

Agenda

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE 2016 SALMON INFORMATION MEETING

Sonoma County Water Agency Office
404 Aviation Boulevard
Santa Rosa, California 95403

~
Wednesday, March 2, 2016
9:30 a.m. – 3:30 p.m.

Welcome - Moderator Opening Comments and Review Agenda	Brett Kormos, CDFW (9:30 a.m.)
2015 Central Valley Chinook Spawner Escapement	Vanessa Gusman, CDFW (9:45 a.m.)
Central Valley Winter Run Chinook Current Status and Overview	Dan Kratville, CDFW (10:05 a.m.)
2015 Central Valley Chinook River Sport Fisheries	Erin Ferguson, CDFW (10:30 a.m.)
BREAK (15 minutes)	(10:50 a.m.)
2015 Klamath Basin Chinook Spawner Escapement, Harvest and Age Composition	Morgan Knechtle, CDFW (11:05 a.m.)
2015 California Ocean Salmon Sport and Commercial Fisheries Overview	Alex Letvin, CDFW (11:25 a.m.)
LUNCH BREAK (1 hour)	(11:45 p.m.)
NMFS 2016 Ocean Salmon Fishery Guidance	Jeromy Jording, NMFS (12:45 p.m.)
Abundance Forecasts and Harvest Model Results	Dr. Michael O'Farrell, NMFS (1:00 p.m.)

Introduction of California Salmon Management Panel

Brett Kormos, CDFW
(1:30 p.m.)

Panel members:

Ms. Marci Yaremko, CDFW Marine Region, PFMC-CDFW Designee
Mr. Dan Welford, CA PFMC member
Mr. David Crabbe, CA PFMC member
Mr. Dave Bitts, PFMC-SAS, CA Troll Representative
Mr. Marc Gorelnik, PFMC-SAS, CA Sport – Private Skiff Representative
Mr. John Atkinson, PFMC-SAS, CA Sport – Charter Boat Representative
Mr. Jim Hie, PFMC-SAS, Conservation
Dr. Michael O'Farrell, NMFS SWFSC, PFMC-STT, Vice-Chair
Mr. Brett Kormos, CDFW Marine Region, PFMC-STT

Public Comment to California Salmon Management Panel

(1:40 p.m.)

- 2016 Ocean Sport Fishery Regulations
- 2016 Ocean Commercial Fishery Regulations
- 2016 Inland Fishery Regulations
 - Klamath River Basin
 - Sacramento River Basin and Delta

Closing Comments and Evaluation Form

Brett Kormos, CDFW
(3:15 p.m.)

Acronyms:

CDFW: California Department of Fish and Wildlife

NMFS: National Marine Fisheries Service

PFMC: Pacific Fishery Management Council

SAS: PFMC Salmon Advisory Subpanel

STT: PFMC Salmon Technical Team

SWFSC: NMFS Southwest Fisheries Science Center, Santa Cruz, CA

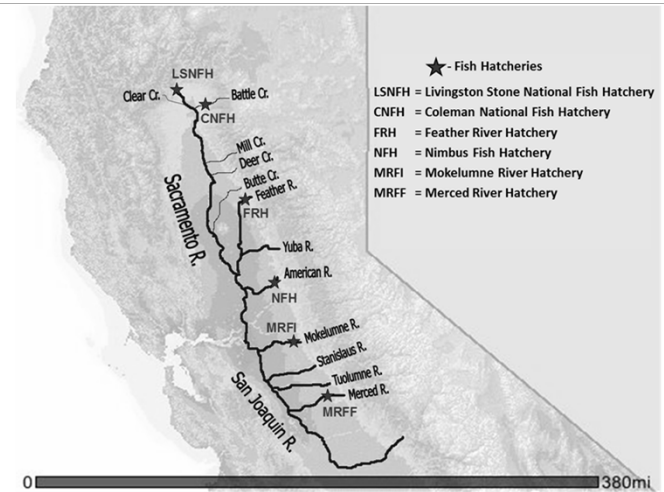


Department of Fish and Wildlife Ocean Salmon Project

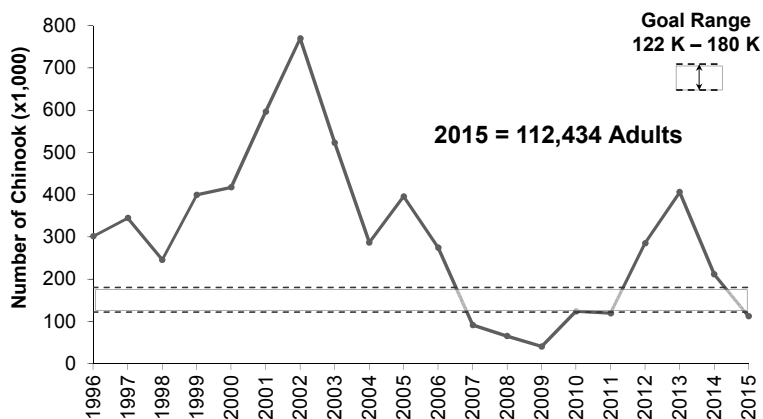
2015 Central Valley Chinook Salmon Spawning Escapement

