their natal streams to spawn. These fish are generally smaller in size and contribute less to the overall salmon population than adult salmon, which typically spend three to five years in the ocean before returning to freshwater to spawn. KRFC recreational fishery bag and possession limits generally contain an adult and grilse component. When considering a grilse fishery, determining a size cutoff that balances angling harvest opportunity for grilse versus protecting adult spawners and not exceeding adult quotas is important. If the size cutoff is too short (conservative), fewer grilse will be caught by anglers, and they will be underutilized because grilse are infrequently used as hatchery brood stock, or because jacks are out-competed by larger males in-river. If the cutoff is too large (liberal), then angling catch of the smaller adults will increase, reducing the hatchery and in-river spawners and potentially causing exceedance of the adult quota.



In years when the adult quota is met, angling is still allowed for KRFC less than or equal to 22 inches TL under the current regulations. The Department is proposing a size limit cutoff range of 22 to 23 inches TL. Changing the size specification for grilse is not anticipated to impact the number or length of angler trips and thus expenditures in the fishery areas.

### **Brown Trout Bag and Possession Limit Increase on the Main Stem Trinity River**

The Department is proposing to increase the daily bag and possession limit for Brown Trout on the main stem of the Trinity River from a five fish daily bag/10 fish possession limit to a 10 fish daily bag/20 fish possession limit. While Brown Trout are not often the primary target of sportfishing, this proposed change will increase fishing opportunity and thus will also help to mitigate any potential reductions in the adult KRFC quota that may have to be accommodated.

The preservation of Klamath River salmon stocks is vital for the ongoing success of Klamath River Basin businesses that provide goods and services related to sportfishing. Scientifically-based KRFC allocations are necessary for the continued preservation of the resource, and therefore the prevention of adverse economic impacts.

Based on the 2011 NMFS report (*In-River Sport Fishing Economics of the Klamath River*, refer to Section III(e)), in a normal year, non-resident Klamath River salmon and steelhead sport anglers together contribute about \$3,442,750 (2017\$) in direct expenditures, resulting in about \$4,221,945 (2017\$) in total economic output to California businesses. The economic impact figures are expressed in 2017 dollars because adjusting for 2019<sup>1</sup> does not meaningfully alter the estimates. The NMFS study found that non-resident (outside the immediate locale) salmon or steelhead angler average expenditures are estimated to be \$108.82 (2017\$) per angler day (for lodging, food, gasoline, fishing gear, boat fuel, and guide fees). The projections do not distinguish between spring and fall runs, however, the report states that the in-river harvest is almost exclusively fall-run.

Additionally, the 2011 NMFS report excluded the Trinity River, the largest tributary to the Klamath. The Trinity River is allocated 33 percent of the KRFC total quota. Using the Trinity quota as a measure of salmon and steelhead angler effort, and thus impacts on associated businesses that support anglers, the total non-resident angler contribution to the entire Klamath River Basin (including the Trinity River) is estimated to be \$4,221,945 (2017\$) in total economic output. This revenue, again using a 33 percent increase to account for the Trinity River, provides an estimated total of 70 jobs in the State (assuming that personnel costs also rise with inflation). This is a conservative estimate of total economic impact as it counts only non-resident angler expenditures.

Local resident average expenditures per angler day are estimated to be 60 percent less (markedly reduced lodging, gasoline, and food expenditures), which yields an estimate of \$43.53 per angler-day. Local resident anglers comprise about 36 percent of Klamath River Basin anglers. Any decreases to expenditures by resident anglers associated with reduced fishing opportunities may be offset by increased expenditures on other locally purchased goods and services – with no net change in local economic activity. Thus, the economic impact analysis focuses on non-resident

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<sup>1</sup>The Implicit Price Deflator for Personal Consumption Expenditures between 2017 and 2019 has been between one to two percent.

angler expenditures which represent new money whose injection serves to stimulate the local economy.

The total impact of non-resident angler direct expenditures supports about 45 jobs for salmon alone or up to 70 jobs for all salmon and steelhead spending (Table 1).

Table 1. Klamath Salmon and Steelhead Total Economic Output (Non-resident anglers, 2017\$)

<b>Klamath Sport Fishing</b>	<b>Salmon</b>	<b>Steelhead</b>	<b>Total</b>
Total Output	\$2,733,115	\$1,488,830	\$ 4,221,945
Labor Income	\$1,264,576	\$688,862	\$ 1,953,438
Jobs	45.7	24.9	70.6

To demonstrate the potential economic impacts that may result from a quota anywhere within the range of 0 - 67,600 KRFC, three adult salmon catch projections are as follows: 100 percent of the 2019 adult KRFC catch limit; 50 percent of the 2019 adult KRFC catch limit; and 0 percent of the 2019 adult KRFC catch limit.

(a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

Projection 1: 100 percent of the 2019 adult KRFC catch limit: The Commission does not anticipate any adverse impacts on the creation or elimination of jobs, as the quotas would not decrease effort nor curtail the number of visitors and thus probable visitor expenditures in the fisheries areas.

Projection 2: 50 percent of the 2019 adult KRFC catch limit: The Commission anticipates some impact on the creation or elimination of jobs, which may be partially offset by the potential for continued sport fishing allowed for other sportfish and grilse KRFC. A 50 percent salmon catch reduction will likely reduce visitor spending by slightly less than 50 percent, given price elasticities of demand for salmon fishing activity of less than one. As the “price” of fishing per unit catch increases, the demand for fishing trips declines by a lesser extent, particularly in the short-run. While difficult to predict, job losses associated with a 50 percent reduction in the adult KRFC catch limit are expected to be less than half of the 45 estimated total jobs supported by salmon angler visits (i.e. fewer than 22 jobs).

Projection 3: 0 percent of the 2019 adult KRFC catch limit: In the event of fisheries closures for adult KRFC in some or all Klamath River Basin areas, the Commission anticipates less than 50 percent reduction in fishery-related jobs. As mentioned above, sport fishing for other species and grilse KRFC may still be allowed, thus mitigating potential job losses.

A closure on the take of all KRFC was instituted in 2017, and only steelhead could be legally harvested during the fall season. The 2017 closure resulted in nearly a 50 percent drop in angler days. However, job creation or elimination tends to lag in response to short-term changes in consumer demand. Thus, the potential impacts of a 2020 closure on the take of adult KRFC are estimated to result in the loss of less than 22 jobs due to adjustment lags, and the continued sport fishing allowed for other species and potentially for grilse KRFC.

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

Projection 1: 100 percent of the 2019 adult KRFC catch limit: The Commission does not anticipate any impacts on the creation of new business or the elimination of existing businesses, as the quotas would not decrease effort nor curtail the number of visitors and thus probable visitor expenditures in the fisheries areas.

Projection 2: 50 percent of the 2019 adult KRFC catch limit: The Commission anticipates a decline in visits to the fishery areas of less than 50 percent due to the continued sport fishing allowed for other species and grilse KRFC. This may result in some decline in business activity, but the Commission does not anticipate any impacts on the creation of new businesses or the elimination of existing businesses directly related to fishing activities. However, with less effort being expended on salmon fishing, the possibility of alternative sportfishing activities and the growth of businesses to serve those activities exists.

Projection 3: 0 percent of the 2019 adult KRFC catch limit: In the event of salmon fisheries closures for adult KRFC in some or all Klamath River Basin areas, the Commission anticipates a decline in regional spending and thus reduced revenues to the approximately 30 to 50 businesses that directly and indirectly serve sport fishing activities with unknown impacts on the creation of new business or the elimination of existing businesses. However, adverse impacts may be mitigated by the continued opportunity to harvest other sportfish and the potential for take of grilse KRFC. Additionally, the long-term intent of the proposed regulatory action is to increase sustainability in fishable salmon stocks and, consequently, promote the long-term viability of these same small businesses.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

Projection 1: 100 percent of the 2019 adult KRFC catch limit: The Commission does not anticipate any impacts on the expansion of businesses in California as the quotas would not increase effort nor increase the number of visitors and thus probable visitor expenditures in the fisheries areas.

Projection 2: 50 percent of the 2019 adult KRFC catch limit: The Commission does not anticipate any impacts on the expansion of businesses currently doing business within the State. Decreases in expenditures by resident anglers associated with reduced fishing opportunities may be offset by increased expenditures on other locally purchased goods and services – with no net change in local economic activity. For non-resident anglers, however, decreases in local expenditures associated with decreases in local fishing opportunities may result in increases in other expenditures outside the Klamath River Basin area.

Projection 3: 0 percent of the 2019 adult KRFC catch limit: In the event of salmon fisheries closures for adult KRFC in some or all Klamath River Basin areas, the Commission does not anticipate any expansion of businesses in California. Decreases in expenditures by anglers associated with reduced fishing opportunities may be partially offset by increased expenditures on other locally purchased goods and services as anglers pursue other sportfish, potentially including grilse KRFC, or the substitution of salmon fishing with other recreational activities.

(d) Benefits of the Regulation to the Health and Welfare of California Residents

Under all projections, the Commission anticipates benefits to the health and welfare of California residents. Providing opportunities for a Klamath River Basin salmon sport fishery and other sport fisheries encourages a healthy outdoor activity and the consumption of a nutritious food. Sport fishing also contributes to increased mental health of its practitioners, as fishing is a hobby and form of relaxation for many. Sport fishing also provides opportunities for multi-generational family activities and promotes respect for California's environment by the future stewards of California's natural resources.

(e) Benefits of the Regulation to Worker Safety

Under all projections, the Commission does not anticipate benefits to worker safety because the proposed regulations will not impact working conditions.

(f) Benefits of the Regulation to the State's Environment

Under all projections, the Commission anticipates benefits to the environment in the sustainable management of Klamath River Basin salmonid resources. It is the policy of this State to encourage the conservation, maintenance, and utilization of the living resources of the ocean and other waters under the jurisdiction and influence of the State for the benefit of all the citizens of the State and to promote the development of local fisheries and distant water fisheries based in California in harmony with international law, respecting fishing and the conservation of the living resources of the ocean and other waters under the jurisdiction and influence of the State. The objectives of this policy include, but are not limited to, the maintenance of sufficient populations of all species of aquatic organisms to ensure their continued existence, and the maintenance of a sufficient resource to support a reasonable sport use. Adoption of scientifically-based Klamath River Basin salmon seasons, size limits, and bag and possession limits provides for the maintenance of sufficient populations of salmon to ensure their continued existence.

(g) Other Benefits of the Regulation

Consistency with Federal Fishery Management Goals: California's salmon sport fishing regulations need to align with the new Federal regulations to achieve optimum yield in California. The PFMC annually reviews the status of west coast salmon populations. As part of that process, it recommends west coast adult salmon fisheries regulations aimed at meeting biological and fishery allocation goals specified in law or established in the FMP. These recommendations coordinate west coast management of sport and commercial ocean salmon fisheries off the coasts of Washington, Oregon, and California, and California inland salmon sport fisheries. These recommendations are subsequently implemented as ocean fishing regulations by the NMFS, and as salmon sport regulations for State marine and inland waters by the Commission.

## **Informative Digest/Policy Statement Overview**

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations (CCR).

The Klamath River Basin, which consists of the Klamath River and Trinity River systems, is managed for fall-run Chinook Salmon (*Oncorhynchus tshawytscha*) through a cooperative system of State, federal, and tribal management agencies. Salmonid regulations are designed to meet natural and hatchery escapement needs for salmonid stocks, while providing equitable harvest opportunities for ocean sport, ocean commercial, river sport, and tribal fisheries.

The Pacific Fishery Management Council (PFMC) is responsible for adopting recommendations for the management of sport and commercial ocean salmon fisheries in the Exclusive Economic Zone (three to 200 miles offshore) off the coasts of Washington, Oregon, and California. When approved by the Secretary of Commerce, these recommendations are implemented as ocean salmon fishing regulations by the National Marine Fisheries Service (NMFS).

The California Fish and Game Commission (Commission) adopts regulations for the ocean salmon sport (inside three miles) and the Klamath River Basin (in-river) sport fisheries, which are consistent with federal fishery management goals.

Tribal entities within the Klamath River Basin maintain fishing rights for ceremonial, subsistence, and commercial fisheries that are managed consistent with federal fishery management goals. Tribal fishing regulations are promulgated by the tribes.

### **Klamath River Fall-Run Chinook Salmon**

Adult Klamath River fall-run Chinook Salmon (KRFC) harvest allocations and natural spawning escapement goals are established by the PFMC. The Klamath River Basin in-river sport salmon fishery is managed using adult quotas.

The KRFC harvest allocation between tribal and non-tribal fisheries is based on court decisions and allocation agreements between the various fishery representatives.

For the purpose of implementing PFMC adult allocation and California Department of Fish and Wildlife (Department) salmon fishery harvest assessment, within the Klamath River Basin the Department currently considers 22 inches total length as a provisional cutoff. Salmon greater than 22 inches total length are defined as adult salmon (ages 3-5) and salmon less than or equal to 22 inches total length are defined as grilse salmon (age-two).

### **PFMC Overfishing Review**

KRFC stocks have been designated as “overfished” by the PFMC. This designation is the result of not meeting conservation objectives for this stock. Management objectives and criteria for KRFC are defined in the PFMC Salmon Fishery Management Plan (FMP). The threshold for overfished status of KRFC is a three-year geometric mean less than or equal to 30,525 natural area adult spawners. This threshold was not met for KRFC during the 2015-2017 period. The 30,525 KRFC natural area adult spawners is considered the minimum stock size threshold, per the FMP. The KRFC adult natural area spawning escapement for 2018 was 53,624 natural area adult spawners, which exceeded the one-year conservation threshold of 40,700 natural area adult spawners. The three-year geometric mean is

still less than the required 40,700 natural area adult spawners, therefore the KRFC are still considered as an “overfished” stock.

Accordingly, the FMP outlines a process for preparing a “rebuilding plan” that includes assessment of the factors that led to the decline of the stock, including fishing, environmental factors, model errors, etc. The rebuilding plan includes recommendations to address conservation of KRFC, with the goal of achieving rebuilt status. Rebuilt status requires meeting a three-year geometric mean of 40,700 adult natural area KRFC spawner escapement. The plan developed by representatives of NMFS, PFMC, U.S. Fish and Wildlife Service, California Department of Fish and Wildlife (Department), and Tribal entities, was submitted to the PFMC in February 2019, adopted by the PFMC in June 2019 and submitted to the NMFS in August 2019. Forthcoming recommendations from the rebuilding plan may alter how KRFC are managed in the future, including changing the in-river allocation number, and/or allocating less than the normal target number.

### **KRFC Allocation Management**

The PFMC 2019 allocation for the Klamath River Basin sport harvest was 7,637 adult KRFC. Preseason stock projections of 2020 adult KRFC abundance will not be available from the PFMC until March 2020. The 2020 basin allocation will be recommended by the PFMC in April 2020 and presented to the Commission for adoption as a quota for the in-river sport harvest at its May 2020 teleconference meeting.

The Commission may modify the KRFC in-river sport harvest quota, which is normally a minimum of 15 percent of the non-tribal PFMC harvest allocation. Commission modifications need to meet biological and fishery allocation goals specified in law or established in the FMP.

The annual KRFC in-river sport harvest quota is specified in subsection 7.50(b)(91.1)(D)1. The quota is split between four geographic areas with a subquota for each area, expressed as a percentage of the total in-river quota, specified in subsection 7.50(b)(91.1)(D)2. For angler convenience, the subquotas, expressed as the number of fish, are listed for the affected river segments in subsection 7.50(b)(91.1)(E). The in-river sport subquota percentages are shown in Figure 1, and are as follows:

1. for the main stem Klamath River from 3,500 feet downstream of the Iron Gate Dam to the Highway 96 bridge at Weitchpec -- 17 percent of the in-river sport quota;
2. for the main stem Klamath River from downstream of the Highway 96 bridge at Weitchpec to the mouth -- 50 percent of the in-river sport quota;
3. for the Trinity River downstream of the Old Lewiston Bridge to the Highway 299 West bridge at Cedar Flat -- 16.5 percent of the in-river sport quota; and
4. for the Trinity River downstream from the Denny Road bridge at Hawkins Bar to the confluence with the Klamath River -- 16.5 percent of the in-river sport fishery quota.

### **Proposed Changes**

Because the PFMC recommendations are not known at this time, ranges are shown in [brackets] in the proposed regulatory text below of bag and possession limits which encompass historical quotas. A range is also shown for the Department’s grilse salmon size limit cutoff delineating between adult and grilse salmon. All are proposed for the 2020 KRFC fishery in the Klamath and Trinity rivers.

The final KRFC bag and possession limits will align with the final federal regulations to meet biological and fishery allocation goals specified in law, or established in the FMP.

#### KRFC SPORT FISHERY (QUOTA MANAGEMENT):

Quota: For public notice requirements, the Department recommends the Commission consider a quota range of 0–67,600 adult KRFC in the Klamath River Basin for the in-river sport fishery. This recommended range encompasses the historical range of the Klamath River Basin allocations and allows the PFMC and Commission to make adjustments during the 2020 regulatory cycle.

Subquotas: The proposed subquotas for KRFC stocks are as follows:

- Main stem Klamath River from 3,500 feet downstream of the Iron Gate Dam to the Highway 96 bridge at Weitchpec -- 17 percent of the total quota equates to [0-11,492];
- Main stem Klamath River from downstream of the Highway 96 bridge at Weitchpec to the mouth -- 50 percent of the total quota equates to [0-33,800];
- Trinity River downstream of the Old Lewiston Bridge to the Highway 299 West bridge at Cedar Flat -- 16.5 percent of the total quota equates to [0-11,154]; and
- Trinity River downstream from the Denny Road bridge at Hawkins Bar to the confluence with the Klamath River -- 16.5 percent of the total quota equates to [0-11,154].

Seasons: No changes are proposed for the Klamath River and Trinity River KRFC seasons:

- Klamath River - August 15 to December 31
- Trinity River - September 1 to December 31

Bag and Possession Limits: As in previous years, no retention of adult KRFC is proposed once the subquota has been met.

#### ***KRFC Size Limit (Grilse Size Considerations)***

The Department is proposing a grilse salmon size limit cutoff range of less than or equal to 22 inches (55.9 cm) to 23 inches (58.4 cm) total length (TL) for discussion before the Department makes a final recommendation. Considered in this context, the size limit cutoff discussion is a trade-off between restricting take of the available adult salmon and quota management versus increasing harvest of two-year-old grilse salmon. In preparation for the proposed regulatory changes for the 2020 KRFC in-river recreational fishing season, the Department has completed an evaluation of the potential impacts to KRFC from increasing the size limit cutoff distinguishing age-two fish from age-three fish for in-river recreational harvest (Appendix A to the Initial Statement of Reasons - ISOR). The Department analyzed a range of grilse size limits between 21 and 24 inches total length. A 21 inch TL size limit was considered overly conservative, and would prevent fishing opportunity on grilse KRFC with little benefit to adult stocks. Raising the maximum grilse size to 24 inches TL was considered too liberal. The range of proposed bag and possession limits for KRFC stocks are as follows:

- Bag Limit - [0-4] Chinook Salmon – of which no more than [0-4] fish over [22-23] inches total length may be retained until the subquota is met, then 0 fish over [22-23] inches total length.
- Possession limit - [0-12] Chinook Salmon of which no more than [0–4] fish over [22-23] inches total length may be retained when the take of salmon over [22-23] inches total length is allowed.

## KRSC SPORT FISHERY:

The Klamath River Basin also supports Klamath River spring-run Chinook Salmon (KRSC). Presently, KRSC stocks are not managed or allocated by the PPMC. No regulatory changes are proposed for the general KRSC opening and closing season dates, and bag, possession and size limits.

### ***Brown Trout Bag and Possession Limit Increase on the Main Stem Trinity River***

The Department is proposing to increase the daily bag and possession limit for Brown Trout on the main stem of the Trinity River from a five fish daily bag/10 fish possession limit to a 10 fish daily bag/20 fish possession limit. This proposed change will increase fishing opportunity on a non-native trout species. As the focus for the Trinity River is on native fish production, a reduction of brown trout may help enhance habitat availability for native fish, consistent with the goals of the federally-administered Trinity River Restoration Program.

### ***Other Changes for Clarity***

The Department is proposing additional changes for clarity, as follows:

1. Amend subsection 5.87(f) to ensure that the size limit cutoff between a grilse and adult Chinook Salmon in the Klamath River Basin is consistent with the size limit cutoff listed in subsection 7.50(b)(91.1).
2. Add paragraph (3) to subsection 7.50(b)(91.1)(A) to include a reference to Section 1.74, Title 14, CCR for sport fish report card requirements.
3. Amend the heading of subsection 7.50(b)(91.1)(A) to read, "Restrictions and Requirements."
4. Throughout the regulatory text in subsection 7.50(b)(91.1), update the year from 2019 to 2020.

### **Benefits of the Proposed Regulations**

The Commission anticipates benefits to the environment in the sustainable management of Klamath River Basin salmonid resources.

Other benefits of the proposed regulations are conformance with federal fishery management goals, health and welfare of California residents and promotion of businesses that rely on salmon sport fishing in the Klamath River Basin.

### **Consistency and Compatibility with Existing Regulations**

Article IV, Section 20 of the State Constitution specifies that the Legislature may delegate to the Fish and Game Commission such powers relating to the protection and propagation of fish and game as the Legislature sees fit. The Legislature has delegated authority to the Commission to promulgate sport fishing regulations (Fish and Game Code sections 200, 205, 315, and 316.5). The Commission has reviewed its own regulations and finds that the proposed regulations are neither inconsistent nor incompatible with existing State regulations. Commission staff has searched the California Code of Regulations and has found no other State regulations related to sport fishing in the Klamath River Basin.



## Proposed Regulatory Language

Section 5.87, Title 14, CCR is amended to read as follows:

### **§ 5.87. North Coast Salmon Report Card Requirement (FG 684, See Section 701).**

*...[Subsections (a) through (e), and (g) through (h) are provided for context only. No changes are proposed.]*

(a) Report Card Required in Waters of the Klamath-Trinity River System and the Smith River. All anglers must have a North Coast Salmon Report Card in their possession while fishing for or taking salmon in waters of the Klamath-Trinity River System and the Smith River, and must complete and return the card pursuant to regulations in this Section and in Section 1.74.

(b) Prior to beginning fishing activity, the cardholder shall record the month, day, and fishing location on the first available line on the report card.

(c) For the Klamath-Trinity River System: Whenever the cardholder lands (either retains or releases) a Chinook salmon, the angler shall immediately record whether the fish was an adult or a jack, and whether the fish has an adipose fin present. Whenever the cardholder releases a Coho salmon, the angler shall immediately record whether the maxillary is present or absent.

(d) For the Smith River: Whenever the cardholder lands (either retains or releases) a Chinook salmon, the angler shall immediately record whether the fish was an adult or a jack, and whether the fish has an adipose fin or left ventral fin present.

(e) Whenever the cardholder moves to another fishing location, the angler shall record the month, day, and location on the next line on the report card.

(f) In the Klamath-Trinity River System ~~and Smith River~~, a jack Chinook salmon is defined as any Chinook salmon that is less than or equal to 22~~[22-23]~~ inches total length. In the Smith River, a jack Chinook salmon is defined as any Chinook salmon that is less than 22 inches total length.

(g) In the event an angler fills in all lines and returns a North Coast Salmon Report Card, an additional card may be purchased. See Section 1.74.

(h) The annual fee for the North Coast Salmon Report Card is specified in Section 701, Title 14, CCR.

Note: Authority cited: Sections 200, 205 and 265, Fish and Game Code. Reference: Sections 200, 205 and 265, Fish and Game Code.

## Proposed Regulatory Language

Subsection (b)(91.1) of Section 7.50, Title 14, CCR is amended to read as follows:

### **§ 7.50. Alphabetical List of Waters with Special Fishing Regulations.**

. . . [No changes to subsections (a) through (b)(91)]

(91.1) Anadromous Waters of the Klamath River Basin Downstream of Iron Gate and Lewiston dams. The regulations in this subsection apply only to waters of the Klamath River Basin which are accessible to anadromous salmonids. They do not apply to waters of the Klamath River Basin which are inaccessible to anadromous salmon and trout, portions of the Klamath River system upstream of Iron Gate Dam, portions of the Trinity River system upstream of Lewiston Dam, and the Shasta River and tributaries upstream of Dwinnel Dam. Fishing in these waters is governed by the General Regulations for non-anadromous waters of the North Coast District (see Section 7.00, subsection (a)(4)).

(A) ~~Hook and Weight Restrictions~~ Restrictions and Requirements.

1. Only barbless hooks may be used. (For definitions regarding legal hook types, hook gaps and rigging see Chapter 2, Article 1, Section 2.10.)
2. During closures to the take of adult salmon, it shall be unlawful to remove any adult Chinook Salmon from the water by any means.
3. See Section 1.74 for sport fish report card requirements.

(B) General Area Closures.

1. No fishing is allowed within 750 feet of any Department of Fish and Wildlife fish-counting weir.
2. No fishing is allowed from the Ishi Pishi Road bridge upstream to and including Ishi Pishi Falls from August 15 through December 31. EXCEPTION: members of the Karuk Indian Tribe listed on the current Karuk Tribal Roll may fish at Ishi Pishi Falls using hand-held dip nets.
3. No fishing is allowed from September 15 through December 31 in the Klamath River within 500 feet of the mouths of the Salmon, the Shasta and the Scott rivers and Blue Creek.
4. No fishing is allowed from June 15 through September 14 in the Klamath River from 500 feet above the mouth of Blue Creek to 500 feet downstream of the mouth of Blue Creek.

(C) Klamath River Basin Possession Limits.

1. Trout Possession Limits.
  - a. The Brown Trout possession limit is ~~40~~20.
  - b. The hatchery trout or hatchery steelhead possession limits are as follows:
    - (i) Klamath River - 4 hatchery trout or hatchery steelhead.
    - (ii) Trinity River - 4 hatchery trout or hatchery steelhead.
2. Chinook Salmon Possession Limits.

- a. Klamath River downstream of the Highway 96 bridge at Weitchpec from January 1 to August 14 and the Trinity River downstream of the Old Lewiston Bridge to the confluence of the South Fork Trinity River from January 1 to August 31: 2 Chinook Salmon.
  - b. Klamath River from August 15 to December 31 and Trinity River from September 1 to December 31: ~~6~~[0-12] Chinook Salmon. No more than ~~3~~[0-4] Chinook Salmon over ~~22~~[22-23] inches total length may be retained when the take of salmon over ~~22~~[22-23] inches total length is allowed.
- (D) Klamath River Basin Chinook Salmon Quotas.
 

The Klamath River fall-run Chinook Salmon take is regulated using quotas. Accounting of the tribal and non-tribal harvest is closely monitored from August 15 through December 31 each year. These quota areas are noted in subsection (b)(91.1)(E) with "Fall Run Quota" in the *Open Season and Special Regulations* column.

  - 1. Quota for Entire Basin.
 

The ~~2019~~[2020] Klamath River Basin quota is ~~7,637~~[0-67,600] Klamath River fall-run Chinook Salmon over ~~22~~[22-23] inches total length. The department shall inform the Commission, and the public via the news media, prior to any implementation of restrictions triggered by the quotas. (NOTE: A department status report on progress toward the quotas for the various river sections is updated weekly, and available at 1-800-564-6479.)
  - 2. Subquota Percentages.
    - a. The subquota for the Klamath River upstream of the Highway 96 bridge at Weitchpec and the Trinity River is 50% of the total Klamath River Basin quota.
      - (i) The subquota for the Klamath River from 3,500 feet downstream of the Iron Gate Dam to the Highway 96 bridge at Weitchpec is 17% of the total Klamath River Basin quota.
      - (ii) The subquota for the Trinity River main stem downstream of the Old Lewiston Bridge to the Highway 299 West bridge at Cedar Flat is 16.5% of the total Klamath River Basin quota.
      - (iii) The subquota for the Trinity River main stem downstream of the Denny Road bridge at Hawkins Bar to the confluence with the Klamath River is 16.5% of the total Klamath River Basin quota.
    - b. The subquota for the lower Klamath River downstream of the Highway 96 bridge at Weitchpec is 50% of the total Klamath River Basin quota.
      - (i) The Spit Area (within 100 yards of the channel through the sand spit formed at the Klamath River mouth) will close when 15% of the total Klamath River Basin quota is taken downstream of the Highway 101 bridge.
- (E) Klamath River Basin Open Seasons and Bag Limits.

All anadromous waters of the Klamath River Basin are closed to all fishing for all year except those areas listed in the following table. Bag limits are for trout and Chinook Salmon in combination unless otherwise specified.

<b><i>Body of Water</i></b>	<b><i>Open Season and Special Regulations</i></b>	<b><i>Daily Bag Limit</i></b>
1. Bogus Creek and tributaries.	Fourth Saturday in May through August 31. Only artificial lures with barbless hooks may be used.	2 hatchery trout or hatchery steelhead**
2. Klamath River main stem from 3,500 feet downstream of Iron Gate Dam to the mouth.		
a. Klamath River from 3,500 feet downstream of the Iron Gate Dam to the Highway 96 bridge at Weitchpec.	January 1 to August 14.	0 Chinook Salmon 2 hatchery trout or hatchery steelhead**
	Fall Run Quota <del>1,298</del> <u>[0-11,492]</u> Chinook Salmon August 15 to December 31, <del>2019</del> <u>2020</u> .	<del>2</del> <u>[0-4]</u> Chinook Salmon - no more than <del>4</del> <u>[0-4]</u> fish over <del>22</del> <u>[22-23]</u> inches total length until subquota is met, then 0 fish over <del>22</del> <u>[22-23]</u> inches total length. 2 hatchery trout or hatchery steelhead**
	Fall Run Quota Exception: Chinook Salmon over <del>22</del> <u>[22-23]</u> inches total length may be retained from 3,500 feet downstream of Iron Gate Dam to the Interstate 5 bridge when the department determines that the adult fall-run Chinook Salmon spawning escapement at Iron Gate Hatchery exceeds 8,000 fish. Daily bag and possession limits specified for fall-run Chinook Salmon apply during this exception.	
b. Klamath River downstream of the Highway 96 bridge at Weitchpec.	January 1 to August 14.	2 Chinook Salmon 2 hatchery trout or hatchery steelhead**

<b>Body of Water</b>	<b>Open Season and Special Regulations</b>	<b>Daily Bag Limit</b>
	Fall Run Quota <del>3,819</del> <u>[0-33,800]</u> Chinook Salmon August 15 to December 31, <del>2019</del> <u>2020</u> .	2 <del>[0-4]</del> Chinook Salmon - no more than 4 <del>[0-4]</del> fish over <del>22</del> <u>[22-23]</u> inches total length until subquota is met, then 0 fish over <del>22</del> <u>[22-23]</u> inches total length.  2 hatchery trout or hatchery steelhead**
	<p>Fall Run Quota Exception: Spit Area (within 100 yards of the channel through the sand spit formed at the Klamath River mouth). This area will be closed to all fishing after 15% of the Total Klamath River Basin Quota has been taken.</p> <p>All legally caught Chinook Salmon must be retained. Once the adult (greater than <del>22</del><u>[22-23]</u> inches) component of the total daily bag limit has been retained anglers must cease fishing in the spit area.</p>	
3. Salmon River main stem, main stem of North Fork downstream of Sawyer's Bar bridge, and main stem of South Fork downstream of the confluence of the East Fork of the South Fork.	November 1 through February 28.	2 hatchery trout or hatchery steelhead**
4. Scott River main stem downstream of the Fort Jones-Greenville bridge to the confluence with the Klamath River.	Fourth Saturday in May through February 28.	2 hatchery trout or hatchery steelhead**
5. Shasta River main stem downstream of the Interstate 5 bridge north of Yreka to the confluence with the Klamath River.	Fourth Saturday in May through August 31 and November 16 through February 28.	2 hatchery trout or hatchery steelhead**
6. Trinity River and tributaries.		
a. Trinity River main stem from 250 feet downstream of Lewiston Dam to the Old Lewiston Bridge.	April 1 through September 15. Only artificial flies with barbless hooks may be used.	2 hatchery trout or hatchery steelhead**

<b><i>Body of Water</i></b>	<b><i>Open Season and Special Regulations</i></b>	<b><i>Daily Bag Limit</i></b>
b. Trinity River main stem downstream of the Old Lewiston Bridge to the Highway 299 West bridge at Cedar Flat.	January 1 to August 31.	2 Chinook Salmon <del>5</del> <u>10</u> Brown Trout 2 hatchery trout or hatchery steelhead**
	Fall Run Quota <del>4,260</del> <u>0-11,154</u> Chinook Salmon September 1 to December 31, <del>2019</del> <u>2020</u> .	<del>2</del> <u>0-4</u> Chinook Salmon - no more than <del>4</del> <u>0-4</u> fish over <del>22</del> <u>22-23</u> inches total length until subquota is met, then 0 fish over <del>22</del> <u>22-23</u> inches total length.  <del>5</del> <u>10</u> Brown trout 2 hatchery trout or hatchery steelhead**
	Fall Run Quota Exception: Chinook Salmon over <del>22</del> <u>22-23</u> inches total length may be retained downstream of the Old Lewiston Bridge to the mouth of Indian Creek when the department determines that the adult fall-run Chinook Salmon spawning escapement at Trinity River Hatchery exceeds 4,800 fish. Daily bag and possession limits specified for fall-run Chinook Salmon apply during this exception.	
c. Trinity River main stem downstream of the Highway 299 West bridge at Cedar Flat to the Denny Road bridge at Hawkins Bar.	January 1 through August 31.	2 Chinook Salmon <del>5</del> <u>10</u> Brown Trout 2 hatchery trout or hatchery steelhead**
	September 1 through December 31.	Closed to all fishing.
d. New River main stem downstream of the confluence of the East Fork to the confluence with the Trinity River.	September 15 through November 15. Only artificial lures with barbless hooks may be used.	2 hatchery trout or hatchery steelhead**

<b><i>Body of Water</i></b>	<b><i>Open Season and Special Regulations</i></b>	<b><i>Daily Bag Limit</i></b>
e. Trinity River main stem downstream of the Denny Road bridge at Hawkins Bar to the mouth of the South Fork Trinity River.	January 1 to August 31.	2 Chinook Salmon <del>5</del> <u>10</u> Brown Trout 2 hatchery trout or hatchery steelhead**
	Fall Run Quota <del>4,260</del> <u>[0-11,154]</u> Chinook Salmon September 1 through December 31, <del>2019</del> <u>2020</u> . This is the cumulative quota for subsections 6.e. and 6.f. of this table.	<del>2</del> <u>[0-4]</u> Chinook Salmon - no more than <del>4</del> <u>[0-4]</u> fish over <del>22</del> <u>[22-23]</u> inches total length until subquota is met, then 0 fish over <del>22</del> <u>[22-23]</u> inches total length. <del>5</del> <u>10</u> Brown Trout 2 hatchery trout or hatchery steelhead**
f. Trinity River main stem downstream of the mouth of the South Fork Trinity River to the confluence with the Klamath River.	January 1 to August 31.	0 Chinook Salmon <del>5</del> <u>10</u> Brown Trout 2 hatchery trout or hatchery steelhead**
	Fall Run Quota <del>4,260</del> <u>[0-11,154]</u> Chinook Salmon September 1 through December 31, <del>2019</del> <u>2020</u> . This is the cumulative quota for subsections 6.e. and 6.f. of this table.	<del>2</del> <u>[0-4]</u> Chinook Salmon - no more than <del>4</del> <u>[0-4]</u> fish over <del>22</del> <u>[22-23]</u> inches total length until subquota is met, then 0 fish over <del>22</del> <u>[22-23]</u> inches total length. <del>5</del> <u>10</u> Brown Trout 2 hatchery trout or hatchery steelhead**
g. Hayfork Creek main stem downstream of the Highway 3 bridge in Hayfork to the confluence with the South Fork Trinity River.	November 1 through March 31. Only artificial lures with barbless hooks may be used.	2 hatchery trout or hatchery steelhead**

<b><i>Body of Water</i></b>	<b><i>Open Season and Special Regulations</i></b>	<b><i>Daily Bag Limit</i></b>
h. South Fork Trinity River downstream of the confluence with the East Fork of the South Fork Trinity River to the South Fork Trinity River bridge at Hyampom.	November 1 through March 31. Only artificial lures with barbless hooks may be used.	2 hatchery trout or hatchery steelhead**
i. South Fork Trinity River downstream of the South Fork Trinity River bridge at Hyampom to the confluence with the Trinity River.	November 1 through March 31.	0 Chinook Salmon. 2 hatchery trout or hatchery steelhead**

. . . [No changes to subsections 7.50(b)(91.2) through (b)(212)]

\* Wild Chinook Salmon are those not showing a healed adipose fin clip and not showing a healed left ventral fin clip.

\*\*Hatchery trout or steelhead in anadromous waters are those showing a healed adipose fin clip (adipose fin is absent). Unless otherwise provided, all other trout and steelhead must be immediately released. Wild trout or steelhead are those not showing a healed adipose fin clip (adipose fin is present).

Note: Authority cited: Sections 200, 205, 265, 270, 315, 316.5, 399 and 2084, Fish and Game Code. Reference: Sections 200, 205, 265, 270, 316.5 and 2084, Fish and Game and Code.



## **APPENDIX A**

### **Evaluation of Alternative Size Limits for Klamath River Fall Chinook Salmon Harvest**

The analyses presented herein were prepared to evaluate the potential impacts to Chinook Salmon from increasing the size limit distinguishing age-two from age-three for in-river recreational harvest of fall Chinook Salmon. Data used in this analysis was collected by staff at the California Department of Fish and Wildlife (Department) and the Hoopa Valley Tribe.

Klamath River fall Chinook (KRFC) Salmon are managed based on adult quotas, meaning that once the quota has been attained, the fishery for adult-sized KRFC is closed. The Klamath basin is divided into four “sub-quota” zones – two each in the Klamath and Trinity Rivers – to provide equitable harvest opportunities to recreational anglers throughout the basin. Each sub-quota area has its own adult allocation and can be closed independently based on near real-time adult KRFC harvest estimates. In most years, regulations allow for a grilse fishery to continue if or when adult closures have occurred, which affords extended recreational harvest opportunity when adult quotas are attained. Department data has demonstrated that the size of grilse (age-two) and adults (age-three and older) overlap in all years to some degree. Consequently, the fishery in general, and the grilse fishery in particular, need to be structured to minimize impacts to adult KRFC conservation goals and to minimize the potential for exceeding harvest quotas.

Current management in the Klamath River assumes an adult size limit of greater than 22 in (55.9 cm) total length (TL) for recreational harvest, whereas the preliminary adult size cutoff for research and monitoring is typically 55 cm (21.7 in) fork length (FL). Total length is used for recreational harvest because it is consistent with fishing regulations for all species state-wide. Fork length is used for research and monitoring of salmon and steelhead because it provides a more consistent measurement across the range of conditions encountered in a scientific context, e.g., fin erosion due to spawning, especially postmortem. These size limits are used to separate grilse from adults during the season because the true age of individual fish cannot be determined until well after the time of harvest. Some grilse are larger, and some adults are smaller than the size limit (Figures 1 and 2). Also, the size that minimizes these overlaps varies from year to year and can only be determined through retrospective analyses. Figures 3 and 4 show the interannual variability in the median and range of lengths for known or estimated age-two and age-three KRFC. The in-season size limits for recreational harvest and for research and monitoring typically do not change from year to year. Recreational anglers have expressed concern that differences in the types of measurement (i.e., TL vs. FL) and/or the size limit of 22” TL reduces their access to grilse Chinook Salmon, particularly in years when adult quotas have been attained and recreational harvest is restricted to the take of grilse.

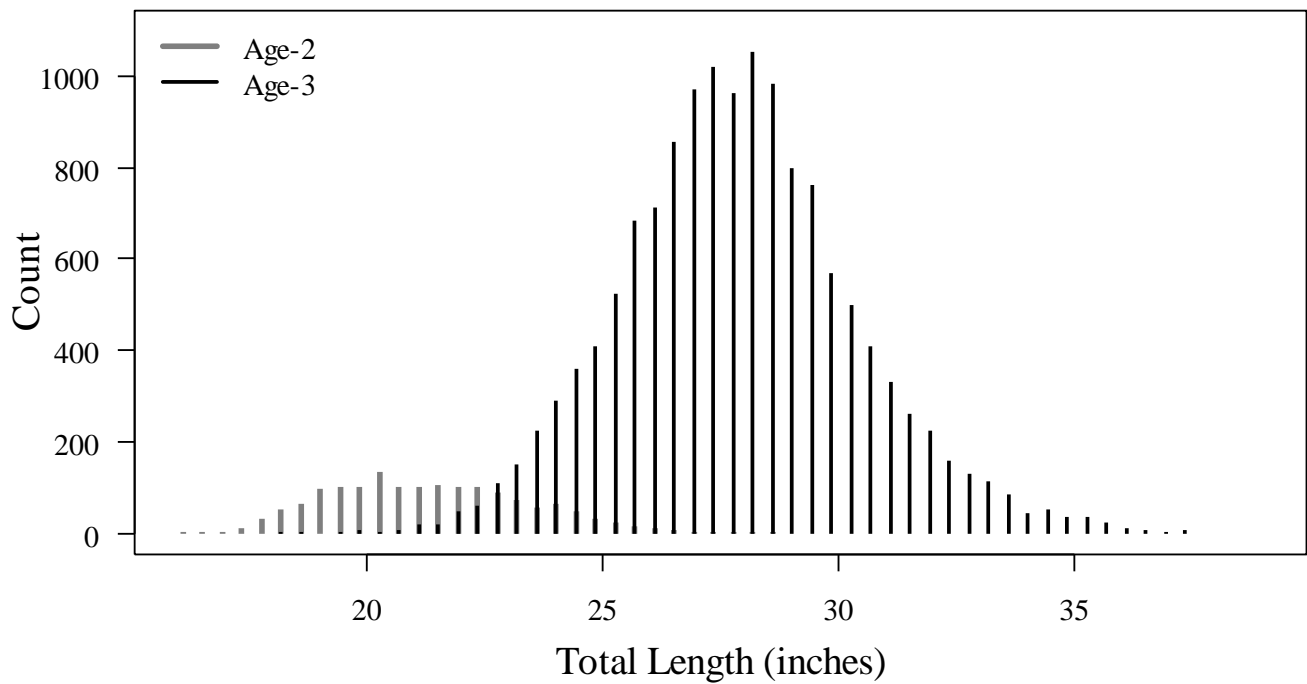


Figure 1. Length frequency histograms of known age-two and known age-three fall Chinook Salmon collected at Trinity River hatchery, 1998 and 2008-2018.

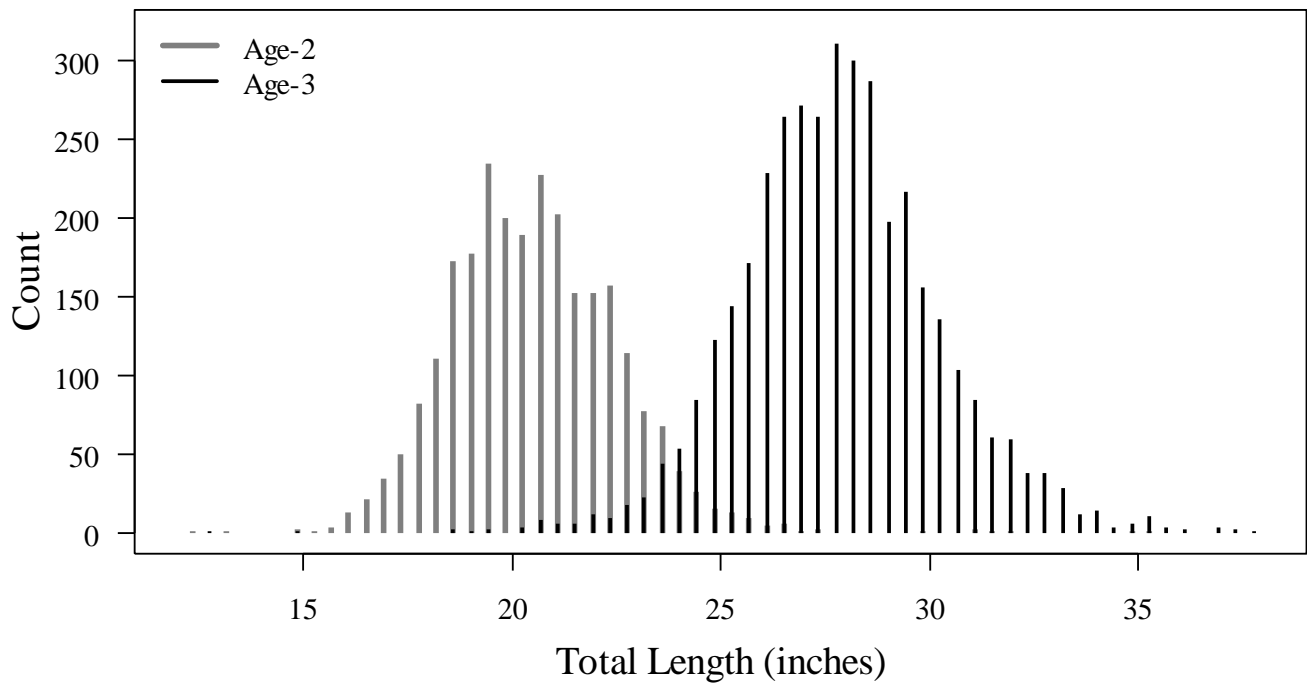


Figure 2. Length frequency histograms of estimated age-two and estimated age-three fall Chinook Salmon collected at Willow Creek weir, Trinity River, 2008-2018.

