

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

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|-------------------------|-----------|-------------------|
| (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^a, 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.

^a 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.