Presented by
Vanessa Gusman

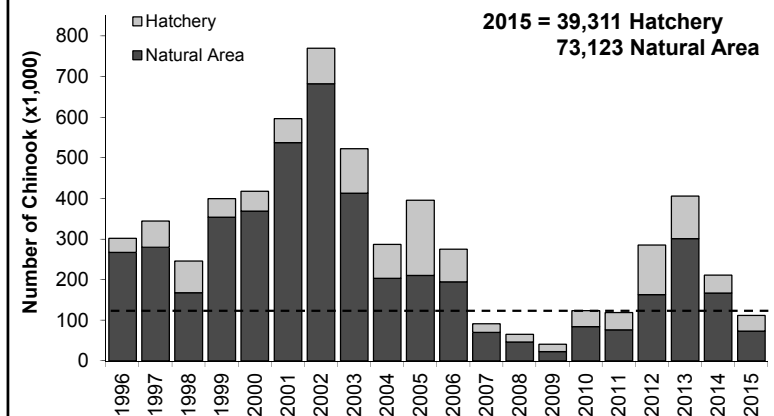
The Central Valley



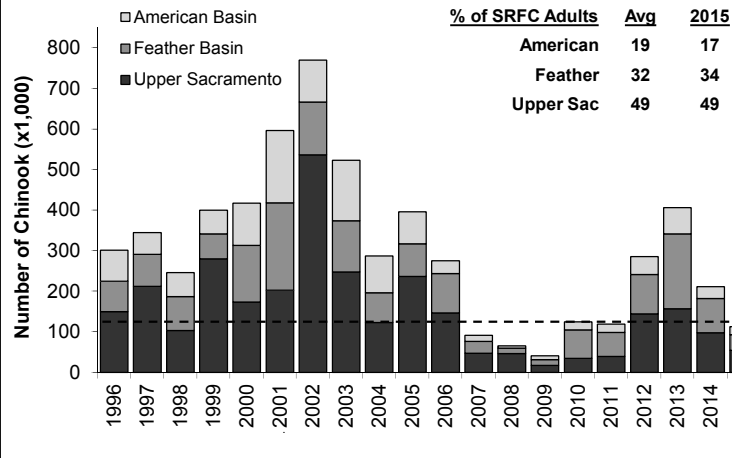
Sacramento River Fall Chinook Adult Spawning Escapement, 1996-2015



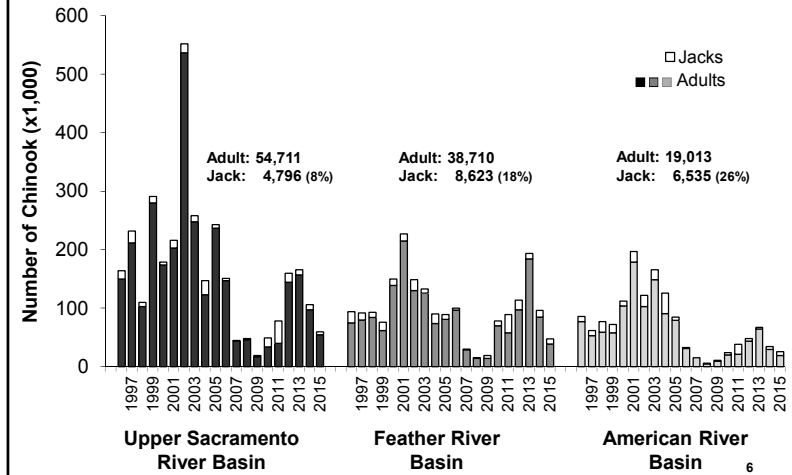
Sacramento River Fall Chinook Hatchery & Natural Area Adult Spawning Escapement, 1996-2015