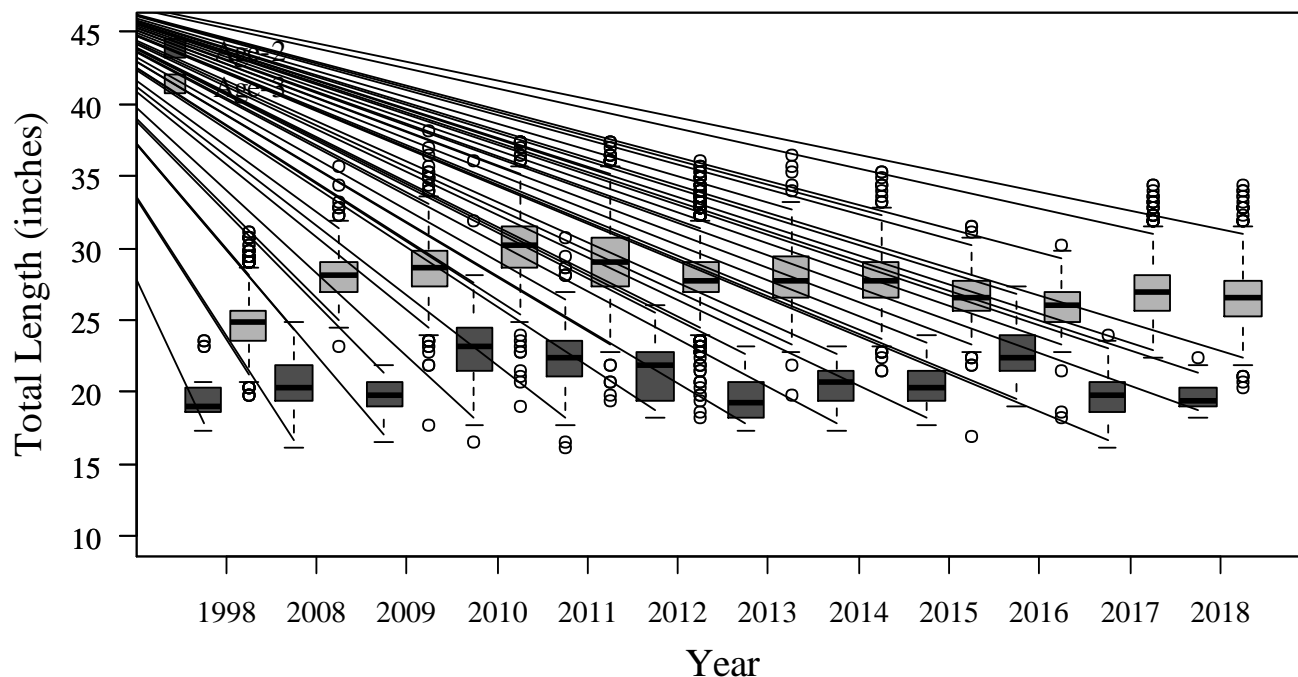


Figure 3. Timeseries of box and whisker plots of total lengths from known age-two and age-three fall Chinook Salmon collected at Trinity River hatchery, 1998 and 2008-2018. Horizontal bars indicate medians, boxes encompass the 25<sup>th</sup> to 75<sup>th</sup> percentiles, whiskers extend to 1.5 times the height of each box, and outliers are presented as open circles.

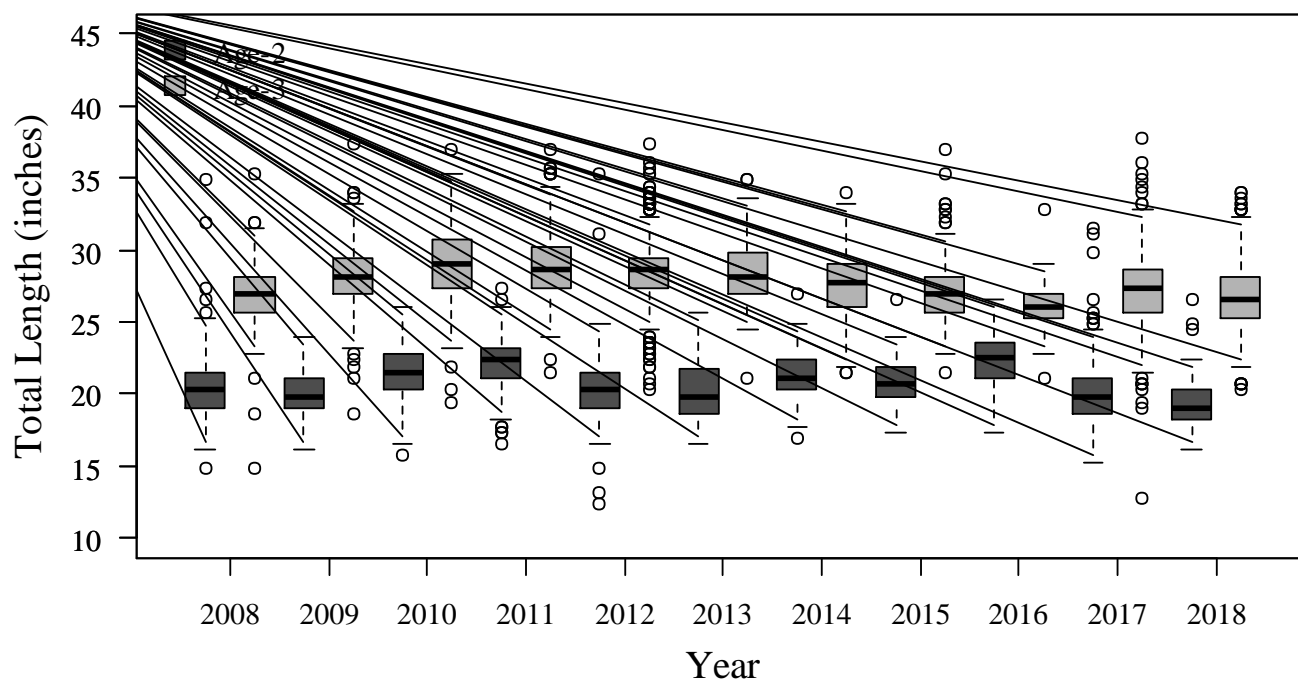


Figure 4. Timeseries of box and whisker plots of total lengths from estimated age-two and age-three fall Chinook Salmon collected at Willow Creek weir, 2008-2018. Horizontal bars indicate medians, boxes encompass the 25<sup>th</sup> to 75<sup>th</sup> percentiles, whiskers extend to 1.5 times the height of each box, and outliers are presented as open circles.

## Conversion of FL to TL

Fish are measured to the nearest centimeter FL for research and monitoring, whereas recreational angling regulations are defined by the nearest inch TL. Nearly all data available on the length of known-age or estimated-age fish (from coded wire tags [CWT] or scale aging) is from research and monitoring (i.e., centimeter fork length). Because this analysis is intended to inform recreational angling regulations, we converted centimeters FL to inches TL.

In August 2019, 115 adult Salmon captured at Junction City weir were measured to the nearest centimeter FL and TL. A linear regression model was fit to these data (Figure 5), which yielded an  $R^2$  value of 0.9934. Model residuals were examined and did not indicate any violations of model assumptions, and there were no outliers with high leverage. The fitted model was then used to estimate total length for known-age fish measured to FL at Trinity River hatchery, Iron Gate hatchery, and Willow Creek weir. Estimates of TL for known-age or estimated-age fish were then converted to inches. All Salmon used for the FL to TL regression were presumed to be spring run, but we believe it is reasonable to assume that the same relationship applies to fall run Chinook Salmon.

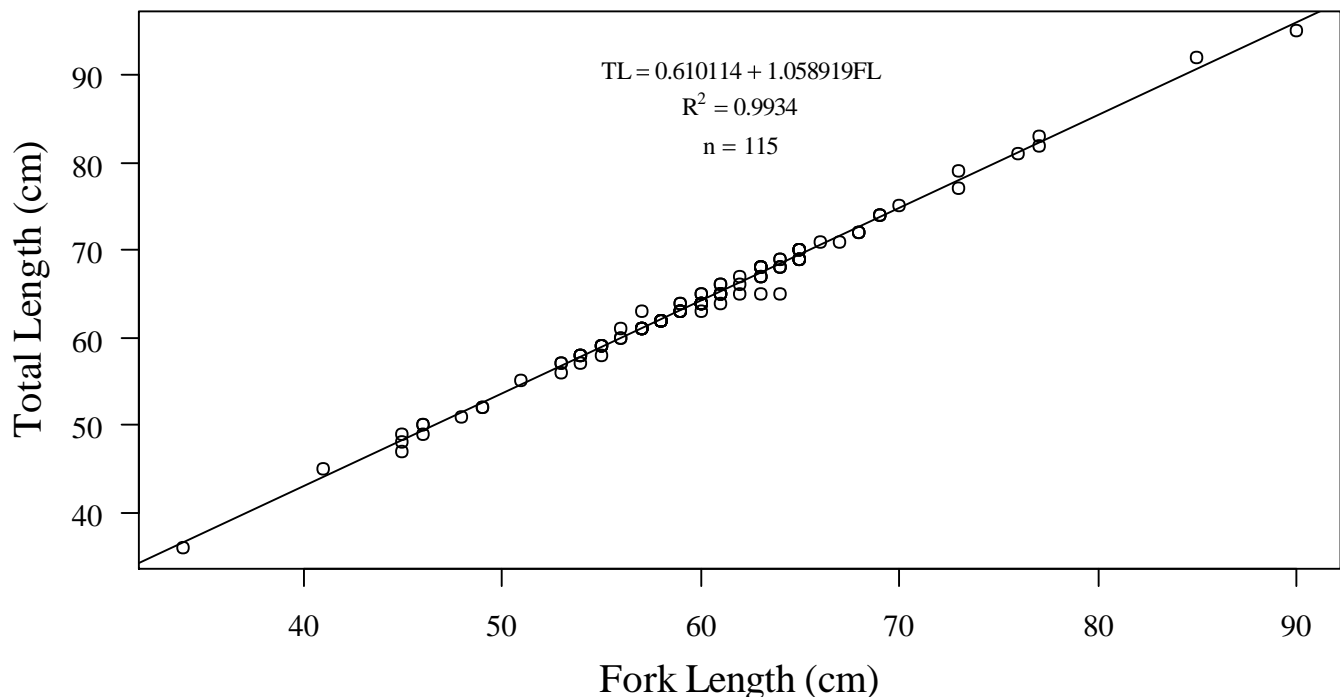


Figure 5. Scatterplot of total length vs. fork length of spring Chinook Salmon captured at Junction City weir in August 2019. The sample size (n), fitted regression line, equation, and coefficient of determination ( $R^2$ ) are presented.

## Effects on age-three Chinook Salmon from size limits of 21 to 24 inches total length

Chinook Salmon returning to hatcheries in the Klamath and Trinity Rivers are measured to the nearest centimeter FL, and heads from fish with adipose fin clips are taken for later recovery and decoding of CWTs. Coded wire tag numbers indicate the hatchery of origin, release type (fingerling or yearling), run type (spring or fall), and brood year from which a fish originated, which in turn provides a known age. Length and known age data from all fall Chinook Salmon fingerlings and yearlings returning to Iron Gate and Trinity River hatcheries with CWTs from 1998 and 2008-2018 were obtained from Department staff. Fall Chinook Salmon were selected because in-river recreational fisheries only receive an adult quota for fall Chinook Salmon, so presumably any change

to size limits would only affect fall Chinook Salmon. Fingerlings and yearlings were selected because both are vulnerable to harvest and are indistinguishable to anglers, thus the combination of release types is more representative of fish that would be affected by a regulation change than either release type on its own. Using data from 2008-2018 is somewhat arbitrary, but we believe this period provides sufficient data to evaluate the effects of any regulation change. The size limit was increased from 22" TL to 24" TL for one year in 1998, which coincided with below average size three-year-old fish returning to the Klamath basin. We include this year as a case study.

A fish weir has been operated on the Trinity River near the town of Willow Creek annually since 1978, where salmon and steelhead are captured and tagged to estimate run sizes. Each trapped fish is measured to the nearest centimeter FL, and scales are collected from a systematic random sample of Chinook Salmon. Scales are aged by the Hoopa Valley tribe to estimate proportions of each age class in the run. Length and scale-estimated age data from fall Chinook Salmon sampled at Willow Creek weir from 2009 to 2018 were obtained from Hoopa Valley Tribe Fisheries Department staff. These data are intended to be used at the population scale, as opposed to using ages of individual fish, by estimating proportions at age that are corrected for reader bias. However, it is not possible to correct for such errors for individual fish, and we have not attempted to do so here. Accuracy of scale aging from 2009-2018 has ranged from 92.3% to 100% and averaged 98.3% for age-two fish, and ranged from 87.0% to 99.2% and averaged 96.8% for age-three fish. Consequently, we expect these data to accurately represent the population.

For each year, hatchery or weir, and proposed length cutoff (21" to 24" TL) we calculated the proportion of known (or estimated) age-two fish larger than the cutoff and the proportion of known (or estimated) age-three fish smaller than the cutoff. Age-four and age-five fish were not considered because they are rarely small enough to be affected by a 24" TL size limit in any meaningful way. The proportion of age-three fish smaller than the cutoff provides an estimate of the magnitude of potential unintended recreational harvest of age-three fish from a given minimum adult size limit (i.e., age-three fish presumed to be age-two because they are less than the cutoff), which we will refer to as impacts to age-three fish for simplicity. Age-three fish comprise the vast majority of the quota-managed fishery in most years. Results are presented separately for known-age fish returning to Iron Gate and Trinity River hatcheries and estimated-age fish captured at Willow Creek weir. It is important to note that none of these samples fully represent the combined Klamath-Trinity stock of fall Chinook Salmon for several reasons. Hatchery recoveries are skewed heavily toward hatchery-origin fish and thus underrepresent natural-origin fish if there is a systematic difference in sizes at age for these two groups. In addition, samples from all locations used in this analysis are collected from the population after in-river tribal and recreational fisheries have selectively removed certain size classes of fish due to fishing regulations (e.g., adult size limits) and/or size-selection bias of fishing methods (e.g., gill nets). Lastly, all samples are taken after Klamath and Trinity sub-stocks have segregated themselves by migrating upstream of Weitchpec into the Klamath or Trinity rivers, respectively, thus the samples may not represent the combined Klamath-Trinity stock encountered by anglers in the lower Klamath River downstream of Weitchpec.

A size limit of 21" TL would protect nearly all age-three fall Chinook Salmon in all years and shows a highly variable percent of age-two fish that would be unavailable during a grilse-only fishery (e.g., after an adult quota is met). Potential unintended impacts to age-three fish were less than 2% at all locations in all years (Tables 1-3) and were generally well below 1%. The percent of age-two fish greater than 21" ranged from 11.76% at Trinity River hatchery in 1998 to 96.41% in 2014 at Iron Gate hatchery.

The current size limit of 22" TL has protected the vast majority of age-three fall Chinook Salmon for the past 10 years. Impacts to age-three fish from a 22" TL size limit exceeded 2% at Trinity River

hatchery and Willow Creek weir in one year each and were generally less than 1% at all locations in most of the past 10 years (Tables 1-3). Impacts have increased in recent years, particularly at Willow Creek weir and Iron Gate hatchery, which reflect the small size at age we have observed in the Klamath River in recent years resulting from inland drought conditions and poor ocean conditions. The percent of age-two fish greater than 22" TL has been highly variable, ranging from 0% at Trinity River hatchery in 2009 to 88.51% at Iron Gate hatchery in 2011.

A size limit of 23" TL shows more variable impacts to age-three fish at all locations sampled, but potential impacts were still relatively low. Over the past 10 years, potential impacts have not exceeded 3.45% (Tables 1-3). Potential impacts have increased in recent years, which is particularly evident at Iron Gate hatchery. From 2009 to 2015, potential impacts to age-three fish from a 23" TL size limit averaged 0.25% and did not exceed 0.44%, but the average from 2016-2018 was 2.49% and was not less than 1.51%. The percent of age-two fish greater than 23" TL was also highly variable, ranging from 0% at Trinity River hatchery in 2009 and 2018 to 65.47% at Iron Gate hatchery in 2014.

Potential impacts to KRFC from a size limit of 24" TL is much more variable and has also increased in recent years. Potential impacts are seen at all locations in all years (i.e., none are 0%). In the past 10 years, potential impacts to age-three fish have exceeded 5% several times at each location and exceeded 10% at Willow Creek weir in 2016.

The 1998 run year presents an illustrative case study because the size limit was changed to 24" TL that year, and, coincidentally, fish were particularly small that year (Figure 1). The same methods for real-time quota management that are employed today were also used in 1998, and post-season analysis revealed that the quota had been exceeded by 5,910 fish. Even at the current size limit of 22" TL, potential impacts to age-three fish exceeded 5% (Tables 1, 3). Assuming a 24" TL size limit, potential unintended impacts to age-three KRFC may have exceeded 37% (Table 3). Reducing the minimum adult size limit from 24" to 23" TL reduced potential impacts by more than half as measured at the two hatcheries. Potential impacts were still alarmingly high for a 23" TL size limit – 14.17% at Trinity River hatchery and 17.73% at Iron Gate hatchery. While 1998 is an outlier compared to the past 10 years, recent increases in the potential unintended impacts to age-three fish suggest that caution should be exercised when considering an increased size limit.

Anecdotal observations from the 2019 run indicate that fish are small this year. Numerous Chinook Salmon less than 16.9" TL have been trapped at Willow Creek weir, and a 19.8" TL age-three fish (based on CWT) was recovered at Iron Gate hatchery.

Table 1. Proportions of known age-two falling above and known age-three falling below proposed minimum adult size limits of 21" to 24" total length collected at Trinity River hatchery, 1998 and 2008-2018 return years.

year	21" TL cutoff		22" TL cutoff		23" TL cutoff		24" TL cutoff	
	age2 > 21"	age3 < 21"	age2 > 22"	age3 < 22"	age2 > 23"	age3 < 23"	age2 > 24"	age3 < 24"
1998	11.76%	0.58%	11.76%	5.62%	11.76%	14.17%	0.00%	29.44%
2008	39.60%	0.00%	18.79%	0.00%	8.05%	0.00%	4.03%	0.29%
2009	8.11%	0.07%	0.00%	0.20%	0.00%	0.27%	0.00%	0.75%
2010	84.56%	0.22%	67.45%	0.43%	50.34%	0.65%	34.56%	0.86%
2011	76.89%	0.15%	52.80%	0.23%	34.06%	0.46%	20.19%	0.88%
2012	65.62%	0.26%	43.75%	0.40%	21.88%	0.58%	15.62%	1.21%
2013	20.00%	0.43%	6.67%	0.87%	3.33%	1.30%	0.00%	3.03%
2014	41.51%	0.00%	13.21%	0.23%	5.66%	0.81%	0.00%	2.08%
2015	36.36%	0.25%	4.55%	0.76%	2.27%	2.53%	2.27%	5.06%
2016	87.21%	1.38%	61.63%	2.07%	37.21%	3.45%	25.58%	6.90%
2017	21.00%	0.00%	4.20%	0.00%	1.31%	0.95%	0.26%	4.86%
2018	13.89%	0.13%	2.78%	0.47%	0.00%	1.73%	0.00%	5.93%

Table 2. Proportions of estimated age-two falling above and known age-three falling below proposed minimum adult size limits of 21" to 24" total length sampled at Willow Creek weir, 2008-2018 return years.

year	21" TL cutoff		22" TL cutoff		23" TL cutoff		24" TL cutoff	
	age2 > 21"	age3 < 21"	age2 > 22"	age3 < 22"	age2 > 23"	age3 < 23"	age2 > 24"	age3 < 24"
2008	32.94%	1.56%	13.41%	2.34%	6.71%	3.12%	2.96%	4.69%
2009	25.69%	0.26%	11.01%	0.78%	3.67%	1.30%	1.83%	1.81%
2010	62.35%	0.86%	38.24%	1.29%	21.76%	1.29%	12.35%	2.58%
2011	75.66%	0.00%	52.12%	0.32%	27.25%	0.63%	12.70%	0.63%
2012	36.75%	0.23%	14.53%	0.58%	3.42%	1.05%	2.56%	1.86%
2013	27.78%	0.00%	20.83%	1.52%	8.33%	1.52%	2.78%	1.52%
2014	60.82%	0.00%	34.02%	1.46%	16.49%	2.44%	4.12%	4.39%
2015	45.22%	0.00%	15.65%	0.56%	6.09%	1.69%	2.61%	3.39%
2016	87.50%	0.00%	55.00%	1.69%	35.00%	3.39%	15.00%	10.17%
2017	27.39%	0.86%	10.37%	1.60%	4.78%	2.21%	1.98%	5.40%
2018	15.74%	0.87%	3.70%	1.57%	2.78%	3.30%	2.78%	6.09%

Table 3. Proportions of known age-two falling above and known age-three falling below proposed minimum adult size limits of 21" to 24" total length collected at Iron Gate hatchery, 1998 and 2009-2018 return years.

year	21" TL cutoff		22" TL cutoff		23" TL cutoff		24" TL cutoff	
	age2 > 21"	age3 < 21"	age2 > 22"	age3 < 22"	age2 > 23"	age3 < 23"	age2 > 24"	age3 < 24"
1998	13.33%	0.85%	0.00%	8.37%	0.00%	17.73%	0.00%	37.45%
2009	57.78%	0.00%	28.89%	0.00%	13.33%	0.19%	4.44%	0.38%
2010	93.78%	0.00%	77.20%	0.00%	56.48%	0.26%	28.50%	0.26%
2011	96.39%	0.07%	88.51%	0.14%	75.46%	0.29%	51.35%	0.79%
2012	84.39%	0.08%	57.56%	0.12%	32.68%	0.26%	11.71%	0.36%
2013	61.96%	0.10%	36.08%	0.10%	20.39%	0.19%	10.59%	0.48%
2014	96.41%	0.12%	81.17%	0.24%	65.47%	0.44%	41.26%	0.61%
2015	64.52%	0.00%	25.81%	0.00%	12.90%	0.13%	3.23%	0.66%
2016	64.71%	0.30%	29.41%	0.60%	23.53%	1.51%	23.53%	6.33%
2017	71.55%	0.27%	36.64%	1.70%	14.44%	3.30%	5.17%	7.59%
2018	63.24%	0.36%	25.00%	1.08%	14.71%	2.67%	4.41%	6.26%

## Key points

- The range and average size of age-two and age-three KRFC changes annually.
- No pre-season data exists to make annual changes to the size limit for grilse KRFC.
- The KRFC fishery is managed using an adult quota designed to meet escapement objectives, and grilse are not quota managed.
- In some years (e.g., 1998) a significant proportion of age-three KRFC are less than the current 22" TL size limit, making them vulnerable to grilse-directed fisheries. These fish are later reclassified as adults, which can result in escapement shortfalls and/or exceeding adult quotas.
- The current size limit of 22" TL protects most adult KRFC in most years
- A size limit of 24" TL increases the inter-annual variability in potential unintended impacts to age-three KRFC.
- Increasing the size limit increases conservation risk due to the potential for harvest of adults less than the grilse size during grilse fisheries.



State of California  
Department of Fish and Wildlife

## Memorandum

Date: November 25, 2019

Original received Nov 25, 2019 at 2:30 PM

To: Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

From: Charlton H. Bonham  
Director

Subject: **Add Subsection (b)(91.2) of Section 7.50, Title 14, CCR, RE: Upper-Klamath Trinity Spring Chinook Salmon Sport Fishing, Certificate of Compliance Initial Statement of Reasons (ISOR)**

Please find attached the Initial Statement of Reasons (ISOR) package for Upper Klamath-Trinity Spring Chinook Salmon (UKTSCS) sport fishing regulations. The proposed certificate of compliance rulemaking will make permanent the June 2019 emergency addition of subsection (b)(91.2) to Section 7.50 allowing limited fishing opportunity of UKTSCS in most of the same reaches of the Klamath River Basin. This proposed certificate of compliance rulemaking would allow continued limited sport fishing take of UKTSCS on the Klamath River downstream of the Highway 96 bridge at Weitchpec between July 1 and August 14, and the Trinity River between the Old Lewiston Bridge and the mouth of the South Fork Trinity River between July 1 and August 31, after which fall season regulations under subsection (b)(91.1) of Section 7.50 will apply. The Department is proposing to remove the language for the New River reach (main stem downstream of the confluence of the East Fork to the confluence with the Trinity River between July 1 and August 31) due to the remoteness of the area, and low observed interest and fishing in this area.

If you have any questions or need additional information, please contact Kevin Shaffer, Chief, Fisheries Branch, by telephone at (916) 327-8841 or by e-mail at [Kevin.Shaffer@wildlife.ca.gov](mailto:Kevin.Shaffer@wildlife.ca.gov). The public notice should identify Senior Environmental Scientist, Wade Sinnen, as the Department's point of contact for this rulemaking. Mr. Sinnen can be reached at (707) 822-5119, or by email at [Wade.Sinnen@wildlife.ca.gov](mailto:Wade.Sinnen@wildlife.ca.gov).

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State of California  
Fish and Game Commission  
Initial Statement of Reasons for Regulatory Action  
Add subsection (b)(91.2) to Section 7.50,  
Title 14, California Code of Regulations  
(Certificate of Compliance)  
Re: Upper Klamath-Trinity spring Chinook salmon sport fishing

I. Date of Initial Statement of Reasons: December 24, 2019

II. Dates and Locations of Scheduled Hearings

(a) Notice Hearing

Date: December 11, 2019

Location: Sacramento, CA

(b) Discussion Hearing

Date: February 21, 2020

Location: Sacramento, CA

(c) Adoption Hearing

Date: April 16, 2020

Location: Sacramento, CA

III. Description of Regulatory Action

(a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations.

**Klamath River Basin Salmon**

The Klamath River Basin, which consists of the Klamath River and Trinity River systems, is managed for fall-run Chinook Salmon (*Oncorhynchus tshawytscha*) through a cooperative system of state, federal, and tribal management agencies. For fall-run Chinook Salmon, the Fish and Game Commission (Commission) annually adopts regulations to match federal fishery management goals.

The Klamath River Basin also supports spring-run Chinook Salmon, also referred to as upper Klamath-Trinity spring Chinook Salmon (UKTSCS). For purpose of this and other regulatory documents drafted for Commission consideration, the same run of salmon in this river basin may be referred to as Klamath River Spring Chinook (KRSC), "Klamath Spring Chinook," "Trinity Spring Chinook," or simply "spring-run Chinook." Naturally produced spring-run Chinook Salmon in this basin are both temporally and spatially separated from fall-run Chinook Salmon. The spring-run in-river sport fishery is not subject to federal fishery management considerations, but is instead managed by the Commission via general basin seasons, daily bag limit, and possession limit regulations. Regular creel surveys and tag returns from anglers provide information on the status of spring-run Chinook Salmon in the Klamath River Basin.

River entry, harvest and spawn timing of spring-run and fall-run Chinook Salmon is estimated in two principal ways: via recovery of coded-wire tags, and presumptively based on basin location and date of observation. Two Klamath basin hatcheries produce Chinook Salmon. Iron Gate Hatchery produces fall-run Chinook Salmon, and Trinity River Hatchery produces both fall-run and spring-run Chinook Salmon. Twenty-five percent of all Chinook Salmon produced at the two basin hatcheries are marked with an adipose fin-clip and injected with a coded-wire tag (CWT). The CWT identifies the race (spring-run or fall-run), hatchery origin, release type (fingerling or yearling) and date of release. Recovery of CWTs allows for estimation of the number of hatchery fish by race observed in harvest and spawning surveys and at hatcheries. In areas where recoveries of hatchery fish are limited or non-existent, Chinook Salmon observations are classified by the location and date of the observation. Chinook Salmon entering the Klamath River mouth between April and July are presumed to be spring-run Chinook Salmon based on their earlier entry timing compared to fall-run. The same is true for tributaries such as the Salmon River and South Fork Trinity River. Fish encountered in these areas prior to August 15 are considered spring-run Chinook Salmon. Additionally, naturally spawning populations of spring-run Chinook Salmon typically utilize higher elevation spawning areas higher up in watersheds. In all areas of the basin, there can be some overlap between the two races of Chinook Salmon, particularly the upper Trinity River mainstem population, where spring-run Chinook Salmon are no longer able to migrate to their historical upper basin holding and spawning habitat due to Trinity and Lewiston dams.

Harvest estimation of the two Chinook Salmon races is accomplished using the time and area attributes discussed above, i.e. cutoff dates, through CWT analyses, or in the case of the Trinity River, using tags of known Chinook race. These tags are applied at Department of Fish and Wildlife (Department) weirs and returned by anglers. The proportion of each Chinook Salmon race (spring-run or fall-run) that is comprised of hatchery produced fish varies annually; however due to the reduced size of the spring-run Chinook Salmon population, hatchery produced fish represent a higher proportion of the overall run when compared to fall-run Chinook Salmon.

### **Spring-run Chinook Salmon Listing Background**

On July 23, 2018, the Commission received a petition to list UKTSCS as endangered under the California Endangered Species Act (CESA). The petitioners, the Karuk Tribe and the Salmon River Restoration Council, submitted information indicating that declining population trends are evidence of extremely low UKTSCS abundance compared to historical status and the current low numbers make UKTSCS vulnerable to extinction.

The following actions were then taken by the Commission, in tandem with the Department:

- **August 2, 2018** - The Commission referred the petition to the Department for an evaluation of the merits of the petition.
- **November 27, 2018** - the Department submitted its evaluation report and recommended that the Commission accept and consider the petition.
- **February 6, 2019** - the Commission considered the Department's evaluation report and public comments received and found that there is sufficient information to indicate

that the petitioned action may be warranted, after which the Commission then accepted the petition for consideration.

- Acceptance of the petition initiates a one-year review by the Department for determining the species status, which will include either a recommendation to the Commission that the petitioned action is not warranted, or a recommendation that the species be listed as threatened or as endangered. During the status review period, the species is considered a “candidate” species, which automatically confers CESA take prohibition measures (Fish and Game Code Section 2085).
- The Department also recommended that the Commission adopt emergency regulations to help protect UKTSCS from take by minimizing confusion by sport anglers who may not have been aware of the CESA protections on UKTSCS as a candidate species.
- The Commission adopted the emergency regulation on February 6, 2019 (effective February 28 through August 27, 2019) to close all salmon fishing in anadromous waters of the Trinity and Klamath rivers to make spring Chinook Salmon sport fishing regulations consistent with CESA protections (February 2019 emergency regulations).
- At the same meeting, the Commission received testimony and letters from several members of the public, including the Del Norte County and Siskiyou County boards of supervisors requesting that the Commission consider shortening the closed periods, or otherwise allow some sport fish take during the spring Chinook Salmon fishing season. The concern expressed was that the complete closure to spring Chinook Salmon fishing would create economic harm to businesses (i.e., local tourism, fishing guides, motels, restaurants, and other infrastructure).
  - Such factors may be considered in authorizing some form of take under Section 2084 of the Fish and Game Code, which allows the Commission to authorize the taking of any fish by hook and line for sport that is listed as an endangered, threatened, or candidate species. Based on the economic factors, coupled with the temporary and sudden nature of the Fish and Game Code Section 2085 protections for candidate species, the Commission requested the Department prepare a recommendation in consideration of Fish and Game Code Section 2084 to address the economic concerns.
- **March 2019** – The Department held stakeholder meetings March 7, 2019 in Crescent City, March 18, 2019 in Sacramento, and March 26, 2019 in Redding to discuss various options with stakeholders and the public to inform regulatory options for some level of recreational (sport fishing) take of spring-run Chinook Salmon during candidacy.
- **April 17, 2019** – the Department presented to the Commission the Department’s guiding principles for considering options pursuant to Fish and Game Code Section 2084, as well as a summary of stakeholder recommendations to balance economic concerns for the locally affected communities.

The guiding principles were:

- Focus on protecting wild spawning UKTSCS populations in upper Salmon River, upper South Fork Trinity River and mainstem Trinity River between Cedar Flat and Lewiston Dam;
- Reduce, but not eliminate, harvest levels of UKTSCS during the candidacy period;
- Direct the timing and location of any allowable take to areas with abundant hatchery stock available to fish; and
- Provide some level of economic and fiscal benefits to the affected communities.

At its April 17, 2019 meeting, the Commission adopted emergency regulations that provide substantial protection to UKTSCS, but allow limited take at the end of the traditional spring season, consistent with Fish and Game Code Section 2084.

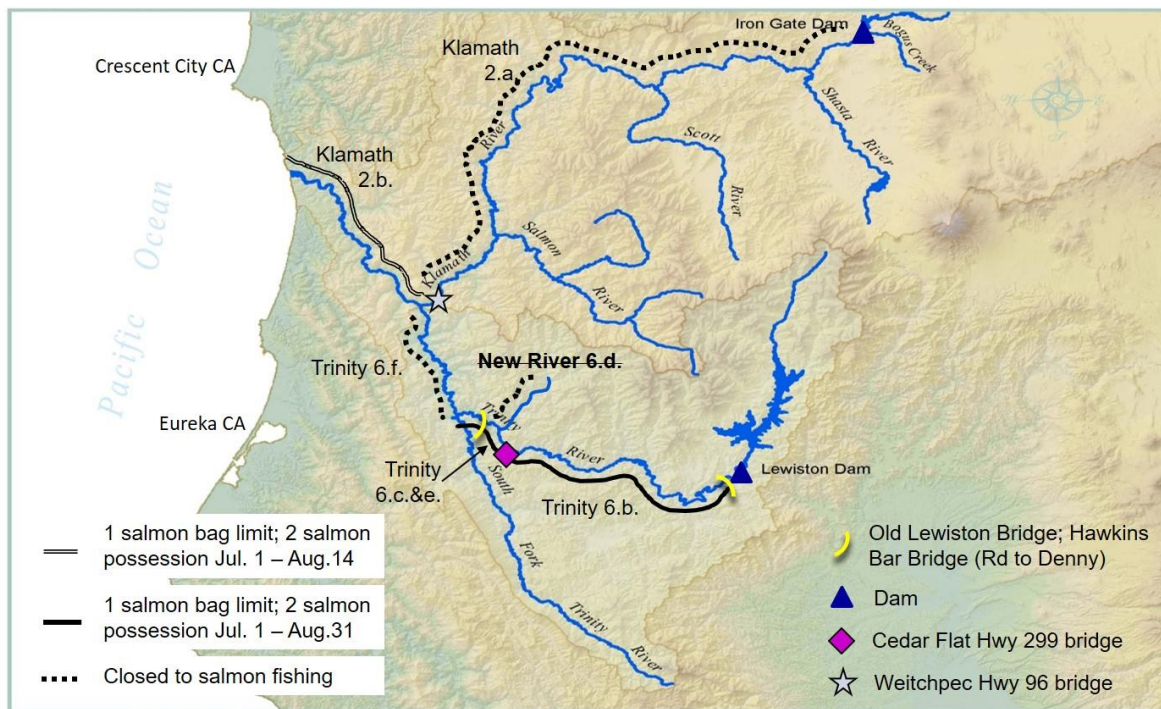
- **June 7, 2019** – the Commission provided notice of proposed adoption of an emergency regulation to add subsection (b)(91.2) to Section 7.50 detailing the river reaches to be opened for fishing beginning July 1, 2019, superseding the February 2019 emergency regulations for the listed river reaches. These emergency regulations allowed limited fishing opportunity of UKTSCS on the Klamath River downstream of the Highway 96 bridge at Weitchpec between July 1 and August 14, and the Trinity River from the Old Lewiston Bridge to the mouth of the South Fork Trinity River, and the New River main stem downstream of the confluence of the East Fork to the confluence with the Trinity River between July 1 and August 31 (June 2019 emergency regulation). The proposal aligned with the Department's guiding principles, in line with Fish and Game Code Section 2084, as follows:
  - The proposed July 1 opening date in the lower Klamath River protects the majority of wild-origin UKTSCS which enter and migrate through the lower Klamath River by reducing the spring Chinook Salmon fishing season by six months (opening July 1 instead of January 1). These wild salmon are destined for spawning in the upper Salmon River and upper South Fork Trinity River. Similarly, the July 1 opening date on the upper Trinity River protects wild UKTSCS by reducing the fishing season by six months.
  - Lowering the bag limit from historic levels still reduces harvest, which provides protection for the wild UKTSCS population.
  - The objectives for hatchery production of spring-run Chinook Salmon at Trinity River Hatchery are to mitigate for the loss of spring-run Chinook Salmon habitat and spawning above Lewiston and Trinity dams, and to provide for foregone sport and tribal harvest opportunities associated with this loss. The proposed regulatory action is consistent with the mitigation fishery objectives. The July 1 opening date on the upper Trinity River protects wild-origin UKTSCS, since the majority of the fish in this area between July and August are produced and stocked by the Trinity River Hatchery.
  - Integration of the feedback received during the February 6, 2019 Commission meeting and March 2019 Department outreach meetings into the proposed emergency regulations helped minimize economic hardship or loss associated with the February 2019 spring-run Chinook Salmon fishing closures. In particular, allowing fishing during the economically important Independence Day

(July 4) weekend at the specified locations was intended to provide economic benefits, while minimizing effects to wild-origin UKTSCS.

- **June 26, 2019** – the June 2019 emergency regulations became effective, overriding and superseding the February 2019 emergency regulations. The June 2019 emergency regulations are set to expire December 24, 2019.
- **December 11, 2019** – the Commission readopted the June 2019 emergency regulation for an additional 90-day period, extending the expiration date to March 23, 2020.
- **December 11, 2019** – the Commission presented within this document a certificate of compliance rulemaking to make permanent the June 2019 emergency regulation, pursuant to Fish and Game Code Section 2084, with some adjustments.

## Regulatory Proposal

The proposed rulemaking will make permanent the June 2019 emergency addition of subsection (b)(91.2) to Section 7.50 allowing limited fishing opportunity of UKTSCS in most of the same reaches. The proposed regulations would allow continued limited take of UKTSCS on the Klamath River downstream of the Highway 96 bridge at Weitchpec between July 1 and August 14, and the Trinity River from the Old Lewiston Bridge to the mouth of the South Fork Trinity River between July 1 and August 31 (Figure 1, Table 1), after which fall season Chinook Salmon regulations under subsection (b)(91.1) of Section 7.50 will apply (not shown). The Department is recommending that the Commission not include the language for the New River reach (main stem downstream of the confluence of the East Fork to the confluence with the Trinity River between July 1 and August 31) due to the remoteness of the area, and low observed interest and fishing in this area.



**Figure 1.** Map of proposed regulations allowing continued sport fish take of spring-run Chinook Salmon in the Klamath River Basin.

**Table 1.** Summary of regulatory changes in response to Commission acceptance of the UKTSCS petition.

<b>Reach*</b>	<b>Subsection 7.50(b)(91.1) regulation to be superseded</b>	<b>February 2019 Emergency Regulations</b>	<b>June 2019 Emergency Regulations</b>	<b>Proposed Cert. of Compliance Regulations</b>
Klamath (Iron Gate Dam to Weitchpec) 7.50(b)(91.1)(E)2.a.	0 salmon bag and possession limit from Jan. 1-Aug.14	Closed to salmon fishing through Aug. 14	No change	No change
Klamath (Weitchpec to Klamath River mouth) 7.50(b)(91.1)(E)2.b.	2 salmon bag and possession limit from Jan. 1-Aug. 14	Closed to salmon fishing through Aug. 14	1 salmon bag limit; 2 salmon possession limit Jul. 1 – Aug 14.	1 salmon bag limit; 2 salmon possession limit Jul. 1 – Aug 14.
Trinity (Old Lewiston Bridge to Hwy 299 bridge at Cedar Flat) 7.50(b)(91.1)(E)6.b.	2 salmon bag and possession limit from Jan. 1- Aug. 31	Closed to salmon fishing through Oct. 15	1 salmon bag limit; 2 salmon possession limit Jul. 1 – Aug 31.	1 salmon bag limit; 2 salmon possession limit Jul. 1 – Aug 31.
Trinity (Hwy 299 bridge at Cedar Flat to Denny Road bridge at Hawkins Bar) 7.50(b)(91.1)(E)6.c.	2 salmon bag and possession limit from Jan. 1- Aug. 31	Closed to salmon fishing through Aug. 31	1 salmon bag limit; 2 salmon possession limit Jul. 1 – Aug 31.	1 salmon bag limit; 2 salmon possession limit Jul. 1 – Aug 31.
New River (confluence of the East Fork to confluence w/ Trinity) 7.50(b)(91.1)(E)6.d.	Closed to salmon fishing	No change	1 salmon bag limit; 2 salmon possession limit Jul. 1 – Aug 31	Closed to salmon fishing
Trinity (Denny Road bridge at Hawkins Bar to mouth of the South Fork Trinity) 7.50(b)(91.1)(E)6.e.	2 salmon bag and possession limit from Jan. 1- Aug. 31	Closed to salmon fishing through Aug. 31	1 salmon bag limit; 2 salmon possession limit Jul. 1 – Aug 31.	1 salmon bag limit; 2 salmon possession limit Jul. 1 – Aug 31.
Trinity (from the mouth of the South Fork Trinity to confluence w/ Klamath River) 7.50(b)(91.1)(E)6.f.	0 salmon bag and possession limit from Jan.1- Aug. 31	Closed to salmon fishing through Aug. 31	No change	No change

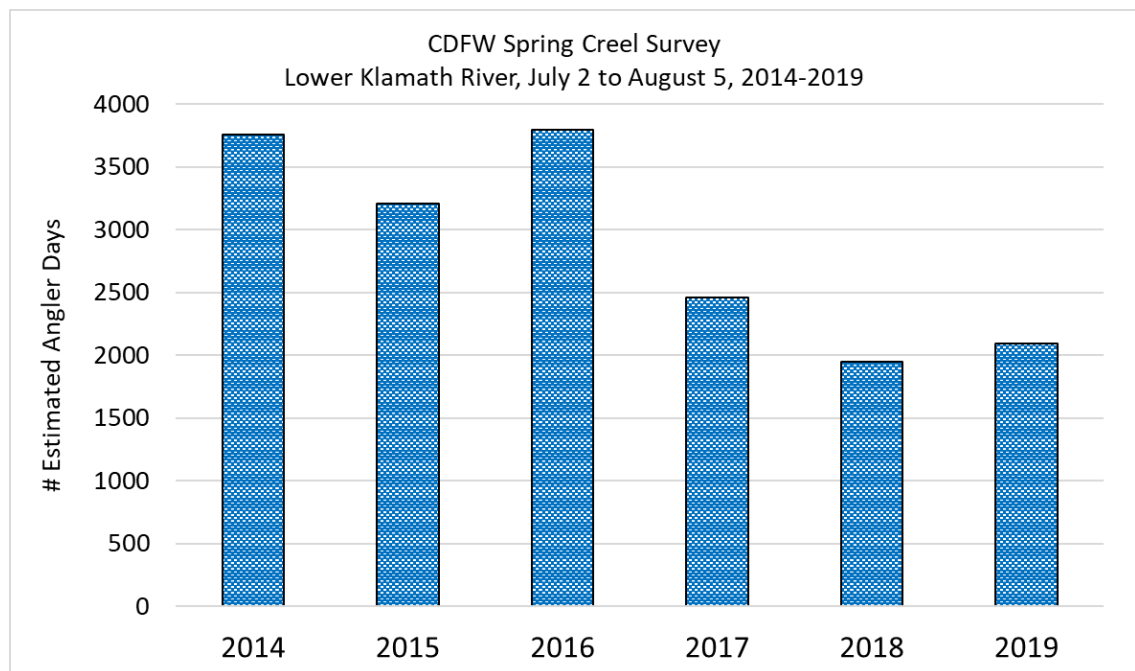
\*description of reach is abbreviated; refer to subsection 7.50(b)(91.1)(E), for specific names of the bodies of water.

Making permanent this six to eight-week window reduces potential economic impacts and helps mitigate the risk of hardship to local businesses and communities from a full closure to fishing under CESA, while protecting UKTSCS during its migratory and spawning phases. Allowing limited take at the end of the traditional spring season for sport fishing by hook and line of UKTSCS is consistent with Fish and Game Code Section 2084.



Klamath River Basin spring creel surveys are performed annually by the Department and its partners. These surveys inform the Department of angler fishing effort in the number of angler days (synonymous with the number of trips), and hours spent. The preliminary creel data gathered during the late period of the 2019 spring season (which begins May 5) suggest that the maintenance of fishing on the lower Klamath River and the upper Trinity River during the month of July (where the creel survey ended August 5) appears to have been successful at maintaining angler days for the river reaches, and thus appears to have a minor economic benefit relative to 2018 (see Figure 1, and the Addendum to the STD 399 for more detail). The 2019 survey shows a minor uptick in the number of estimated angler days from 2018 (147 days – Figure 2).

**Figure 2.** Angler Days in the Lower Klamath River by Department angler creel survey July 2 to August 5, 2014 – 2019.



(b) Goals and Benefits of the Regulation

Compared to the full closure under CESA, the proposed regulations provide increased recreational take of Chinook Salmon during the peak of the season, starting July 1 and through August 14 (Klamath River – six weeks) or August 31 (Trinity River – eight weeks). The July 1 opening date in the lower Klamath River protects the majority of wild-origin UKTSCS which enter and migrate through the lower Klamath River by reducing the spring Chinook Salmon fishing season by six months (opening July 1 instead of January 1). Similarly, the July 1 opening date on the upper Trinity River protects wild UKTSCS by reducing the fishing season by six months.

Making permanent this six to eight-week window reduces potential economic impacts and helps mitigate the risk of hardship to local businesses and communities from a full closure to fishing under CESA, while protecting UKTSCS during its migratory and spawning phases.

(c) Authority and Reference Sections from Fish and Game Code for Regulation

Authority cited: Sections 200, 205, 265, 270, 315, 316.5, 399 and 2084, Fish and Game Code.

Reference: Sections 200, 205, 265, 270, 316.5 and 2084, Fish and Game Code.

(d) Specific Technology or Equipment Required by Regulatory Change

None.

(e) Identification of Reports or Documents Supporting Regulation Change

None.

(f) Public Discussions of Proposed Regulations Prior to Notice Publication

The Department held stakeholder meetings March 7, 2019 in Crescent City, March 18, 2019 in Sacramento and March 26, 2019 in Redding to discuss various options with stakeholders and the public.

At its April 17, 2019 meeting, the Commission discussed allowing limited sport fish take during the candidacy period of UKTSCS, which precipitated the adoption of the June 2019 emergency regulation.

IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change

No alternatives were identified by or brought to the attention of Commission staff that would have the same desired regulatory effect.

(b) No Change Alternative

Without this certificate of compliance rulemaking, the current addition of subsection (b)(91.2) of Section 7.50 will expire in 2020. The sport fishing season on the reaches of rivers in the Klamath River Basin would revert to the pre-emergency regulations, whereby the sport fish take of UKTSCS would be prohibited under CESA.

V. Mitigation Measures Required by Regulatory Action

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. Making permanent the June 2019 emergency regulations via the certificate of

compliance process would both create permanent incentives for more tourists to travel to coastal northern California, and help stimulate the local economies in Del Norte, Siskiyou, Trinity and neighboring counties.

- (b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment

The Commission does not anticipate any significant impact on the creation or elimination of jobs, the creation of new business, the elimination of existing businesses, or the expansion of businesses in California. This is due to the re-opening of limited sport fishing take during the peak of the season, starting July 1, and through August 14 (Klamath River) or August 31 (Trinity River). Compared to the full closure under CESA, the proposed regulation provides increased recreational fishing opportunity for the six to eight-week window between July and August in the Klamath River Basin.

The Commission anticipates benefits to the health and welfare of California residents through the activity of fishing for salmon. The Commission does not anticipate any benefits to worker safety because the proposed regulation will not affect existing working conditions. The Commission anticipates a neutral impact to the state's environment, as the majority of fish present in the river reaches during the limited six- or eight-week windows are believed to be of hatchery origin.

- (c) Cost Impacts on a Representative Private Person or Business

The Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

- (d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State

None.

- (e) Nondiscretionary Costs/Savings to Local Agencies

None.

- (f) Programs Mandated on Local Agencies or School Districts

None.

- (g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code

None.

- (h) Effect on Housing Costs

None.

## VII. Economic Impact Assessment

- (a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

The Commission does not anticipate any significant impact on the creation or elimination of jobs within the state due to the re-opening of limited sport fishing take during the peak of the season, starting July 1, and through August 14 (Klamath River) or August 31 (Trinity River). Compared to the full closure under CESA, the proposed increase in recreational fishing opportunity and angler spending in the affected areas for a six to eight-week period is not likely to be sufficient to induce the creation or elimination of jobs.

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The Commission does not anticipate any significant impact on the creation of new businesses or the elimination of existing businesses within the state due to the re-opening of limited sport fishing take during the peak of the season, starting July 1, and through August 14 (Klamath River) or August 31 (Trinity River). Compared to the full closure under CESA, the proposed increase in recreational fishing opportunity and angler spending in the affected areas for a six to eight-week period is not likely to be sufficient to induce the creation of new businesses or elimination of existing businesses.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

The Commission does not anticipate any significant impact on the expansion of businesses currently doing business within the state due to the re-opening of limited sport fishing take during the peak of the season, starting July 1, and through August 14 (Klamath River) or August 31 (Trinity River). Compared to the full closure due to CESA, the proposed increase in recreational fishing opportunity and angler spending in the affected areas for a six to eight week period is not likely to be sufficient to induce the expansion of businesses as the number of visitors is expected to be within historical ranges.

(d) Benefits of the Regulation to the Health and Welfare of California Residents

The Commission anticipates benefits to the health and welfare of California residents through the activity of fishing for salmon.

(e) Benefits of the Regulation to Worker Safety

The Commission does not anticipate any benefits to worker safety because the proposed regulation will not affect existing working conditions.

(f) Benefits of the Regulation to the State's Environment

The Commission anticipates a neutral impact to the state's environment, as the majority of fish present in the river reaches during the limited six- or eight-week windows are believed to be of hatchery origin.

## **Informative Digest/Policy Statement Overview**

Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations.

### **Background**

The Klamath River Basin spring-run Chinook Salmon (*Oncorhynchus tshawytscha*) in-river sport fishery is managed by the Fish and Game Commission (Commission) via general basin seasons, daily bag limit, and possession limit regulations. Regular creel surveys and tag returns from anglers provide information on the status of spring-run Chinook Salmon in the Klamath River Basin. (Spring Chinook salmon may also be referred to as upper Klamath-Trinity spring Chinook Salmon - UKTSCS, Klamath River Spring Chinook -KRSC, "Klamath Spring Chinook," "Trinity Spring Chinook," or simply "spring-run Chinook".)

In February 2019, the Commission accepted a petition to list UKTSCS, which confers candidacy status. Under the California Endangered Species Act (CESA), take prohibition measures apply (Fish and Game Code Section 2085). The Commission adopted emergency regulations in February 2019 for certain portions of the Klamath and Trinity Rivers to prohibit take and help protect UKTSCS by minimizing confusion by sport anglers who may not have been aware of the CESA candidacy protections. The Commission also received testimony and letters from the public, as well as the Del Norte County and Siskiyou County boards of supervisors that a complete prohibition on take of spring-run Chinook Salmon would create economic harm to businesses. The public requested that the Commission consider shortening the closed periods, or otherwise allow some sport fish take during the spring Chinook Salmon fishing season.

The California Department of Fish and Wildlife (Department) assessed the ability under Section 2084 of the Fish and Game Code to allow for some level of sport fishing take by hook and line, while still providing protective spring-run Chinook Salmon regulatory measures. On April 17, 2019, the Commission adopted emergency regulations to mitigate the potential adverse economic and fiscal impacts of a complete prohibition of take. The emergency regulations, which went into effect June 26, 2019, allow limited sport fishing take of spring-run Chinook Salmon on the Klamath River downstream of the Highway 96 bridge at Weitchpec between July 1 and August 14, and the Trinity River from the Old Lewiston Bridge to the mouth of the South Fork Trinity River, and the New River main stem downstream of the confluence of the East Fork to the confluence with the Trinity River between July 1 and August 31.

### **Regulatory Proposal**

This proposed rulemaking will make permanent the June 2019 emergency regulations allowing limited sport fish take of UKTSCS in most of the same reaches. The proposed regulation would allow continued limited sport fishing take of UKTSCS on the Klamath River downstream of the Highway 96 bridge at Weitchpec between July 1 and August 14, and the Trinity River from the Old Lewiston Bridge to the mouth of the South Fork Trinity River between July 1 and August 31, with a bag limit of one Chinook Salmon and a possession limit of two Chinook Salmon, after which fall season regulations under subsection (b)(91.1) of Section 7.50 will apply. This proposed rulemaking does not make permanent the language for the New River reach (main stem downstream of the confluence of the East Fork to the confluence with the Trinity River between July 1 and August 31).

## **Benefits of the Proposed Regulations**

Compared to the full closure under CESA, the proposed regulations provide increased recreational fishing opportunity for a July 1 start during the peak of the season, and through August 14 (Klamath River – six weeks) or August 31 (Trinity River – eight weeks). The July 1 opening date in the lower Klamath River protects the majority of wild-origin UKTSCS which enter and migrate through the lower Klamath River by reducing the spring Chinook Salmon fishing season by six months (opening July 1 instead of January 1). These wild salmon are destined for spawning in the upper Salmon River and upper South Fork Trinity River. Similarly, the July 1 opening date on the upper Trinity River protects wild UKTSCS by reducing the fishing season by six months.

Making permanent this six to eight-week window reduces potential economic impacts and helps mitigate the risk of hardship to local businesses and communities from a full closure to fishing under the CESA, while protecting UKTSCS during its migratory and spawning phases. Allowing limited take at the end of the traditional spring season for sport fish by hook and line of UKTSCS is consistent with Fish and Game Code Section 2084.

## **Consistency and Compatibility with Existing Regulations**

Article IV, Section 20 of the State Constitution specifies that the Legislature may delegate to the Commission such powers relating to the protection and propagation of fish and game as the Legislature sees fit. The Legislature has delegated authority to the Commission to authorize the taking of any fish by hook and line for sport that is listed as an endangered, threatened, or candidate species (Section 2084, Fish and Game Code). The Commission has reviewed its own regulations and finds that the proposed regulations are neither inconsistent nor incompatible with existing State regulations. Commission staff has searched the California Code of Regulations and has found no other State regulations related to spring Chinook Salmon sport fishing in the Klamath River Basin.

## Proposed Regulatory Language

Subsection (b)(91.2) is added to Section 7.50, Title 14, CCR, as follows:

### **§ 7.50. Alphabetical List of Waters with Special Fishing Regulations.**

. . . [No changes to subsections (a) through (b)(91.1)]

#### **(91.2) Special Order Regarding Take of Chinook Salmon in Anadromous Waters of the Klamath River Basin Downstream of Iron Gate and Lewiston dams.**

Notwithstanding subsection (b)(91.1) of Section 7.50, between January 1 and August 14 on the Klamath River and between January 1 and August 31 on the Trinity River, and South Fork Trinity River, Chinook Salmon may not be taken or possessed except as authorized on the identified segments of rivers as listed in the following table. All other restrictions apply.

<u>Body of Water</u>	<u>Open Season and Special Regulations</u>	<u>Daily Bag and Possession Limit</u>
<u>(A) Klamath River segment identified in subsection 7.50(b)(91.1)(E)2.b.</u>	<u>July 1 through August 14</u>	<u>1 Chinook Salmon</u> <u>2 Chinook Salmon in possession</u>
<u>(B) Trinity River segment identified in subsection 7.50(b)(91.1)(E)6.b.</u>	<u>July 1 through August 31</u>	<u>1 Chinook Salmon</u> <u>2 Chinook Salmon in possession</u>
<u>(C) Trinity River segment identified in subsection 7.50(b)(91.1)(E)6.c.</u>	<u>July 1 through August 31</u>	<u>1 Chinook Salmon</u> <u>2 Chinook Salmon in possession</u>
<u>(D) Trinity River segment identified in subsection 7.50(b)(91.1)(E)6.e.</u>	<u>July 1 through August 31</u>	<u>1 Chinook Salmon</u> <u>2 Chinook Salmon in possession</u>

. . . [No changes subsections 7.50(b)(92) through (b)(212)]

\* Wild Chinook Salmon are those not showing a healed adipose fin clip and not showing a healed left ventral fin clip.

\*\*Hatchery trout or steelhead in anadromous waters are those showing a healed adipose fin clip (adipose fin is absent). Unless otherwise provided, all other trout and steelhead must be immediately released. Wild trout or steelhead are those not showing a healed adipose fin clip (adipose fin is present).

Note: Authority cited: Sections 200, 205, 265, 270, 315, 316.5, 399 and 2084, Fish and Game Code.  
Reference: Sections 200, 205, 265, 270, 316.5 and 2084, Fish and Game Code.

**ECONOMIC AND FISCAL IMPACT STATEMENT  
(REGULATIONS AND ORDERS)**

STD. 399 (REV. 12/2013)

**ECONOMIC IMPACT STATEMENT**

DEPARTMENT NAME <b>Fish and Game Commission</b>	CONTACT PERSON <b>Margaret.Duncan@</b>	EMAIL ADDRESS <b>wildlife.ca.gov</b>	TELEPHONE NUMBER <b>916 653-4674</b>
DESCRIPTIVE TITLE FROM NOTICE REGISTER OR FORM 400 <b>Add Subsect. (b)(91.2), Sec. 7.50, Title 14, CCR, Re: Klamath River Basin Spring Chinook Salmon Sport Fishing</b>			NOTICE FILE NUMBER <b>Z</b>

**A. ESTIMATED PRIVATE SECTOR COST IMPACTS** *Include calculations and assumptions in the rulemaking record.*

1. Check the appropriate box(es) below to indicate whether this regulation:

- ☒ a. Impacts business and/or employees
 ☐ e. Imposes reporting requirements  
☒ b. Impacts small businesses
 ☐ f. Imposes prescriptive instead of performance  
☐ c. Impacts jobs or occupations
 ☒ g. Impacts individuals  
☐ d. Impacts California competitiveness
 ☐ h. None of the above (Explain below):

Positive business revenue and fiscal impacts are anticipated.***If any box in Items 1 a through g is checked, complete this Economic Impact Statement.******If box in Item 1.h. is checked, complete the Fiscal Impact Statement as appropriate.*****Fish and Game Commission**2. The \_\_\_\_\_ estimates that the economic impact of this regulation (which includes the fiscal impact) is:  
(Agency/Department)

- ☒ Below \$10 million  
☐ Between \$10 and \$25 million  
☐ Between \$25 and \$50 million  
☐ Over \$50 million *[If the economic impact is over \$50 million, agencies are required to submit a [Standardized Regulatory Impact Assessment](#) as specified in Government Code Section 11346.3(c)]*

3. Enter the total number of businesses impacted: 30-50Describe the types of businesses (Include nonprofits): Fishing boat owners, tackle stores, guides, food, fuel, lodging, camping vendorsEnter the number or percentage of total businesses impacted that are small businesses: 80%4. Enter the number of businesses that will be created: 0 eliminated: 0Explain: Anticipated changes in fishing activity are not expected to be large enough to induce business loss/creation.

5. Indicate the geographic extent of impacts: ☐ Statewide

☒ Local or regional (List areas): Trinity, Siskiyou, Del Norte, and Humboldt Counties

6. Enter the number of jobs created: 0 and eliminated: 0Describe the types of jobs or occupations impacted: Fishing guides, retail sales clerks in sport fish-serving businesses such as: tackle stores, food, fuel, lodging, and camping vendors.

7. Will the regulation affect the ability of California businesses to compete with other states by making it more costly to produce goods or services here? ☐ YES ☒ NO

If YES, explain briefly: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



**ECONOMIC AND FISCAL IMPACT STATEMENT  
(REGULATIONS AND ORDERS)**

STD. 399 (REV. 12/2013)

**ECONOMIC IMPACT STATEMENT (CONTINUED)****B. ESTIMATED COSTS** *Include calculations and assumptions in the rulemaking record.*

1. What are the total statewide dollar costs that businesses and individuals may incur to comply with this regulation over its lifetime? \$ 0
- a. Initial costs for a small business: \$ 0 Annual ongoing costs: \$ 0 Years: 1
- b. Initial costs for a typical business: \$ 0 Annual ongoing costs: \$ 0 Years: 1
- c. Initial costs for an individual: \$ 0 Annual ongoing costs: \$ 0 Years: 1
- d. Describe other economic costs that may occur: No new costs.
2. If multiple industries are impacted, enter the share of total costs for each industry: N/A
3. If the regulation imposes reporting requirements, enter the annual costs a typical business may incur to comply with these requirements.  
Include the dollar costs to do programming, record keeping, reporting, and other paperwork, whether or not the paperwork must be submitted. \$ N/A
4. Will this regulation directly impact housing costs? ☐ YES ☒ NO  
If YES, enter the annual dollar cost per housing unit: \$ \_\_\_\_\_  
Number of units: \_\_\_\_\_
5. Are there comparable Federal regulations? ☐ YES ☒ NO  
Explain the need for State regulation given the existence or absence of Federal regulations: Fish and Game Code (FGC) sections 200 and 205  
Enter any additional costs to businesses and/or individuals that may be due to State - Federal differences: \$ N/A

**C. ESTIMATED BENEFITS** *Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.*

1. Briefly summarize the benefits of the regulation, which may include among others, the This action will enable limited sport fishing take Klamath River Basin health and welfare of California residents, worker safety and the State's environment: spring Chinook Salmon (UKTSCS)  
that should benefit sport anglers and the area businesses that support sport fishing activities. No impacts on worker safety are anticipated. Neutral impacts to the state's environment are anticipated as the majority of UKTSCS in the river reaches during the reg. period are believed to be hatchery fish.
2. Are the benefits the result of: ☐ specific statutory requirements, or ☒ goals developed by the agency based on broad statutory authority?  
Explain: Statute provides the Fish & Game Commission authority to establish sport fishing regulations (FGC sections 200 and 205)
3. What are the total statewide benefits from this regulation over its lifetime? \$ 372,130 - 400,226
4. Briefly describe any expansion of businesses currently doing business within the State of California that would result from this regulation: Any changes  
in fishing activity levels are not expected to be sufficient enough to induce the expansion of businesses currently doing business within the State.

**D. ALTERNATIVES TO THE REGULATION** *Include calculations and assumptions in the rulemaking record. Estimation of the dollar value of benefits is not specifically required by rulemaking law, but encouraged.*

1. List alternatives considered and describe them below. If no alternatives were considered, explain why not: No Alternatives were identified that would  
have the same desired regulatory effect as the proposed regulation. The No change alternative would eliminate subsection (b)(91.2) of section 7.50 in 2020,  
whereby the sport fish take of UKTSCS would be prohibited under the California Endangered Species Act

**ECONOMIC AND FISCAL IMPACT STATEMENT  
(REGULATIONS AND ORDERS)**

STD. 399 (REV. 12/2013)

**ECONOMIC IMPACT STATEMENT (CONTINUED)**

2. Summarize the total statewide costs and benefits from this regulation and each alternative considered:

Regulation: Benefit: \$ 372K - 400K Cost: \$ 0Alternative 1: Benefit: \$ N/A Cost: \$ N/AAlternative 2: Benefit: \$ N/A Cost: \$ N/A

3. Briefly discuss any quantification issues that are relevant to a comparison of estimated costs and benefits for this regulation or alternatives:

Benefits = estimated (Jul - Aug UKTSCS salmon angler days) x angler spending/day) x (the multiplier: 1.662) = total economic impact.

4. Rulemaking law requires agencies to consider performance standards as an alternative, if a regulation mandates the use of specific technologies or equipment, or prescribes specific actions or procedures. Were performance standards considered to lower compliance costs?

☐ YES☒ NOExplain: Fisheries management regulations traditionally involve setting harvest quotas, seasons, bag and possession limits.**E. MAJOR REGULATIONS** *Include calculations and assumptions in the rulemaking record.****California Environmental Protection Agency (Cal/EPA) boards, offices and departments are required to submit the following (per Health and Safety Code section 57005). Otherwise, skip to E4.***1. Will the estimated costs of this regulation to California business enterprises **exceed \$10 million**? ☐ YES ☐ NO***If YES, complete E2. and E3******If NO, skip to E4***

2. Briefly describe each alternative, or combination of alternatives, for which a cost-effectiveness analysis was performed:

Alternative 1: \_\_\_\_\_

Alternative 2: \_\_\_\_\_

*(Attach additional pages for other alternatives)*

3. For the regulation, and each alternative just described, enter the estimated total cost and overall cost-effectiveness ratio:

Regulation: Total Cost \$ \_\_\_\_\_ Cost-effectiveness ratio: \$ \_\_\_\_\_

Alternative 1: Total Cost \$ \_\_\_\_\_ Cost-effectiveness ratio: \$ \_\_\_\_\_

Alternative 2: Total Cost \$ \_\_\_\_\_ Cost-effectiveness ratio: \$ \_\_\_\_\_

4. Will the regulation subject to OAL review have an estimated economic impact to business enterprises and individuals located in or doing business in California exceeding \$50 million in any 12-month period between the date the major regulation is estimated to be filed with the Secretary of State through 12 months after the major regulation is estimated to be fully implemented?

☐ YES☒ NO*If YES, agencies are required to submit a [Standardized Regulatory Impact Assessment \(SRIA\)](#) as specified in Government Code Section 11346.3(c) and to include the SRIA in the Initial Statement of Reasons.*

5. Briefly describe the following:

The increase or decrease of investment in the State: \_\_\_\_\_

The incentive for innovation in products, materials or processes: \_\_\_\_\_

The benefits of the regulations, including, but not limited to, benefits to the health, safety, and welfare of California residents, worker safety, and the state's environment and quality of life, among any other benefits identified by the agency: \_\_\_\_\_

**ECONOMIC AND FISCAL IMPACT STATEMENT  
(REGULATIONS AND ORDERS)**

STD. 399 (REV. 12/2013)

**FISCAL IMPACT STATEMENT****A. FISCAL EFFECT ON LOCAL GOVERNMENT** *Indicate appropriate boxes 1 through 6 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*

- ☐ 1. Additional expenditures in the current State Fiscal Year which are reimbursable by the State. (Approximate)  
(Pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code).

\$ \_\_\_\_\_

- ☐ a. Funding provided in \_\_\_\_\_  
Budget Act of \_\_\_\_\_ or Chapter \_\_\_\_\_, Statutes of \_\_\_\_\_

- ☐ b. Funding will be requested in the Governor's Budget Act of \_\_\_\_\_  
Fiscal Year: \_\_\_\_\_

- ☐ 2. Additional expenditures in the current State Fiscal Year which are NOT reimbursable by the State. (Approximate)  
(Pursuant to Section 6 of Article XIII B of the California Constitution and Sections 17500 et seq. of the Government Code).

\$ \_\_\_\_\_

*Check reason(s) this regulation is not reimbursable and provide the appropriate information:*

- ☐ a. Implements the Federal mandate contained in \_\_\_\_\_
- ☐ b. Implements the court mandate set forth by the \_\_\_\_\_ Court.

Case of: \_\_\_\_\_ vs. \_\_\_\_\_

- ☐ c. Implements a mandate of the people of this State expressed in their approval of Proposition No. \_\_\_\_\_

Date of Election: \_\_\_\_\_

- ☐ d. Issued only in response to a specific request from affected local entity(s).

Local entity(s) affected: \_\_\_\_\_  
\_\_\_\_\_

- ☐ e. Will be fully financed from the fees, revenue, etc. from: \_\_\_\_\_

Authorized by Section: \_\_\_\_\_ of the \_\_\_\_\_ Code;

- ☐ f. Provides for savings to each affected unit of local government which will, at a minimum, offset any additional costs to each;

- ☐ g. Creates, eliminates, or changes the penalty for a new crime or infraction contained in \_\_\_\_\_

- ☐ 3. Annual Savings. (approximate)

\$ \_\_\_\_\_

- ☐ 4. No additional costs or savings. This regulation makes only technical, non-substantive or clarifying changes to current law regulations.

- ☐ 5. No fiscal impact exists. This regulation does not affect any local entity or program.

- ☒ 6. Other. Explain [The proposed regulation to permit limited sport fishing take of UKTSCS at high visitation periods is expected to increase local sales and transient occupancy tax revenues to local governments in the impacted areas \(see Addendum\).](#)

**ECONOMIC AND FISCAL IMPACT STATEMENT  
(REGULATIONS AND ORDERS)**

STD. 399 (REV. 12/2013)

**FISCAL IMPACT STATEMENT (CONTINUED)****B. FISCAL EFFECT ON STATE GOVERNMENT** *Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*☐ 1. Additional expenditures in the current State Fiscal Year. (Approximate)

\$ \_\_\_\_\_

*It is anticipated that State agencies will:*☐ a. Absorb these additional costs within their existing budgets and resources.☐ b. Increase the currently authorized budget level for the \_\_\_\_\_ Fiscal Year☐ 2. Savings in the current State Fiscal Year. (Approximate)

\$ \_\_\_\_\_

☐ 3. No fiscal impact exists. This regulation does not affect any State agency or program.☒ 4. Other. Explain The proposed regulation to allow limited sport fishing take of UKTSCS in portions of the Klamath River Basin may result in small gains in California state sales tax and may increase salmon report card sales revenue to the CA Department of Fish and Wildlife (see Addendum).**C. FISCAL EFFECT ON FEDERAL FUNDING OF STATE PROGRAMS** *Indicate appropriate boxes 1 through 4 and attach calculations and assumptions of fiscal impact for the current year and two subsequent Fiscal Years.*☐ 1. Additional expenditures in the current State Fiscal Year. (Approximate)

\$ \_\_\_\_\_

☐ 2. Savings in the current State Fiscal Year. (Approximate)

\$ \_\_\_\_\_

☒ 3. No fiscal impact exists. This regulation does not affect any federally funded State agency or program.☐ 4. Other. Explain \_\_\_\_\_

FISCAL OFFICER SIGNATURE

DATE

*The signature attests that the agency has completed the STD. 399 according to the instructions in SAM sections 6601-6616, and understands the impacts of the proposed rulemaking. State boards, offices, or departments not under an Agency Secretary must have the form signed by the highest ranking official in the organization.*

AGENCY SECRETARY

DATE

*Finance approval and signature is required when SAM sections 6601-6616 require completion of Fiscal Impact Statement in the STD. 399.*

DEPARTMENT OF FINANCE PROGRAM BUDGET MANAGER

DATE



STD399 CALCULATIONS WORKSHEET  
ADDENDUM

Add subsection (b)(91.2) to Section 7.50,  
Title 14, California Code of Regulations  
(Certificate of Compliance)

Re: Upper Klamath-Trinity spring Chinook salmon sport fishing

**Economic Impact Statement**

**Background**

In February 2019, the Fish and Game Commission (Commission) accepted a petition to list upper Klamath-Trinity spring Chinook Salmon (UKTSCS), which confers candidacy status on UKTSCS. During the candidacy period, California Endangered Species Act (CESA) take prohibition measures apply (Fish and Game Code Section 2085). At the same meeting, the Commission adopted emergency regulations (February 2019 emergency regulations) prohibiting take of UKTSCS on certain portions of the Klamath and Trinity rivers to help protect UKTSCS by minimizing confusion by sport anglers who may not have been aware of the CESA candidacy protections. The Commission received testimony and letters from the public, as well as the Del Norte County and Siskiyou County boards of supervisors that a complete prohibition of spring Chinook Salmon take would create economic harm to businesses (i.e., local tourism sector, fishing guides, motels, restaurants, and other retail), and requesting that the Commission consider shortening the closed periods, or otherwise allow some sport fish take during the spring Chinook Salmon fishing season. The California Department of Fish and Wildlife (Department or CDFW) assessed the ability under Section 2084 of the Fish and Game Code to allow for some level of sport fish take by hook and line, while still providing protective spring Chinook Salmon regulatory measures.

The Commission adopted emergency regulations on April 17, 2019 to mitigate the potential adverse economic and fiscal impacts of a complete prohibition of take. The emergency regulations allow limited fishing opportunity on spring-run Chinook Salmon on the Klamath River downstream of the Highway 96 bridge at Weitchpec between July 1 and August 14, the Trinity River between the Old Lewiston Bridge and the mouth of the South Fork Trinity River between July 1 and August 31, and the New River main stem downstream of the confluence of the East Fork to the confluence with the Trinity River between July 1 and August 31. The emergency regulations are effective June 26, 2019 through March 23, 2020 ("June 2019 emergency regulations").

**Current Regulatory Proposal**

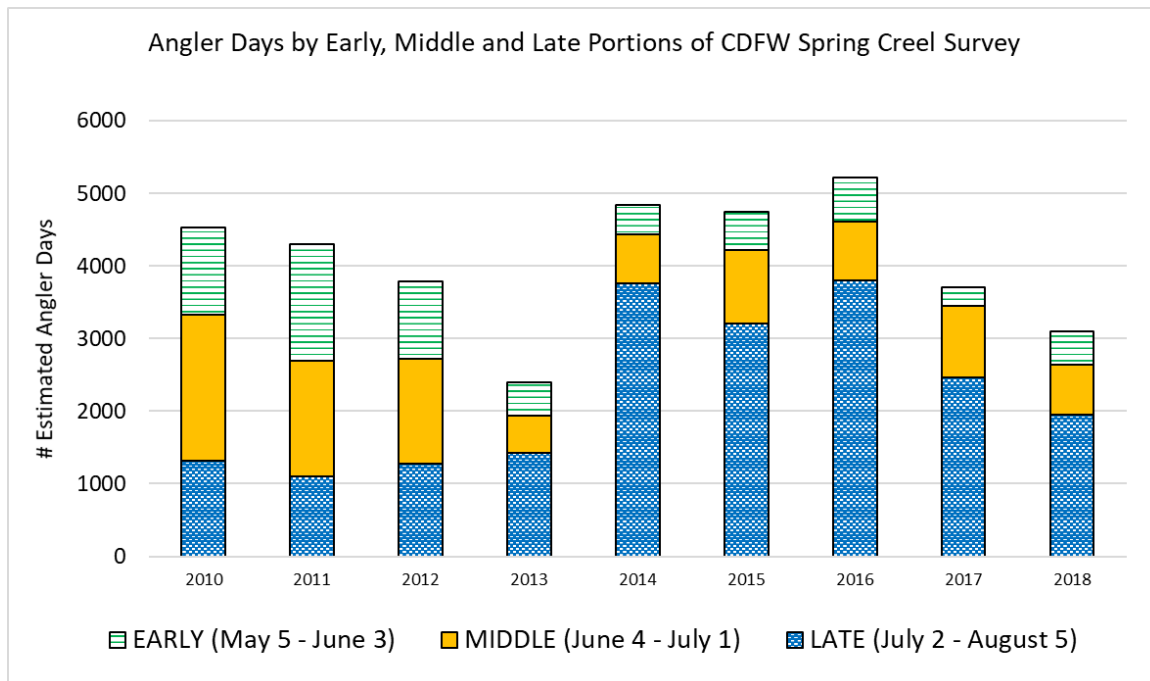
This proposed rulemaking will make permanent the June 2019 emergency regulations to allow limited fishing opportunity of UKTSCS in most of the same reaches. The proposed regulations would allow continued limited sport fishing take of UKTSCS on the Klamath River downstream of the Highway 96 bridge at Weitchpec between July 1 and August 14, and the Trinity River between the Old Lewiston Bridge and the mouth

of the South Fork Trinity River between July 1 and August 31, after which fall season regulations will apply.

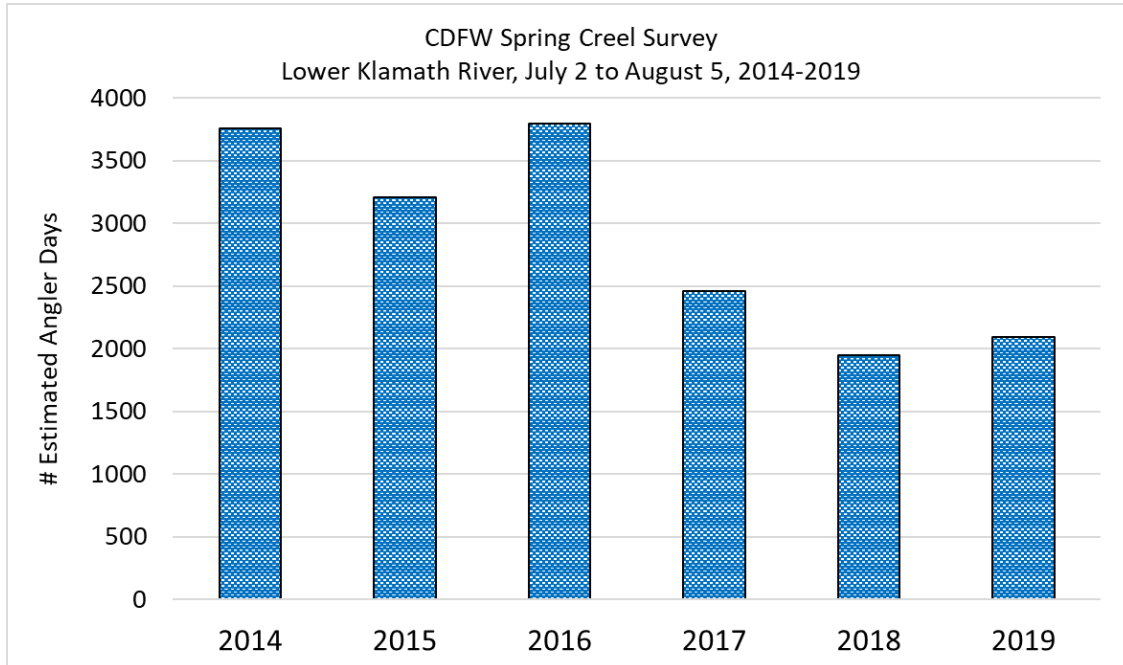
The proposed regulations do not make permanent the language for the New River reach (main stem downstream of the confluence of the East Fork to the confluence with the Trinity River between July 1 and August 31).

Compared to the full closure under CESA, the proposed regulation provides increased recreational fishing opportunity for the six- to eight-week window between July and August in the Klamath River Basin. Maintaining the six-week window of fishing opportunity on the lower Klamath River and the eight-week window on the upper Trinity River is supported by historically high visitation documented by the late portion of the Department's spring creel survey (July 2 through August 5) (Figure 1). The creel survey is run between May and August on the Klamath River from its confluence with the Trinity River downstream to the Klamath River mouth. The creel survey documents the species, number of angler hours, and the number of angler days from the place of residence or lodging to the fishing location(s), which are considered to be synonymous with angler trips for purposes of this survey. Since 2014, the period from July 2 to August 5 reflects a much higher share of angler days, indicative of angler interest and activity. Preliminary 2019 survey results show a minor uptick in the number of estimated angler days (147 days) from 2018, as shown in Figure 2; the Department did not run a creel survey during the early (May 5 to June 3) and middle (June 4 to July 1) portions because of the complete closure to fishing on these reaches due to CESA and the February 2019 emergency regulations.

**Figure 1. Angler Days by Early, Middle, and Late Portions of CDFW Spring Creel Survey data.**



**Figure 2. Angler Days in the Lower Klamath River by Department angler creel survey July 2 to August 5, 2014 – 2019.**



The period on the lower Klamath River between July 1 and August 14, and the upper Trinity River between July 1 and August 31, coincides with generally higher work and school vacations. This should optimize the potential for increased visitor expenditures, sales tax, and transient occupancy tax revenues to the affected areas, particularly: Crescent City and Klamath (Del Norte County); Eureka, Arcata, and Willow Creek (Humboldt County); Yreka (Siskiyou County); and Weaverville (Trinity County). Angler spending is anticipated to be received by an array of small businesses that serve sport fishing activities.

In particular, allowing sport fishing during the economically important Independence Day (July 4) weekend at the specified locations was intended to provide economic benefits, while minimizing effects to wild-origin UKTSCS.

## **Fiscal Impact Statement**

### **A. Fiscal Impact on Local Government**

#### **1. Tax Revenue Impact Projections Methods**

The proposed rulemaking to maintain fishing opportunity during the six- to eight-week window between July and August in the Klamath River Basin was evaluated as to what extent it would impact travel times, visits to each fishery area, and length of stay to each area. The activities involve participant expenditures in the retail, food and accommodations, automotive service and fuel, sporting equipment sales/rent/lease, and recreational services sectors. Direct expenditures generate local sales tax and transient occupancy tax for the Klamath River Basin area local governments.

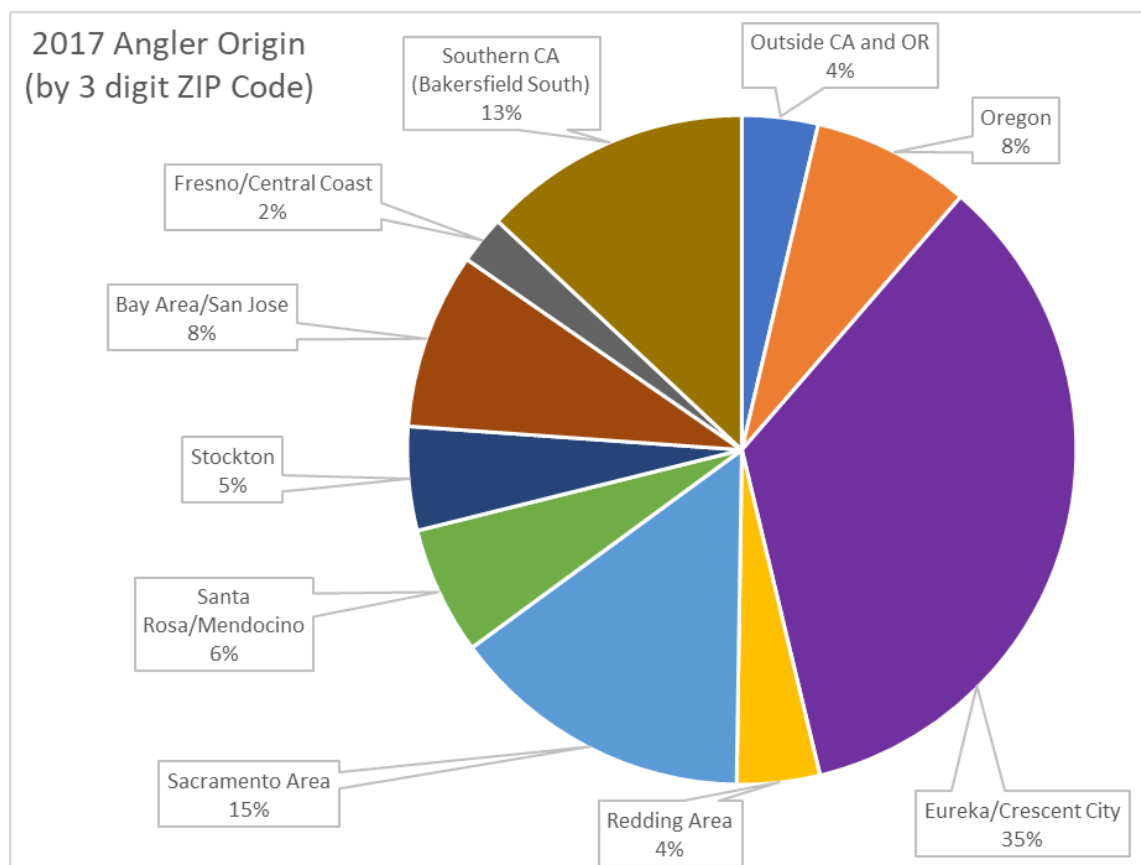
### a. Local Sales Tax

The California State Board of Equalization reports local sales tax rates for the areas under evaluation. Local sales tax rates in Del Norte, Siskiyou, Trinity, and Humboldt counties range from 1.30% to 1.83%. Increases in visitor spending due to increased numbers of visits and in the length of stay could result in sales tax revenue gains that are estimated to range from \$3,288 to \$3,536 over the open period.

### b. Transient Occupancy Tax (TOT)

Lower Klamath spring Chinook Salmon angler creel survey data sorted by zip code of origin show that a large share of out-of-area anglers (65%) participate in the fishery (Figure 3).

**Figure 3. Angler Zip Code of Origin 2017**



Sport anglers' survey responses reveal that those who travel a greater distance to the fishery area are more likely to choose to stay overnight in the area. Those who live in the closest proximity to fishery sites and those who fish in the earliest hours of the day show a lower likelihood of staying overnight. Overnight stays are often at private campgrounds, motels, and hotels, all of which collect TOTs. County treasurer tax collectors report the county TOTs, with rates in Del Norte, Siskiyou, Trinity, and Humboldt counties ranging from 8% to 10%. The projected gains in overnight stays range from 974 to 1,047 nights, which could result in gains in local TOT revenues to local governments from \$15,333 to \$16,490 over the proposed open period.



## **B. Fiscal Impact on State Government**

### **1. State Government Sales Tax Revenue**

Additional spending in the impacted Klamath River Basin areas is expected to also translate into small increases in California state sales tax revenue in the range of \$13,434 to \$14,449 over the period proposed to remain open, given a six percent state sales tax rate (excluding local taxes) in the affected cities and counties (Table 1).

**Table 1. Angler Days Estimated State and Local Sales Tax Revenue 2018-2019 (2019\$).**

Survey Year	Angler Days	Spending per Day	Total Angler Local Spending	State Sales Tax Revenues	Local Sales Tax Revenues
2018	1,947	\$ 115	\$ 223,905	\$ 13,434	\$ 3,288
2019	2,094	\$ 115	\$ 240,810	\$ 14,449	\$ 3,536

Source: California Department of Tax and Fee Administration; CDFW Spring Creel Survey; U.S. Department of the Interior, *In-River Sport Fishing Economics Technical Report*, National Oceanographic and Atmospheric Administration, National Marine Fisheries Service, September 2011.

### **2. California Department of Fish and Wildlife Revenue Impact**

#### **a. Changes in North Coast Salmon Report Card Sales**

Estimates of North Coast Salmon Report Card sales losses or gains are based on the Department's License and Revenue Branch sport fishing license volume and revenue historical records. Surveys of the Klamath River Basin fishing community, fishers and businesses also inform the estimates.

Apparent relations between changes in take limits and report card sales may not be indicative of continued patterns in the future. Other factors may influence participation in the fishery, such as gas prices, weather, consumer confidence and other unknowns.

While difficult to predict, the proposed regulation could result in an estimated maintenance of report card sales in the range of 1,000 to 3,000 report cards, which could result in report card sales revenue gains to the Department from \$6,740 to \$20,220 at the 2020 card price of \$6.74. Any changes in report card sales revenue for the two fiscal years after the proposed regulations go into effect cannot be projected, as the future status of the candidate species is not known at this time.

## STAFF SUMMARY FOR DECEMBER 11-12, 2019

## 21. UPPER-KLAMATH TRINITY SPRING CHINOOK SALMON SPORT FISHING (CERTIFICATE OF COMPLIANCE)

### Today's Item

Information ☐Action ☒

Consider authorizing publication of notice of intent to implement a certificate of compliance for the emergency regulations concerning upper Klamath-Trinity spring Chinook salmon sport fishing.

### Summary of Previous/Future Actions

- |                                                                                         |                                    |
|-----------------------------------------------------------------------------------------|------------------------------------|
| • Adopted emergency regulations authorizing take under Section 2084                     | Apr 17, 2019; Santa Monica         |
| • Re-adoption of emergency regulations                                                  | Dec 11-12, 2019; Sacramento        |
| • <b>Today's notice hearing for certificate of compliance regulations</b>               | <b>Dec 11-12, 2019; Sacramento</b> |
| • Second re-adoption of emergency regulations                                           | Feb 5-6, 2020; Sacramento          |
| • Discussion of certificate of compliance regulations                                   | Feb 5-6, 2020; Sacramento          |
| • Adoption of certificate of compliance regulations authorizing take under Section 2084 | Apr 15-16, 2020; Sacramento        |

### Background

As of Feb 2019, upper Klamath-Trinity river spring Chinook salmon (UKTRS) is a candidate species under California Endangered Species Act (CESA), which confers CESA protections during candidacy. CESA also provides that FGC may adopt regulations to authorize take of certain threatened or endangered species and candidate species under California Fish and Game Code Section 2084. At its Apr 17, 2019 meeting, FGC adopted emergency regulations allowing limited take of UKTSCS at the end of the traditional spring season, while also providing substantial protection to UKTSCS, consistent with Fish and Game Code Section 2084 (see exhibits 4 and 5 for additional background). The Apr emergency regulations, codified in subsection 7.50(b)(91.2), went into effect Jun 26, 2019 and will expire Dec 24, 2019 unless readopted.

At today's meeting, DFW is requesting that FGC publish notice of its intent to adopt a certification of compliance of the emergency regulations (Exhibit 1). This proposed rulemaking will make permanent the Jun 2019 emergency regulations allowing limited sport fish take of UKTSCS in most of the same reaches. The proposed regulation would allow continued limited sport fishing take of UKTSCS on the Klamath River downstream of the Highway 96 bridge at Weitchpec between Jul 1 and Aug 14, and the Trinity River from the Old Lewiston Bridge to the mouth of the South Fork Trinity River between Jul 1 and Aug 31, after which fall season regulations under subsection 7.50(b)(91.1) will apply. The proposed regulations will supersede the Jan 1 opening dates prescribed in subsection 7.50(b)(91.1). DFW recommends that FGC not make permanent the Jul 1 through Aug 31 season on the New River reach due to the remoteness of the area and low observed interest in fishing the area.