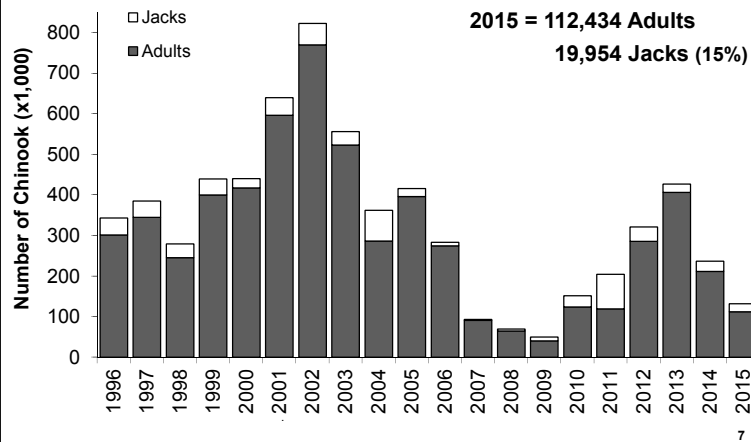
Sacramento River Fall Chinook Adult Spawning Escapement By Basin, 1996-2015



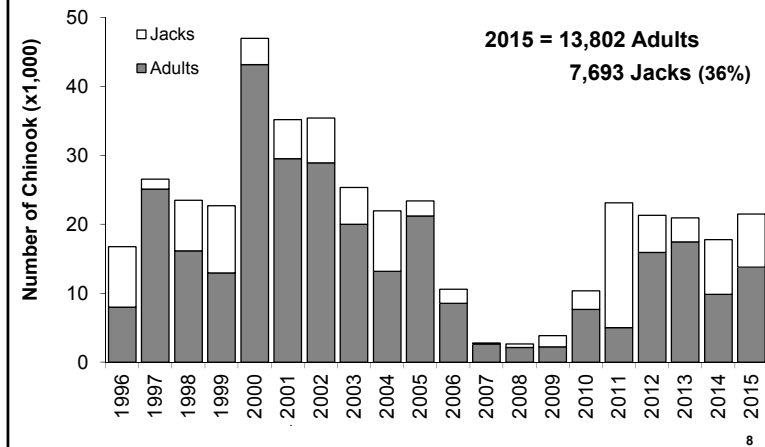
Sacramento River Fall Chinook Adult & Jack Spawning Escapement By Basin, 1996-2015



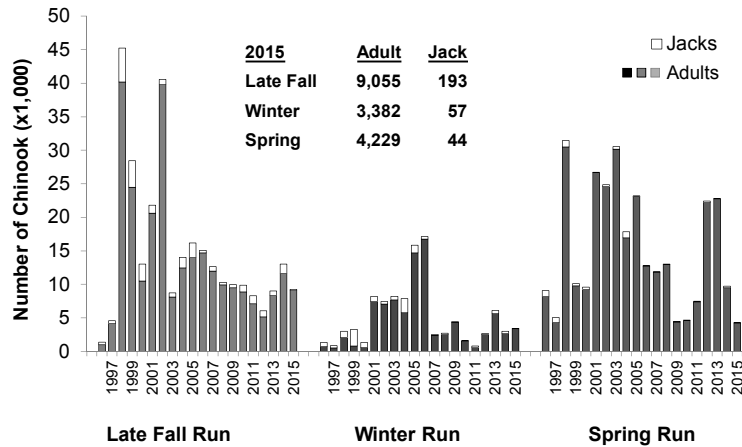
Sacramento River Fall Chinook Adult & Jack Spawning Escapement, 1996-2015



San Joaquin Basin Fall Chinook Adult & Jack Spawning Escapement, 1996-2015



Other Sacramento Basin Chinook Stocks Spawning Escapement, 1996-2015



Department of Fish and Wildlife Ocean Salmon Project



Thank You

Vanessa Gusman
Environmental Scientist
Vanessa.Gusman@wildlife.ca.gov
(707) 576-2375

More information available at:
www.pcouncil.org/salmon

2015 Sacramento River Fall Chinook Hatchery and Natural Area Escapement

		Jacks	Adults	Total	% Jack	% Nat	% SRFC Total
Upper Sacramento River Basin	Hatchery	1,895	13,817	15,712	12%		12%
	Natural	<u>2,901</u>	<u>40,894</u>	<u>43,795</u>	<u>7%</u>	74%	<u>33%</u>
		4,796	54,711	59,507	8%		45%
Feather River Basin (including Yuba River)	Hatchery	2,612	17,648	20,260	13%		15%
	Natural	<u>6,011</u>	<u>21,062</u>	<u>27,073</u>	<u>22%</u>	57%	<u>21%</u>
		8,623	38,710	47,333	18%		36%
American River Basin	Hatchery	3,916	7,846	11,762	33%		9%
	Natural	<u>2,619</u>	<u>11,167</u>	<u>13,786</u>	<u>19%</u>	54%	<u>10%</u>
		6,535	19,013	25,548	26%		19%
Total 2015 SRFC Escapement		19,954	112,434	132,388	15%	64%	100%