**STAFF SUMMARY FOR DECEMBER 11-12, 2019**

After FGC makes its final decision on the UKTSCS petition under CESA, FGC may wish to take action to amend or repeal the permanent regulations depending on the outcome of that decision.

**Significant Public Comments (N/A)****Recommendation**

**FGC staff:** Authorize publication of notice as requested by DFW.

**DFW:** Authorize publication of notice of intent to adopt the regulations as described in the Initial Statement of Reasons (ISOR, Exhibit 2).

**Exhibits**

1. DFW memo, received Nov 25, 2019
2. ISOR, received Nov 25, 2019
3. Economic and Fiscal Impact Statement (std. 399)
4. Staff summary from Feb 2019 FGC meeting (for background purposes only)
5. Staff summary from Apr 2019 FGC meeting (for background purposes only)
6. DFW presentation

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission authorizes publication of a notice of its intent to add subsection 7.50(b)(91.2) related to special order regarding take of Chinook salmon in anadromous waters of the Klamath River Basin downstream of Iron Gate and Lewiston dams.

## Memorandum

**Date:** November 15, 2019

**To:** Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

**From:** Charlton H. Bonham  
Director

**Subject:** **Five-Year Status Review of Baker's Larkspur**

The California Department of Fish and Wildlife (Department) has prepared the attached Five-Year Status Review of Baker's Larkspur for the Fish and Game Commission (Commission) pursuant to the California Endangered Species Act (CESA). Pursuant to Fish and Game Code, section 2077, subdivision (a), the Department has prepared this Five-Year Status Review to evaluate whether conditions that led to the original listing of Baker's larkspur are still present.

In completing this Five-Year Status Review, the Department finds there is sufficient scientific information to indicate that the conditions that led to the listing of Baker's larkspur as endangered in April of 2006 are still present. The scientific information available to the Department indicates that Baker's larkspur remains in serious danger of extinction in all of its range due to one or more causes. Therefore, the Department recommends no change to the status of Baker's larkspur.

If you have questions or need additional information, please contact Richard Macedo, Branch Chief, Habitat Conservation Planning Branch at (916) 653-3861, or by e-mail at [Richard.Macedo@wildlife.ca.gov](mailto:Richard.Macedo@wildlife.ca.gov).

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State of California  
Natural Resources Agency  
Department of Fish and Wildlife

REPORT TO THE FISH AND GAME COMMISSION  
FIVE-YEAR STATUS REVIEW OF BAKER'S LARKSPUR (*Delphinium bakeri*)

December 2019



Baker's larkspur, CDFW photo by Doreen Smith

Charlton H. Bonham, Director  
Department of Fish and Wildlife



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## I. EXECUTIVE SUMMARY

Baker's larkspur (*Delphinium bakeri* Ewan) is currently listed as an endangered plant under the California Endangered Species Act. Pursuant to Fish and Game Code section 2077, subdivision (a), the California Department of Fish and Wildlife (Department) has prepared this Five-Year Status Review to evaluate whether conditions that led to the original listing of Baker's larkspur are still present. This review is based on the best scientific information currently available to the Department regarding each of the components listed under section 2072.3 of the Fish and Game Code and Section 670.1, subdivisions (d) and (i)(1)(A), of Title 14 of the California Code of Regulations. In addition, this document includes a review of the identification of habitat that may be essential to the continued existence of the species, and the Department's recommendations for management activities and other recommendations for recovery of the species (Fish & G. Code, § 2077, subd. (a)).

Baker's larkspur is a perennial herb in the buttercup family (Ranunculaceae) and is about 50-100 cm (20-40 in) tall with showy deep blue and white flowers. Its historical range was in Marin and Sonoma counties, but has been reduced to a single naturally occurring roadside population in Marin County. Due to its location and very small population size, Baker's larkspur is highly vulnerable to several threats and at extreme risk of extinction.

At the time of listing in 2006, there were four major threats to the survival and reproduction of Baker's larkspur: (1) modification of habitat through conversion to agricultural land, including pasture; (2) possible overexploitation from seed collection for horticultural trade; (3) human-related activities such as road maintenance (e.g., mowing and emergency flood response); and (4) other natural occurrences that stem from bottleneck events that reduce population size and result in low genetic variation, inbreeding depression, and high vulnerability to random events. Baker's larkspur continues to encounter these threats, but is also at risk of extinction from two additional threats: (5) competition from other plant species, and (6) predation (herbivory). Between 2005 and 2019, the single natural population has maintained an average population size of nine plants, with only two to three plants flowering per year. However, with such a small population size, it would only take a single major event to extirpate this population, driving the species to extinction.

The survival of Baker's larkspur can be attributed to management efforts by the University of California Botanical Gardens (UCBG), the U.S. Fish and Wildlife Service, and the California Native Plant Society, with coordination from the Department. UCBG and collaborators have monitored the natural population annually and conducted studies to assess the genetic variation of the natural and nursery-grown populations. Recovery efforts have included introducing Baker's larkspur into three new locations within 6 km (3.7 mi) of the natural population, but these introduced populations have thus far failed to establish. The Department recommends the continuation of these introduction efforts, with additional research goals. It will be beneficial to: (1) understand more about the ecology of Baker's larkspur to identify new introduction sites; (2) identify the stage at which the plants are most vulnerable to natural threats, to focus intervention activities; and (3) quantify the genetic diversity of the remaining natural population and the cultivated plants that the introductions are drawn from.

In completing this Five-Year Status Review for Baker's larkspur, the Department finds there is sufficient scientific information to indicate that the conditions that led to the listing of Baker's larkspur as endangered are still present, and recommends no change to its status on the list of endangered species at this time.



## **II. INTRODUCTION**

### **A. Five-Year Status Review**

This Five-Year Status Review addresses Baker's larkspur (*Delphinium bakeri* Ewan), which is designated as an endangered species under the California Endangered Species Act (CESA) (Fish and G. Code, § 2050 et seq.; Cal. Code Regs., tit. 14, § 670.2, subd. (a)(27)(A)). Upon a specific appropriation of funds by the Legislature, the California Department of Fish and Wildlife (Department) shall, or if other funding is available, in the absence of a specific appropriation, may, review species listed as endangered or threatened under CESA every five years to determine if the conditions that led to the original listing are still present (Fish and G. Code, § 2077, subd. (a)). Baker's larkspur is also listed as endangered under the Federal Endangered Species Act. Pursuant to Fish and Game Code section 2077, subdivision (b), the U.S. Department of the Interior, U.S. Fish and Wildlife Service (USFWS) was contacted in an effort to coordinate this status review with their five-year review process (under review in 2019) (Prevost, pers. comm. 2019).

Using the best scientific information available to the Department, this Five-Year Status Review includes information on the following components pursuant to Fish and Game Code sections 2072.3 and 2077, subdivision (a), and section 670.1, subdivision (d), of Title 14 of the California Code of Regulations: species' population trend(s), range, distribution (including a detailed distribution map), abundance, life history, factors affecting the species' ability to survive and reproduce, the degree and immediacy of threats, the impact of existing management efforts, the availability and sources of information, identified habitat essential for the continued existence of the species, and the Department's recommendations for future management activities and other recovery measures to conserve, protect, and enhance the species.

### **B. Listing and Status Review History**

On October 5, 1979, Baker's larkspur was listed as rare and protected under the Native Plant Protection Act (NPPA) of 1977 (Fish and G. Code, § 1900 et seq.).

On January 26, 2000, USFWS, under the authority of the Endangered Species Act of 1973, listed Baker's larkspur as federally endangered.

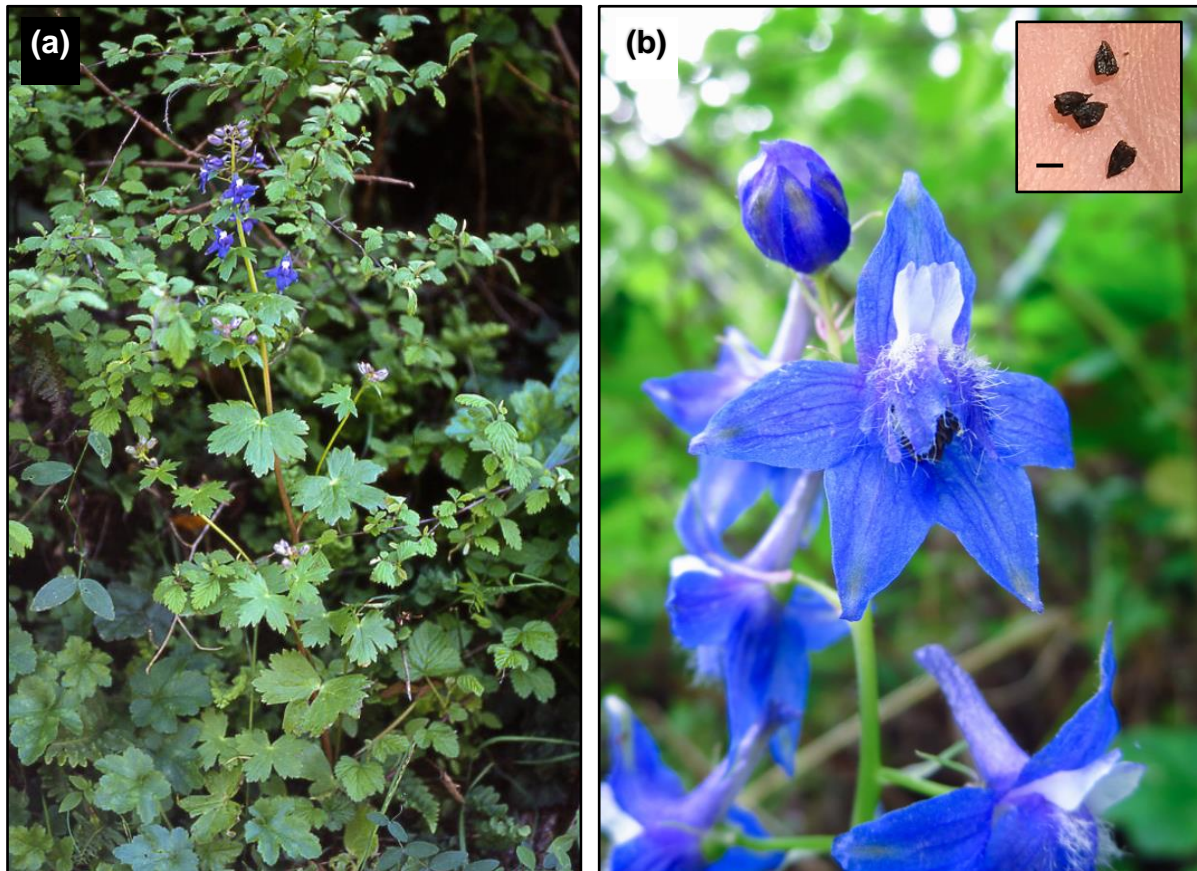
In 2005, the Department petitioned the California Fish and Game Commission (Commission) to change the status of Baker's larkspur from rare to endangered, the Commission adopted the proposal, and Baker's larkspur was added to the CESA list of endangered plants on April 7, 2006 (Cal. Code Regs., tit. 14, § 670.2, subd. (a)(27)(A)). The main identified threats to the species at the time of listing included modification and/or destruction of habitat, overexploitation, human-related activities, and other natural occurrences that pose a threat to its extremely small population.

This Five-Year Status Review was prepared by Dr. Raffica La Rosa, in the Department's Habitat Conservation Planning Branch, Native Plant Program.

### III. BIOLOGY

#### A. Taxonomic and Physical Description

Baker's larkspur is a perennial herb in the buttercup family (Ranunculaceae). Plants generally produce one stem that is 50-100 cm (20-40 in) tall, smooth, and is loosely attached to a thickened root (Figure 1). The leaves are simple, palmately lobed, have toothed edges, and grow at the base of the plant (basal leaves) and along the stem (cauline leaves). Leaves often have a distinctive light green center where the stalk of the leaf (petiole) is attached, which has been used as a diagnostic trait, but can be found in other species as well (CDFG 2005; Koontz 2005). Baker's larkspur sometimes retains its upper leaves when in flower and fruit (CNPS 1977). It can be distinguished from other larkspurs with overlapping ranges based on stem and leaf traits, and plant height. For example, *Delphinium californicum* is more than 1 m (40 in) tall, and *D. decorum*, *D. hesperium*, and *D. patens* have hairy stems and deeply lobed leaves (CNPS 1988).



**FIGURE 1. Photos of Baker's larkspur (*Delphinium bakeri*).** (a) A mature plant in bloom, and (b) the flowers of Baker's larkspur, with a close-up of the seeds shown in the inset (scale bar = 1 mm). Photos (a) and (b) by Holly Forbes (inset by Raffica La Rosa).

A single stem of Baker's larkspur can have one or more flowering stalks (inflorescences). The inflorescence is a terminal raceme, meaning the flowers grow along the upper end of the stem (Figure 1a). The flowers are showy with bilateral symmetry common to larkspurs (Figure 1).

Each flower consists of five dark blue sepals, about 1 cm (0.4 in) long; the uppermost sepal forms a nectar spur, which is a long, tapered tube where nectar collects. The four petals are in the center of the flower and are smaller than the sepals. The upper two petals are typically white and the lower two petals are blue with hairs on the upper surface; the lower petals are larger than the upper white petals. Each flower can produce a fruit consisting of three to four small, dry segments called follicles that are 18-20 mm (7.1-7.9 in) long. Each follicle, once ripe, splits lengthwise and contains about 20 seeds (Forbes, pers. comm. 2019b). Seeds are small, black, smooth, shiny, and have a pyramidal shape (Figure 1b).

Baker's larkspur is distinct from other larkspur (*Delphinium*) species (CDFG 2005), and closely related to the more common red larkspur (*Delphinium nudicaule*) (Koontz et al. 2004). Larkspurs tend to have high genetic diversity, and it was found that even the rare species with small populations tend to have relatively high genetic diversity (Koontz and Forbes 2011). This assessment of the genetic diversity of the naturally occurring population (natural population) of Baker's larkspur was determined from samples taken prior to 2005. In 2005, the population was drastically reduced from approximately 50 plants to just nine after emergency maintenance crews excavated a large area of the roadside where most of the plants were growing. The very small population size makes it risky to remove any leaf tissue for additional genetic studies as tissue removal can stress the plant or make it more susceptible to disease. Consequently, the current level of genetic diversity of the population is not known; however, it is likely that the genetic diversity is significantly lower than it was prior to 2005.

## **B. Life History and Ecology**

Baker's larkspur is a long-lived perennial, with some plants living at least 13 years or more (Forbes, pers. comm. 2019b). Seeds germinate and dormant roots produce new shoots in response to winter rains. Plants bloom between March and May and release seeds between May and July. In a nursery, plants can reproduce in their third year, but it can take at least seven years for plants in the wild to first produce flowers (Forbes, pers. comm. 2019b). At the end of the growing season, the aboveground vegetation dies back, and the plants can survive the hot, dry summer underground as small tuber-like roots.

Baker's larkspur generally reproduces by outcrossing, so it relies on animal pollinators such as hummingbirds and bees to move pollen between individual plants. Pollinators may also transfer pollen within a plant, and because Baker's larkspur is self-compatible (CPC 2017), it can reproduce even when there is only one flowering plant, or if the timing of flowering is too offset between individuals. Selfing can be detrimental, however, because it can contribute to inbreeding depression and a loss of genetic diversity, a common threat to most rare species with small population sizes.

Throughout a growing season, the number of Baker's larkspur plants can decrease substantially due to generalist herbivores like slugs and snails (e.g., banana slugs (*Ariolimax* sp.)) (UCGB 2012; USFWS 2015). Baker's larkspur is also subject to disturbances such as digging by wildlife and trampling by cattle, where cattle are present (Forbes, pers. comm. 2019a); herbivory from insects and other animals (USFWS 2015); seed predation of unripened fruits (R. La Rosa, pers. obs.); and possible fungal infection of the flowers (Forbes, pers. comm. 2019a).

## **C. Habitat Necessary for Species Survival**

Baker's larkspur has been found growing on steep rocky slopes made of decomposing shale that are frequently disturbed. It has also been historically seen along grassy fencerows (CNDDb

2019). The immediate area surrounding individual larkspurs is moderately moist with partial shade. Small Baker's larkspur populations have been introduced into three new locations within the species' range (USFWS 2015). Outplanting sites are within a 6 km (3.7 mi) radius of the natural population. Specific sites were chosen to mimic the north-facing aspect, level of direct sunlight, community diversity, and close proximity to a water source (e.g., stream) of the only remaining natural population.

i. Vegetation Communities

Baker's larkspur grows north of San Francisco along the central coast of California (Koontz and Warnock 2012). It has also been introduced into nearby areas supporting a California Bay-Coast Live Oak Alliance (Sawyer et al. 2009; MMWD 2014). When Baker's larkspur was first discovered in 1942, it was growing alongside California honeydew (*Horkelia californica* ssp. *dissita*) and straightbeak buttercup (*Ranunculus orthorhynchus*). The only known naturally occurring population grows under an overstory that includes California bay (*Umbellularia californica*), California buckeye (*Aesculus californica*), and coast live oak (*Quercus agrifolia*). Other native plants associated with Baker's larkspur include: California blackberry (*Rubus ursinus*), sword fern (*Polystichum munitum*), goldback fern (*Pentagramma triangularis*), licorice fern (*Polypodium glycyrrhiza*), maidenhair fern (*Adiantum jordanii*), woodland star (*Lithophragma affine*), grand hound's tongue (*Cynoglossum grande*), alumroot (*Heuchera* sp.), oceanspray (*Holodiscus discolor*), sanicle (*Sanicula* sp.), western poison oak (*Toxicodendron diversilobum*), giant trillium (*Trillium chloropetalum*), bedstraw (*Galium* sp.), and red ribbons (*Clarkia concinna*) (Koontz and Forbes 2003; CNDDDB 2019; R. La Rosa pers. obs.). CNPS (2019) further identifies broadleaved upland forest, coastal scrub, and valley and foothill grasslands as habitats associated with Baker's larkspur.

ii. Geology and Soils

Baker's larkspur occurs on decomposing shale or limestone slopes at low elevations below 300 m (985 ft) (Koontz and Warnock 2012; CNDDDB 2019). The only known extant natural population exists in an area that spans approximately 35 m (115 ft) along a road and rises about 3 m (9 ft) up a sheer slope. The soil layer is very shallow and unstable, with solid rock beneath it. Activities by county road crews have reduced the soil layer even further over the past 10-20 years. The three introduced populations, like the natural population, are on steep, north-facing slopes about 2 m (6.5 ft) high, with moist soil. The soils in the immediate vicinity of these populations have not been examined for type, substrate, pH, or minerality, so little is known about the soil chemistry at these sites.

The soil series that best represent the soils that are found at the one extant and two presumed extirpated natural sites are: Blucher, Kneeland, McMullin, and Tocaloma (Appendix A) (Soil Survey Staff 2019). Based on the descriptions of these soil series, the characteristics that are associated with Baker's larkspur are fine grained and loamy, with well mixed, superactive topsoil in the "Haploxerolls" soil great group. Haploxerolls are part of the Mollisol soil order and are common to California grasslands with thick topsoil and lots of soil organic carbon. This soil type is associated with areas of weathered shale and limestone (O'Geen and Arroues 2016), consistent with soil types that were reported with the early collections of Baker's larkspur (CNDDDB 2019).

### iii. Climate and Hydrology

The remaining natural population of Baker's larkspur experiences a Mediterranean climate that is characterized by hot, dry summers and cool, wet winters. Based on 30 years of temperature and precipitation data between 1981-2010 gathered from local weather stations near the natural population, the estimated annual rainfall total is about 112 cm (44 in) (PRISM Climate Group 2004). The estimated monthly average high/low temperatures range from 12.8°/4.4°C (55°/40°F) in January to 27.8°/11.7°C (82°/53°F) in July (PRISM Climate Group 2004). In April, when rainfall tapers off and the plants are in bloom, the average temperature is 20.0°/7.2°C (68°/45°F). Baker's larkspur populations (natural and introduced) grow in mesic (moist) soil, and in close proximity to water sources (e.g., streams, rivers, or reservoirs); humidity from the water sources may help delay drying of the soil during the growing season.

## IV. DISTRIBUTION AND ABUNDANCE

### A. Range and Distribution

Baker's larkspur is native and restricted (endemic) to the central coast and San Francisco Bay Area of California (Koontz and Warnock 2012). Historically, its range included Sonoma and Marin counties (Figure 2). Its first known collection was in the 1930s, and it has only been found naturally occurring in a few locations between 90 and 205 m (295-672 ft) in elevation. When Baker's larkspur was first described by Joseph Ewan (1942), he recognized that its range was highly restricted, and he described it as a "fast disappearing larkspur [that he hoped could be] saved from extinction." There is a total of six documented occurrences (CNDDB 2019) of Baker's larkspur, including historical, contemporary, natural, and introduced locations (Figure 2; Table 1).

Extirpated populations: two populations were no longer present when Baker's larkspur became State-listed as endangered. They are presumed extirpated as no one has seen Baker's larkspur at either location in over 80 years, but the exact locations of the original collections are unknown.

- *Camp Meeker* – this is the northernmost population on record, and the only one from Sonoma County. There are several herbarium collections from this population, with the last collection taken in 1946. The original location of the population is likely still on private property (Table 1). B. Guggolz reported that the population was extirpated after surveying the area in 1986 (CNDDB 2019).
- *Tomales* – this population of Baker's larkspur is in the northwest region of Marin County, and is likely on private property. It was last seen in 1923, but the exact location of that sighting is unknown. Grazing is very common in the area, and Baker's larkspur has not been reported in this area since, so it is presumed to be extirpated.

Extant population: when Baker's larkspur was added to the NPPA list of rare species, and later when it was added to the CESA list of endangered species, there was only one naturally occurring extant population on record.

- *Marshall Petaluma Road* – This population occurs in the Point Reyes U. S. Geological Survey 7.5-minute topographic quadrangle on the south side of Marshall Petaluma Road near mile marker "C112, 5.32 mi, 8.561 km" between Marshall and Petaluma in Marin



County. This population remains the only known natural population of Baker's larkspur in 2019. It occurs on private property within the county road right-of-way on a very steep ungrazed slope that abuts the road.



**FIGURE 2. Range and distribution of Baker's larkspur (*Delphinium bakeri*).** The range of *Delphinium bakeri* is restricted to the rectangle marked on the California inset. Introduced sites are collectively marked with one circle per location. The current extant distribution consists of the four southernmost populations. The upper two populations, Camp Meeker and Tomales, are historical sites and have not been seen since 1946 and 1923, respectively (CNDDDB 2019).

**TABLE 1. Populations of Baker's larkspur (*Delphinium bakeri*).**

EO <sup>1</sup>	Population	Population origin	Status	County	Ownership	Parcel <sup>2</sup>	Land use category <sup>3</sup>
1	Marshall Petaluma Road	Natural	Extant, but low numbers	Marin	County/Private	125-010-12	Farmland-improved
3	Tomales <sup>4</sup>	Natural	Extirpated (presumed)	Marin	Unknown, but likely private	Unknown	Residential or Vacant land
4	Camp Meeker <sup>4</sup>	Natural	Extirpated	Sonoma	Unknown, but likely private	Unknown	Residential/Agricultural/ or Industrial
5	Stubbs Vineyard	Introduced	Declining; population not yet established	Marin	Private	125-010-08	Agriculture-improved
6	Chileno Valley Ranch	Introduced	Declining; population not yet established	Marin	Private	106-120-07	Farmland-unimproved
7	Soulajule Reservoir	Introduced	Unsuccessful establishment	Marin	Marin Municipal Water District	106-241-09	Rural-improved

<sup>1</sup>Element Occurrence, CNDDDB

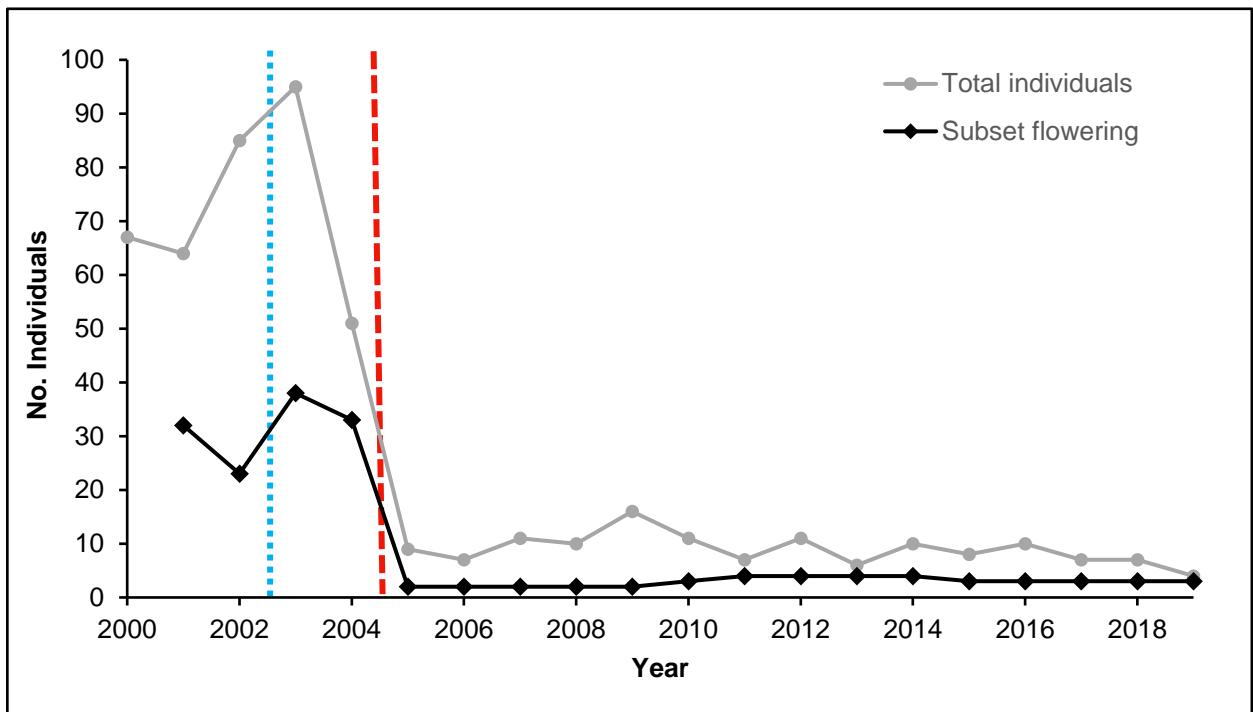
<sup>2</sup>Assessor's Parcel Number

<sup>3</sup>Taken from county parcel ownership data

<sup>4</sup>Exact location unknown

Introduced populations: in winter 2009/2010, three outplantings were planned through cooperative agreements with each of the three landowners and USFWS and CDFW (formerly California Department of Fish and Game) and outlined in a USFWS Recovery Plan (USFWS 2015). The outplanting was primarily executed by the University of California Botanical Garden (UCBG). UCBG grew nursery plants from seed collected from the Marshall Petaluma Road population, then collected seed from the nursery-grown plants each year between 2008 and 2012. UCBG also collected seed from the Marshall Petaluma Road population each year between 2001 and 2005 (excluding 2002).

- *Chileno Valley Ranch* – outplanted sites at this location are approximately 6 km (3.7 mi) north of the natural Marshall Petaluma Road population. In the winter of 2019, UCBG expanded its outplanting efforts into a new site about 1.2 km (0.75 mi) south of the original sites.
- *Soulajule Reservoir* – three outplanted sites at this location are approximately 3 km (1.9 mi) southwest of the natural population. The sites are spaced along the southern edge of the reservoir. No new plants were added in 2019.
- *Stubbs Vineyard* – the single outplanted site at this location is approximately 3.3 km (2 mi) northeast of the natural population. In the winter of 2019, UCBG outplanted mature plants into a new site adjacent to the original site.



**FIGURE 3. Population trend of Baker's larkspur (*Delphinium bakeri*).** Population size (gray) and the subset of individuals that were flowering (black) at the naturally occurring Marshall Petaluma Road population (CNDDDB EO #1) between 2000-2019. The dotted blue line indicates when the population was mowed while setting seed (late spring, 2002), and the dashed red line indicates when road crews excavated the road cut above the mud-filled culvert.



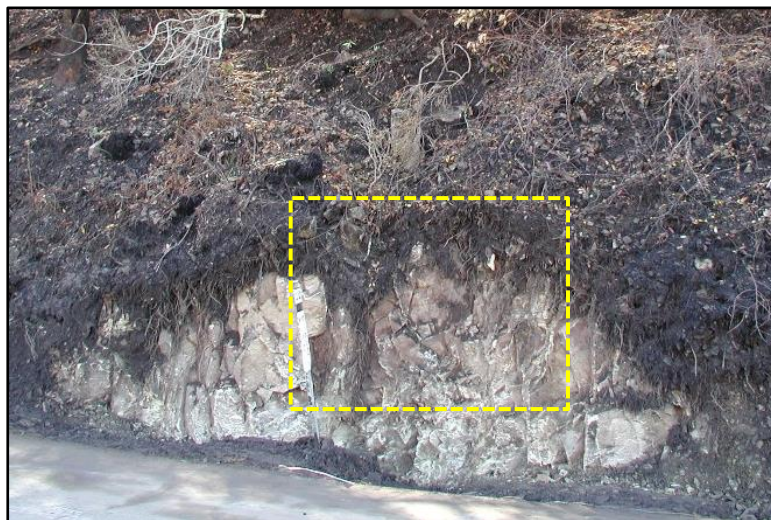
(a) 2001



(b) post-mowing in 2002



(c) post-fire in 2004



**FIGURE 4. Threats to Baker's larkspur (*Delphinium bakeri*) on Marshall Petaluma Road.** Photos of the Marshall Petaluma Road population (CNDDDB EO #1) between 2001 and 2004 when the population was severely reduced by natural and human causes. Photos show the population (a) in 2001, (b) after mowing in 2002, (3) after a fire in 2004, and (d) after excavation above the culvert in 2004. The yellow dashed box approximates the same area of hillside in all four photos which contained about two-thirds of the total natural population in 2003. Photos by Holly Forbes.

**TABLE 2. Population trends of outplanted sites.** Outplanting began in the winter of 2009/2010 at three locations. Each location consisted of 1-4 sites. Numbers in parentheses are the number of individuals planted into the location in a given year. In 2019, two new sites were added, one at Chileno Valley Ranch and one at Stubbs Vineyard. (UCBG 2012, 2015, 2019; USFWS 2015; Forbes, pers. comm. 2019)

Year	Chileno Valley Ranch			Soulajule Reservoir			Stubbs Vineyard		
	# Adult plants	# Flowered	# Young recruits	# Adult plants	# Flowered	# Young recruits	# Adult plants	# Flowered	# Young recruits
2009	-	-	-	40	-	-	11	-	-
2010	45	-	-	26 (70)	-	-	-	-	-
2011	-	10	30	89	-	-	5	-	-
2012	-	4	-	-	0	1	1 (7)	8	-
2013	26	5	98	18	1	28	3	3	1
2014	14	2	32	20	0	13	3	1	6
2015	14	-	65	14	0	1	3	0	6
2016	2	1	0	9	0	0	0	0	0
2017	14	3	0	4	0	0	0	0	0
2018	7	2	0	25	0	0	0	0	0
2019	13 (28)	16	0	18	1*	0	0 (24)	18	0

\*This flowering plant is the first Baker's larkspur recruit (offspring of outplanted individuals) to reach maturity and flower at any of the three introduced locations.

## B. Population Trend and Abundance

The one extant population on Marshall Petaluma Road has maintained an average population size of nine plants, ranging from 6-16 plants annually since 2004 (Figure 3). The population size is so low that it is at high risk of extinction. UCBG has introduced Baker's larkspur into three locations near the Marshall Petaluma Road population. These plants have been monitored annually and throughout their growing seasons for growth, flowering, and seed set. To date, these outplanted sites have not become established populations (Table 2). Trends and abundances of the individual populations are discussed below.

- *Marshall Petaluma Road* – Data on population size show a population that fluctuated between 0-50 plants in the 1980s (CNDDDB 2019). Population information was not collected in the 1990s, but starting in 2000, UCBG began monitoring the population and recording the number of mature plants, as well as the number of plants that were reproductive (i.e., producing flowers) (Figure 3).

Between 2000 and 2002, the population of Baker's larkspur was between 64-85 plants, with approximately 30-50% of them flowering. While seeds were developing in late May 2002, the population was mowed by a Marin County road crew (Figure 4b; Figure 3, blue dotted line). Due to the timing of this mowing, the plants were unable to contribute to the next generation of Baker's larkspur. The ground was also gouged by mowing equipment, disturbing root stocks of the long-lived perennial species. Signs were erected to protect approximately 30 m (98 ft) of roadside from future mowing. In the following year, 2003, the population size was 97 plants with about 40% of those individuals in flower. In the short-term, mowing did not seem to harm the population; however, the missing deposit of seeds to the seed bank may have affected the long-term recruitment into the population.

In the winter of 2004, a fire created conditions that led to a mudslide that filled the culvert below the roadcut on which the plants were growing (Figure 4c). The road subsequently flooded, and a Marin County emergency road crew cleared the culvert to recover proper drainage. In addition, several meters above the culvert was also excavated down to bedrock, which reduced the population of Baker's larkspur to just nine individuals (Figure 4d; Figure 3, red dashed line). The population has not recovered from these events (Figure 3). After these events, the population has consistently had between 6-16 plants, with 2-4 reproductive individuals annually. Consequently, any seeds produced by this population have a greater likelihood of being inbred, which will reduce the genetic variation of the population.

- *Chileno Valley Ranch* – In December 2009, a total of 45 mature Baker's larkspur plants were outplanted into three introduction sites at this location. The sites were in close proximity and fenced to exclude cattle. In January 2011, 30 additional plants were added to the same three sites. As of 2018, these three sites had failed to become established populations (Table 2). In winter 2018/2019, 28 individuals were outplanted into a new site on the property. It will be several years before the success of this introduction can be determined.
- *Soulajule Reservoir* – In January 2010, 40 mature Baker's larkspur plants were outplanted into one introduction site near the southwest edge of the reservoir. In January 2011, 70 mature plants were outplanted in two additional nearby introduction sites (35 plants each). These two sites were abandoned after they stopped producing flowers and seeds in 2014. Plants in the three sites flowered well initially, but only the first site near



the southwest edge of the reservoir supported mature plants into 2019, although none flowered since 2013 (Table 2). In 2019, for the first time, a recruit (i.e., offspring of the outplanted individuals) reached maturity and flowered. It failed to produce any seeds.

- *Stubbs Vineyard* – In March 2009, 11 three-year-old Baker's larkspur plants were outplanted into a fenced site that was wooded, sloped, and near a stream that crossed a gravel road. In February 2012, seven additional plants were added to the one remaining plant at this site. Three adult plants survived through 2015, but no plants remained by 2016. Initially, plants did well and flowered each year, but eventually they all appeared to die off with no recruitment from the seeds of previous years. In 2019, 24 new mature individuals were outplanted into an adjacent site just outside the fence. It will be several years before the success of this new site can be determined.

## V. THREATS AND SURVIVAL FACTORS

### A. Factors Affecting Ability to Survive and Reproduce

At the time of listing, threats to Baker's larkspur included: modification and/or destruction of habitat, overexploitation, human-related activities, and other natural occurrences that pose a threat to its extremely small population. Explanations of how these factors affect the species are described below, followed by two additional factors that currently threaten the species' survival.

- *Present or threatened modification or destruction of its habitat* – Conversion of land to "grainfields" (Ewan 1942), along with conversion to grazing land and the encroachment of non-native grasslands, led to the extirpation of the two historical populations. Similar land conversions are ongoing and have reduced possible habitat across the historical range of Baker's larkspur (Forbes, in litt. 2004). Lack of adequate habitat also diminishes the chances of the Marshall Petaluma Road population expanding beyond its current restricted habitat. If not collected, most seeds produced by the Marshall Petaluma Road population currently fall into the culvert or fall onto the paved road. Furthermore, habitat of the natural population could be reduced by future road maintenance or efforts to upgrade or widen the county road.
- *Overexploitation* – In 1992, all seeds that were produced by the Marshall Petaluma Road population were taken illegally, possibly for horticultural purposes (USFWS 2000; CDFG 2005). The poacher was never identified, and the seeds were not recovered. Removing the yearly reproductive output for an entire population can negatively impact the species. There has not been any evidence of this type of activity since, however it remains a threat as larkspurs produce showy flowers, and horticultural trade markets for rare plants could shift, making rare larkspurs highly desirable.
- *Human-related activities* – At the time of listing, the only remaining natural population had suffered several setbacks that reduced its population size to just nine plants. The most impactful activities were associated with roadside maintenance. There were two poorly timed mowing events that destroyed plants before they could fully set seed. The most damaging event occurred in October 2004 after a fire burned the area, resulting in a mudslide that filled the culvert below the population. Road crews used a backhoe to clear the culvert, and in the process excavated the entire slope above the culvert down to bedrock; this was where most of the population was located, and the natural population has not recovered from this event.

Baker's larkspur is susceptible to environmental changes associated with climate change. The Climate Change Vulnerability Index (CCVI) (NatureServe 2016) quantifies the vulnerability of a species under current climate change models, using information on the needs of a species, its range, life history, and ecology (CDFW 2019). Baker's larkspur is rated as "Highly Vulnerable," meaning its abundance and range are likely to decrease significantly by 2050. Factors that most determined this rating were the bottleneck (severe reduction in population size and genetic variation), its narrow temperature tolerance (experiencing a range of temperatures of spanning 42°F), somewhat specialized pollination, short dispersal distance, and anthropogenic barriers to dispersal (roads and agricultural fields).

- *Other natural occurrences* – With such small population sizes confined to very small areas, Baker's larkspur is highly vulnerable to random events. Documented random events that have negatively affected the natural population include vehicle collisions, fire, mudslides, and small mammal digging or movement over the population. Small populations are also susceptible to inbreeding depression, which results in low genetic variation and the potential inability to adapt to environmental changes (Ellstrand and Elam 1993). The ability to adapt is especially important in the face of climate change.

In addition to these threats that contributed to the near extinction of Baker's larkspur, this species is further at risk due to competition from encroaching woody vegetation, and predation (herbivory) by slugs and cattle (USFWS 2015; Forbes, pers. comm. 2019).

- *Competition* – Baker's larkspur competes with surrounding vegetation for resources such as sunlight. At the Marshall Petaluma Road population, the ecological succession of the roadside (i.e., the change of the plant community over time) has been ongoing since the backhoe removed all soil down to bedrock. Since then, detritus has collected, new soil has been deposited, and Marin County has refrained from mowing the area where Baker's larkspur grows, so the surrounding vegetation has rebounded and Baker's larkspur faces increased competition from encroaching woody shrubs.
- *Predation* – Baker's larkspur faces predation from animals that eat its leaves, stems, or seeds. Loss of individuals throughout the season due to herbivory has been identified through monthly censuses (UCBG). Herbivory by slugs has been the primary threat to the populations that have been introduced into sites near Marshall Petaluma Road, and is partially responsible for their inability to become established populations that do not require consistent human intervention. For plants that can successfully reproduce and set seed, seed predation is another event that hinders success of the introduced populations and survival of the natural population.

## **B. Degree and Immediacy of Threats**

Threats that are faced by Baker's larkspur have increased since this species was placed on the list of endangered species in 2006. This species remains in extreme danger of extinction. Without continued protection of the natural population, and management through recovery projects, the risk of this species being lost is very high and Baker's larkspur could go extinct at any time. Loss of genetic diversity due to population reductions, along with random events, are likely the greatest threats to the Marshall Petaluma Road population. Timing and outcome of

these types of threats are, by nature, unpredictable and require diligent monitoring of the natural and introduced populations.

## MANAGEMENT AND RECOVERY

### A. Impact of Existing Management Efforts

Current management efforts consist of the collection and long-term storage of seeds from the Marshall Petaluma Road population, and the introduction of cultivated plants grown from seeds collected from the natural population, into new sites nearby.

#### i. Marshall Petaluma Road Population Monitoring

Management efforts at the natural population has consisted of identifying and mapping all individuals, then monitoring them throughout the growing season to census the number of seedlings, mature plants, plants that survive to flower, plants that survive to produce seeds, and the number of seeds produced. Since 2003, the California Native Plant Society (CNPS) and UCBG has coordinated with Marin County to stop maintenance crews from mowing the roadside where Baker's larkspur grows, which has allowed the natural population to complete its reproductive cycle annually.

Because seeds from this roadside population tend to fall into the culvert and onto the road, which is not suitable habitat for Baker's larkspur, UCBG has collected all of the seeds produced by the natural population (typically from only two to three plants) since 2009. Seeds are kept frozen at UCBG to be used for future plantings and/or genetic studies.

#### ii. USFWS-led Recovery Efforts (2009-Present)

UCBG has managed concerted efforts towards establishing new populations of Baker's larkspur. Beginning in 2009, staff at USFWS secured USFWS Recovery funds to support seed collection, propagation, outplanting, and monitoring by UCBG (Symonds, pers. comm. 2019b). Additional funding through the USFWS Partners for Fish and Wildlife Program funded site preparation and the installation of fences to exclude cattle on private and Marin County property where new outplanting sites within the historic range of Baker's larkspur would be established (Symonds, pers. comm. 2019a). Plans for introduction sites and the results of the first six years of the project are described in the USFWS Recovery Plan (USFWS 2015).

USFWS signed cooperative agreements with each of the private landowners, as well as the Marin Municipal Water District to allow cultivated plants to be outplanted into seven new sites at the three locations. These agreements state that the outplanting sites will be managed cooperatively through 2030, 2030, and 2020, respectively; however, the landowners retain full ownership of the sites and may terminate their agreement, with notice, at any time. Termination of any of the agreements is highly unlikely, but the future of the sites once the agreements expire or if a property is sold is uncertain. Each landowner also has a memorandum of understanding with the Department and USFWS to permit the recovery efforts for Baker's larkspur on their land.

The introduction sites are within 6 km (3.7 mi) of the Marshall Petaluma Road population. Outplanting sites were chosen based on their apparent similarity to the natural population (i.e., moist, steep slopes with diverse plant communities near a stream). To maximize

genetic diversity, cultivated Baker's larkspur plants grown for outplanting were descendants of the natural population, and grown at the Regional Parks Botanic Garden in Berkeley, CA, or were grown from wild-collected seeds and grown by maternal line at UCBG in Berkeley, CA. Cultivated plants had relatively large root stocks that could initially support vegetative growth while they became established. Initially, these outplanted populations did very well, with many plants flowering in the first few years. Subsequently, plants ceased flowering and herbivory from slugs significantly reduced the population size (Table 2; Forbes, pers. comm. 2019a). In the winter of 2018/2019, UCBG introduced additional plants into two new sites, one at Chileno Valley Ranch, and one at Stubbs Vineyard. These two new populations did well in the first year (spring 2019), flowering and setting seed. When possible, seeds were counted and dispersed back into the site by UCBG staff to germinate next winter.

Thus far, this recovery project has not established new populations of Baker's larkspur that are reliably sustainable without human intervention. Establishing new plant populations can be very challenging and generally has a low rate of success (Fiedler 1991). However, in the case of Baker's larkspur, it is the only possible way to increase the number of populations, thereby lowering the risk of extinction. UCBG will continue trying to establish new Baker's larkspur populations, and with long-term data collection, may identify the sites that will support Baker's larkspur for the long-term.

## **B. Recommendations for Management Activities and Other Recommendations for Recovery of the Species**

The Department's recommendations for management and recovery of Baker's larkspur begin with the continued preservation of the current natural population through monitoring activities and promotion of recruitment of plants into the population. Recovery of Baker's larkspur is dependent on introductions into the historical range of the species to boost the number of individuals and occurrences. Recommendations include:

- Collaborate with Marin County to ensure there are no new impacts to the natural population from road maintenance or mowing. Mowing should only be done with permission from the scientists at CDFW, CNPS, UCBG, and/or USFWS who are familiar with the phenology (i.e., the timing of growth, flowering, and seed production) of Baker's larkspur.
- Consider planting seedlings that have been cultivated from wild-collected seeds into the natural population. However, all proposals should strongly weigh the risk of unintended introductions of pathogens or other factors that may negatively affect the current highly vulnerable population.
- Monitor all introduction populations several times throughout the growing season to collect demographic data (e.g., numbers of seedlings, adults, flowering plants, fruits, and seeds). This will identify the vulnerability of each life stage, so interventions can be chosen that will mitigate the most risk to each introduced population.
- Facilitate research that expands our knowledge of the ecology of Baker's larkspur to help identify suitable habitat (1) to narrow searches for additional natural populations and (2) that could act as introduction sites. Much remains unknown about the soil chemistry, moisture, and species interactions (e.g., pollination, competition) that define the natural population.

- Foster relationships with private landowners in Baker's larkspur's historical range and employ tools such as Safe Harbor Agreements (Fish and G. Code, § 2089.2 et seq.) to incentivize recovery and conservation of the species.
- Develop microsatellite markers (a tool for quantifying population genetics) for Baker's larkspur. This research is currently underway, but is time intensive (Koontz, pers. comm. 2019).
- Describe the genetic diversity of the natural population and the cultivated plants currently growing at the two botanical gardens. Before the devastating population reduction in 2005, genetic studies showed that Baker's larkspur, like other larkspurs, had higher diversity than expected for its small population size (Koontz 2011). The population reduction down to just nine plants was likely a major genetic bottleneck; however, without further genetic studies, the genetic diversity of the current population cannot be known. Care should be taken when collecting tissue for such genetic studies, seeking techniques that minimize impacts to the natural population. Additionally, any new introduced populations should be genetically diverse, so understanding the genetics of the cultivated stock will facilitate recovery efforts.
- Collect seeds following protocols that consider genetic diversity and rarity (e.g., RSABG 2009) and place them in long-term conservation storage at Department-approved facilities.
- Coordinate with other resource agencies and organizations to establish a formal recovery team to support recovery efforts beyond 2020 when the USFWS recovery period ends (USFWS 2015).

## VI. RECOMMENDATION TO THE COMMISSION

Pursuant to Fish and Game Code section 2077, the Department has prepared this Five-Year Status Review based upon the best scientific information available to the Department to determine if conditions that led to the original listing are still present. Based on this Five-Year Status Review, the Department submits the following recommendation to the Commission.

In completing this Five-Year Status Review for Baker's larkspur (*Delphinium bakeri*), the Department finds there is sufficient scientific information to indicate that the conditions that led to the listing Baker's larkspur as endangered are still present, and recommends no change to the status of Baker's larkspur on the list of endangered species at this time.

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### **C. Personal Communication**

FORBES, H. 2019a. Conversation with R. La Rosa during a site visit to the introduced populations [7 June 2019].

FORBES, H. 2019b. E-mail message to R. La Rosa answering several questions on seed and fruit number per plant, and clarification of outplanting activities and seed collection [28 June 2019].

KOONTZ, J. A. 2019. E-mail message to R. La Rosa discussing the current status of microsatellite marker development for Baker's larkspur [10 July 2019].

PROVOST, S. 2019. E-mail message to R. La Rosa regarding the USFWS 5-year review. S Provost included a draft of that document [Received: 20 February 2019]

SYMONDS, K. 2019a. Conversation with R. La Rosa during a site visit to the introduced populations [7 June 2019].

SYMONDS, K. 2019b. E-mail message to R. La Rosa discussing funding sources for the outplanting project [Received: 19 July 2019].

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**APPENDIX A. Soil composition of natural and introduced sites.** Each soil series is described independently, but can exist alone, or as a soil complex with another series (Soil Survey Staff 2019). Most of the soil series share a similar soil profile: loamy texture, mixed topsoil, superactive cation activity, and a haploxerolls soil group. There are three soil series that do not share this common profile: Barnabe, Cole, and Los Osos.

<b>Series</b>	<b>Site(s)<sup>1</sup></b>	<b>Population type<sup>2</sup></b>	<b>Texture</b>	<b>Topsoil</b>	<b>Cation activity</b>	<b>Soil group</b>
Barnabe <sup>3</sup>	T	N	loamy-skeletal	mixed	active	isomesic lithic haplustolls
Blucher	CM, T	N	fine-loamy	mixed	superactive	thermic fluvaquentic haploxerolls
Bonnydoon	CVR, SR	I	loamy	mixed	superactive	thermic shallow entic haploxerolls
Cole <sup>4</sup>	T	N	fine	mixed	superactive	thermic pachic argixerolls
Kneeland	CM	N	fine-loamy	mixed	superactive	isomesic ultic haploxerolls
Los Osos <sup>5</sup>	CVR	I	fine	smectitic	none	thermic typic argixerolls
McMullin	MPR, SR	N, I	loamy	mixed	superactive	mesic lithic ultic haploxerolls
Saurin	SV	I	fine-loamy	mixed	superactive	thermic typic haploxerolls
Tocaloma	MPR, SR, SV	N, I	fine-loamy	mixed	superactive	mesic typic haploxerolls

<sup>1</sup>Sites are: CM (Camp Meeker), CVR (Chileno Valley Ranch), MPR (Marshall Petaluma Road), SR (Soulajule Reservoir), SV (Stubbs Vineyard), and T (Tomaes)

<sup>2</sup>Associated Baker's larkspur population type: natural (N) or introduced (I)

<sup>3</sup>Exact site location unknown; this soil type may not be present at the actual site of the historic population

<sup>4</sup>Part of a soil complex with the Blucher series

<sup>5</sup>Part of a soil complex with the Bonnydoon series

## STAFF SUMMARY FOR DECEMBER 11-12, 2019

**23. STATUS REVIEWS FOR THREATENED AND ENDANGERED SPECIES****Today's Item****Information** ☒**Action** ☐

Receive status reviews from DFW for Baker's larkspur (*Delphinium bakeri*) and Clara Hunt's milkvetch (*Astragalus claranus*), which are listed as threatened or endangered under the California Endangered Species Act (CESA).

**Summary of Previous/Future Actions**

- |                                                                          |                                    |
|--------------------------------------------------------------------------|------------------------------------|
| • Determined listing of Clara Hunt milkvetch as threatened was warranted | Jan 7, 1991; Palm Springs          |
| • Determined listing of Baker's larkspur as endangered was warranted     | Apr 4, 2006; Monterey              |
| • <b>Today's receipt of status reviews</b>                               | <b>Dec 11-12, 2019; Sacramento</b> |
| • Determine if the action may be warranted                               | Feb 5-6, 2020; Sacramento          |

**Background DFW**

Clara Hunt's milkvetch has been listed as a threatened species since 1991, and Baker's larkspur has been listed as an endangered species since 2006. Both species are currently included in FGC's list of endangered and threatened plants found in Section 670.2.

California Fish and Game Code Section 2077 mandates that the status of species listed by FGC as threatened or endangered under CESA be reviewed every five years, if funding is available. New DFW funding was authorized in 2018 for purposes of completing reviews; the reviews scheduled for receipt at this meeting are the first two to be conducted under the authorized funding. Additional status reviews are expected at future FGC meetings.

DFW has prepared status reviews of Baker's larkspur (exhibits 1-2) and Clara Hunt's milkvetch (exhibits 3-4) to evaluate whether the conditions that led to the original listings are still present, or if conditions have changed to warrant a different listing status.

- Baker's larkspur: DFW finds there is sufficient scientific information to indicate that the conditions that led to the listing of Baker's larkspur as endangered in 2006 are still present. The scientific information available to DFW indicates that Baker's larkspur remains in serious danger of extinction in all of its range due to one or more causes. Therefore, DFW recommends no change to the status of Baker's larkspur.
- Clara Hunt's milkvetch: DFW finds there is sufficient scientific information to indicate that the conditions that led to the listing of Clara Hunt's milkvetch as threatened in 1991 have changed. The scientific information available to DFW indicates that Clara Hunt's milkvetch is in serious danger of extinction in all or a significant portion of its range due to one or more causes. Therefore, DFW recommends a change in the status of Clara Hunt's milkvetch from threatened to endangered.

The DFW report regarding Clara Hunt's milkvetch is the equivalent of a listing petition with a DFW recommendation to accept, which should be considered by FGC as described in subdivision (b) of Section 2073.5, and is subject to sections 2074 to 2079, inclusive (Fish and Game Code sections 2072.7 and 2077(e)).

**STAFF SUMMARY FOR DECEMBER 11-12, 2019**

At this meeting, DFW will provide an overview on the process set forth in Fish and Game Code Section 2077 for reviews of species listed under CESA.

**Significant Public Comments (N/A)****Recommendation**

**FGC staff:** Accept DFW's evaluation report to allow staff to provide notice that consideration of DFW's candidacy recommendation for Clara Hunt's milkvetch will be scheduled for Feb.

**DFW:** Change the status of Clara Hunt's milkvetch from threatened to endangered. No change to the status of Baker's larkspur is recommended.

**Exhibits**

1. DFW memo transmitting Baker's larkspur status review, received Nov 18, 2019
2. DFW five-year status review of Baker's larkspur, dated Dec 2019
3. DFW memo transmitting Clara Hunt's milkvetch status review, received Nov 18, 2019
4. DFW five-year status review of Clara Hunt's milkvetch, dated Sep 2019
5. DFW presentation

**Motion/Direction (N/A)**

# 5-Year Species Reviews

State of California  
Natural Resources Agency  
Department of Fish and Wildlife  
REPORT TO THE FISH AND GAME COMMISSION  
FIVE-YEAR STATUS REVIEW OF BAKER'S LARKSPUR (*Delphinium bakeri*)  
December 2019



Baker's larkspur, CDFW photo by Doreen Smith

Charlton H. Bonham, Director  
Department of Fish and Wildlife



Baker's larkspur  
Endangered

State of California  
Natural Resources Agency  
Department of Fish and Wildlife  
REPORT TO THE FISH AND GAME COMMISSION  
FIVE-YEAR STATUS REVIEW OF CLARA HUNT'S MILKVETCH (*Astragalus claranus*)  
September 2019



Clara Hunt's milkvetch photo by Jeb Bjerke

Charlton H. Bonham, Director  
Department of Fish and Wildlife



Clara Hunt's milkvetch  
Threatened



# 5-Year Species Review:

## Baker's larkspur

### *(Delphinium bakeri)*

**Fish & Game**  
**Commission Meeting**  
February 21, 2020

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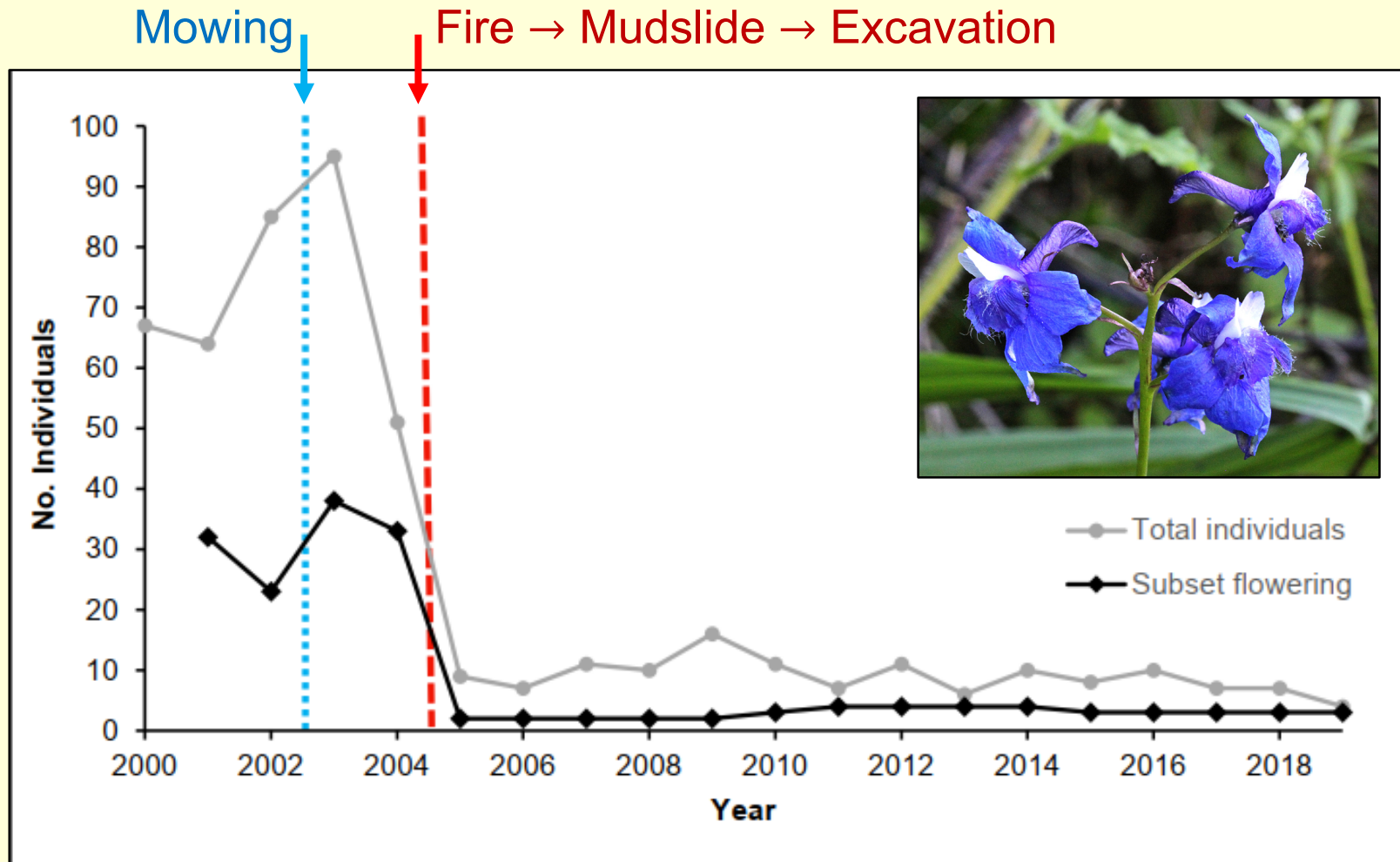
# Baker's larkspur

- Grows October-July
- *One* population remains
- Steep, crumbly slopes
- Marin (& Sonoma?) County
- Introduced 3 new pops. in 2009 (not yet established)



Photos: Holly Forbes

# Population trend

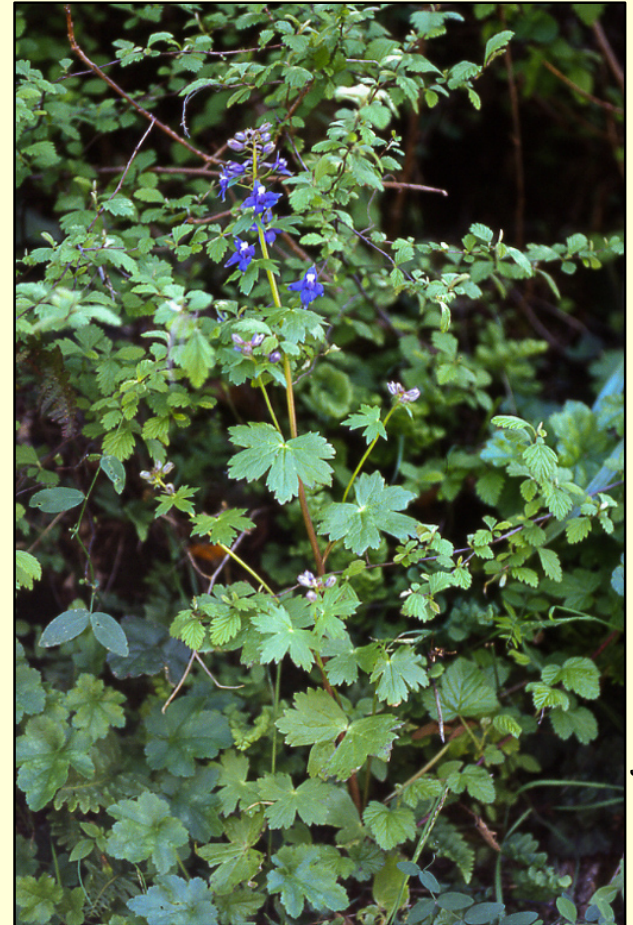


1979 - CA Rare

2006 - CA Endangered

# Threats: Then & Now

- Modification and destruction of habitat
- Human-related activities
- Random occurrences
- Competition\*
- Predation\*



Holly Forbes

\* Added in 2019

**Retain current status: Endangered**



# Questions ♦ Thank You



Vernon Smith

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## Memorandum

**Date:** November 18, 2019

**To:** Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

**From:** Charlton H. Bonham  
Director

**Subject:** **Five-Year Status Review of Clara Hunt's Milk-Vetch**

The California Department of Fish and Wildlife (Department) has prepared the attached Five-Year Status Review of Clara Hunt's Milk-Vetch for the Fish and Game Commission (Commission) pursuant to the California Endangered Species Act (CESA). Pursuant to Fish and Game Code section 2077, subdivision (a), the Department has prepared this Five-Year Status Review to evaluate whether conditions that led to the original listing of Clara Hunt's milkvetch are still present.

In completing this Five-Year Status Review, the Department finds there is sufficient scientific information to indicate that the conditions that led to the listing of Clara Hunt's milkvetch as threatened in January of 1991 have changed. The scientific information available to the Department indicates that Clara Hunt's milkvetch is in serious danger of extinction in all or a significant portion of its range due to one or more causes. Therefore, the Department recommends a change in the status of Clara Hunt's milkvetch from threatened to endangered. This Five-Year Status Review shall be considered by the Commission as a petition with a Department recommendation to accept and consider the petition (Fish and G. Code §§ 2072.7 and 2077).

If you have questions or need additional information, please contact Richard Macedo, Branch Chief, Habitat Conservation Planning Branch at (916) 653-3861, or by e-mail at [Richard.Macedo@wildlife.ca.gov](mailto:Richard.Macedo@wildlife.ca.gov).

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State of California  
Natural Resources Agency  
Department of Fish and Wildlife

REPORT TO THE FISH AND GAME COMMISSION  
FIVE-YEAR STATUS REVIEW OF CLARA HUNT'S MILKVETCH (*Astragalus claranus*)

September 2019



Clara Hunt's milkvetch photo by Jeb Bjerke

Charlton H. Bonham, Director  
Department of Fish and Wildlife



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## I. EXECUTIVE SUMMARY

Clara Hunt's milkvetch (*Astragalus clarianus* Jeps.) is currently listed as threatened under the California Endangered Species Act (CESA). Pursuant to Fish and Game Code section 2077, subdivision (a), the California Department of Fish and Wildlife (Department) has prepared this Five-Year Status Review to evaluate whether conditions that led to the original listing of Clara Hunt's milkvetch are still present. This review is based on the best scientific information currently available to the Department regarding each of the components listed under section 2072.3 of the Fish and Game Code, and Section 670.1, subdivisions (d) and (i)(1)(A), of Title 14 of the California Code of Regulations. In addition, this document reviews identification of habitat that may be essential to the continued existence of the species, and the Department's recommendations for management activities and other recommendations for recovery of the species. (Fish & G. Code, § 2077, subd. (a).)

Clara Hunt's milkvetch is a short annual herb of the legume family that has white petals with bright purple tips. There are six small populations of Clara Hunt's milkvetch, all located in Napa and Sonoma Counties within ten miles of St. Helena. The species is generally found in oak woodlands, in sparsely-vegetated openings without significant shrub or tree overstory, and appears to be adapted to poor quality, acidic soils that may limit competition from other plants.

Despite a lack of consistent monitoring and limitations in available data, sufficient information is available to suggest that of the six known populations of Clara Hunt's milkvetch, one population is declining and another population may be extirpated or only exist in the soil seed bank. The August 1989 "Report to the Fish and Game Commission on the Status of Clara Hunt's Milkvetch (*Astragalus clarianus*)" identified several factors affecting the ability of Clara Hunt's milkvetch to survive and reproduce that the Commission considered in listing Clara Hunt's milkvetch under CESA. Factors identified in the 1989 report were: present or threatened modification or destruction of habitat, predation, and stochastic (chance) extinction events due to small population size. These factors continue to threaten Clara Hunt's milkvetch with extinction. In addition to the factors identified in 1989, the Department has identified invasive plants, vegetation community succession, climate change, and possibly herbivory as additional factors affecting the ability of Clara Hunt's milkvetch to survive and reproduce. The scientific information available to the Department indicates that Clara Hunt's milkvetch is in serious danger of extinction in all or a significant portion of its range due to one or more causes.

In completing this Five-Year Status Review for Clara Hunt's milkvetch, the Department finds there is sufficient scientific information to indicate that the conditions that led to the listing of Clara Hunt's milkvetch as threatened have changed. Therefore, the Department recommends a change in the status of Clara Hunt's milkvetch from threatened to endangered. This Five-Year Status Review shall be considered by the Commission as a petition with a Department recommendation to accept and consider the petition (Fish and G. Code §§ 2072.7 and 2077).

## **II. INTRODUCTION**

### **A. Five-Year Status Review**

This Five-Year Status Review addresses Clara Hunt's milkvetch (*Astragalus claranus* Jeps.), which is designated as a threatened species under the California Endangered Species Act (CESA) (Fish and G. Code § 2050 et seq.; Cal. Code Regs. tit. 14 § 670.2, subd. (b)(6)(A)). Upon a specific appropriation of funds by the Legislature, the California Department of Fish and Wildlife (Department) shall, or if other funding is available, in the absence of a specific appropriation, may, review species listed as endangered or threatened under CESA every five years to determine if the conditions that led to the original listing are still present (Fish and G. Code § 2077, subd. (a)). Clara Hunt's milkvetch is also listed as endangered under the federal Endangered Species Act. Pursuant to Fish and Game Code section 2077, subdivision (b), this Five-Year Status Review was conducted in conjunction with the 5-year Review for Clara Hunt's milkvetch completed by the U.S. Fish and Wildlife Service on May 2, 2019. The U.S. Fish and Wildlife Service concluded that Clara Hunt's milkvetch remains an endangered species under the federal Endangered Species Act (USFWS 2009, 2019).

Using the best scientific information available to the Department, this Five-Year Status Review includes information on the following components pursuant to section 2072.3 and section 2077, subdivision (a), of the Fish and Game Code and section 670.1, subdivision (d), of Title 14 of the California Code of Regulations: species' population trend(s), range, distribution (including a detailed distribution map), abundance, life history, factors affecting the species' ability to survive and reproduce, the degree and immediacy of threats, the impact of existing management efforts, the availability and sources of information, identified habitat essential for the continued existence of the species, and the Department's recommendations for future management activities and other recovery measures to conserve, protect, and enhance the species.

### **B. Listing and Status Review History**

On July 1, 1988, Mr. Joe Callizo of the California Native Plant Society submitted a petition to the California Fish and Game Commission (Commission) requesting that Clara Hunt's milkvetch be listed as an endangered species under CESA. On August 26, 1988, the Commission accepted a Department recommendation to accept the petition and designated Clara Hunt's milkvetch a candidate species. In August of 1989 the Department completed a report to the Commission on the status of Clara Hunt's milkvetch which included a recommendation that the Commission find that the petitioned action to list Clara Hunt's milkvetch as endangered was warranted. After considering the petition, the Department's recommendation and report, and public comments, the Commission decided at a public meeting to designate Clara Hunt's milkvetch as a threatened species under CESA. In January of 1991, Clara Hunt's milkvetch was designated a threatened species under CESA. Clara Hunt's milkvetch was listed as endangered under the federal Endangered Species Act on October 22, 1997.

This Five-Year Status Review was prepared by Jeb McKay Bjerke in the Department's Habitat Conservation Planning Branch, Native Plant Program.

### III. BIOLOGY

#### A. Taxonomic and Physical Description

Clara Hunt's milkvetch is a slender annual herb of the legume family (Fabaceae), with mature plants growing to heights of approximately 7 to 23 centimeters (3 to 9 inches) (Ruygt 1994). Stems of Clara Hunt's milkvetch branch from near the base of the plant and curve or angle upwards, and plants are sparsely covered with small appressed hairs (Jepson 1925, Wojciechowski and Spellenberg 2012). Like most other species of the genus *Astragalus*, the leaves of Clara Hunt's milkvetch are composed of smaller segments called leaflets that are arranged in pairs with one terminal leaflet centered at the end of the leaf. Clara Hunt's milkvetch leaves have two to four pairs of leaflets that have deeply notched tips (cover photo). The root zone of Clara Hunt's milkvetch is approximately 10 centimeters (4 inches) deep, and swelling observed along the primary roots suggests that the species may have a symbiotic relationship with a fungus that is referred to as a mycorrhizal association (Ruygt 1994).

Like most plants in the legume family, the flowers of Clara Hunt's milkvetch are bisexual, and are pea-like, which means that they have one large upper petal called a banner, two smaller side petals called wings, and two fused lower petals called a keel (Figure 1). The petals of Clara Hunt's milkvetch are more or less white, and the banner and keel petals have bright purple tips. Clara Hunt's milkvetch flowers are arranged into groups called inflorescences, and vegetative parts of the inflorescences are covered in short black hairs.

A Clara Hunt's milkvetch flower can develop into a 17 to 25 millimeter ( $\frac{2}{3}$  to 1 inch) long fruit called a legume that can split into two halves that may remain joined at the base. Clara Hunt's milkvetch fruits are two-chambered, crescent-shaped, tapered at the ends, and sparsely covered with small appressed hairs. Clara Hunt's milkvetch fruits have a unique stalk-like base that is attached to a peg-like, 1.5 to 2.5 mm ( $\sim 1/16$  inch) extension of the flower that is most evident after fruits have dropped from the plant. Clara Hunt's milkvetch fruits tend to split open only after becoming wet (Liston 1990a). Fruits generally have between six and twelve seeds (Barneby 1965, Ruygt 1994). Clara Hunt's milkvetch seeds are about 2.0 to 3.3 mm ( $\sim 1/8$  inch) long and do not have any specialized dispersal structures (Macdonald 2016). Data collected by Ruygt (1994) suggests that Clara Hunt's milkvetch may produce an average of 29 viable seeds per plant.

Clara Hunt's milkvetch has a chromosome count of  $2n=22$  (Liston 1990b).

#### B. Life History and Ecology

Like many plants in the legume family, Clara Hunt's milkvetch exhibits physical seed dormancy, which means there is a physical barrier (seed coat) that prevents moisture from entering seeds (Ruygt 1994, Baskin and Baskin 1998). This seed coat prevents seed germination, even if other environmental factors such as moisture and temperature are favorable, and allows Clara Hunt's milkvetch to form a persistent seed bank. Clara Hunt's milkvetch seeds are reported to require scarification to initiate germination in the lab, such as by nicking the seed coat with a razor blade (Ruygt 1994, CDFW 2010, Rancho Santa Ana Botanic Garden 2018). Rainfall, animal activity, or other natural forces are likely needed to agitate soil particles and naturally break the seed coat of Clara Hunt's milkvetch seeds.

Reports indicate that Clara Hunt's milkvetch seeds may germinate as early as October and as late as March, depending on rainfall patterns (Hunter 1989, Ruygt 1994). After germination,

(a) Group of Clara Hunt's milkvetch flowers



(b) Photo showing Clara Hunt's milkvetch with competing vegetation, including immature Mediterranean grasses.



Figure 1. Photographs of Clara Hunt's milkvetch (*Astragalus claranus*)

California Department of Fish and Wildlife  
Five-Year Status Review of Clara Hunt's Milkvetch (*Astragalus claranus*)

seedlings have been observed growing at a slow rate from November until late February or early March, followed by a period of accelerated growth and development until mid- or late-April (Ruygt 1994). Ruygt also observed that individuals that germinated in April and May failed to mature.

Clara Hunt's milkvetch flowers from March to early May. Flowering within individual populations has been observed to be somewhat synchronous; however, different populations may begin flowering and reach peak flowering at different times in the same year (Ruygt 1994).

Clara Hunt's milkvetch is likely insect pollinated but plants are also capable of self-fertilization (Ruygt 1994). Bee pollination is a common mode of pollination in the *Astragalus* genus and bees have been observed visiting Clara Hunt's milkvetch plants (Green and Bohart 1975; Karron 1987; Sugden 1985, Liston 1992). Ruygt (1994) did not observe any pollinators during multiple site visits to populations in 1993 and 1994 and suggested that Clara Hunt's milkvetch may be visited by pollinators that are active at night or twilight.

Based on data collected from the Lake Hennessey and Lewelling Lane populations in 1993, Ruygt estimated that 35 to 50 percent of Clara Hunt's milkvetch flowers developed into mature fruit. In one experiment, Ruygt also found that fruit production was 25 percent lower in plants that pollinators were prevented from visiting, indicating that while pollinators may increase fruit production, they are not a requirement. Fruits have been observed on plants as early as April 16. Fruits tend to split apart and release seeds only after becoming wet (Liston 1990a). With no obvious dispersal agents or mechanisms, the dispersal ability of Clara Hunt's milkvetch seeds appears to be low, which likely limits the potential for colonization of unoccupied habitat.

## **IV. DISTRIBUTION AND ABUNDANCE**

### **A. Range and Distribution**

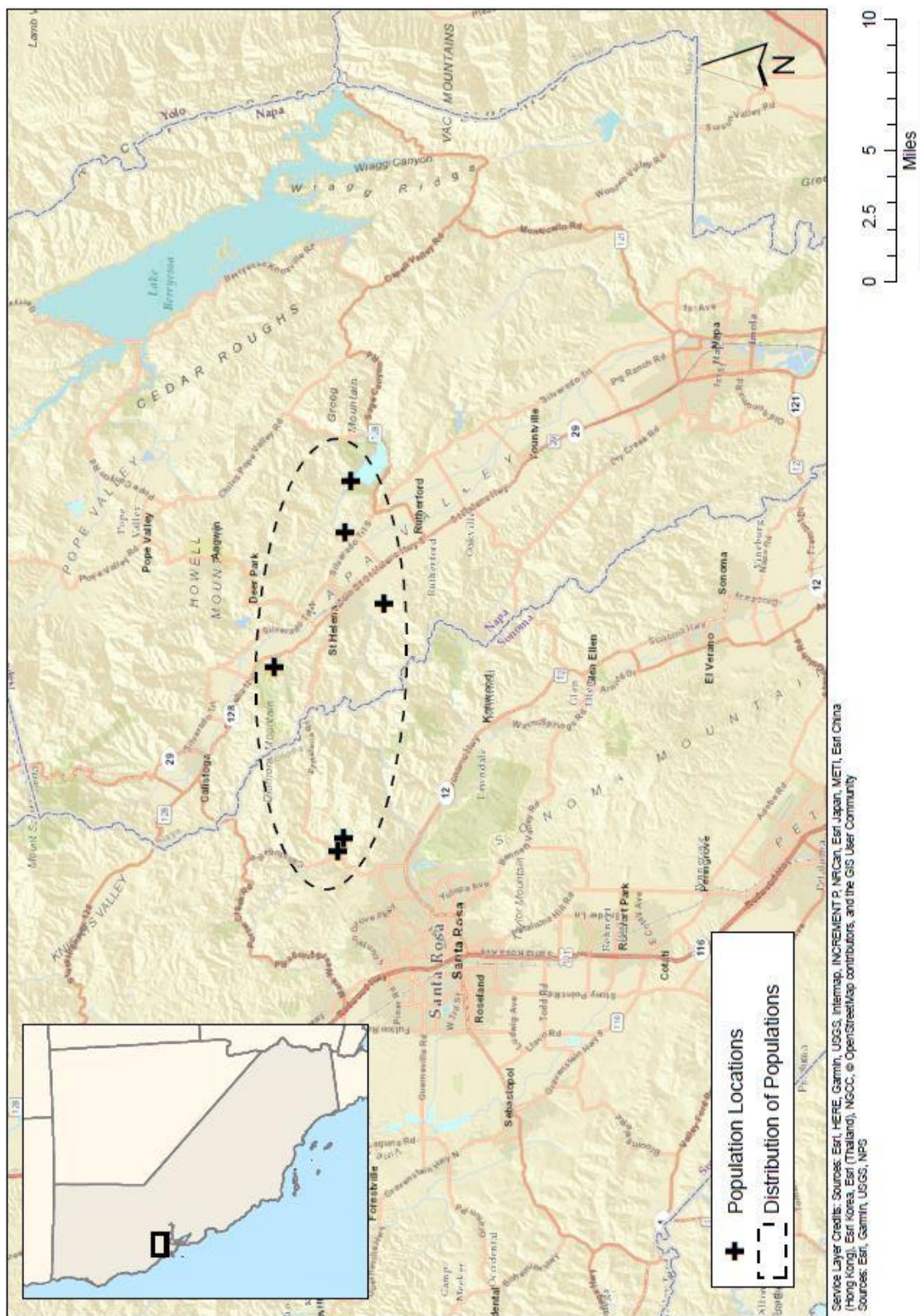
Range is the general geographical area in which an organism occurs. For purposes of CESA and this Five-Year Status Review, the range is the species' California range (*Cal. Forestry Assn. v. Cal. Fish and Game Com.* (2007) 156 Cal.App.4th 1535, 1551). Distribution describes the actual sites where individuals and populations of the species occur within the species' range.

Clara Hunt's milkvetch only occurs in California, in the northern Coast Range of California. All known populations of Clara Hunt's milkvetch are near St. Helena in Napa County, and northeast of the city of Santa Rosa in Sonoma County, at elevations between approximately 95 and 360 meters (320 and 1175 feet) above sea level (Figure 2) (CNDDDB 2019). The exact location that the type specimen of Clara Hunt's milkvetch was collected from is unknown. The type specimen was collected by Ms. Clara Adele Hunt and received by Willis Linn Jepson on April 8, 1909. The collection location was only described as "St. Helena". Another collection by Ms. Hunt from "Near St. Helena" was made in 1922. St. Helena has expanded since 1922, and therefore the habitat for the type locality may have been destroyed. Populations of Clara Hunt's milkvetch in Napa County are in the Napa River watershed that drains to San Pablo Bay. Populations of Clara Hunt's milkvetch in Sonoma County are in the Mark West Creek watershed that flows to the Russian River and the Pacific Ocean.

The distribution of Clara Hunt's milkvetch is documented within the California Natural Diversity Database (CNDDDB). Plant taxa, animal taxa, and natural communities that are documented



Figure 2. Regional Vicinity of Clara Hunt's milkvetch (*Astragalus claranus*) Populations



within the CNDDDB are of conservation concern within California and are referred to as “elements.” An “element occurrence” (occurrence) is a location record for a site which contains an individual, population, nest site, den, or stand of a special status element. Populations, individuals, or colonies that are located within 0.40 kilometer (1/4 mile) of each other generally constitute a single occurrence, sometimes with multiple “parts” (Bittman 2001). The CNDDDB occurrence records for Clara Hunt’s milkvetch were updated in May 2019, in conjunction with the preparation of this Five-Year Status Review. There are currently six occurrences of Clara Hunt’s milkvetch that are documented in the CNDDDB. To make it easier to refer to these different occurrences in this Five-Year Status Review, each occurrence has been named as a separate “population” in Table 1, below. A detailed distribution map for Clara Hunt’s milkvetch is included in this Five-Year Status Review as Figure 3. All documented Clara Hunt’s milkvetch populations are located within an approximately 10-mile radius of St. Helena. The locations of known Clara Hunt’s milkvetch populations are described as follows:

Alpine School: The Alpine School Population is one of two populations of Clara Hunt’s milkvetch in Sonoma County. The Alpine School Population is approximately 15 kilometers (9.5 miles) west of St. Helena and approximately 10 kilometers (6 miles) northeast of downtown Santa Rosa. The Alpine School Population is located on private property and is southeast of the intersection of St. Helena and Calistoga Roads. The Alpine School Population has two separate parts in the CNDDDB, based on surveys conducted intermittently since the late 1980s (Figure 4a). Historical collections suggest that Clara Hunt’s milkvetch was also present across from the historic Alpine School, on the north side of St. Helena Road, but this area now has vineyards and a horse stable (McCarten 1985). The Alpine School Population is approximately 0.6 kilometer (0.4 mile) west of the Saddle/Hayfork Population, which is described in more detail below. The landowner of the property containing the Alpine School Population also owns a portion of the Saddle/Hayfork Population.

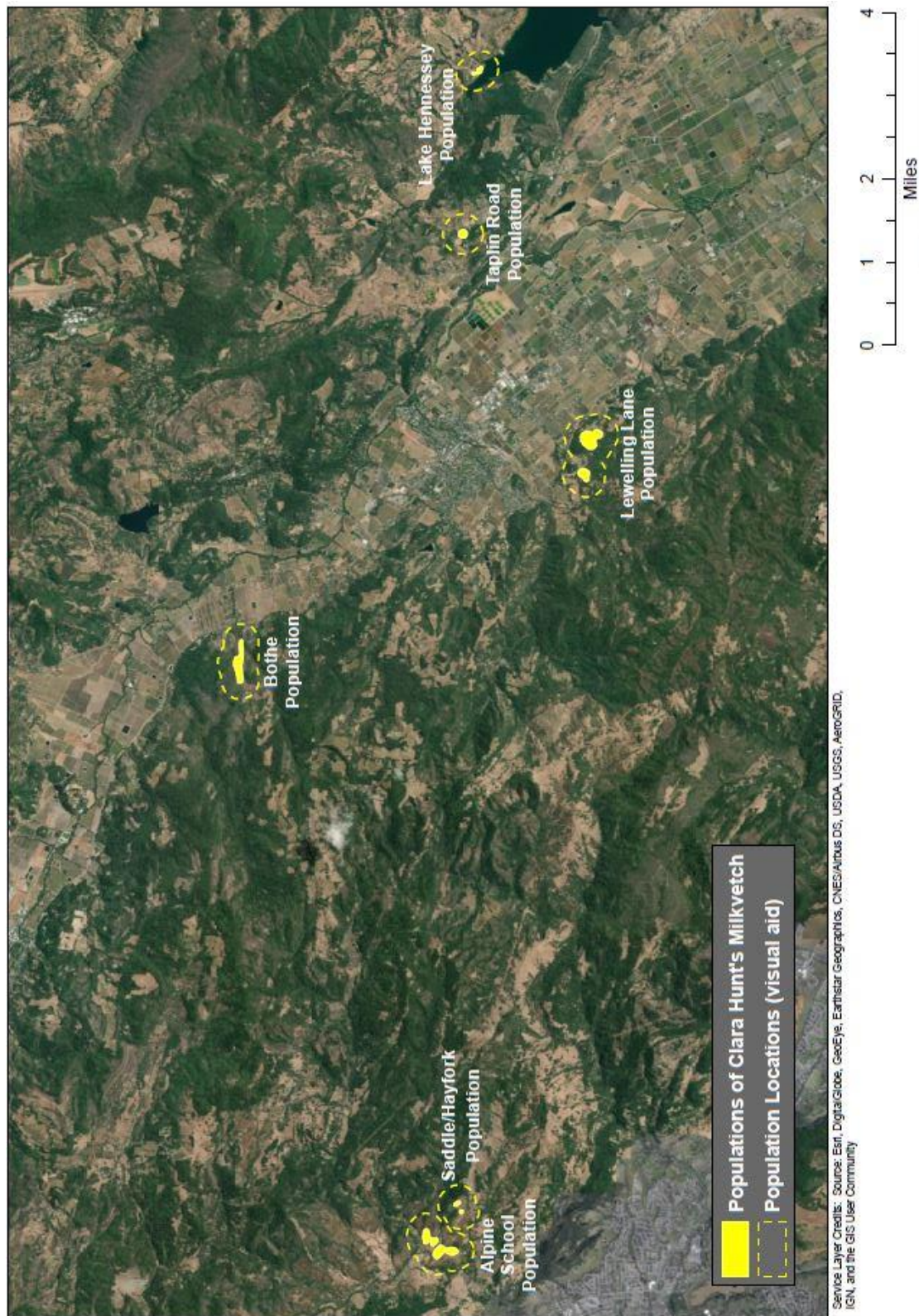
Bothe: The Bothe Population is one of four populations of Clara Hunt’s milkvetch in Napa County. The Bothe Population is located within Bothe-Napa Valley State Park, approximately five kilometers (3.1 miles) northwest of St. Helena. The Bothe Population is mapped as one long population in the CNDDDB that begins approximately 190 meters (620 feet) west of the Historic Bale Grist Mill building and extends approximately 0.8 kilometer (0.5 mile) to the west.

Lake Hennessey: The Lake Hennessey Population is one of four populations of Clara Hunt’s milkvetch in Napa County. The Lake Hennessey Population is located north of Lake Hennessey, approximately seven kilometers (4.4 miles) east of St. Helena. The Lake Hennessey Population has two separate parts in the CNDDDB, both adjacent to Conn Valley Road. The northern part of the Lake Hennessey Population is on the north side of Conn Valley Road on private property. The southern part of the Lake Hennessey Population is on the south side of Conn Valley Road, between the road and Lake Hennessey. The southern part is on land associated with the Lake Hennessey reservoir and is owned by the City of Napa (Figure 4b).

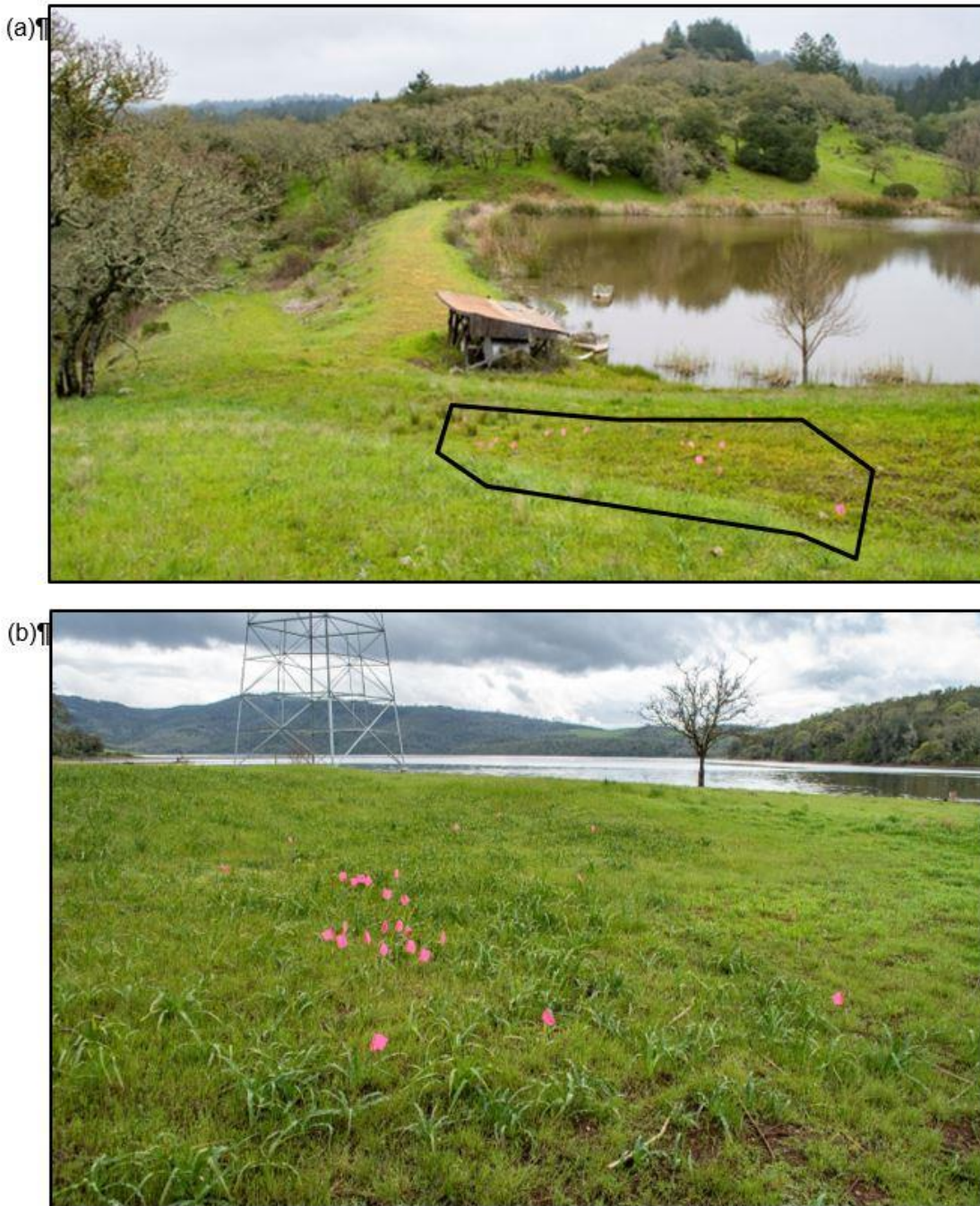
Lewelling Lane: The Lewelling Lane Population is one of four populations of Clara Hunt’s milkvetch in Napa County. The Lewelling Lane Population is located on the west side of the Napa Valley, approximately two kilometers (1.4 miles) south of St. Helena, and southwest of the western terminus of Lewelling Lane. The Lewelling Lane Population has two separate parts. The western part of the population is mapped on three private parcels. The eastern part of the population is mapped on five private parcels.



Figure 3 Figure 3. Clara Hunt's milkvetch (*Astragalus claranus*) Distribution Map







(a) Alpine School Population of Clara Hunt's milkvetch on April 8, 2019, with pink pin flags marking locations of plants. Location of plants is outlined and view is approximately to the northeast; (b) Lake Hennessey Population of Clara Hunt's milkvetch on March 27, 2019, with pink pin flags marking locations of 27 plants; view is approximately to the southeast.