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2015 Other Central Valley Chinook Stocks Hatchery and Natural Area Escapement

		Jacks	Adults	Total	% Jack	% Nat
Central Valley Late Fall Chinook	Hatchery	191	6,528	6,719	3%	
	Natural	<u>2</u>	<u>2,527</u>	<u>2,529</u>	<u>0.1%</u>	27%
		193	9,055	9,248	2%	
Sacramento River Winter Chinook	Natural	<u>57</u>	<u>3,382</u>	<u>3,439</u>	<u>2%</u>	100%
		57	3,382	3,439	2%	
Central Valley Spring Chinook	Hatchery	44	3,190	3,234	1%	
	Natural	<u>---</u>	<u>1,039</u>	<u>1,039</u>	<u>---</u>	24%
		44	4,229	4,273	---	
San Joaquin Fall Chinook	Hatchery	3,719	5,761	9,480	39%	
	Natural	<u>3,974</u>	<u>8,041</u>	<u>12,015</u>	<u>33%</u>	56%
		7,693	13,802	21,495	36%	

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Director's Office
1416 Ninth Street, 12th Floor
Sacramento, CA 95814
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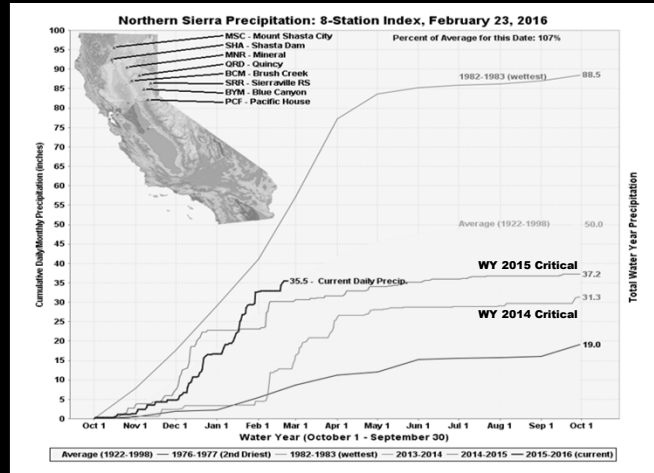
EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director



Winter-Run Chinook Salmon in the 2014 and 2015 Drought

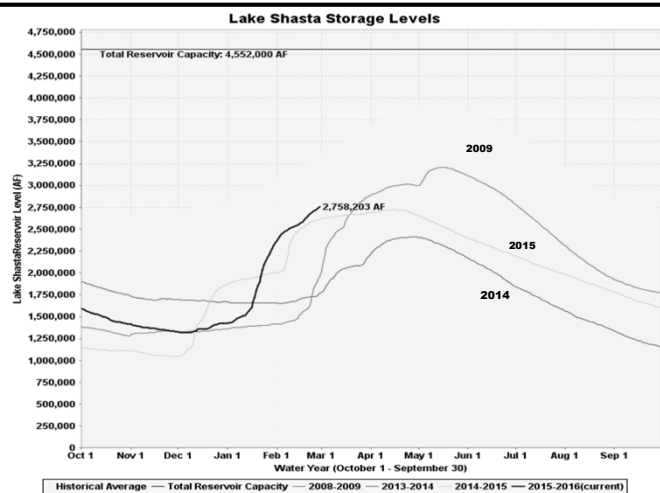
Daniel Kratville
daniel.kratville@wildlife.ca.gov

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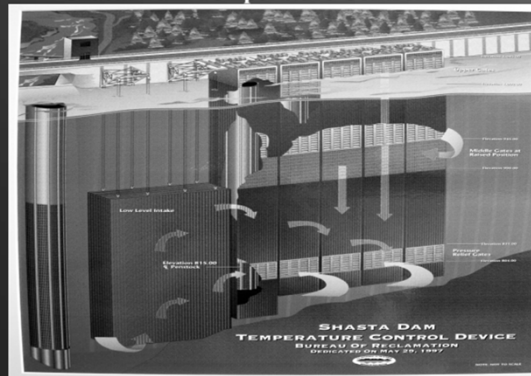