Figure 4. Photographs of Clara Hunt's milkvetch (*Astragalus claranus*) habitat

California Department of Fish and Wildlife  
 Five-Year Status Review of Clara Hunt's Milkvetch (*Astragalus claranus*)

Table 1. Clara Hunt's Milkvetch Populations

<i>Population Name</i>	<i>Occurrence Number</i>	<i>County</i>	<i>Land Ownership</i>
Alpine School	3	Sonoma	Private with conservation easement
Bothe	7	Napa	State Park
Lake Hennessey	11	Napa	City of Napa, Private
Lewelling Lane	12	Napa	Private
Saddle/Hayfork	14	Sonoma	Private with conservation easement, Sonoma County
Taplin Road	13	Napa	Private

Saddle/Hayfork: The Saddle/Hayfork Population is one of two populations of Clara Hunt's milkvetch in Sonoma County. The Saddle/Hayfork Population is approximately 15 kilometers (9.5 miles) west of St. Helena and approximately ten kilometers (6 miles) northeast of downtown Santa Rosa. As currently mapped in the CNDDDB the Saddle/Hayfork Population has two separate parts, but this mapping is based on observations from only 2019, and Clara Hunt's milkvetch plants have also been observed elsewhere in the immediate vicinity of the population (Evans pers. comm. 2019). The Saddle/Hayfork Population occurs on private property that is protected with a conservation easement, and on the adjacent Saddle Mountain Open Space Preserve owned by the Sonoma County Agricultural Preservation and Open Space District. The Saddle/Hayfork Population is approximately 0.6 kilometer (0.4 mile) east of the Alpine School Population, which is described in more detail above. The landowner of the property containing the Alpine School Population also owns a portion of the Saddle/Hayfork Population.

Taplin Road: The Taplin Road Population is one of four populations of Clara Hunt's milkvetch in Napa County. The population is located approximately four kilometers (2.5 miles) east of St. Helena, on the north side of Taplin Road. The Taplin Road Population occurs on one private parcel.

If undocumented populations of Clara Hunt's milkvetch existed in the past, urban development, agricultural development and/or the filling of Lake Hennessey may have eliminated them. There may also be additional, undocumented populations of Clara Hunt's milkvetch.

## **B. Population Trend and Abundance**

Available data on the population trends and abundance of Clara Hunt's milkvetch populations have been compiled in Appendix A (Ruygt 1994, USFWS 2009, 2019, CNDDDB 2019). Clara Hunt's milkvetch populations were monitored and visited regularly in the 1980s and 1990s. Beginning in 1999, visits to Clara Hunt's milkvetch populations occurred less frequently, and regular monitoring appears to have ceased. Because populations have only been visited intermittently since the early 1980s, and with inconsistent levels of comprehensiveness and survey effort, the direct comparison of population numbers between years and sites is limited, and Clara Hunt's milkvetch population trends are difficult to discern. Furthermore, the Department recognizes that populations of annual plants can have high annual variability

depending upon environmental conditions, making it difficult to detect population trends. Annual plant numbers can fluctuate wildly from year to year, depending on the seed production in previous years, germination of seedlings, and environmental conditions (e.g., timing and amount of rainfall) (Fischer and Matthies 1998; Harrison et al. 1999).

Since the beginning of monitoring efforts in the early 1980s, individual populations of at least one thousand Clara Hunt's milkvetch plants have only been observed in seven years: 1992, 1993, 1994, 1996, 1998, 2009, and 2011. It is not clear why Clara Hunt's milkvetch germination and survival was relatively high in these years. Populations of at least 1,000 Clara Hunt's milkvetch plants have only been observed at the Alpine School and Lewelling Lane populations, and these two populations are therefore considered to be the largest populations of Clara Hunt's milkvetch.

Despite a lack of consistent monitoring and limitations in available data, sufficient information is available to suggest that one population of Clara Hunt's milkvetch is declining, and another population may be extirpated or only exist in the soil seed bank. The population trends and abundance of each of the known Clara Hunt's milkvetch populations are discussed in more detail below.

Alpine School. The highest number of plants observed at this population was estimated at 4,500 in 1992, and the lowest number of plants observed at this population was zero in 2003 and 2008. Over 1,000 plants were observed at this population in six years (1992, 1993, 1996, 1998, 2009, and 2011), making this one of the two largest known populations of Clara Hunt's milkvetch. It does not appear that this population was surveyed for Clara Hunt's milkvetch between 2012 and 2018. Department staff observed approximately 50 plants at this population in 2019 (see Figure 4a) (CNDDDB 2019). The trend of this population is unknown.

Bothe. The highest number of plants observed at this population was 200 in 1992, and the lowest number of plants observed at this population was zero in 2004, 2012, 2014, 2015, and 2019. The most recent observation of Clara Hunt's milkvetch at Bothe State Park was eight plants in 2009, and no plants have been found at the Bothe Population since 2009, despite surveys in 2012, 2014, 2015, and 2019 (CNDDDB 2019). Although this population has only been visited intermittently, the available information suggests that this population may be extirpated or may only exist in the soil seed bank.

Lake Hennessey. The highest number of plants reported at this population was approximately 700 in the early 1980s, and the lowest number of plants observed at this population was one plant in 2011. Populations sizes of over 100 plants were observed several times between 1984 and 1994. The Lake Hennessey Population appears to have only been surveyed six times between 1994 and 2014, and never was the population observed to be over 100, as was observed between 1984 and 1994. Twenty-six Clara Hunt's milkvetch plants were observed at this population in 2015, 19 were observed in 2016, 22 were observed in 2017, 60 to 150 were observed in 2018, and 27 were observed at this population in 2019. Although this population has not been monitored regularly, the available information suggests that the Lake Hennessey Population may be declining.

Lewelling Lane. This population is one of the largest two known populations of Clara Hunt's milkvetch. In 1994, 6,192 plants were reported at this population, which is the highest number of plants ever reported for a population of Clara Hunt's milkvetch. The lowest number of plants observed at this population was 15 in 1991, which is the first year of CNDDDB data recorded for this population. This population does not appear to have been surveyed since 2009, so the trend of this population is unknown, but the population is presumed to still be present.

Saddle/Hayfork. This population was first discovered in 2008. The highest number of plants reported at this population was 300 in 2009 and the lowest number of plants observed at this population was 0 in 2014. Monitoring efforts at this population may have been focused on the portion of the population that is on the Saddle Mountain Open Space Preserve. Forty Clara Hunt's milkvetch plants were observed at the Saddle/Hayfork Population in 2019 (Figure 5). The trend of this population is unknown.

Taplin Road. The Department only has data on this population from four years: 1997, 1998, 2009, and 2016. Sixty Clara Hunt's milkvetch plants were present in 1997, 290 were present in 1998, 60 were present in 2009, and 10 were present in 2016. The trend of this population is unknown.

The observed sharp rises and falls in Clara Hunt's milkvetch population sizes suggest that population size is highly dependent on climatic conditions, and a significant seed bank is present in the soil. Surveys also indicate that population levels of different Clara Hunt's milkvetch populations can vary independently from one another in the same year. For example, the Alpine School Population was ten times larger than the Lewelling Lane Population in 1992, and two years later the Lewelling Lane Population was six times larger than the Alpine School Population. Population size in a given year is therefore likely a function of both climate and prior years' contribution to the seed bank.

In a study of several species of *Astragalus*, Liston (1990a) investigated the genetic identity of three Clara Hunt's milkvetch populations (Alpine School, Bothe, and Lake Hennessey) and found them to share a high genetic identity value (mean  $I = .981$ ), supporting the recognition of Clara Hunt's milkvetch as a distinct species. Liston also found that the Lake Hennessey and Alpine School populations have unique alleles for the species, and this genetic variation among populations is therefore important to conserve.

## **V. HABITAT NECESSARY FOR SPECIES SURVIVAL**

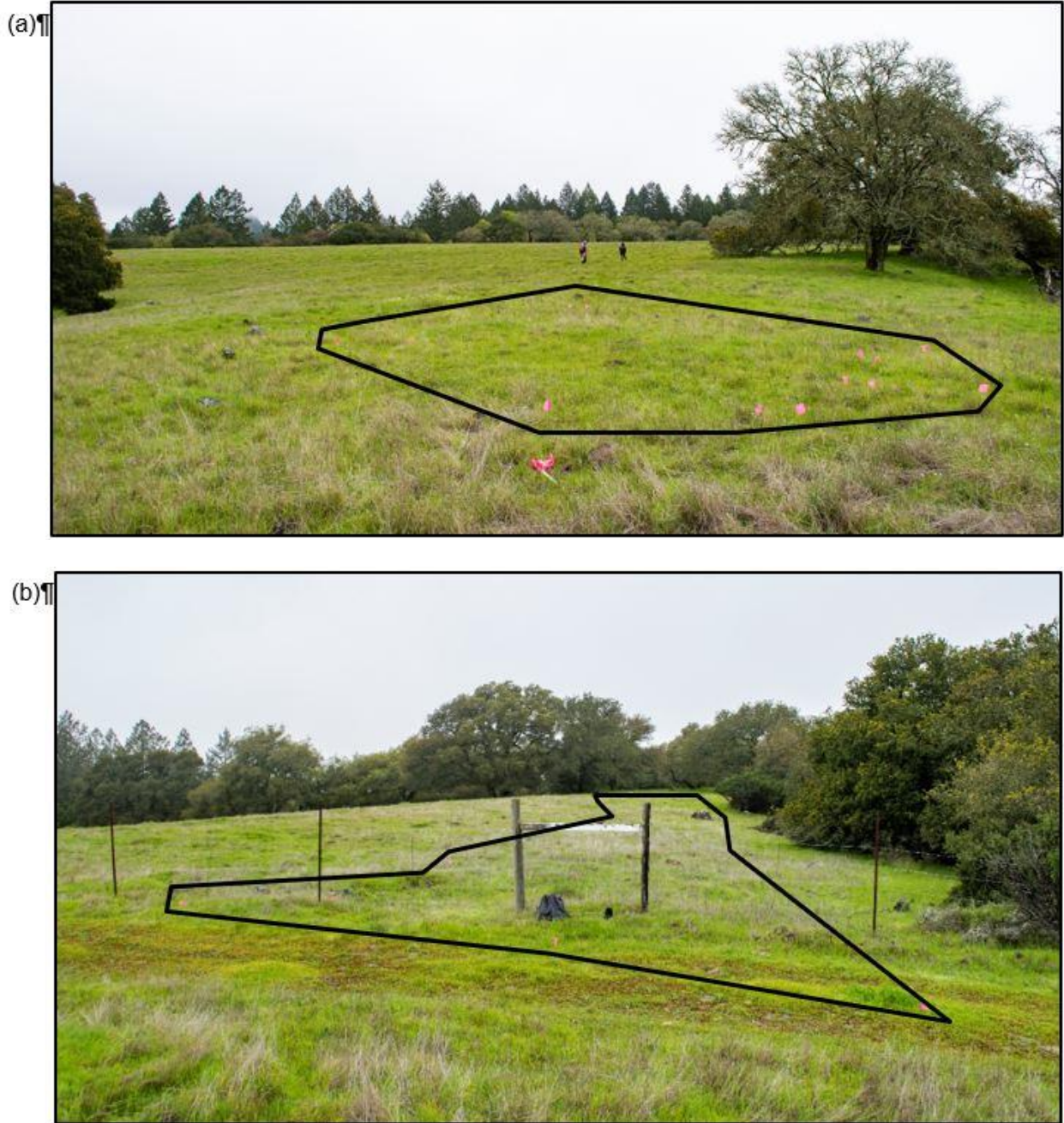
Clara Hunt's milkvetch is generally found in oak woodlands, in sparsely vegetated openings without significant shrub or tree overstory. Clara Hunt's milkvetch appears to be adapted to poor quality, acidic soil conditions that retard the growth of other plant species. This tolerance of poor soil conditions allows Clara Hunt's milkvetch to occur in areas with reduced competition from plant species that thrive in richer soil.

### **A. Vegetation Communities**

The Department uses A Manual of California Vegetation, Second Edition (Sawyer et al. 2009) to classify natural communities within California. The vegetation of Sonoma County has been mapped consistent with A Manual of California Vegetation, Second Edition (Klein et al. 2015a and 2015b), and the vegetation of Napa County has been mapped consistent with the older first edition of A Manual of California Vegetation (Sawyer and Keeler-Wolf 1995, Thorne et al. 2004). Based on these vegetation maps, Clara Hunt's milkvetch appears to be commonly associated with California annual grasslands, and with various vegetation types that have oak trees as dominant species (Table 2).

Clara Hunt's milkvetch is generally found in openings, without significant shrub or tree overstory, however the native shrub and tree species found near Clara Hunt's milkvetch populations include common manzanita (*Arctostaphylos manzanita*), buckbrush (*Ceanothus cuneatus* var.





(a) Western part of the Saddle/Hayfork Population of Clara Hunt's milkvetch on April 8, 2019. View is approximately to the northeast; population is outlined. (b) Eastern part of the Saddle/Hayfork Population of Clara Hunt's milkvetch on April 8, 2019. View is approximately to the northwest; population is outlined

Figure 5. Photographs of Clara Hunt's milkvetch (*Astragalus claranus*) habitat at the Saddle/Hayfork Population

Table 2. Vegetation Types Mapped at Clara Hunt's Milkvetch Populations

Vegetation Type/Population	<i>Alpine School</i>	<i>Bothe</i>	<i>Lake Hennessey</i>	<i>Lewelling Lane</i>	<i>Saddle/Hayfork</i>	<i>Taplin Road</i>
<i>Arctostaphylos</i> ( <i>canascens</i> , <i>manzanita</i> , <i>stanfordiana</i> ); <i>A. glandulosa</i> Mapping Unit	X					
California Annual and Perennial Grassland Macrogroup <u>or</u> California Annual Grasslands Alliance	X		X	X	X	X
Coast Live Oak ( <i>Quercus agrifolia</i> ) Alliance					X	X
Coast Live Oak - Blue Oak ( <i>Quercus douglasii</i> ) - (Foothill Pine ( <i>Pinus sabiniana</i> )) (no formal description (NFD)) Association			X			X
Foothill Pine Alliance				X		
Foothill Pine / Mesic Non-serpentine Chaparral NFD Association				X		
Mixed Oak Alliance ( <i>Quercus agrifolia</i> , <i>Q. douglasii</i> , <i>Q. garryana</i> , <i>Q. kelloggii</i> , <i>Q. lobata</i> , <i>Q. wislizenii</i> )	X	X		X	X	X
Oregon White Oak ( <i>Quercus garryana</i> ) Alliance	X	X				
Serpentine Grasslands NFD Super Alliance				X		
Valley Oak ( <i>Quercus lobata</i> ) Alliance	X					

*cuneatus*), birch-leaf mountain-mahogany (*Cercocarpus betuloides* var. *betuloides*), toyon (*Heteromeles arbutifolia*), ponderosa pine (*Pinus ponderosa*), foothill pine (*Pinus sabiniana*), Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*), coast live oak (*Quercus agrifolia* var. *agrifolia*), blue oak (*Quercus douglasii*), leather oak (*Quercus durata* var. *durata*), Oregon oak (*Quercus garryana* var. *garryana*), and California black oak (*Quercus kelloggii*).

Ruygt (1994) observed the following six herbaceous plants in the immediate vicinity of Clara Hunt's milkvetch at all four populations that he studied (Alpine School, Bothe, Lake Hennessey, and Lewelling Lane):

- common soaproot (*Chlorogalum pomeridianum*),
- blue dicks (*Dichelostemma capitatum* ssp. *capitatum*),
- fescue (*Festuca* sp.),
- true babystars (*Leptosiphon bicolor*),
- slender cottonweed (*Micropus californicus* var. *californicus*), and
- California plantain (*Plantago erecta*).

The following plant species were also associated with Clara Hunt's milkvetch at three of the four populations that Ruygt (1994) studied:

- Chilean trefoil (*Acmispon wrangelianus*),
- soft chess (*Bromus hordeaceus*),
- sticky mouse-ear chickweed (*Cerastium glomeratum*),
- California goldfields (*Lasthenia californica* ssp. *californica*),
- purple needle grass (*Stipa pulchra*),
- one-sided blue grass (*Poa secunda* ssp. *secunda*),
- purple sanicle (*Sanicula bipinnatifida*), and
- dwarf sack clover (*Trifolium depauperatum* var. *depauperatum*).

Sparse vegetation cover is a common trait of Clara Hunt's milkvetch habitat and may be a necessary condition for the species from the standpoint of competition for light and nutrients (Ruygt 1994). Ruygt also observed that the height of associated species ranged from 6 to 25 centimeters (2 to 10 inches), and did not overshadow Clara Hunt's milkvetch plants, even during late successional development.

## **B. Geology and Soils**

Clara Hunt's milkvetch is found in the northern Coast Range of California in a region of the northern Coast Range that is dominated by north-northwest trending valleys and ridges of mountains that are mostly less than 800 meters (2600 feet) in elevation.

The geology of the northern Coast Range is broadly composed of two components: (1) older rocks that are generally highly mixed and deformed and have traveled great distances from the locations where they were formed; and (2) younger, less deformed rocks that are roughly in the same locations where they were formed (Graymer et al. 2007). The older rocks in Napa and eastern Sonoma Counties originated from ancient ocean crusts and deposits, and include: (1) the Great Valley sequence of sandstone, conglomerate and shale; (2) the Coast Range ophiolite of serpentinite, gabbro, and other rocks which rare plants are often associated with; and (3) the Franciscan Complex, which is a confusing mix of various kinds of thoroughly folded and sheared rocks (Bailey et al. 1964, Alt and Hyndman 1975, Graymer et al. 2007). The younger rocks in Napa and eastern Sonoma Counties include volcanic rocks from the eruption of the Sonoma Volcanic field, and even younger superficial deposits of sandstones and mudstones that often have many fossils.

All known populations of Clara Hunt's milkvetch are within or in close proximity to the northern part of the Sonoma Volcanic field. The rocks in the northern part of the Sonoma Volcanic field



surround and extend to the south of the Mount Saint Helena caldera, and are the youngest rocks of the Sonoma Volcanic field (Wagner et al. 2011). The Lake Hennessey Population and Lewelling Lane Populations are also associated with serpentinite rocks from the older Coast Range ophiolite.

There are a variety of different soil series mapped at populations of Clara Hunt's milkvetch by the Natural Resources Conservation Service (Soil Survey Staff 2019). Many of these soil series are noted as being loams, and are weathered from volcanic, metavolcanic, and sedimentary rock.

Ruygt (1994) excavated six soil pits within one meter of Clara Hunt's milkvetch plants at the Alpine School, Bothe, Lake Hennessey and Lewelling Lane populations to examine soil properties, and found soils from all pits to be rocky, shallow and well-drained. Ruygt found the Lake Hennessey Population to be in soil formed from serpentine bedrock, and the Lewelling Lane Population to be in soil formed from serpentine bedrock with volcanic or other metamorphic components. The Alpine School and Bothe populations were both found to occur on soils formed from basalt (volcanic) bedrock.

Based on a soil chemical analysis, Ruygt (1994) found all soils sampled in Clara Hunt's milkvetch habitat to be medium to strongly acidic (pH 5.2-6.0). There were very low levels of manganese at the Bothe and Lewelling Lane populations compared with levels at nearby unoccupied habitat, suggesting that tolerance to low manganese may be a key parameter determining milkvetch habitat at those locations. Clara Hunt's milkvetch also appears to have the ability to tolerate low levels of calcium and potentially toxic levels of magnesium. Clara Hunt's milkvetch also appears to be tolerant of levels of nickel and aluminum that may be toxic to other plants in acidic soils (McCarten 1986, Ruygt 1994). In summary, Clara Hunt's milkvetch appears to be adapted to poor quality soils that retard the growth of other plant species.

### **C. Climate, Hydrology and Other Factors**

Clara Hunt's milkvetch populations occur in a Mediterranean climate, which consists of cool, wet winters and warm, dry summers. Although precipitation at Clara Hunt's milkvetch populations may occur in any month of the year, over 95 percent of the precipitation falls from October to May, which is typical for much of California. Between 1983 and 2018 the average annual precipitation at Clara Hunt's milkvetch populations has been approximately 88 centimeters (34.8 inches) (PRISM 2019). Rainfall can vary dramatically at Clara Hunt's milkvetch populations from month to month and from year to year. Among the Clara Hunt's milkvetch populations, climate data suggests that the Bothe Population receives the most precipitation and the Lake Hennessey Population receives the least, although the difference between the two populations is relatively low (approximately 9 centimeters/3.5 inches) (Ruygt 1994, PRISM 2019). Precipitation occurs mainly as rain; snowfall and hail occur infrequently and melt almost immediately. The coldest month of the year at Clara Hunt's milkvetch populations is typically December, which has an average low temperature of approximately 38.8°F. The hottest month of the year is typically July, after Clara Hunt's milkvetch plants have died.

Between 1983 and 1992, Ruygt (1994) noted an apparently positive correlation between November precipitation, as a percentage of average precipitation, and the number of Clara Hunt's milkvetch plants in a monitoring quadrat at the Bothe Population. This could suggest that rainfall in the early growing season is a critical factor for Clara Hunt's milkvetch seed germination and establishment.

Clara Hunt's milkvetch likely receives most of its water from precipitation. Ruygt (1994) assessed soil drainage and water holding capacity in soil pits at the Alpine School, Bothe, Lake Hennessey and Lewelling Lane populations of Clara Hunt's milkvetch. Based on Ruygt's assessment, soil water holding capacity appears to be lowest at the Bothe Population, and highest at the Lewelling Lane and Lake Hennessey populations. Drainage class was assessed as "somewhat excessive" at one of the two soil pits at the Alpine School Population, and was assessed as "well-drained" or "moderately well-drained" at the remaining soil pits at the Alpine School, Bothe, Lake Hennessey and Lewelling Lane populations of Clara Hunt's milkvetch (Ruygt 1993, Soil Survey Division Staff 1993). This could suggest that Clara Hunt's milkvetch is also adapted to drought tolerance or tolerance of well-drained soils.

High densities of Clara Hunt's milkvetch plants have been observed in areas disturbed by gopher mounds (Ruygt 1993, Evans pers. comm. 2019). Additionally, after removal of a soil stockpile placed on a portion of the Lake Hennessey Population in the fall of 1990, particularly robust Clara Hunt's milkvetch individuals were found in areas that had been scraped bare (Ruygt 1994). This suggests that soil disturbance and competing vegetation could be important factors affecting germination, establishment, and growth of Clara Hunt's milkvetch.

The incline of slopes at Clara Hunt's milkvetch habitat is generally slight (0 to 10 degrees), and the slope aspect varies widely (Ruygt 1993, Department observation).

## **VI. THREATS AND SURVIVAL FACTORS**

### **A. Factors Affecting Ability to Survive and Reproduce**

The August 1989 "Report to the Fish and Game Commission on the Status of Clara Hunt's Milkvetch (*Astragalus clarianus*)" prepared by the Department identified several factors affecting the ability of Clara Hunt's milkvetch to survive and reproduce that the Commission considered in listing Clara Hunt's milkvetch under CESA. The factors identified in the 1989 report were: present or threatened modification or destruction of habitat, predation, and stochastic (chance) extinction events due to small population size. These factors continue to threaten Clara Hunt's milkvetch with extinction. In addition to the factors identified in 1989, the Department has also identified invasive plants, vegetation community succession, climate change, and possibly herbivory as additional factors affecting the ability of Clara Hunt's milkvetch to survive and reproduce.

#### **i. Present or Threatened Modification or Destruction of Habitat**

Three Clara Hunt's milkvetch populations are considered to have a moderate to high risk of habitat elimination or degradation, and three populations are considered to have a low risk of habitat elimination or degradation. The risk of habitat elimination or degradation at each of the Clara Hunt's milkvetch populations is discussed below.

Alpine School. The threat of habitat elimination from development or significant change in land use at the Alpine School Population is low. The Sonoma County Agricultural Preservation and Open Space District holds a conservation easement that protects the property from development and significant land use changes. Degradation of Clara Hunt's milkvetch habitat at the Alpine School Population could still take place as a result of domestic animal grazing, equipment use, or other unforeseen activities by the landowner in the future, particularly if the activities result in trampling, excessive or inadequate soil disturbance, hydrological changes,

excessive winter or spring herbivory, or the creation of conditions that are favorable for the establishment and spread of invasive plant species. In 2019, the property with the Alpine School Population was being used as pasture for an unknown number of horses. The landowner for the Alpine School Population also owns a portion of the Saddle/Hayfork Population, so land use changes could affect both populations simultaneously. Historical scientific collections suggest that the Alpine School Population previously occupied a larger area that extended to the north side of St. Helena Road. Prior to state listing the north side of St. Helena Road was converted to vineyards and a horse stable was built, reducing the total area of the population (McCarten 1985).

Bothe. The threat of habitat elimination and habitat degradation at the Bothe Population is low because the property is owned and managed by the California Department of Parks and Recreation as Bothe-Napa Valley State Park. There is very little human activity at the Bothe Population because there are no maintained hiking trails in the vicinity. Alteration of the Bothe Population of Clara Hunt's milkvetch habitat from vegetation encroachment is discussed below under the heading "Vegetation Encroachment".

Lake Hennessey. The threat of habitat elimination and degradation at the Lake Hennessey Population is moderate to high. Prior to listing, the Lake Hennessey Population was likely reduced in size when Lake Hennessey was created in the 1950s (USFWS 2009). The Lake Hennessey Population is almost entirely on land owned by the City of Napa and a small portion on the north side of Conn Valley Road is on private property. The Lake Hennessey Population is adjacent to the Lake Hennessey reservoir, and is frequently visited for recreation. The City of Napa placed a portable toilet on the population in 1987 or 1988 and continues to maintain a portable toilet and garbage cans for the area (Liston 1990a, Department observation). A utility tower is maintained in the immediate vicinity of the population. In the fall of 1990, the City of Napa permitted topsoil vendors to remove topsoil from the drought-exposed bed of Lake Hennessey, and the soil was stockpiled on approximately 30 percent of the Lake Hennessey Population (Figure 6a) (Ruygt 1994). Much of the stockpiled soil was removed in 1992 and 1993. A portion of the population covered by the soil stockpile recovered surprisingly well in 1992, with 325 individuals observed; however, the area was subsequently degraded by the invasion of weedy species such as goatgrass (*Aegilops triuncialis*). In February of 1991, the Department installed a fence along Conn Valley Road to prevent vehicles from driving onto the population. Sometime between April 2015 and March 2016, wood chips from an unknown source were spread over the area, extending onto a portion of the Lake Hennessey Population (Google Earth 2019). Due to the relatively un-weathered appearance of the wood chips shown in Figure 6b, the addition of wood chips to the area may be a periodic or ongoing occurrence. It is unclear whether or not the addition of wood chips to the area has had an effect on Clara Hunt's milkvetch. Although the Lake Hennessey Population has not been monitored regularly, the available information suggests that the population is declining.

Lewelling Lane. The threat of habitat elimination and habitat degradation from development or change in land use at the Lewelling Lane Population is moderate to high. The Lewelling Lane Population occurs on several private parcels with different landowners, and the land use zoning for these parcels is "Agricultural Preserve" or "Agricultural Watershed" (Napa County 2015). The Agricultural Preserve district classification is: "intended to be applied in the fertile valley and foothill areas of Napa County in which agriculture is and should continue to be the predominant land use, where uses incompatible to agriculture should be precluded and where the development of urban type uses would be detrimental to the continuance of agriculture and the maintenance of open space which are economic and aesthetic attributes and assets of the county" (Napa County Code of Ordinances section 18.16.010). The Agricultural Watershed



(a) Clara Hunt's milkvetch habitat at the Lake Hennessey Population buried under soil dredged from Lake Hennessey in 1990 (Source: Ruygt 1994, Photo by W. Grummer).

(b) Clara Hunt's milkvetch habitat at the Lake Hennessey Population on March 27, 2019 showing wood chips on the site .

Figure 6. Human Disturbance to Clara Hunt's milkvetch (*Astragalus claranus*) Habitat at the Lake Hennessey Population

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district classification is: “intended to be applied in those areas of Napa County where the predominant use is agriculturally oriented, where watershed areas, reservoirs and floodplain tributaries are located, where development would adversely impact on all such uses, and where the protection of agriculture, watersheds and floodplain tributaries from fire, pollution and erosion is essential to the general health, safety and welfare” (Napa County Code of Ordinances section 18.20.010). A number of land uses such as agriculture, housing, and wine production could occur in Agricultural Preserve and Agricultural Watershed districts, and many of these land uses could result in the elimination or degradation of Clara Hunt’s milkvetch habitat (Napa County Code of Ordinances sections 18.16.20 and 18.20.020).

Saddle/Hayfork. The threat of habitat elimination from development or change in land use at the Saddle/Hayfork Population is low. The Saddle/Hayfork Population occurs on two parcels: one is private property that is protected by a conservation easement, and the other is the Saddle Mountain Open Space Preserve that is owned and managed by the Sonoma County Agricultural Preservation and Open Space District for aesthetic and habitat values (Sonoma County Agricultural Preservation and Open Space District 2019). Degradation of Clara Hunt’s milkvetch habitat at the Saddle/Hayfork Population could still occur as a result of modified land uses and land management activities in the future, particularly if land use activities on the private property result in trampling, excessive or inadequate soil disturbance, hydrological changes, excessive winter and spring herbivory, or the creation of conditions that are favorable for the establishment and spread of invasive plant species. In 2019, the portion of the population that occurs on private property was being used as pasture for an unknown number of horses. The landowner for the Alpine School Population also owns a portion of the Saddle/Hayfork Population, so land use changes could affect both populations simultaneously.

Taplin Road. The threat of habitat elimination and habitat degradation from development or change in land use at the Taplin Road Population is moderate to high. The Taplin Road Population occurs on one private parcel with the land use zoning of “Agricultural Watershed” (Napa County 2015). A number of land uses such as agriculture, housing, and wine production could occur in the Agricultural Watershed district, and many of these land uses could result in the elimination or degradation of Clara Hunt’s milkvetch habitat (Napa County Code of Ordinances section 18.20.020).

## ii. Invasive Plants

Invasive species are often cited as the second greatest threat to biodiversity behind habitat loss (Wilcove et al. 1998, Levine et al. 2003, Pimentel et al. 2004) and North America has accumulated the largest number of naturalized plants in the world (van Kleunen et al. 2015). Many studies hypothesize or suggest that competition is the process responsible for observed invasive species impacts to biodiversity; however, invasive species may impact native species in different ways (Levine et al. 2003). Invasive species may threaten native populations through competition for light, water, or nutrients; addition of harmful biochemicals to soil; alteration of soil chemistry; thatch accumulation that inhibits seed germination and seedling recruitment; changes in natural fire frequency; disruptions to pollination or seed-dispersal mutualisms; changes in soil microorganisms; diseases; or other mechanisms. The magnitude of invasive species impacts in Mediterranean habitats, such as those in California, largely depends on the characteristics of the invading species and the habitat being invaded (Fried et al. 2014). The invader’s life form and ability to create very dense stands have an effect on the magnitude of impacts, with creeping plant species having greater effect (Gaertner et al. 2009, Fried et al. 2014). Greater invasive species impacts also have been recorded in areas with high soil moisture (Reever Morghan and Rice 2006, Fried et al. 2014). Invasive species may also



influence native species colonization rates, and may thus lead to declines in local diversity over longer timescales (Yurkonis and Meiners 2004). Nitrogen deposition from air pollution may also increase the suitability of previously nutrient-poor habitats for invasive species, allowing such habitats to become more easily invaded (Weiss 1999). Studies have not been conducted on the impact of invasive species on Clara Hunt's milkvetch specifically; however, the negative impacts of plant invasions on Mediterranean ecosystems have been well demonstrated (Gaertner et al. 2009, Fried et al. 2014).

Invasive Mediterranean grasses such as barbed goatgrass, soft chess, annual false brome (*Brachypodium distachyon*), rattlesnake grass (*Briza maxima*), ripgut brome (*Bromus diandrus*), medusahead (*Elymus caput-medusae*), and Italian ryegrass (*Festuca perennis*), have been observed in close proximity to Clara Hunt's milkvetch populations and pose a significant risk to the species (Ruygt 1993, Cal-IPC 2019a, Evans pers. comm. 2019). These Mediterranean grasses can compete with Clara Hunt's milkvetch for light, water, and nutrients, and may also form a layer of dead thatch that inhibits Clara Hunt's milkvetch germination the following year. Additional invasive species that are not grasses, such as yellow star thistle (*Centaurea solstitialis*), red-stem filaree (*Erodium cicutarium*), French Broom (*Genista monspessulana*), burclover (*Medicago polymorpha*), English plantain (*Plantago lanceolata*), and curly dock (*Rumex crispus*) have also been documented in close proximity to Clara Hunt's milkvetch populations (Ruygt 1993, Cal-IPC 2019a).

There is also evidence that invasive weeds may alter the soil microbe community, which can impact the relative fitness of native forbs and ecosystem composition. In a study of yellow star thistle and barbed goatgrass in serpentine grasslands, Batten et al. (2004) found that the soil microbial community differed significantly between native and invaded areas. Changes to the soil microbial community could impact nutrient cycling processes, and could make inhospitable soils more susceptible to plant species invasions.

Cheat grass (*Bromus tectorum*), an annual grass, is not currently a serious problem in Napa and Sonoma Counties; however, most of Napa County and eastern Sonoma County are expected to become suitable habitat for cheat grass by the year 2050 due to climate change (Cal-IPC 2019b). Cheat grass threatens ecosystems by overcrowding native habitats and increasing the frequency and extent of wildfires. Wildfires can increase nitrogen availability, making soils more suitable for cheat grass, which in turn can create a feedback loop by increasing the frequency of fire (Kerns and Day 2017). There is also evidence that cheat grass itself can increase soil nitrogen availability, which could potentially help it invade habitats with poor quality soils. Stark and Norton (2015) found that under wet conditions (i.e. winter and spring conditions), cheat grass increased soil nitrogen availability, and that faster rates of nitrogen cycling by cheat grass were accompanied by greater concentrations of soil organic carbon and nitrogen. If cheat grass spreads significantly in Napa and Sonoma Counties by the year 2050, it may become a serious additional threat to the continued existence of Clara Hunt's milkvetch.

Invasive plant species pose a serious threat to Clara Hunt's milkvetch by affecting ground cover. Sparse vegetation cover is a common trait of Clara Hunt's milkvetch habitat and may be a necessary condition for the species. Invasive plant species can form dense stands of vegetation that are taller than vegetation in natural Clara Hunt's milkvetch habitat, and thus invasive vegetation may significantly reduce the amount of habitat that is available for Clara Hunt's milkvetch. Impacts from invasive plant species on Clara Hunt's milkvetch have become more severe since Clara Hunt's milkvetch was listed. In addition, due to the effects of climate change

and the continued spread of invasive plants in California, the impacts from invasive plant species on Clara Hunt's milkvetch will likely become a greater threat in the future.

### iii. Vulnerability of Small Populations

Clara Hunt's milkvetch has a narrow distribution with only six small populations occupying relatively small areas. Although range-wide population monitoring for Clara Hunt's milkvetch has not been conducted, population estimates have always been relatively low, and it has been 20 years since an individual population reached more than 1,500 plants. The Department recognizes that species with few populations and small population sizes are highly vulnerable to extinction due to stochastic (chance), demographic, environmental, and genetic events (Shaffer 1981, 1987; Primack 2006; Groom et al. 2006). Chance events, such as a landslide, drought, or fire could result in the loss of all or a significant portion of a Clara Hunt's milkvetch population. Chance environmental conditions that result in seed germination without subsequent growth and reproduction could also deplete the soil seed bank and threaten the long-term persistence of Clara Hunt's milkvetch. The Bothe Population and Lake Hennessey Population appear to be the smallest Clara Hunt's milkvetch populations, and may therefore be the most vulnerable to extirpation due to chance events.

Impacts to a species that have already taken place may also lead to an "extinction debt," where species that appear abundant disappear over time (Tilman et al. 1994, Kuussaari et al. 2009). Extinction processes often occur with a time delay and populations living close to their extinction threshold might survive for long periods of time before they go extinct (Hanski and Ovaskainen 2002, Lindborg and Eriksson 2004, Helm et al. 2006, Vellend et al. 2006). Habitat specialist species, such as Clara Hunt's milkvetch, may also be more sensitive to changes in habitat and thus more prone to local extinction than generalist species (Helm et al. 2006, Krauss et al. 2010, Cousins and Vanhoenacker 2011, Guardiola et al. 2013).

### iv. Climate Change

Warming of the climate is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia (IPCC 2014). Experimental and empirical evidence indicates that climate change is negatively impacting wildlife species and natural systems across the globe (Parmesan and Yohe 2003, Parmesan 2006). According to the California Global Warming Solutions Act of 2006, climate change is now considered one of the greatest threats to California's ecosystems, and over the current century, climate change will alter the fundamental character, production, and distribution of the ecosystems in California (Snyder et al. 2002, Snyder and Sloan 2005, California Energy Commission 2009b). Climate change is a major challenge to the conservation of California's natural resources, and it will amplify existing risks and create new risks for natural systems.

Numerous studies indicate that by the end of the century California's climate will be considerably warmer than today's, more winter precipitation will fall as rain instead of snow, snowpack will be substantially diminished, and snowpack will melt much earlier in the year (Kim et al. 2002; Knowles and Cayan 2002; Snyder et al. 2002; Miller et al. 2003; Hayhoe et al. 2004; Leung et al. 2004; Vanrheenen et al. 2004; California Energy Commission 2009a, 2009b; Melillo et al. 2014). California is also more vulnerable to climate fluctuations relative to the rest of the United States because it derives a disproportionate percentage of its water supply from only a small number of winter storms, typically in the form of "atmospheric rivers" (Dettinger 2011, Dettinger et al. 2011).

Department staff assessed the vulnerability of Clara Hunt's milkvetch to climate change using the NatureServe Climate Change Vulnerability Index Version 3.02 (CDFW 2019, NatureServe 2016). Based upon the Department's assessment, Clara Hunt's milkvetch has a climate change vulnerability index value of Moderately Vulnerable (MV), indicating that abundance and/or range extent of Clara Hunt's milkvetch within the geographical area assessed is likely to decrease by 2050. Factors contributing to this vulnerability assessment include Clara Hunt's milkvetch's limited seed dispersal capabilities and the species' restriction to habitat with poor quality soils that retard the growth of other plant species.

v. Vegetation Community Succession

Vegetation community succession is a threat to Clara Hunt's milkvetch, particularly at the Bothe Population. Clara Hunt's milkvetch is generally found in sparsely-vegetated openings in oak woodland without significant shrub or tree overstory. Growth of trees and shrubs at the Bothe Population is reducing and eliminating openings in oak woodland that have been utilized by Clara Hunt's milkvetch. Clara Hunt's milkvetch has not been observed at the Bothe Population since 2009, despite surveys in 2012, 2014, 2015, and 2019. Without disturbance, the suitable habitat for Clara Hunt's milkvetch at the Bothe Population may be eliminated. Large-scale disturbance events in Clara Hunt's milkvetch habitat likely occur from wildfires and smaller-scale disturbance can occur from wind, tree mortality, and other factors.

vi. Herbivory and Predation

Evidence of herbivory and predation of Clara Hunt's milkvetch in the form of partial loss of leaves, severed flower heads, and penetration of fruit walls has been observed. A spittle bug (*Aphrophora* sp.) and aphid (Aphidoidea) have also been observed on Clara Hunt's milkvetch plants, although no damage from these insects was observed (Ruygt 1994). Ruygt also conducted a pollinator exclusion study with 55 Clara Hunt's milkvetch plants at the Lewelling Lane Population in 1994, and observed fruit parasitism and herbivore damage of plants outside of pollinator exclusion screens to be substantially higher (67%) than plants within pollinator exclusion screens. While some herbivory and predation is expected in natural systems, comprehensive herbivory and predation studies have not been conducted, and it is unknown whether or not herbivory and predation are significant factors affecting the ability of Clara Hunt's milkvetch populations to survive and reproduce.

The Alpine School Population and a portion of the Saddle/Hayfork Population are subject to grazing by horses and could be subject to grazing by other domestic animals in the future. It is unknown whether or not grazing by horses and other domestic animals is beneficial and/or detrimental to the species or its habitat.

**B. Degree and Immediacy of Threats**

The six known populations of Clara Hunt's milkvetch are all threatened to some degree by elimination and degradation of habitat, invasive plants, the vulnerability of small populations, and climate change. The Bothe Population is currently also threatened by vegetation community succession. All six populations could also be threatened by herbivory and predation, but more information on this potential threat is needed.

The Department is not currently aware of any development projects proposed within or near Clara Hunt's milkvetch populations; nevertheless, land use activities on private property such as domestic animal grazing, equipment use, trampling, or other unforeseen activities could occur at



any time. These activities threaten the Alpine School, Lewelling Lane and Taplin Road populations. The current recreational and utility tower land use at the Lake Hennessey Population is an immediate and ongoing threat, particularly because available information suggests that the Lake Hennessey Population is declining.

Invasive plants are also present at all Clara Hunt's milkvetch populations and pose an immediate and ongoing threat to the species throughout its range, particularly in situations where an organic thatch layer is allowed to accumulate. In addition, the inherent vulnerability of small populations is an ongoing threat to all Clara Hunt's milkvetch populations. Climate change is likely to affect Clara Hunt's milkvetch abundance and/or range extent by the year 2050, particularly if conditions in Clara Hunt's milkvetch habitat become more favorable for invasive plant species such as cheat grass. Vegetation community succession appears to have already had a significant adverse effect on the Bothe Population, and the population may now be extirpated or may only exist in the soil seed bank. The degree and immediacy of threats from herbivory and predation are not currently known.

Based on the best available scientific information, the Department considers Clara Hunt's milkvetch to be in serious danger of becoming extinct throughout all, or a significant portion of its range.

## **VII. MANAGEMENT AND RECOVERY**

### **A. Impact of Existing Management Efforts**

There are currently no rangewide management efforts for Clara Hunt's milkvetch.

#### **i. Saddle Mountain Open Space Preserve Management Plan**

A portion of the Saddle/Hayfork Population is on the Saddle Mountain Open Space Preserve, owned by Sonoma County. The Sonoma County Agricultural Preservation and Open Space District prepared a management plan for the Saddle Mountain Open Space Preserve in early 2019 that includes management strategies for enhancement of plant communities and habitats; native plant revegetation; establishment of buffer zones; restoration of landscape disturbance processes; management of visitor use impacts; and ongoing monitoring and evaluation (Sonoma County Agricultural Preservation and Open Space District 2019). Implementation of invasive species control, habitat enhancement, and fuel management projects under the Saddle Mountain Open Space Preserve Management Plan could be beneficial for the Saddle/Hayfork Population of Clara Hunt's milkvetch.

#### **ii. Conservation Seed Banking**

Clara Hunt's milkvetch seed was collected from the Alpine School, Lake Hennessey, Lewelling Lane, and Taplin Road Populations in 2009, and approximately 1,969 seeds are stored at Rancho Santa Ana Botanic Garden conservation seed storage facilities (Rancho Santa Ana Botanic Garden 2018). Rancho Santa Ana Botanic Garden conducted germination tests on 30 Clara Hunt's milkvetch seeds in 2009, approximately four months after they were collected. After breaking the seed coat and placing the seeds in agar, 29 (97%) of the Clara Hunt's milkvetch seeds successfully germinated (CDFW 2010).

## **B. Recommendations for Management Activities and Other Recommendations for Recovery of the Species**

The Department recommends that the following actions be conducted to prevent the extinction of Clara Hunt's milkvetch:

- Complete a recovery plan for Clara Hunt's milkvetch in collaboration with the U.S. Fish and Wildlife Service.
- Convene a working group or recovery team to implement a Clara Hunt's milkvetch recovery plan in collaboration with the U.S. Fish and Wildlife Service.
- Implement demographic monitoring of all Clara Hunt's milkvetch populations.
- Determine the most effective management techniques for controlling invasive vegetation and maintaining Clara Hunt's milkvetch habitat via scientific research or adaptive management.
- Protect the Lake Hennessey, Lewelling Lane and Taplin Road populations from habitat elimination and degradation so that all remaining populations of Clara Hunt's milkvetch are protected, and the habitat that is essential for the continued existence of the species is preserved.
- Develop a habitat suitability model for Clara Hunt's milkvetch, and search for additional populations.
- Implement a limited controlled burn or vegetation clearing at the Bothe Population in collaboration with the California Department of Parks and Recreation and the California Department of Forestry and Fire Protection.
- If habitat manipulation efforts at the Bothe Population do not result in growth and reproduction of the species, implement a species reintroduction project at Bothe-Napa Valley State Park.
- Investigate ways to reduce impacts from recreational use, invasive species, and remnant topsoil piles at the Lake Hennessey Population in collaboration with the City of Napa.
- Work with landowners to ensure that impacts to the Lewelling Lane and Taplin Road populations are avoided in the future, and investigate possible landowner incentives for habitat protection.
- Collect seeds from the Saddle/Hayfork and Bothe populations for long-term conservation storage. Request that Rancho Santa Ana Botanic Garden conduct seed viability tests on the Clara Hunt's milkvetch seed collected in 2009, and collect additional Clara Hunt's milkvetch seed from wild populations, if necessary.

## **VIII. RECOMMENDATION TO THE COMMISSION**

Pursuant to Fish and Game Code section 2077, the Department has prepared this Five-Year Status Review based upon the best scientific information available to the Department to determine if conditions that led to the original listing are still present. Based on this Five-Year Status Review, the Department submits the following recommendation to the Commission:

In completing this Five-Year Status Review for Clara Hunt's milkvetch, the Department finds there is sufficient scientific information to indicate that the conditions that led to the listing of Clara Hunt's milkvetch have changed, and recommends a change in the status of Clara Hunt's milkvetch from threatened to endangered. This Five-Year Status Review shall be considered by the Commission as a petition with a Department recommendation to accept and consider the petition (Fish and G. Code §§ 2072.7 and 2077).

## IX. SOURCES

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## **B. Personal Communication**

EVANS, ROB. 2019. Conversation between Jeb Bjerke and Rob Evans, independent consultant, regarding *Astragalus claranus* at the Sonoma County Agricultural Preservation and Open Space District Saddle Mountain Open Space Preserve.



## Clara Hunt's Milkvetch (*Astragalus claranus*)



### Fish and Game Commission Meeting

February 21, 2020  
Jeb McKay Bjerke  
Native Plant Program

1

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## Goal: Summarize 5-Year Review

### Outline:

- Overview of Clara Hunt's Milkvetch
- Threats
- Department Recommendation

2

2

## Background

1991- State threatened

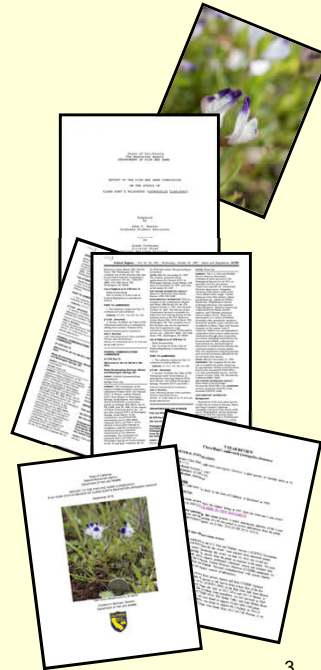
1997- Federally  
endangered

2009- Federal  
5-year species review

(maintained as endangered)

2019- State and Federal  
5-year species reviews

(both recommend endangered status)



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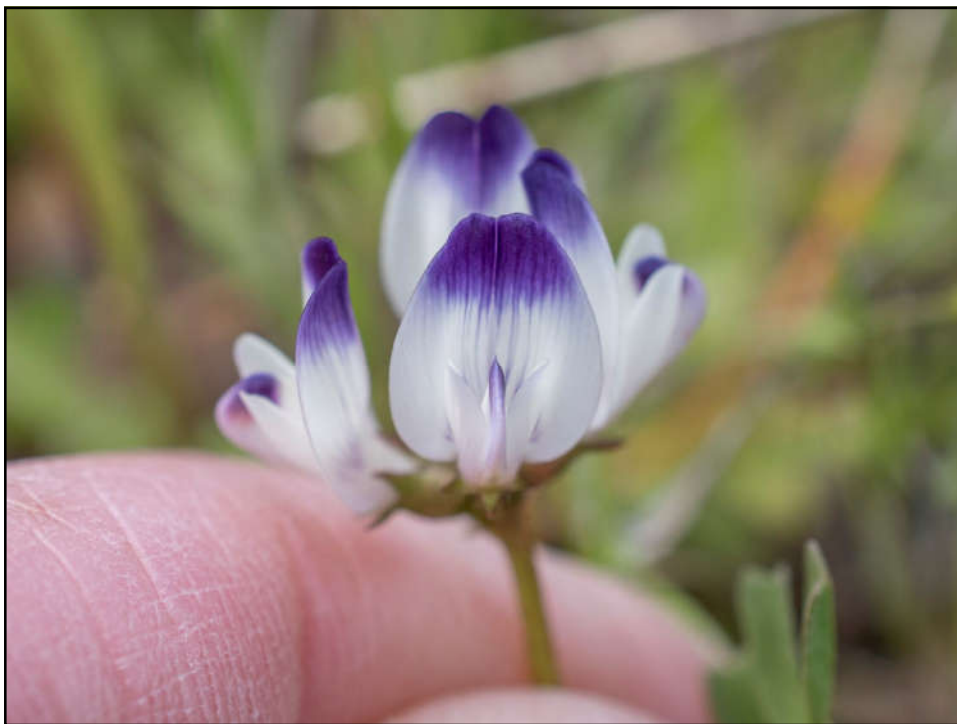
## Description of Plant

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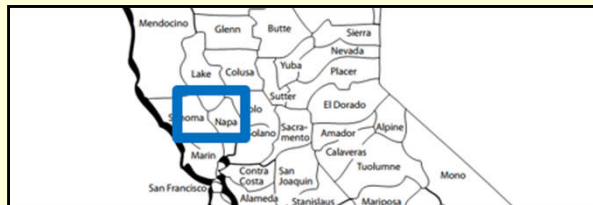
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## Distribution

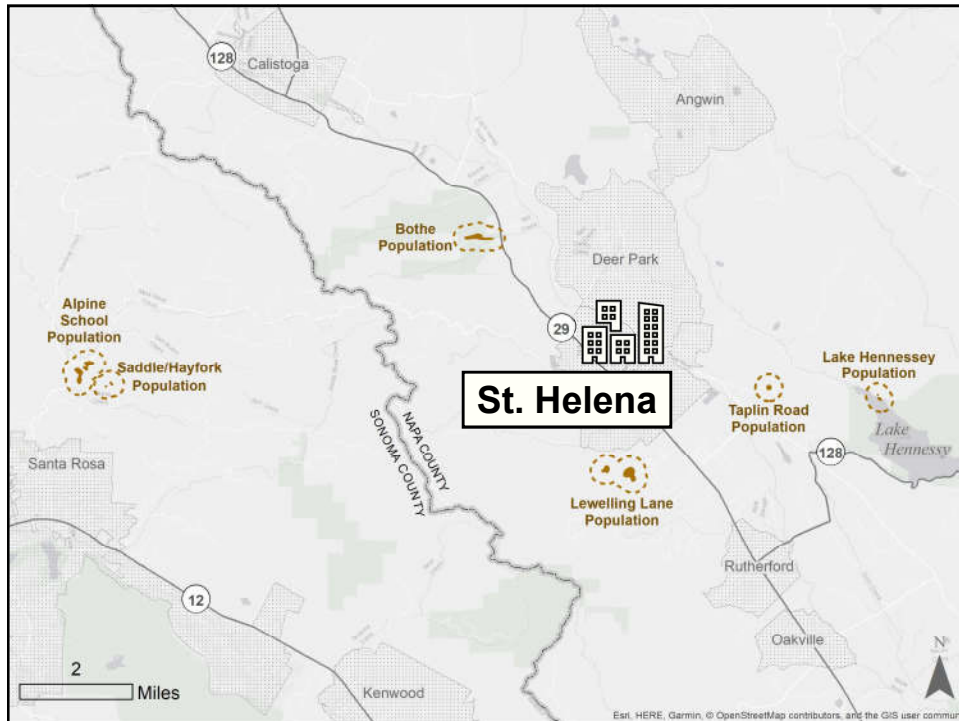
- Six small populations known
- Napa and Sonoma Counties
- Within 10 miles of St. Helena



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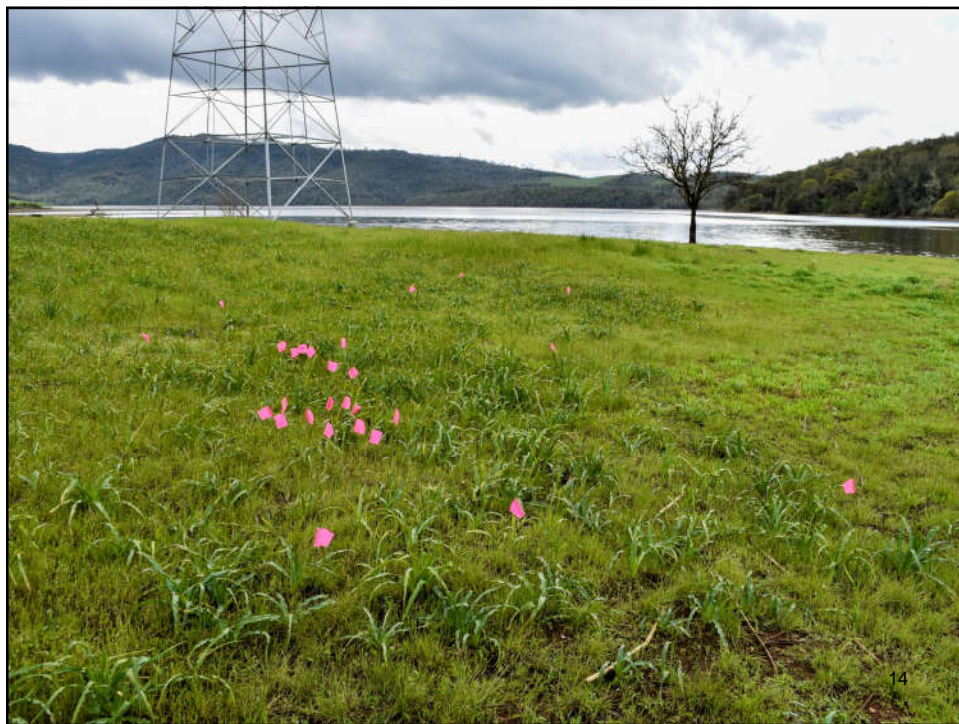
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## Populations

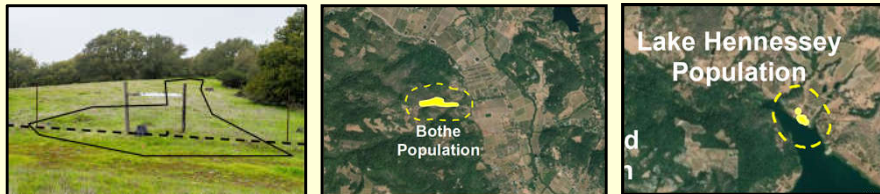
- Highly variable from year to year
  - Populations always relatively small
  - Most plants ever seen at a pop. **6,192** (in 1994)
  - Least plants seen at a pop. **zero**



16

## Since Threatened Listing in 1991:

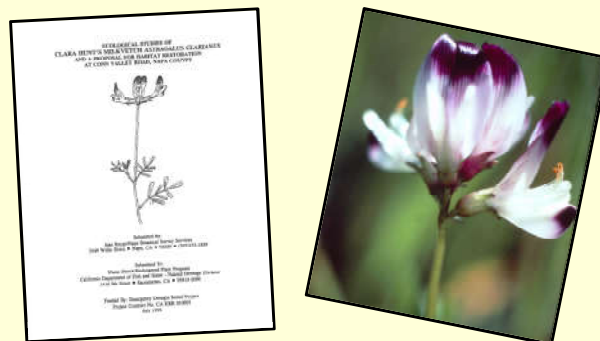
- Saddle/Hayfork population discovered in 2008 (6<sup>th</sup> known population)
- Bothe population not seen since 2009
- Lake Hennessey population appears to be declining



17

## Since Threatened Listing in 1991:

- Infrequent and inconsistent monitoring
- Little scientific & conservation attention after 1994 ecological studies (Jake Ruygt)



18

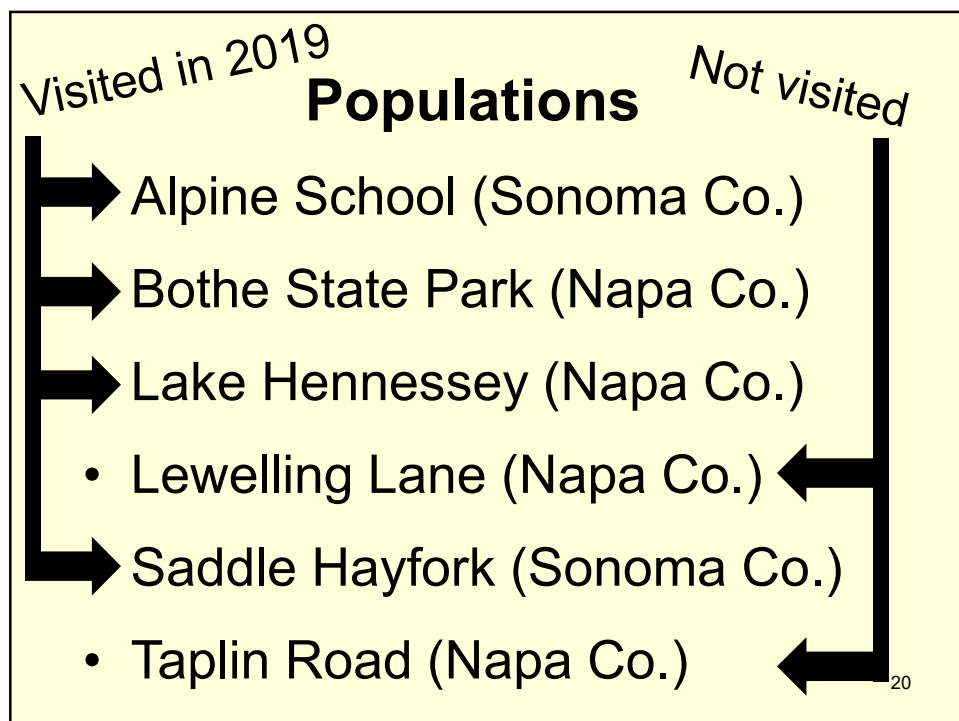
18

## Populations

- Alpine School (Sonoma Co.)
- Bothe State Park (Napa Co.)
- Lake Hennessey (Napa Co.)
- Lewelling Lane (Napa Co.)
- Saddle Hayfork (Sonoma Co.)
- Taplin Road (Napa Co.)

19

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20

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# Threats

21

21

## **Threats Identified in 1991:**

- modification or destruction of habitat
- small population size
- predation



22

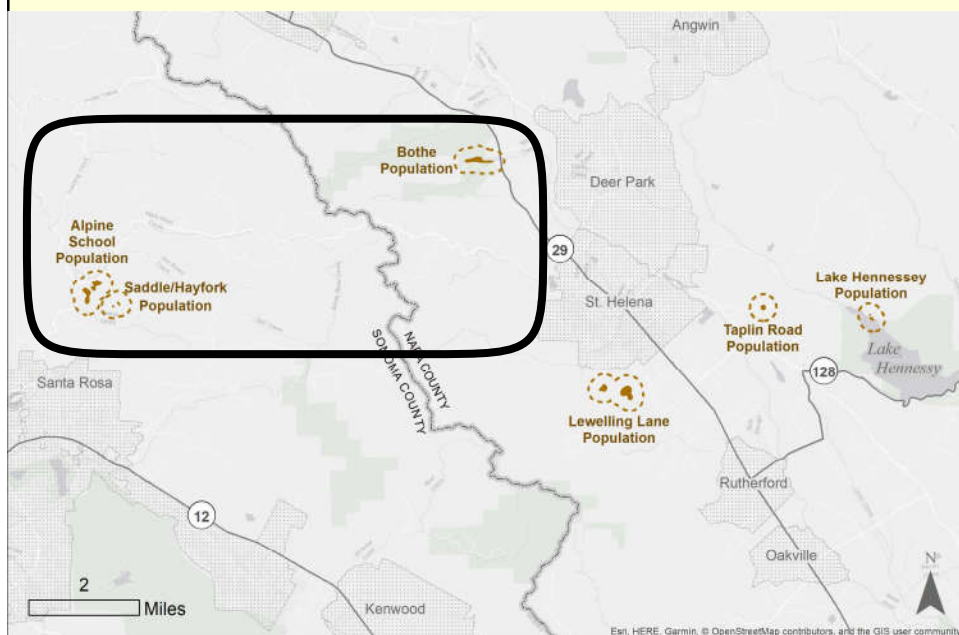
## Modification or Destruction of Habitat

3 populations protected from development

23

23

## open space, state park, or conservation easement



24

## Modification or Destruction of Habitat

3 populations protected from development

- One of these may be extirpated
- Still vulnerable to other threats

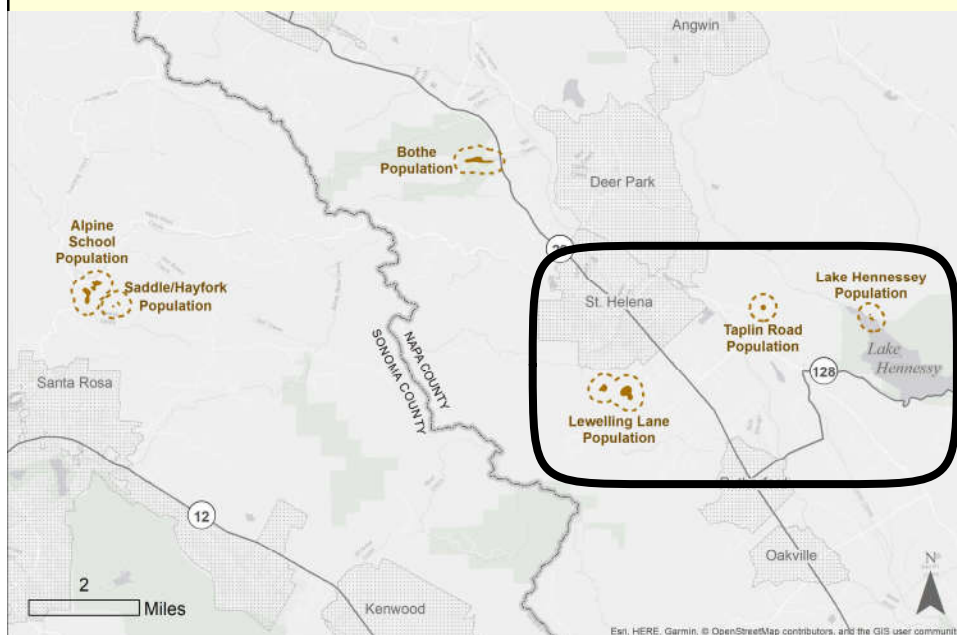
3 populations still vulnerable to land use and development

- ongoing threats from public use

25

25

## Threatened by development/public use



26

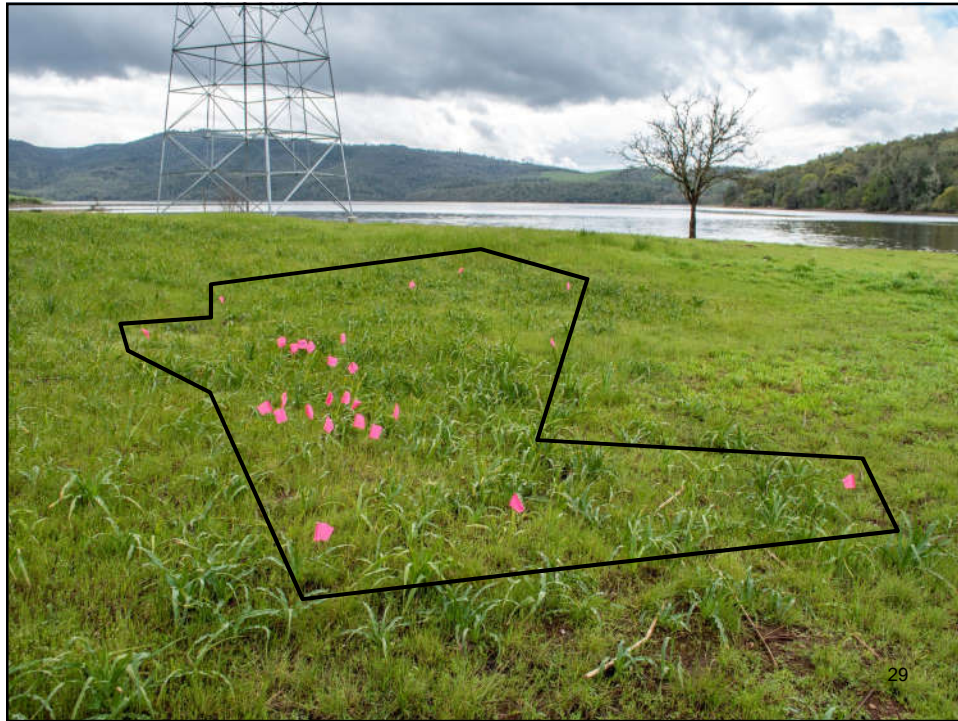




27



28



29

### **Small Population Size**

- Population estimates have always been relatively low
- ~120 plants observed in 2019
- 20 years since a population of more than 1,500 plants was seen
- Small populations are more vulnerable to extinction

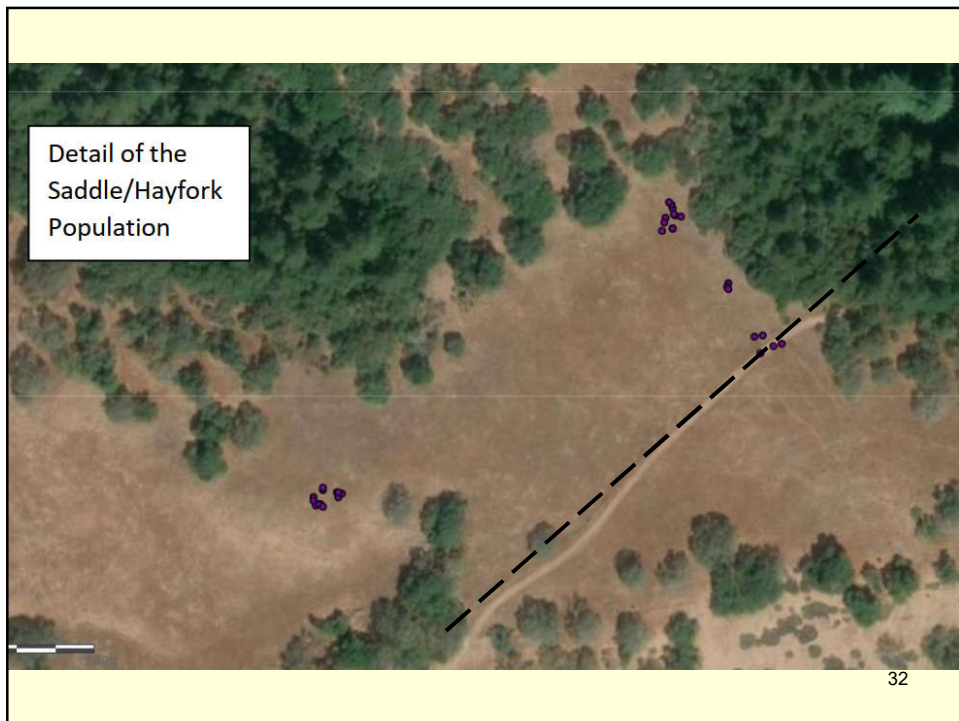
30

30





31



32

### Threats Identified in 1991:

- modification or destruction of habitat
- small population size
- predation

*(little information on this threat)*

### Additional Threats in 2019



33

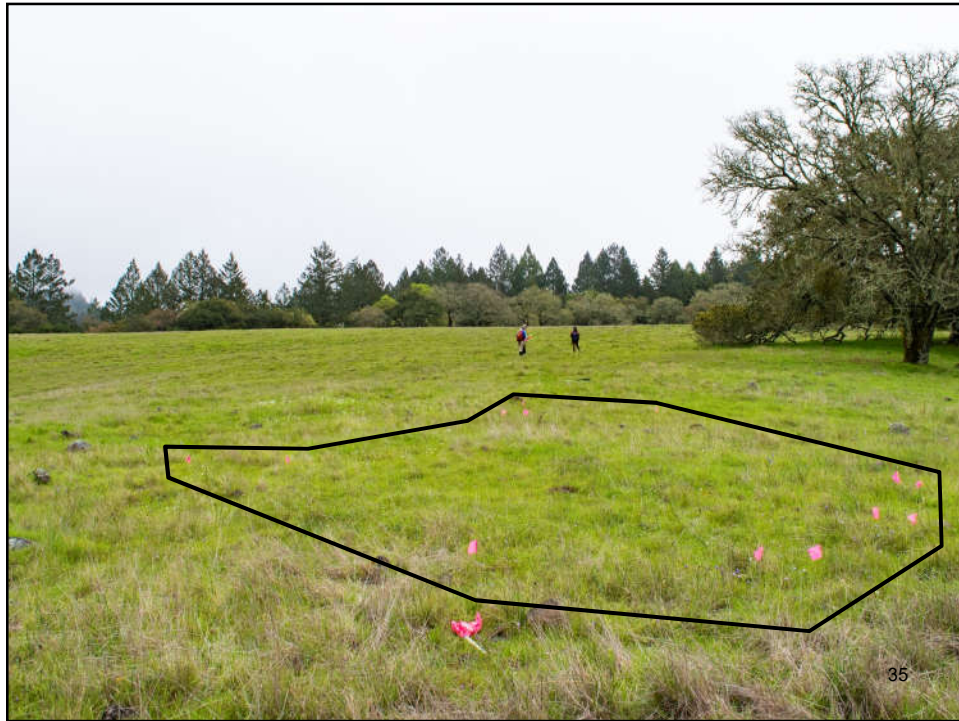
### Additional Threats (2019)

- **invasive plants** – not found in dense vegetation

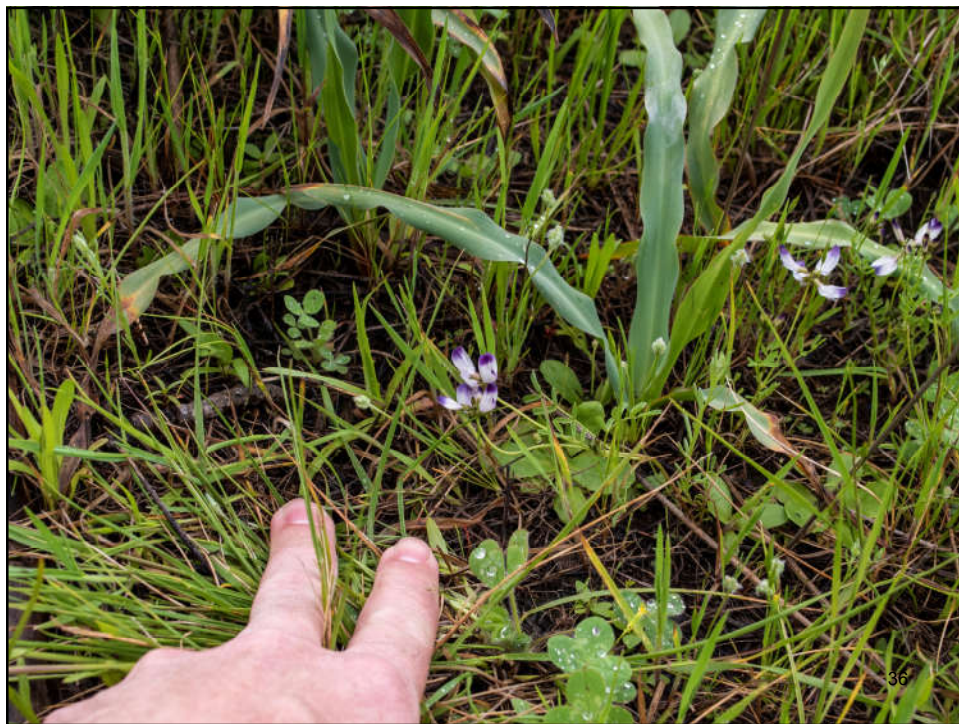
34

34



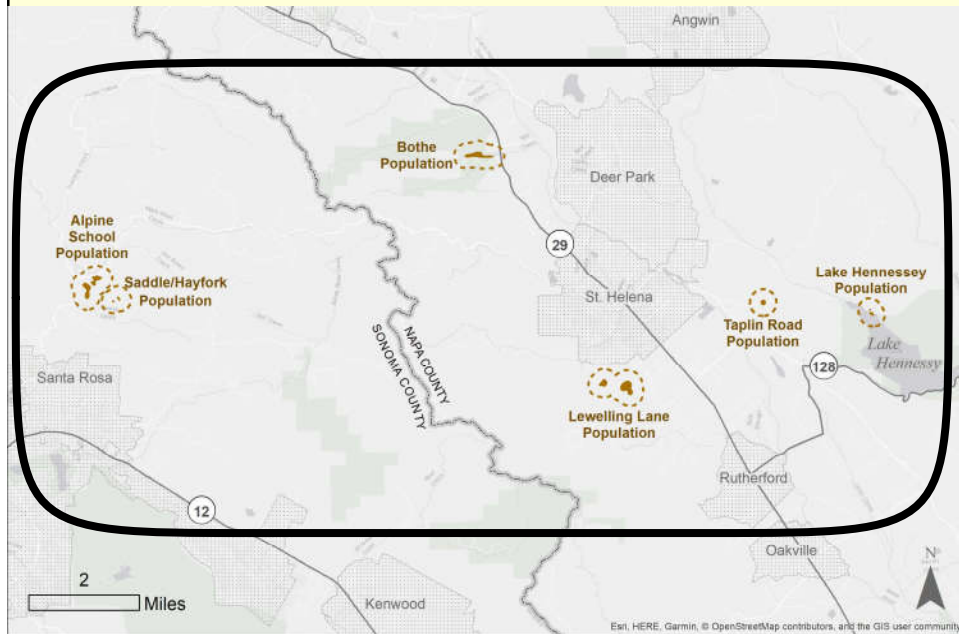


35



36

## All populations threatened by invasive plants



37

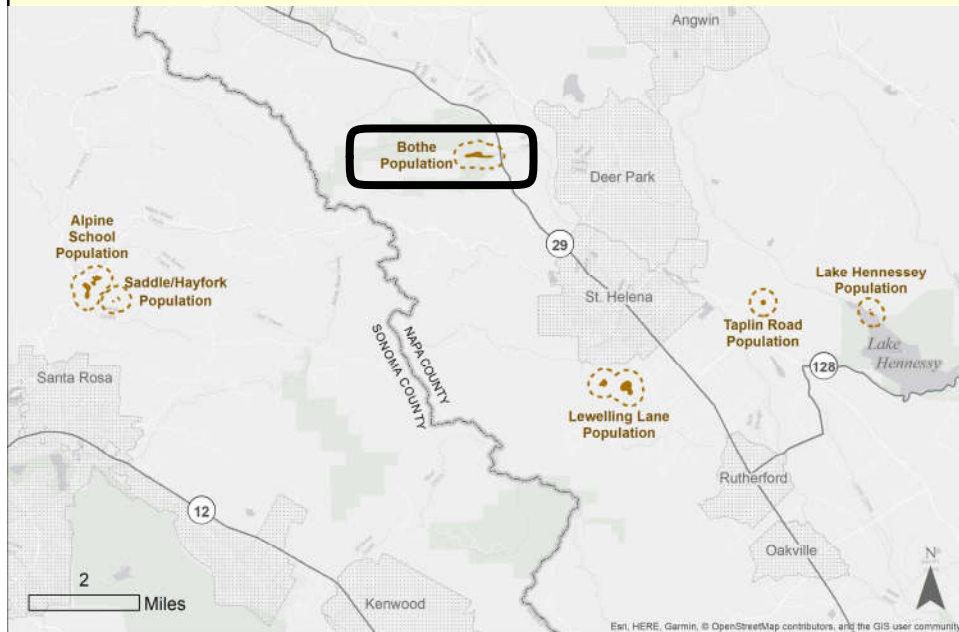
## Additional Threats (2019)

- **invasive plants** – not found in dense vegetation
- **vegetation community succession**

38

38

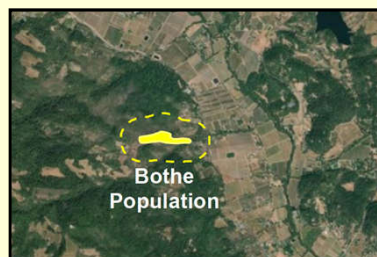
## Threatened by vegetation community succession



39

## Bothe State Park (Napa Co.)

- State Park Land
- Zero plants in 2012, 2014, 2015, and 2019
- Not seen since 2009 (8 plants)



**May be extirpated due to dense vegetation**

40

40





41

## Additional Threats (2019)

- **invasive plants** – not found in dense vegetation
- **vegetation community succession**
- **climate change**
  - Moderate vulnerability due to limited seed dispersal and habitat restrictions
- **possibly herbivory**

42

42

## Conclusion

The Department finds there is sufficient scientific information to indicate that the conditions that led to the listing of Clara Hunt's milkvetch have changed, and recommends a change in the status of Clara Hunt's milkvetch from threatened to endangered.

43

43

## Presentation Summary

### Clara Hunt's Milkvetch

- 6 small populations
- Major Threats:
  - Habitat modification and destruction
  - Small population size
  - Invasive plants\*
  - Climate change\*
  - Vegetation community succession\*



*\*New in 2019 5-Year Review*

Department recommends a change in status from threatened to endangered

44

44

**Questions**    ♦    **Thank You**



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(916) 376-8675  
[Jeb.Bjerke@wildlife.ca.gov](mailto:Jeb.Bjerke@wildlife.ca.gov)

45



## **California Fish and Game Commission**

### **Potential Agenda Items for April 2020 Commission Meeting**

The next Commission meeting is scheduled for April 15-16, 2020 in Sacramento. This document identifies potential agenda items for the meeting, including items to be received from Commission staff and the California Department of Fish and Wildlife (DFW).

#### **Wednesday, April 15: Marine-related and administrative items**

1. General public comment for items not on the agenda (Day 1)
2. Tribal Committee
3. Marine Resources Committee
4. Executive director's report (staff report, legislative update)
5. Notice: commercial Pacific Herring eggs on kelp (Fishery Management Plan Implementation)
6. Notice: recreational Dungeness crab marine life protection measures (*Note: If approved under Item 18, this rulemaking will be moved to notice in June 2020*)
7. Marine items of interest from previous meetings
8. Action on marine petitions for regulation change
9. Action on marine non-regulatory requests from previous meetings
10. Receive DFW informational items (marine)
11. Strategic plan
12. Executive (closed) session

#### **Thursday, April 16: Wildlife- and inland fisheries-related and administrative items**

13. General public comment for items not on the agenda (Day 2)
14. Wildlife Resources Committee
15. Adopt: mammal hunting
16. Adopt: waterfowl (annual)
17. Adopt: public use of DFW lands
18. Discuss: Central Valley sport fishing (annual)
19. Discuss: Klamath River Basin sport fishing (annual)
20. Adopt: Klamath River Basin 2084 Spring Chinook Salmon regular rulemaking (Certificate of Compliance)
21. Receive DFW's one-year status review report for the petition to list Cascades frog as an endangered or threatened species under the California Endangered Species Act (CESA)
22. Receive DFW's 90-day evaluation report for the petition to list western Joshua tree as a threatened or endangered species under CESA
23. Determine whether the petitioned action to list mountain lion as an endangered or threatened species under CESA may be warranted
24. Determine whether the petitioned action to list Shasta snow-wreath as an endangered or threatened species under CESA may be warranted
25. Discuss DFW's five-year status review report and determine whether a change in status of riparian brush rabbit under CESA may be warranted

26. Wildlife and inland fisheries items of interest from previous meetings
27. Action on wildlife and inland fisheries petitions for regulation change
28. Action on wildlife and inland fisheries non-regulatory requests from previous meetings
29. Receive DFW informational items (wildlife and inland fisheries)
30. Administrative items (next meeting agenda, rulemaking timetable, new business)

# California Fish and Game Commission: Perpetual Timetable for Anticipated Regulatory Actions

Updated Thursday, February 12, 2020

Items proposed for change are shown in blue underlined font

Regulatory Change Category	Title 14 Section(s)	FGC Sacramento Feb 21, 2020	WRC Sacramento Mar 5, 2020	MRC Santa Rosa Mar 17, 2020	FGC Sacramento Apr 15, 2020	FGC Sacramento Apr 16, 2020	Teleconference May 14, 2020	WRC Santa Rosa May 14, 2020	FGC Santa Ana Area Jun 24, 2020	FGC Santa Ana Area Jun 25, 2020	MRC San Clemente Area Jul 21, 2020	TC Fortuna Area Aug 18, 2020	FGC Fortuna Area Aug 19, 2020	FGC Fortuna Area Aug 20, 2020	WRC Sacramento Sep 17, 2020	FGC Oakland Oct 14, 2020	FGC Oakland Oct 15, 2020	TC Monterey Area Nov 9, 2020	MRC Monterey Area Nov 10, 2020	FGC San Diego Dec 9, 2020	FGC San Diego Dec 10, 2020	WRC TBD	TC TBD
Recreational and Commercial Pacific Herring (Fishery Management Plan Implementation)	26.50, 28.50, 28.60, 28.62, 55.00, 55.01, 55.02, 163, 163.1, 163.5, 164, 705	E 3/1																					
Experimental Fishing Permit (EFP) Program (Phase I)	90 and 704			E 3/31																			
Possession of Nongame Animals (Nutria)	473				E 4/1																		
Upper Klamath-Trinity spring Chinook salmon sport fishing emergency regulations	7.50(b)(91.2)			EE 3/24																			
Upper Klamath-Trinity spring Chinook salmon sport fishing emergency regulations (2nd 90-day extension)	7.50(b)(91.2)	A	E 3/24 through 6/22						EE 6/22														
Upper Klamath-Trinity spring Chinook salmon sport fishing (certificate of compliance)	7.50(b)(91.2)	D				A			E 6/22														
Public use of Department of Fish and Wildlife lands <sup>1</sup>	550, 550.5, 551, 552, 630, 702	D				A					E 7/1												
Mammal Hunting	360, 361, 362, 363, 364, 364.1	D				A					E 7/1									N			
Waterfowl (Annual)	502, 507	D				A					E 7/1									N			
Central Valley Sport Fishing (Annual)	2.35, 7.00, 7.50(b)(5), (68), (124), (156.5)	D				D	A				E 7/16									N			
Klamath River Basin Sport Fishing (Annual) <sup>2</sup>	5.87(f), 7.50(b)(91.1)	D				D	A					E 8/15								N			
Commercial Pacific Herring Eggs on Kelp (Fishery Management Plan Implementation)	163, 164				N				D/A							E 10/1							
Recreational Dungeness Crab Marine Life Protection Measures	1.74, 29.80, 29.85, 29.91	V			N				D				A					E 11/1					
Commercial Kelp and Algae Harvest Management	165, 165.5, 705								N				N,D/A			D/A E 10/1					E 1/1		
Simplification of Statewide Inland Fishing Regulations <sup>3</sup>	5.00, 7.00, 7.50, 8.10		R							N				D			A						

Rulemaking Schedule to be Determined	Title 14 Section(s)	FGC Sacramento Feb 21, 2020	WRC Sacramento Mar 5, 2020	MRC Santa Rosa Mar 17, 2020	FGC Sacramento Apr 15, 2020	FGC Sacramento Apr 16, 2020	Teleconference May 14, 2020	WRC Santa Rosa May 14, 2020	FGC Santa Ana Area Jun 24, 2020	FGC Santa Ana Area Jun 25, 2020	MRC San Clemente Area Jul 21, 2020	TC Fortuna Area Aug 18, 2020	FGC Fortuna Area Aug 19, 2020	FGC Fortuna Area Aug 20, 2020	WRC Sacramento Sep 17, 2020	FGC Oakland Oct 14, 2020	FGC Oakland Oct 15, 2020	TC Monterey Area Nov 9, 2020	MRC Monterey Area Nov 10, 2020	FGC San Diego Dec 9, 2020	FGC San Diego Dec 10, 2020	WRC TBD	TC TBD
Santa Cruz Harbor Salmon Fishing (FGC Petition #2016-018)	TBD																						
European Green Crab (FGC Petition #2017-006)	TBD																						
Wildlife Areas/Public Lands <sup>4</sup>	TBD																						
Experimental Fishing Permit (EFP) Program (Phase II)	TBD			V																			
Possess Game / Process Into Food	TBD																						
American Zoological Association / Zoo and Aquarium Association	671.1																						
Night Hunting in Gray Wolf Range (FGC Petition #2015-010)	474																						
Shellfish Aquaculture Best Management Practices	TBD																						
Ban of Neonicotinoid Pesticides on Department Lands (FGC Petition #2017-008)	TBD																						
Commercial Pink Shrimp Trawl	120, 120.1, 120.2																						
Ridgeback Prawn Incidental Take Allowance	120(e)																						

## KEY

FGC = California Fish and Game Commission MRC = FGC Marine Resources Committee WRC = FGC Wildlife Resources Committee TC = FGC Tribal Committee

EM = Emergency EE = Emergency Expires E = Anticipated Effective Date (RED "X" = expedited OAL review)

N = Notice Hearing D = Discussion Hearing A = Adoption Hearing

V = Vetting R = Committee Recommendation

1 = FGC Petition #2018-005 2 = Includes FGC Petition 2019-020 3 = Includes FGC Petition #2018-008 4 = Includes FGC Petition #2018-003



OFFICE OF ADMINISTRATIVE HEARINGS

State of California

GENERAL JURISDICTION DIVISION

1350 Front Street Suite 3005, San Diego CA 92101  
(619) 525-4475 phone  
www.dgs.ca.gov/OAH

CALIFORNIA  
FISH AND GAME  
COMMISSION

Department of General Services

Governor Gavin Newsom

2019 NOV 25 AM 9:30

November 22, 2019

California Fish and Game Commission  
Attn: Executive Director  
1416 Ninth Street, Suite 1320  
Sacramento, CA 95814

**Subject:** Langman, Keith  
OAH No. 2019030577  
Agency No. 17ALJ01-FGC

Enclosed are the following:

- ☒ The original Proposed Decision
- ☒ An agency order of adoption. If the Proposed Decision is adopted, please return a copy of the signed adoption order to the Office of Administrative Hearings.
- ☐ The original Decision
- ☒ Exhibits forthcoming under a separate label via GSO
- ☐ Email copy of the Proposed Decision to:
- ☐ The above referenced case was resolved prior to conclusion of the hearing. We are returning the enclosed original exhibits 1 – x to you.

AB: pg

Encl.

Transmittal Form  
OAH 60 (Rev. 04/09)

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**BEFORE THE  
FISH AND GAME COMMISSION  
STATE OF CALIFORNIA**

**In the Matter of the Accusation Against:**

**KEITH LANGMAN, Respondent**

**Case No. 17ALJ01-FGC**

**OAH No. 2019030577**

**PROPOSED DECISION**

Adam L. Berg, Administrative Law Judge, Office of Administrative Hearings, State of California, heard this matter on October 28, 2019, in San Diego, California.

David Kiene, Senior Legal Counsel, represented complainant David Bess, Chief, Law Enforcement Division, Department of Fish and Wildlife (department), State of California.

Keith Langman, respondent, represented himself.

Oral and documentary evidence was received. The record was closed and the matter was submitted for decision on October 28, 2019.

## **FACTUAL FINDINGS**

### **Background**

1. Respondent holds a Commercial Fishing License, Commercial Trap Permit, Lobster Operator Permit, and Southern Rock Crab Trap Permit (collectively referred to as "entitlements").<sup>1</sup>

2. On January 30, 2017, complainant, in his official capacity, filed an accusation against respondent seeking to permanently revoke respondent's entitlements. The accusation alleged 12 causes for discipline based on violations of the Fish and Game Code.<sup>2</sup> Respondent timely filed a notice of defense. This hearing ensued.

---

<sup>1</sup> There was no evidence regarding when the department originally issued respondent these entitlements, but they were in full force and effect at all times relevant to this accusation.

<sup>2</sup> At hearing, complainant moved to amend the accusation by interlineation by withdrawing the twelfth cause for discipline in its entirety. The request was granted without objection.

## **The December 4, 2016, Incident**

### **COMPLAINANT'S EVIDENCE**

3. Robert Rojas is employed by the department as a Wildlife Officer (Warden) who testified at the hearing and prepared an Arrest/Investigation Report that was received as evidence. The following is a summary of his testimony and report.

On December 4, 2016, Warden Rojas, Warden Justin Sandvig, and another warden were conducting a marine patrol off the coast of Point Loma in San Diego. At approximately 10:40 a.m., Warden Rojas observed a commercial fishing vessel registered to respondent. Warden Rojas observed two subjects aboard the vessel, who were later identified as respondent and his deckhand, Gary Ellis Greiner. As the wardens approached the vessel in their skiff, Warden Rojas observed respondent and Mr. Greiner retrieve a pink lobster trap buoy from the surface of the water. Based on the angle of the line that connected the buoy to the trap, Warden Rojas believed that the trap was on the ocean floor. As the wardens continued to approach the vessel, Warden Rojas observed respondent and Mr. Greiner look in the wardens' direction and then at each other. Respondent then turned the vessel in an "evasive manner" to prevent the port side of the boat from being observed by the approaching wardens. Warden Rojas then observed Mr. Greiner reach into a large, blue, plastic barrel and pull out what appeared to be a black, mesh, box, receiver. A receiver is a container used to keep fish alive in the water. Mr. Greiner appeared to throw the receiver into the water, but Warden Rojas's view was obstructed because Mr. Greiner was on the port side. Warden Rojas shouted at Mr. Greiner to "stop" and identified himself as a department officer. Mr. Greiner then retrieved another receiver from the plastic barrel and threw it overboard. Warden Rojas had a clear view of the receiver as he was

approximately 10 to 15 feet away from respondent's vessel. Warden Rojas believed that Mr. Greiner threw the receiver overboard in a deliberate motion.