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Shasta Storage Levels



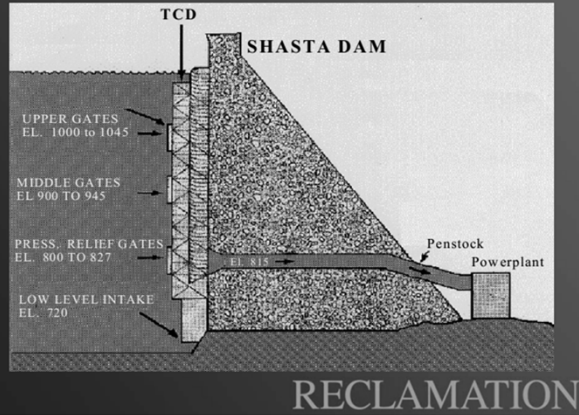
Shasta Dam Temperature Control Device



RECLAMATION

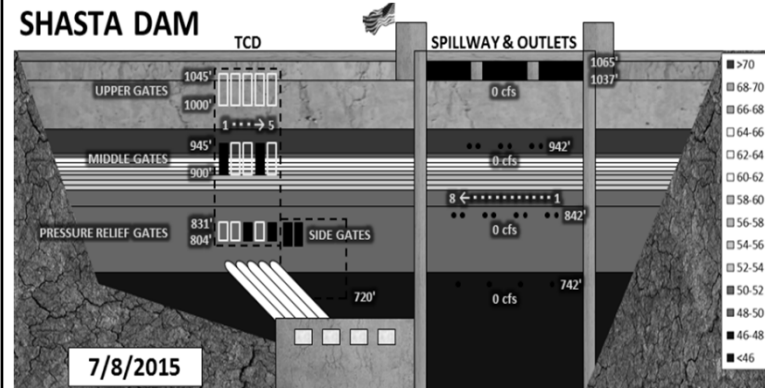
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Shasta Dam TCD Configuration



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Temperature Profile Graph



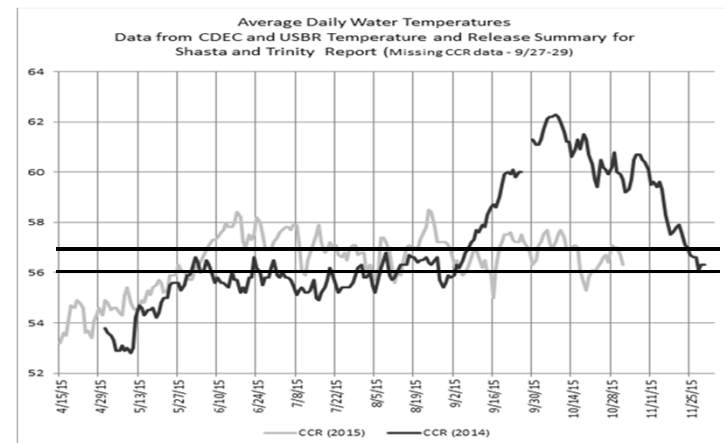
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USBR Operations Shasta Reservoir

2014		2015	
CCR 56 F		CCR 57 F	
Month	Flow CFS	Month	Flow CFS
June	9000-10000	June	7250
July	9000-10000	July	7250
August	7000-8000	August	7250
September	4000-5000	September	6500
October	4000	October	5000

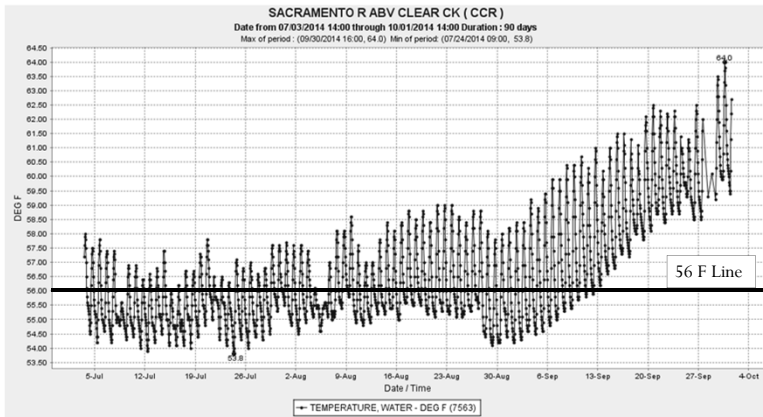
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CCR comparison 2014 - 2015



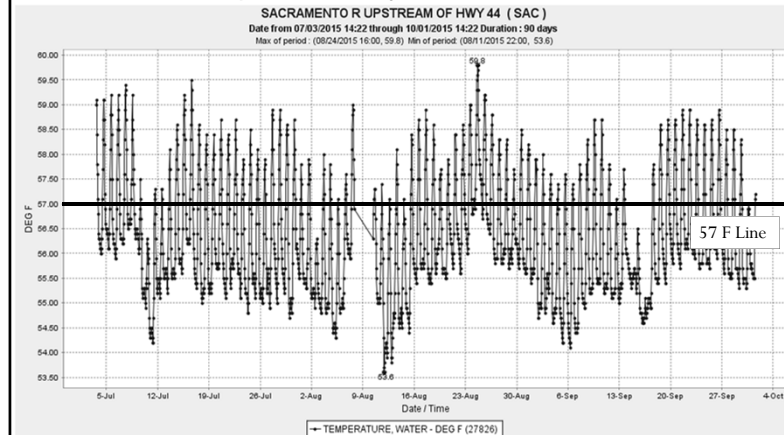
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Daily Temperatures at Clear Creek Compliance Point July 03, 2014 to October 01, 2014



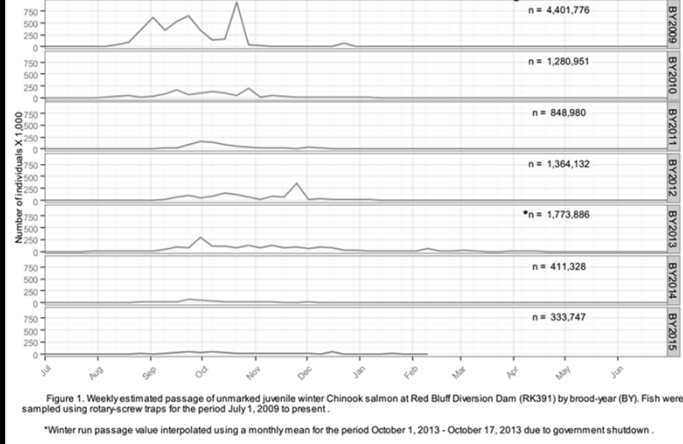
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Daily Temperatures at Hwy 44 Bridge Upstream of Compliance Point July 03, 2014 to October 01, 2014



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Juvenile Winter Chinook Salmon Estimated Passage



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Hypothesized Causes of Cohort Collapse

- 2014: We think that the loss of temperature control by the USBR was the major cause of the loss from egg to juvenile life stages.
- 2015: While the USBR never fully lost control of temperature, we believe that the average temperatures were too high, resulting in similar losses as 2014.

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Livingston Stone National Fish Hatchery

- In 2014 and in 2015 the fish agencies began preparing various contingency plans. One part of those plans was to increase the LSNFH production to maximum.
- Reinstate Captive Broodstock Program

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Hatchery Production

- 2014: Approximately 600,000
- 2015: Approximately 400,000 (lower number this year due to disease issues with the adult broodstock and lower numbers of adults trapped)

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Juvenile Production Estimate (JPE) Entering the Delta

- 2015: 257,116
- 2014: 331,021
- 2013: 1,227,267

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In-River Recreational Fishing Closures

- In 2015, the CDFW enacted a recreational fishing closure on the Sacramento River from the Highway 44 Bridge to the Keswick Dam.
- In 2016, a second closure has been approved by the Fish and Game Commission.

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Monitoring

- The fish agencies have greatly increased our monitoring efforts over the last three years.
- Increased temperature monitoring in the Sacramento and the tributaries.
- Increased stranding monitoring.
- Increased rescue efforts.

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Questions?

Daniel Kratville
daniel.kratville@wildlife.ca.gov

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CENTRAL VALLEY ANGLER SURVEY: 2015 Recreational Harvest of Chinook Salmon



Erin Ferguson, James Lyons & Rob Titus

California Department of Fish and Wildlife
Fisheries Branch
Anadromous Resource Assessment
Sacramento, California



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2015 Central Valley Salmon Season

Open July 16th-December 16th

Exceptions:

Lower American River

July 16th–December 31

Upper Sacramento River

August 1st to December 16th

RBDD to Deschutes Road Bridge

Feather River

July 16th to October 15th

Low flow channel closed



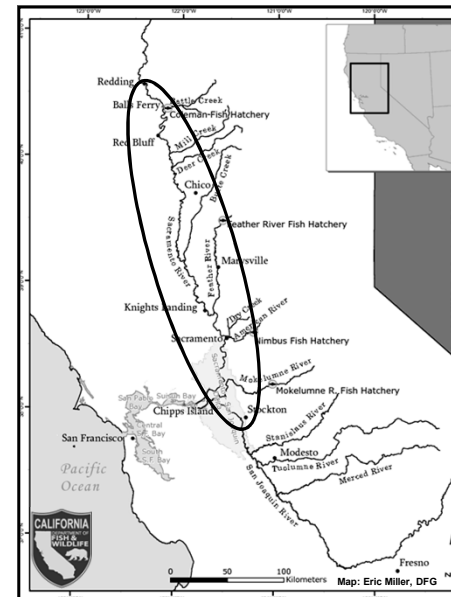
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Central Valley Angler Survey