The wardens boarded respondent's vessel to perform an inspection. Warden Sandvig asked respondent what Mr. Greiner threw overboard, and respondent said it was "just bait." The wardens inspected the lobsters on the boat using a department-issued lobster gauge. This is a device that is commercially available and calibrated to three and one-quarter inches, which is the minimum size-limit to catch California spiny lobster. Two of the 25 lobsters found aboard the vessel measured less than the three and one-quarter inch size limit, and were thus undersized. All three wardens used their own gauges to verify that the two lobsters were undersized. Based on the way the gauge is shaped, if there is any gap between the caliper and the shell then the lobster is undersized. Warden Rojas photographed the two undersized lobsters and seized them as evidence.

Warden Rojas inspected respondent's paperwork and found that a page from the Daily Lobster Logbook dated October 6 through October 8, 2016, had not been delivered to the department by the 10th day of the following month as required by regulation. The log book consists of pages in duplicate. Both the department's copy and fisherman's copy were still in the log book. Warden Rojas issued respondent citations for taking undersized lobster, late-filed lobster fishing logs, failing to declare catch upon demand, and destruction of evidence.

After the contact with respondent ended, wardens donned SCUBA gear and dove around the immediate area to search for the receivers they believed Mr. Greiner threw overboard. They found an empty receiver that matched the description of the one Wardens Rojas and Sandvig observed Mr. Greiner throw overboard. The receiver was open in one end and was empty. In his almost 20 years of experience as a warden,



Warden Rojas has observed numerous ways by which fisherman retain undersized lobster and attempt to hide them from wardens. One common method is for fisherman to place undersized lobsters in containers, such as the receiver, which can easily be dumped overboard upon encountering wardens.

4. Warden Justin Sandvig testified at the hearing. He was with Warden Rojas during the encounter with respondent and wrote a supplemental investigation report. Warden Sandvig also observed Mr. Greiner reach into the blue barrel and retrieve the black, mesh receiver. He immediately yelled at Mr. Greiner to stop what he was doing but Mr. Greiner looked in the direction of the wardens before dropping the receiver in the ocean. Warden Sandvig could clearly see there were lobsters inside of the receiver. He had been a warden for over 13 years and specialized in offshore patrol. He also had experience with fisherman keeping undersized lobsters in dump buckets that could be discarded if caught by wardens. After Warden Sandvig boarded respondent's vessel, he asked respondent what was in the receiver. Respondent said it was only bait. He then asked why Mr. Greiner would throw bait overboard and respondent simply shrugged his shoulders. Warden Sandvig asked Mr. Greiner what he threw overboard and Mr. Greiner responded that he did not know what Warden Sandvig was talking about.

5. Respondent was charged with multiple violations of the Code in the Superior Court of California, County of San Diego, Case No. M227528CF. At the time of the incident, respondent was on criminal probation following a conviction for taking an undersized lobster in Case No. M224130CF, discussed below. On April 13, 2017, the court dismissed the charges in Case No. M227528CF but extended respondent's probation in Case No. M224130CF.

## RESPONDENT'S EXPLANATION

6. Respondent submitted written responses to each of the causes for discipline contained in the accusation. Regarding the allegation that he failed to exhibit lobsters to the wardens upon their request, respondent wrote that he used 48-hour "pop-ups" and, "[i]t is not possible to exhibited [*s/c*] lobsters that are in traps or receivers that are sitting on the bottom of the ocean until the pop up disintegrates and the buoy pops up to the surface (about 48 hours)."

7. Regarding the allegation that respondent possessed undersized lobsters, respondent said the court dismissed the charge. He wrote:

I don't believe I had undersize lobster[s]. The officer took two lobsters over to the fish and wildlife mother ship to measure with a micrometer. All lobsters where [*s/c*] on my gauge. I asked if I could re measure the two lobsters that he later took over to the mother ship but the officer would not let me. We are not required to use micrometers.

8. Regarding the allegation that respondent possessed fishing logs that were not timely submitted to the department, respondent wrote that he accidentally missed mailing one of the pages for the month of October. He did not believe this was a serious violation because the department received similar information when he submitted the transport logs to the department and the buyer also turned in the information for the month of October on the "landing receipts."

## **EVALUATION OF THE EVIDENCE**

9. The testimony of Wardens Rojas and Sandvig was credible. Their reports thoroughly documented the encounter with respondent. A preponderance of evidence established that respondent failed to exhibit lobsters for inspection upon request of the wardens because respondent's agent, Mr. Greiner, threw the lobsters into the ocean upon seeing the wardens approach their vessel. When the wardens approached respondent's vessel, the wardens observed respondent and Mr. Greiner look at each other before respondent maneuvered the boat so the port side where Mr. Greiner was located was obscured from the wardens' view. After Mr. Greiner threw the first receiver into the ocean, he ignored Warden Sandvig's order to stop and proceeded to throw another receiver containing lobsters into the ocean. When questioned by Warden Sandvig, respondent lied and said that Mr. Greiner was only throwing bait overboard. However, it is clear that under the circumstances, respondent and Mr. Greiner were attempting to prevent the wardens from finding undersized lobsters taken by respondent.

10. A preponderance of evidence established that respondent possessed two undersized lobsters. Warden Rojas credibly testified that when measuring each lobster, there was a gap between the calipers of his certified lobster gauge. Although respondent testified that he believed the lobsters were of legal size, his testimony was not credible or supported by any other evidence.

11. A preponderance of evidence established that respondent failed to timely submit the department his fishing logbook covering the month of October 2016.

## **November 24, 2015, Incident**

### **COMPLAINANT'S EVIDENCE**

12. Warden Santos Cabral (now a Lieutenant Specialist) testified at the hearing and prepared an Arrest/Investigation Report that was received as evidence. The following is a summary of his testimony and report. On November 24, 2015, Warden Cabral was on patrol aboard a United States Coast Guard (USCG) cutter offshore of Point Loma. Warden Cabral was aboard the cutter's small boat and observed respondent's vessel pulling lobster traps from the kelp bed. Warden Cabral and USCG personnel boarded the vessel and identified respondent and Mr. Greiner. Warden Cabral measured the lobsters using his department-issued lobster gauge, and found six lobsters that were undersized. Warden Cabral compared his lobster gauge with respondent's gauge and observed that respondent's gauge appeared to be accurate. Warden Cabral asked respondent if he measured each of the lobsters, and respondent replied that he thought the hairs at the back of the carapace counted toward the minimum size. Warden Cabral explained that the hairs did not count toward the measurement of the lobster.

13. On November 9, 2016, in the Superior Court of California, County of San Diego, in Case No. M224130CF, respondent pleaded guilty and was convicted of a violation of Fish and Game Code section 8252, taking of an undersized lobster. The original sentencing information was not provided, but on April 13, 2017, the court found respondent violated his probation and extended the probation until April 12, 2020. The court ordered respondent to pay fines and fees and perform 40 hours of volunteer work.

## **RESPONDENT'S EXPLANATION**

14. Respondent wrote that he pled guilty to one count of taking an undersized lobster, and the other five counts were dismissed. Respondent did not believe he had six undersized lobsters. He wrote that he pled guilty because he wanted to save his and the court's time.

## **EVALUATION OF THE EVIDENCE**

15. A preponderance of the evidence established respondent possessed six undersized lobsters. In addition to taking an undersized lobster for which respondent was criminally convicted, Warden Cabral's testimony that he measured five additional undersized lobsters was credible. Although respondent argued that the remaining criminal counts were dismissed, this is not dispositive of whether there was a violation, and the weight of the evidence established that these lobsters too were undersized.

## **November 8, 2014, Incident**

### **COMPLAINANT'S EVIDENCE**

16. On November 8, 2014, Wardens Rojas and Sandvig were conducting a marine patrol when they contacted respondent and Mr. Greiner in a vessel off the coast of Point Loma. The wardens boarded the vessel to conduct an inspection of respondent's catch and paperwork. Respondent did not have his original Commercial Fishing License, which he was required to present, but did provide a photocopy of the license. Warden Rojas verified that respondent did have a valid license. In addition, respondent did not have his Commercial Vessel Registration and Commercial Lobster Permit, both of which he was required to maintain aboard the vessel while fishing for lobster.

The wardens located 15 lobsters. They measured the lobsters using their calibrated lobster gauges and found 6 of the 15 lobsters were undersized. Warden Rojas compared his gauge to respondent's lobster gauge and noted that the inside measurement of respondent's gauge was less than three and one-quarter inches.

On March 9, 2015, in the Superior Court of California, County of San Diego, in Case No. M196005CF, respondent pleaded guilty and was convicted of a violation of Fish and Game Code section 8252, taking of an undersized lobster. The court dismissed the remaining five counts of this violation and ordered respondent to participate in the San Diego Downtown Community Court. No additional sentencing information was provided.

#### **RESPONDENT'S EXPLANATION**

17. Respondent wrote that he pled guilty to having one undersize lobster because the judge told him that if performed 16 hours of community service at a homeless shelter all of the charges would be dropped. Regarding the allegations that respondent failed to carry his commercial boat registration, commercial fishing license, and lobster permit, respondent wrote that he was 63 years old and when the wardens began questioning him he became flustered and could not find an envelope containing these documents. The wardens were able to verify that respondent did in fact have the required licenses and permits.

#### **EVALUATION OF THE EVIDENCE**

18. A preponderance of the evidence established respondent possessed six undersized lobsters. In addition to the undersized lobster for which respondent was criminally convicted for unlawfully taking, Warden Rojas's testimony that he measured five additional undersized lobsters was credible. It was undisputed that respondent

failed to carry and conspicuously post his commercial vessel registration, and did not have in his possession his commercial fishing license and lobster permit.

## **September 16, 2005, Incident**

### **COMPLAINANT'S EVIDENCE**

19. On September 16, 2005, Warden Rojas and other wardens were conducting a patrol offshore from San Clemente island. Through radar, they identified a vessel that appeared to be drifting, which indicated that it might be involved in some form of fishing. At approximately 7:25 a.m., they were able to get a close look at the vessel, a commercial fishing vessel registered to respondent. Respondent and his crewmember were bringing in a drift gill net onto a large reel at the stern of the boat. At 7:30 a.m., Warden Rojas made contact with the vessel. Warden Rojas spoke to a third individual, who was a contract fisheries observer for the National Oceanic and Atmospheric Administration (NOAA). At approximately 7:45 a.m., Lt. E. Kord used radar aboard the department's patrol boat to obtain a distance from the end of the net to the stern of respondent's vessel. The distance measured .688 nautical miles (4,200 feet). Based on the amount of net already on the reel, Warden Rojas suspected that the net exceeded the maximum permitted length of one nautical mile. Warden Rojas observed the radar reflector located at the end of the net, which was a coffee can taped to a bamboo stick. Regulations require the radar deflector to be 10 inches in any dimension, but the coffee can measured only 7.5 inches by 6 inches. In addition to not meeting the legal dimensions, respondent's permit number was not affixed to the buoy attached to the shaft. Having a proper radar reflector is a safety issue as it allows for other vessels to safely navigate around a drift gill net.



Warden Rojas boarded respondent's vessel at 8:15 a.m. and spoke to respondent. Warden Rojas asked respondent why the radar deflector was not of proper size. Respondent said his net was run over two nights ago and he lost his radar deflector as a result. When asked, respondent said the total length of net on the reel was 800 fathoms (4,800 feet). Warden Rojas informed respondent that he would need to measure the net and asked how much longer it would take respondent to bring in the rest of the net. Respondent said he had three or four more hours' worth of pulling. Warden Rojas gave respondent the option of measuring the net in the water or back on the dock in San Diego; respondent requested it be measured on the dock. At approximately 9:00 a.m., the wardens returned to their patrol boat. At 9:15 a.m., Lt. Kord measured the distance from the radar reflector at the end of the net to the stern of respondent's vessel, which measured .368 nautical miles.

Warden Rojas also ascertained that respondent was fishing in an area where, from June 1 through November 15, shark or swordfish gill nets are prohibited from being in the water from two hours after sunrise to two hours before sunset. According to the U.S. Naval Observatory's sun and moon data for that date, sunrise was at 6:38 a.m. Thus, respondent was not permitted to have his net in the waters past 8:38 a.m. At 10:24 a.m., Warden Rojas observed the last of the gill net being reeled up on respondent's vessel.

The wardens escorted respondent's vessel back to port and surveilled it until the next morning when Warden Rojas and 15 of his colleagues measured the net on the pier. They measured a total floatline measurement of 6,600 feet, which was 660 feet over the legal limit. This 10 percent difference would allow respondent to possibly yield 10 percent more fish. Wardens seized 660 feet of the net.



On May 11, 2006, in the Superior Court of California, County of San Diego, in Case No. M980079CF, respondent pled no contest to a misdemeanor violation of Fish and Game Code section 8573, subdivision (c), having an improper radar deflector. All remaining charges were dismissed. The court placed respondent on summary probation for three years, ordered him to pay fines and fees, and ordered him to forfeit the unlawful portion of his net. All proceeds from the catch were returned to respondent.

### **RESPONDENT'S EXPLANATION**

20. Regarding the non-complaint radar deflector, respondent wrote that his original reflector had fallen off the previous day, so he attached a coffee can. He intended on purchasing a new reflector upon returning to port. Respondent wrote that he was not given the opportunity to get the gill net out of the water in time. He had to stop pulling net because the wardens were questioning him, his crew, and the federal observer. After the deadline for retrieving the net from the water past, he slowed the retrieving pace to allow his crew and the observer time "to do there [*sic*] and keep the deck in ship shape." Respondent believed the City Attorney declined to prosecute this violation. Respondent also stated that the judge dismissed the charge that his net was too long. He believed the wardens included the two stotzas float line when measuring the end. There is a stotza at each end and each measures 300 feet.

### **EVALUATION OF THE EVIDENCE**

21. A preponderance of evidence established that respondent did not attach a legally sufficient radar detector to his gill net. Respondent's conviction is conclusive evidence of this violation. Respondent also failed to affix his registration number to the attached buoy or float.

22. A preponderance of evidence established that respondent kept a shark or swordfish gill net in the water after two hours following sunrise. It was undisputed that respondent was fishing in waters where restrictions on the time a gill net could be used were in effect. Warden Rojas credibly testified that respondent did not finish retrieving the gill net until 10:24 a.m., approximately two hours after the 8:38 a.m. deadline.

Respondent argued that the wardens' inspection impeded his ability to retrieve the gill net in time. Essentially, respondent argued that but for the wardens conducting the inspection, he would have retrieved the net before the 8:38 a.m. deadline. There is some merit to respondent's argument. However, as respondent's argument is essentially an affirmative defense, he has the burden of proving that his gill net would have been timely retrieved but for the wardens' intervention. Respondent did not meet this burden. The wardens contacted respondent's vessel at 7:30 a.m., approximately one hour before the deadline. At 7:45 a.m., the department's radar measured the net in the water to be .688 nautical miles or 4,200 feet, which was approximately 64 percent of the total net length of 6,600 feet. Warden Rojas asked respondent how much longer it would take to retrieve the net and respondent said it would be three or four hours. The wardens disembarked respondent's vessel at 9:00 a.m. Respondent did not retrieve the entire net until approximately an hour-and-a-half later. Although respondent stated that he retrieved the net at a slower pace because he was already past the deadline, this belies his contention that he would have timely recovered his net. Put another way, respondent had approximately 64 percent of his net in the water with one hour left at the time the wardens contacted the vessel. In order to show that he would have recovered the remaining net before 8:38 a.m., respondent would have had to demonstrate that the remaining net could be recovered in less than an hour. At 9:15 a.m., 15 minutes after the wardens disembarked, the department's radar

measured 0.368 nautical miles of net in the water. Yet, it took respondent over an hour to recover this amount. Under these circumstances, respondent could not show that he would have recovered approximately twice this length of net in under an hour had the wardens not interrupted the process.

23. A preponderance of evidence established that respondent's gill net measured 6,600 feet in length, exceeding the maximum legal limit. Although respondent believed that the wardens, in measuring his net, included the stotzas, which by statute are excluded from the measurement, Warden Rojas credibly testified that the measurement did not include the stotzas.

### **Respondent's Testimony**

24. Respondent testified that he has been a commercial fisherman for 45 years. He is now basically retired. He sold his lobster permit in 2016. He wants to retain his commercial fishing license because he still likes to take friends out fishing and he cannot assist in any manner, including driving the boat, if he does not have a commercial license. He has been trying to sell his boat and the crab permit he still retains. Because of the lottery system for selling permits, he has been unable to sell the crab permit. If the permit is revoked, he will not be able to sell it, which is worth thousands of dollars.

## **LEGAL CONCLUSIONS**

### **The Fish and Game Commission's Authority**

1. Fish and Game Code section 7857, subdivision (b), provides that the Fish and Game Commission (commission) may suspend, revoke, or cancel commercial

fishing privileges for a period of time to be determined by the commission for reasons that include:

(2) A violation of this code, the terms of the permit or other entitlement, or the regulations adopted pursuant thereto, by the licensee, permittee, person holding the entitlement, or his or her agent, servant, employee, or person acting under the licensee's, permittee's, or entitled person's direction or control.

2. California Code of Regulations, title 14, section 746 outlines the procedures utilized for hearings conducted to revoke an entitlement.

3. Except as otherwise provided by law, a party has the burden of proof as to each fact the existence or nonexistence of which is essential to the claim for relief or defense that he is asserting. (Evid. Code, § 500.) The burden of proof is on the department to prove each of the causes for discipline contained in the accusation. The standard of proof is a preponderance of the evidence. (*Id.* at § 115.) "Preponderance of the evidence" means evidence that has more convincing force than that opposed to it. If the evidence is so evenly balanced that one is unable to say that the evidence on either side of an issue preponderates, the finding on that issue must be against the party who had the burden of proving it. (*People v. Mabini* (2000) 92 Cal.App.4th 654, 663.)



## Relevant Statutes and Regulations

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4. Fish and Game Code section 2012 requires among other things that all fish<sup>3</sup> taken<sup>4</sup> must be exhibited upon demand to any person authorized by the department to enforce the Fish and Game Code.<sup>5</sup>

5. Fish and Game Code section 8252 provides:

No spiny lobster less than three and one-quarter inches in length measured in a straight line from the rear edge of the eye socket to the rear edge of the body shell, both points to be on the midline of the back, may be taken, possessed, purchased, or sold.

Every person taking spiny lobster shall carry a measuring device and shall measure any lobster immediately on removal from his trap and if it is found to be undersize the lobster shall be returned to the water immediately.

6. Fish and Game Code section 7881, subdivision (b), requires a commercial boat registration to be carried aboard the vessel at all times and to be posted in a conspicuous place.

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<sup>3</sup> The term "fish" includes crustaceans. (Fish & G. Code, § 45.)

<sup>4</sup> The term "take" means hunt, pursue, catch, capture, or kill. (*Id.* at § 86.)

<sup>5</sup> The department is authorized to inspect all boats where fish may be stored. (*Id.* at § 1006.)

7. Fish and Game Code section 7857, subdivision (d), requires a commercial fishing license, permit, or other entitlement to be in the licensee's, permittee's, or entitled person's possession, or immediately available to the licensee, permittee, or entitled person at all times when engaged in any activity for which the commercial fishing license, permit, or entitlement is required.

8. Fish and Game Code section 8254, subdivision (b), provides: "Every person who takes, assists in taking, possesses, or transports lobsters for commercial purposes while on any boat, barge, or vessel, or who uses or operates or assists in using or operating any boat, net, trap, line, or other appliance to take lobsters for commercial purposes, shall have a valid lobster permit."

9. Fish and Game Code section 8573 (as in effect in 2005)<sup>6</sup> permits drift gill nets to be used to take shark and swordfish under permit subject to the following restrictions:

(a) From June 1 to November 15, inclusive, shark or swordfish gill nets shall not be in the water from two hours after sunrise to two hours before sunset east of a line described as follows:

From a point beginning at Las Pitas Point to San Pedro Point on Santa Cruz Island, thence to Gull Island Light, thence to the northeast extremity of San Nicolas Island, thence along the high water mark on the west side of San Nicolas Island to the southeast extremity of San Nicolas

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<sup>6</sup> The statute was amended effective January 1, 2008.

Island, thence to the northwest extremity of San Clemente Island, thence along the high water mark on the west side of San Clemente Island to the southeast extremity of San Clemente Island, thence along a line running 150° [sic] true from the southeast extremity of San Clemente Island to the westerly extension of the boundary line between the Republic of Mexico and San Diego County.

(b)(1) The total maximum length of a shark or swordfish gill net on the net reel on a vessel, on the deck of the vessel, and in the water at any time shall not exceed 6,000 feet in float line length. The float line length shall be determined by measuring the float line, as tied, of all the net panels, excluding the bridle, towline, or stotza and excluding the parachute or other drogue device.

10. California Code of Regulations, title 14, section 190 requires commercial licensees to submit to the department logbooks of fishing activities. Subdivision (d), requires logbooks to be submitted to the department "on or before the 10th day of each month following the month to which the records pertain."

### **Cause Exists to Revoke Respondent's Entitlements**

11. Cause exists to discipline respondent's entitlements pursuant to Fish and Game Code section 7857, subdivision (b), based on the following grounds:

### **FIRST CAUSE FOR DISCIPLINE**

Respondent violated Section<sup>7</sup> 2012 by failing to exhibit lobsters upon demand by department wardens. [Factual Finding 9]

### **SECOND CAUSE FOR DISCIPLINE**

Respondent violated Section 8252 by possessing two undersized lobsters on December 4, 2016. [Factual Finding 10]

### **THIRD CAUSE FOR DISCIPLINE**

Respondent violated Regulation<sup>8</sup> 190, subdivision (d), by failing to deliver a fishing logbook to the department on or before the 10th day of the month following the month to which the records pertain. [Factual Finding 11]

### **FOURTH CAUSE FOR DISCIPLINE**

Respondent violated Section 8252 by possessing six undersized lobsters on November 24, 2015. [Factual Finding 15]

### **FIFTH CAUSE FOR DISCIPLINE**

Respondent violated Section 8252 by possessing six undersized lobsters on November 8, 2014. [Factual Finding 18]

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<sup>7</sup> All future statutory references are to the Fish and Game Code.

<sup>8</sup> All future references to "Regulation" are to title 13 of the California Code of Regulations.



### **SIXTH CAUSE FOR DISCIPLINE**

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Respondent violated Section 7881, subdivision (b), for failing to carry aboard and conspicuously post his commercial boat registration. [Factual Finding 18]

### **SEVENTH CAUSE FOR DISCIPLINE**

Respondent violated Section 7857, subdivision (d), for failing to have in his possession his commercial fishing license while engaged in commercial fishing. [Factual Finding 18]

### **EIGHTH CAUSE FOR DISCIPLINE**

Complainant alleged respondent violated Section 8254, subdivision (b), for failing to possess a valid lobster operator permit while engaged in commercial lobster fishing. That provision requires a lobster permit to engage in commercial lobster fishing, but does not state that such permit must be in the permittees possession. In this case, respondent had a valid lobster permit, although he did not have it in his possession. Thus, he did not violate Section 8254, subdivision (b), as alleged. Section 7857, subdivision (d), does requires him to have this permit in his possession while lobster fishing, however, this provision was not cited in this cause for discipline. Accordingly, the eighth cause for discipline is dismissed.

### **NINTH CAUSE FOR DISCIPLINE**

Respondent violated Section 8573, subdivision (c), by failing to attach a radar reflector to his shark or swordfish gillnet that contained the proper dimensions and failing to affix his registration number to the to the attached buoy. [Factual Finding 21]

## **TENTH CAUSE FOR DISCIPLINE**

Respondent violated Section 8573, subdivision (a), by keeping a shark or swordfish gill net in the water after 8:36 a.m., which was two hours after sunrise.

[Factual Finding 22]

## **ELEVENTH CAUSE FOR DISCIPLINE**

Respondent violated Section 8573, subdivision (b)(1), as in effect in 2005, when his shark or swordfish gill net exceeded 6,000 feet. [Factual Finding 23]

## **Appropriate Discipline**

12. Respondent committed numerous violations over the course a of two-year period from 2014 through 2016. Although respondent also committed three violations in 2005, these occurred almost 15 years ago; because of the time that has passed, little weight is afforded to these violations in determining discipline. The 2014 through 2016 violations range in seriousness. Respondent's failure to have his licenses and permits in his possession are technical violations that do not impact the public welfare. Much more concerning is that respondent repeatedly took undersized lobsters on three separate occasions, conduct for which he suffered two criminal convictions. The fact that the criminal court dismissed multiple charges as part of a plea agreement has no bearing on whether respondent committed these violations. Rather, respondent demonstrated a repeated pattern of disregarding the law in relation to the taking of undersized lobsters. These repeated violations have a direct impact on the State's ability to preserve its natural resources, which in turn affects the public welfare. Finally, respondent's actions on December 6, 2016, where his crewmember threw lobsters overboard upon the wardens' approach, is serious, and an aggravating factor. It was clear that respondent gave tacit approval to his crewmember to effectively destroy


evidence of taking undersized lobsters. By turning the boat away to obscure the wardens' view, respondent directly aided in this obstruction.

Although respondent testified that he is essentially retired and no longer engages in commercial fishing, there is nothing to prevent him from engaging in commercial fishing activities should he so choose. His repeated disregard of the law and lack of any rehabilitation provide no assurance that he will not continue to violate the commission's rules and regulations, or engage in criminal conduct in the future. When all the facts and circumstances are considered, it is contrary to the public interest to allow respondent to retain his commercial fishing privileges.

## **ORDER**

All entitlements, including the commercial fishing license, commercial trap permit, lobster operator permit, and southern rock crab trap permit issued to respondent Keith Langman are permanently revoked.

DATE: November 22, 2019

DocuSigned by:  
  
19DED247706C4FB...

ADAM L. BERG

Administrative Law Judge

Office of Administrative Hearings





State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
License and Revenue Branch  
1740 N. Market Blvd.  
Sacramento, CA 95834  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



**Certified Mail**

May 30, 2019

Mr. Michael P. Anderson  
[REDACTED]

[REDACTED] CA 95521

Subject: **NOTICE OF DENIAL FOR REINSTATEMENT OF SALMON VESSEL  
PERMIT, PERMIT NUMBER SA0724**

Dear Mr. Anderson:

This letter is in response to your request to reinstate the Salmon Vessel Permit (SVP), Permit Number SA0724, for the *FV Frances* (FG27133).

**Authority-Salmon Vessel Permit**

Fish and Game Code (FGC) Section 8235(a) states that the owner of a permitted vessel, or that owner's agent, may apply for renewal of the permit annually on or before April 30, upon payment of the fees without penalty. Upon receipt of the application and fees, the Department of Fish and Wildlife ("Department") shall issue the permit for use of the permitted vessel in the subsequent permit year only to the owner of the permitted vessel.

**Authority-Late Renewal Applications**

FGC Section 7852.2(a) establishes a graduated late fee for any renewal application that is received after the deadline.

FGC Section 7852.2(b) states the Department shall not waive the applicable late fee. Additionally, FGC Section 7852.2(c) requires the Department to deny any application for renewal received after March 31 of the permit year following the year in which the applicant last held a valid permit for that fishery.

**Reason for Appeal to the Department**

In your email dated April 30, 2019, you are requesting reinstatement of the SVP for the *FV Frances*. You explained several seasons of closures and limited seasons has caused you severe financial duress. You stated that you were told by Department personnel last spring that you had until June 30, 2019, to renew your 2018-2019 SVP with a late fee. You stated that you went to the Department's Eureka office on April 29, 2019, to pay your 2018 and 2019 permit fees and were told that you could not renew your permit. You further explained that it has been incredibly challenging to survive as a commercial salmon harvester and it would be sad to have an error end your livelihood and the life of a vessel that has been harvesting salmon since 1931.

Mr. Michael P. Anderson

May 7, 2019

Page 2

**Department Findings**

Department license records show that the *F/V Frances* last held a valid SVP in 2017-2018, which made you eligible to renew the permit for the 2018-2019 permit year.

**Department Determination**

Based on the previously stated information, your request to reinstate the SVP for the *F/V Frances* is denied, because the *F/V Frances* last held a valid SVP in the 2017-2018 permit year. The Department received your request to renew the SVP on April 30, 2019. FGC Section 7852.2(c) requires the Department to deny any application for renewal received after March 31 of the permit year following the year in which the applicant last held a valid permit for that fishery.

**Deadline to File an Appeal to the Fish and Game Commission**

If you wish to appeal the Department's decision, you must submit a written appeal to the Fish and Game Commission (Commission) either by mail at P.O. Box 944209, Sacramento, CA 94244-2090, or by email at [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov). Pursuant to FGC Section 7852.2(d), your written appeal must be received within 60 days of the date of this letter. The Commission, upon consideration of the appeal, may grant the renewal of the SVP. If the Commission grants the renewal, it shall assess the applicable late fees, which amount to \$1,764.98. A fee schedule is enclosed.

If you have any questions or require further assistance, please contact Ms. Ruth Flores at (916) 928-7470 or [Ruth.Flores@wildlife.ca.gov](mailto:Ruth.Flores@wildlife.ca.gov).

Sincerely,



Joshua Morgan, Chief  
License and Revenue Branch  
Enclosure

cc: Ms. Melissa Miller-Henson  
Fish and Game Commission  
Sacramento, CA

Ms. Ruth Flores  
California Department of Fish and Wildlife  
Sacramento, CA





State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
License and Revenue Branch  
1740 N. Market Blvd.  
Sacramento, CA 95834  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



Mr. Michael P. Anderson  
Fees Required for Reinstatement for a  
Salmon Vessel Permit (SVP)  
Permit Number SA0724  
FV Frances (FG27133)

Prior Year Fees	Permit Fees
2018-2019 Commercial Fishing Salmon Stamp	\$ 87.55
Commercial Boat Registration	\$ 367.25
SVP	\$ 44.29
Late Fee (61 days to March 31, 2019)	\$ <u>607.75</u>

**Prior Year Fees Due** \$ **1,106.84**

**Prior year permit fees must be paid before a 2019-2020 SVP can be issued**

Current Year Fees	
2019-2020 Commercial Fishing License	\$ 145.75
Commercial Fishing Salmon Stamp	\$ 87.55
Commercial Boat Registration	\$ 379.00
SVP	\$ <u>45.84</u>

**Total Current Fees Due** \$ **658.14**  
**Total Fees Due** \$ **1,764.98**

If the Fish and Game Commission should recommend approval, full payment of \$1,764.98 would be due.

RECEIVED  
CALIFORNIA  
FISH AND GAME  
COMMISSION

June 6, 2019

2019 JUN 12 PM 1:01

I am writing to appeal the denial of the reinstatement of the Salmon Vessel Permit attached to the F/V Frances (FG 27133)

The combination of several seasons that were either severely limited or completely closed led me to make the decision to hold onto money meant to pay for my SVP and taking the fines in hopes of immediate financial survival. The decision was made when told by staff at your Eureka office I had until June 30, 2019 to pay for my license and fines.

On April 29, 2019 I returned to the Eureka office to pay both the licensing fees and fines incurred to be told by the very person that informed me I had until June of 2019 that I could not renew my SVP.

Due to this misinformation I sit tied up in Eureka while the most promising season offered to us in years passes before me. Please rectify this immediately as I've been further burdened by a mistake made by the staff of your Eureka office.

Thank You,

A handwritten signature in black ink, appearing to read 'Michael Anderson', with a long horizontal line extending to the right.

Captain Michael Anderson

F/V Frances (FG27133)



January 13, 2020

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: *In the Matter of Michael Anderson*

Dear Commissioners:

This letter is in response to Michael Anderson's request to appeal the Department of Fish and Wildlife's ("Department") denial of his request to renew his Salmon Vessel Permit, #SA0724 ("SVP"). The SVP was last valid during the 2017-18 fishing year. Mr. Anderson submitted his appeal request to the Commission on June 12, 2019. The Department notes that while Mr. Anderson claims in his appeal request that he was misinformed by a staff member about the renewal deadline, he received two notifications from the Department on November 28 and November 30, 2018, reminding him of the March 30, 2019 renewal deadline. One of the reminders is attached. Nonetheless, the Department will not be participating in this appeal and accordingly, does not object to the renewal of the SVP for the 2019-2020 fishing year, provided that he pays all applicable fees.

The fees that Mr. Anderson must pay to renew the SVP are described in Fish and Game Code, section 7852.2 ("Section 7852.2"), subdivision (a). Section 7852.2, subdivision (a) states:

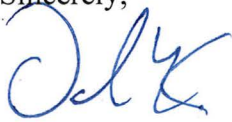
- (a) In addition to the base fee for the license, stamp, permit, or other entitlement, the department shall assess a late fee for any renewal the application for which is received after the deadline, according to the following schedule:
  - (1) One to 30 days after the deadline, a fee of one hundred twenty-five dollars (\$125).
  - (2) Thirty-one to 60 days after the deadline, a fee of two hundred fifty dollars (\$250).
  - (3) Sixty-one days or more after the deadline, a fee of five hundred dollars (\$500).

To emphasize that these fees must be paid, Section 7852.2, subdivision (b) states that "The department shall not waive the applicable late fee," while subdivision (d) states "If the commission grants renewal, it shall assess the applicable late fee pursuant to subdivision (a)." The fees total **\$1,764.98** and are described in the attached fee statement.



If you have any questions please contact me at the address above or by telephone number (916) 651-7646, or e-mail at [David.Kiene@wildlife.ca.gov](mailto:David.Kiene@wildlife.ca.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read 'DK', is positioned above the printed name.

DAVID KIENE  
Senior Staff Counsel

Cc: Michael Anderson



State of California - Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
License and Revenue Branch  
1740 North Market Boulevard  
Sacramento, CA 95834  
www.wildlife.ca.gov

EDMUND G. BROWN JR, Governor  
CHARLTON H. BONHAM, Director



November 30, 2018

MICHAEL PHILLIP ANDERSON

CA 95521



\* 1 0 0 1 6 1 8 4 7 8 \*

BOAT NAME: F/V FRANCES F&G BOAT#: FG27133

**Subject: Commercial Fishing Limited Entry Permit Late Renewal Notice**

Dear Permittee:

This letter is to inform you that you have not renewed your Commercial Fishing Limited Entry and Restricted Access Permit(s) with the California Department of Fish and Wildlife (CDFW) for the 2018-2019 permit year.

The deadline to renew is **March 31, 2019**.

**Renewals submitted after the deadline will be denied.** If you did not renew by the deadline, you may submit a written request for reinstatement of your permit to the Department's License and Revenue Branch at the address above.

**To retain your permit, please submit the total fee for the license(s) and permit(s) below, along with the following:**

- This Commercial Fishing Limited Entry Permit Late Renewal Notice.
- A copy of your current vessel documentation (**United States Coast Guard Certificate of Documentation or State Registration**).
- Payment - Credit Card Payment Authorization Form, personal check or money order.

<u>Licenses and Permit</u>	<u>FEE</u>
Commercial Boat Registration (FG27133)	\$367.25
Commercial Salmon Vessel Permit With Qualifier (SA0724)*	\$44.29
Limited Entry Late Fee (June 30, 2018 to March 31, 2019)	\$607.75
<b>Total</b>	<b>\$1,019.29</b>

\* Qualifier must have the 2018 Commercial Fishing License and Salmon Stamp in order to renew the Salmon Vessel Permit.

Use the enclosed self-addressed envelope to mail the above items. If you have already renewed for the 2018-2019 permit year, please disregard this notice.

**PLEASE NOTE:** Incomplete renewals will not be accepted and will be returned to you.

If you have any questions or require further assistance, please contact the Department's License and Revenue Branch at (916) 928-5822 or [LRBCOMM@wildlife.ca.gov](mailto:LRBCOMM@wildlife.ca.gov).

Thank you for your attention to this matter.

Enclosure

*Conserving California's Wildlife Since 1870*



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
License and Revenue Branch  
1740 N. Market Blvd.  
Sacramento, CA 95834  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



Mr. Michael P. Anderson  
Fees Required for Reinstatement for a  
Salmon Vessel Permit (SVP)  
Permit Number SA0724  
F/V Frances (FG27133)

Prior Year Fees	Permit Fees
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SVP	\$ 44.29
Late Fee (61 days to March 31, 2019)	\$ <u>607.75</u>
<b>Prior Year Fees Due</b>	<b>\$ 1,106.84</b>

**Prior year permit fees must be paid before a 2019-2020 SVP can be issued**

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Commercial Fishing Salmon Stamp	\$ 87.55
Commercial Boat Registration	\$ 379.00
SVP	\$ <u>45.84</u>
<b>Total Current Fees Due</b>	<b>\$ 658.14</b>
<b>Total Fees Due</b>	<b>\$ 1,764.98</b>

If the Fish and Game Commission should recommend approval, full payment of \$1,764.98 would be due.



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
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GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



**Certified Mail**

May 13, 2019

Mr. Douglas B. Dirkse

CA 92111

**Subject: NOTICE OF DENIAL FOR REINSTATEMENT OF SALMON VESSEL  
PERMIT, PERMIT NUMBER SA0661**

Dear Mr. Dirkse:

This letter is in response to your request to reinstate the Salmon Vessel Permit (SVP), Permit Number SA0661, for the F/V *Olinka* (FG25318).

**Authority-Salmon Vessel Permit**

Fish and Game Code (FGC) Section 8235(a) states that the owner of a permitted vessel, or that owner's agent, may apply for renewal of the permit annually on or before April 30, upon payment of the fees without penalty. Upon receipt of the application and fees, the Department of Fish and Wildlife ("Department") shall issue the permit for use of the permitted vessel in the subsequent permit year only to the owner of the permitted vessel.

**Authority-Late Renewal Applications**

FGC Section 7852.2(a) establishes a graduated late fee for any renewal application that is received after the deadline.

FGC Section 7852.2(b) states the Department shall not waive the applicable late fee. Additionally, FGC Section 7852.2(c) requires the Department to deny any application for renewal received after March 31 of the permit year following the year in which the applicant last held a valid permit for that fishery.

**Reason for Appeal to the Department**

In your letter received on April 9, 2019, you are requesting reinstatement of the SVP for the F/V *Olinka*. You explained that your SVP was not renewed in 2014 after renewing it since 1987. You did not realize you were renewing the Commercial Fishing Salmon Stamp instead of the SVP. You stated that you have not trolled for salmon for about 15 years, but never intended to retire the permit. This year you became interested in salmon fishing and attempted to renew your annual commercial licenses and you were told that your SVP had lapsed since 2014. You requested that the SVP be reinstated.



Mr. Douglas B. Dirkse

May 7, 2019

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**Department Findings**

Department license records show that the *F/V Olinka* last held a valid SVP in 2013-2014, which made you eligible to renew the permit for the 2014-2015 permit year.

**Department Determination**

Based on the previously stated information, your request to reinstate the SVP for the *F/V Olinka* is denied, because the *F/V Olinka* last held a valid SVP in the 2013-2014 permit year. The Department received your request to renew the SVP on April 8, 2019. FGC Section 7852.2(c) requires the Department to deny any application for renewal received after March 31 of the permit year following the year in which the applicant last held a valid permit for that fishery.

**Deadline to File an Appeal to the Fish and Game Commission**

If you wish to appeal the Department's decision, you must submit a written appeal to the Fish and Game Commission (Commission) either by mail at P.O. Box 944209, Sacramento, CA 94244-2090, or by email at [fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov). Pursuant to FGC Section 7852.2(d), your written appeal must be received within 60 days of the date of this letter. The Commission, upon consideration of the appeal, may grant the renewal of the SVP. If the Commission grants the renewal, it shall assess the applicable late fees, which amount to \$3,219.12. A fee schedule is enclosed.

If you have any questions or require further assistance, please contact Ms. Ruth Flores at (916) 928-7470 or [Ruth.Flores@wildlife.ca.gov](mailto:Ruth.Flores@wildlife.ca.gov).

Sincerely,



Joshua Morgan, Chief  
License and Revenue Branch  
Enclosure

cc: Ms. Melissa Miller-Henson  
Fish and Game Commission  
Sacramento, CA

Ms. Ruth Flores  
California Department of Fish and Wildlife  
Sacramento, CA



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
License and Revenue Branch  
1740 N. Market Blvd.  
Sacramento, CA 95834  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



Mr. Douglas B. Dirkse  
Fees Required for Reinstatement for a  
Salmon Vessel Permit (SVP)  
Permit Number SA0661  
FV Olinka (FG25318)

Prior Year Fees	Permit Fees
2014-2015 SVP	\$ 42.49
Late Fee (61 days to March 31, 2015)	\$ 581.25
2015-2016 SVP	\$ 43.00
Late Fee (61 days to March 31, 2016)	\$ 589.00
2016-2019 SVP	\$ 43.00
Late Fee (61 days to March 31, 2017)	\$ 589.00
2017-2018 SVP	\$ 43.00
Late Fee (61 days to March 31, 2018)	\$ 590.50
2018-2019 SVP	\$ 44.29
Late Fee (61 days to March 31, 2019)	\$ <u>607.75</u>
<b>Prior Year Fees Due</b>	<b>\$ 3,173.28</b>

**Prior year permit fees must be paid before a 2019-2020 SVP can be issued**

<b>Current Year Fees</b>	
2019-2020 SVP	\$ <u>45.84</u>
<b>Total Current Fees Due</b>	<b>\$ 45.84</b>
<b>Total Fees Due</b>	<b>\$ 3,219.12</b>

**If the Fish and Game Commission should recommend approval, full payment of \$3,219.12 would be due.**

**From:** Douglas Dirkse [REDACTED]  
**Date:** May 22, 2019 at 10:46:03 AM PDT  
**To:** "[fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)" <[fgc@fgc.ca.gov](mailto:fgc@fgc.ca.gov)>  
**Subject:** Expired Salmon Vessel Permit

This is an appeal to the Fish and Game Commission for the reinstatement of an expired Salmon Vessel Permit (SVP), Permit Number SA0661, for the F/V Olinka (FG25318)  
I understand the reason for the denial, FGC Section 7852.2(c)  
It was never my intention to let go of the SVP, I was renewing my Salmon Stamp every year and didn't realize I wasn't getting the SVP, I was focused on diving urchins and sea cucumbers...  
Please consider my appeal for all the same considerations as in the original request.  
My livelihood depends on the SVP now that I am unable to dive anymore.  
I understand the applicable late fees, I don't have a problem paying them if I get the SVP back.  
Thanks for the detailed response back on this matter, and how to resolve it.

Douglas Dirkse,

F/V Olinka

( [REDACTED] ) - [REDACTED]  
[REDACTED]  
[REDACTED]

Paper backup to follow by Certified Mail  
Sent from my iPad



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
Office of the General Counsel  
P.O. Box 944209  
Sacramento, CA 94244-2090  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



November 27, 2019

California Fish and Game Commission  
P.O. Box 944209  
Sacramento, CA 94244-2090

Re: *In the Matter of Douglas Dirkse*

Dear Commissioners:

This letter is in response to Douglas Dirkse's request to appeal the Department of Fish and Wildlife's ("Department") denial of his request to renew his Salmon Vessel Permit, #SA0661 ("SVP"). The SVP was last valid during the 2013-14 fishing year. Mr. Dirkse submitted his appeal request to the Commission on May 22, 2019. The Department will not be participating in this appeal and accordingly, does not object to the renewal of the SVP for the 2019-2020 fishing year, provided that he pays all applicable fees.

The fees that Mr. Dirkse must pay to renew the SVP are described in Fish and Game Code, section 7852.2 ("Section 7852.2"), subdivision (a). Section 7852.2, subdivision (a) states:

- (a) In addition to the base fee for the license, stamp, permit, or other entitlement, the department shall assess a late fee for any renewal the application for which is received after the deadline, according to the following schedule:
  - (1) One to 30 days after the deadline, a fee of one hundred twenty-five dollars (\$125).
  - (2) Thirty-one to 60 days after the deadline, a fee of two hundred fifty dollars (\$250).
  - (3) Sixty-one days or more after the deadline, a fee of five hundred dollars (\$500).

To emphasize that these fees must be paid, Section 7852.2, subdivision (b) states that "The department shall not waive the applicable late fee," while subdivision (d) states "If the commission grants renewal, it shall assess the applicable late fee pursuant to subdivision (a)." The fees total **\$3,219.12** and are described in the attached fee statement.

If you have any questions please contact me at the address above or by telephone number (916) 651-7646, or e-mail at [David.Kiene@wildlife.ca.gov](mailto:David.Kiene@wildlife.ca.gov).

Sincerely,

DAVID KIENE  
Senior Staff Counsel



Cc: Douglas Dirkse



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
License and Revenue Branch  
1740 N. Market Blvd.  
Sacramento, CA 95834  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

GAVIN NEWSOM, Governor  
CHARLTON H. BONHAM, Director



Mr. Douglas B. Dirkse  
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