- Estimate angler effort targeting Chinook salmon
- Estimate catch-per-unit-effort (CPUE)
- Estimate harvest of Chinook salmon
- Collect biological information on the catch
- Recover coded-wire tags

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Sampling Design:

- 25 survey sections:
 - *Sacramento River: Carquinez Bridge to Deschutes Rd Bridge*
 - *Feather River*
 - *American River*
 - *Mokelumne River*
- Eight randomly selected sampling days per month:
 - *four weekdays*
 - *four weekend days*

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Estimates of Chinook Salmon Effort, Catch, and Harvest



Data collection via:

- Roving angler counts
- Roving angler interviews
- Access point interviews
- Coded Wire Tag (CWT) Recovery

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Overview of 2015 Central Valley Sport Fishery for Chinook Salmon*

Effort:	733,921 angler hours
Trips:	148,718 angling days
Total catch:	42,486 salmon
Harvest:	24,362 salmon
Release:	18,124 salmon
Pct retention:	58 %
Harvest rate:	3 salmon per 100 angler hours



* Based on fishery statistics for the American, Feather, Mokelumne and Sacramento rivers, July – December 2015.

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Raw Statistics

Contacted over 6,158 fishing parties
 1,601 salmon reported kept
 1,497 Salmon observed
 - or 6.1% of the Estimated Harvest
 359 adipose fin-clipped salmon, or 24%
 345 heads taken for CWT recovery, or 96%



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Coded Wire Tag Recoveries

340 CWTs successfully recovered and read

- 30.0% Feather River Hatchery fall run
- 28.0% Coleman National Fish Hatchery fall run
- 13.0% Nimbus Hatchery fall run
- 13.0% Mokelumne River Hatchery fall run
- 8.0% Feather River spring run
- 5.0% Coleman National Fish Hatchery late-fall run
- 3.0% Merced River Fish Facility fall run
- 0.0% Winter run

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Sacramento River Fall-Run Chinook Salmon (SRFC) Harvest

Defined as any harvest of Chinook salmon in the American, Feather and Sacramento rivers.



Excludes

Harvest in the Mokelumne River.

Harvest in the Late-fall-run Chinook salmon fishery

Known non-SRFC from the recovery of coded wire tags

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SRFC Inland Harvest

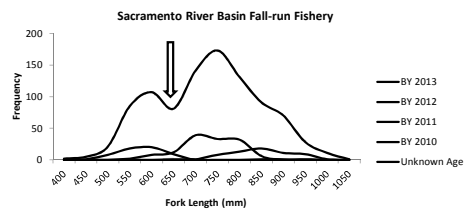
18,619 SRFC in 2015, or 76% of all Chinook salmon harvest in the Central Valley



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Fork Length Frequency Analysis

Conducted for each management zone to determine the delineation between two year old (grilse) and older SRFC Chinook salmon.



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Grilse Composition Varied Between Management Zones

40% Lower Sacramento
36% American River
4% Feather River
13% Upper Sacramento



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Final SRFC Harvest Estimate

Overall 24% of the harvest were grilse

14,070 adult SRFC

4,549 grilse SRFC



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2015 Sacramento River Late-Fall-Run Chinook Salmon Season

- Restricted to the Upper Sacramento River
Knights Landing to Deschutes Road Bridge
- Open November 1st – December 16th
- Daily bag limit of 2 Chinook salmon, 4 possession limit



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Sacramento River Late-Fall-Run Chinook Salmon Fishery

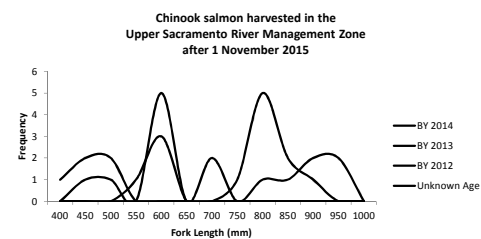


- **Effort:** 14,761 angler hours
- **Trips:** 2,350 angler trips
- **Harvest:** 133 salmon*
- **Harvest rate:** 0.9 salmon per 100 angler hours
- **Additional Harvest*:** 186 salmon caught downstream

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SRLFC Summary Statistics

- **Expanded estimate:** 319 salmon
- **61% Catch was of known hatchery origin**
 - 53% SRLFC
- **Fork Length Frequency Analysis**
 - Grilse cutoff difficult to determine ($n = 27$ fish)



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2015 Mokelumne River Fall-Run Chinook Salmon Season

- **Camanche Dam to Highway 12 overcrossing**
 - Survey excluded Lake Lodi and a middle reach.
- **Open July 16st – December 16th**
- **Daily bag limit of 2 Chinook salmon, possession was 4 salmon**



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Mokelumne River Fishery San Joaquin Fall-Run Chinook Salmon (SJRFC)

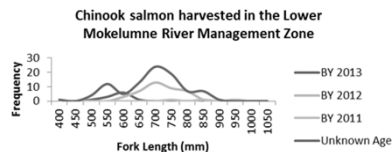


- **Effort:** 29,002 angler hours
- **Trips:** 4,723 angler trips
- **Harvest:** 1,281 salmon*
- **Harvest rate:** 4 salmon per 100 angler hours
- **Additional Harvest*:** 3,127 salmon harvested out of basin

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Mokelumne River Summary Statistics

- **Expanded estimate: 4,408 salmon**
- **26% Catch was of known hatchery origin**
 - 78% San Joaquin River Fall-run Chinook Salmon
 - 21% SRFC
 - 1% SRLFC
- **Fork Length Frequency Analysis**
 - Grilse cutoff at 600 mm or 14% grilse



- **Final SJRFC Estimate: 3,791 adult, 617 grilse**

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Contact Information

- | | |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| • Erin Ferguson | • James Lyons |
| DFW / Central Valley Angler | DFW / Central Valley Angler |
| Survey -Sacramento | Survey -Red Bluff |
| (916) 227-5029 | (530) 529-3295 |
| Erin.Ferguson@Wildlife.Ca.Gov | James.Lyons@Wildlife.Ca.Gov |



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SUMMARY OF THE 2015 CENTRAL VALLEY CHINOOK SALMON SPORT FISHERY

Prepared by Erin Ferguson and James Lyons
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Fisheries Branch
8175 Alpine Avenue, Suite F
Sacramento, CA 95826
contact: Erin.Ferguson@Wildlife.Ca.Gov

Season

Fishing for Chinook salmon in Central Valley rivers opened on 16 July 2015 on the Feather, American, and Mokelumne rivers, and on the Sacramento River from the Carquinez Bridge to the Red Bluff Diversion Dam. An additional Sacramento River reach, from the Red Bluff Diversion Dam to the Deschutes Road Bridge, opened on 1 August 2015. Closing dates varied from 16 December through 31 December 2015. The varied closing dates were chosen to avoid contact with endangered winter-run Chinook salmon. The daily bag limit was 2 Chinook salmon with a 4 Chinook salmon possession limit for each licensed angler.

Methods

The fishery was monitored by California Department of Fish and Wildlife's Central Valley Angler Survey using a three-stage random-stratified sampling design that consisted of two roving counts, roving interviews, and access point interviews. The fishery area was divided into 25 survey sections that were sampled 8 times a month, resulting in a sampling rate of 27% of total available fishing days. Biological data were collected on all harvested Chinook salmon. Coded-wire tags (CWT) from adipose fin-clipped salmon were used for stock identification and to determine age structure of the catch.

Fishery Results

Estimated angling effort in the Central Valley Chinook salmon fishery totaled 733,921 hours, corresponding to about 148,718 fishing trips. This level of effort was 24% lower than that estimated in 2014 (969,496 hours or 187,887 trips) and 49% of the average observed prior to the fall-run Chinook salmon decline in 2007. Total harvest in the Central Valley river fishery was estimated at 24,362 salmon with an additional 18,124 salmon caught and released. Retention rate of salmon was approximately 58% of the catch. Based on observed catch, 24% of the Chinook salmon harvested were adipose fin clipped and coded wire tagged. Of the 340 CWTs recovered and read, 71% were Sacramento Basin fall-run Chinook salmon, 5% were Coleman National Fish Hatchery late-fall-run Chinook salmon, 16% were San Joaquin Basin fall-run Chinook salmon, and 8.0% were Feather River Hatchery spring-run Chinook salmon. No known-origin winter-run Chinook salmon were observed in angler survey sampling.

Estimated harvest of Chinook salmon in the Sacramento River fall-run season was 22,829*. Fork length (FL) frequency analysis (see figure below) was used to determine the delineation between 2-year-old (grilse) and older (adult) Sacramento Basin fall-run Chinook. The size break between the two age groups ranged from 600 to 650 mm FL in different parts of the basin, resulting in 22% of the overall harvest consisting of grilse. Grilse percentage ranged from 4% to 40% in sub-basins. The total estimated harvest of Sacramento Basin fall-run Chinook consisted of 5,114 grilse and 17,715 adults.

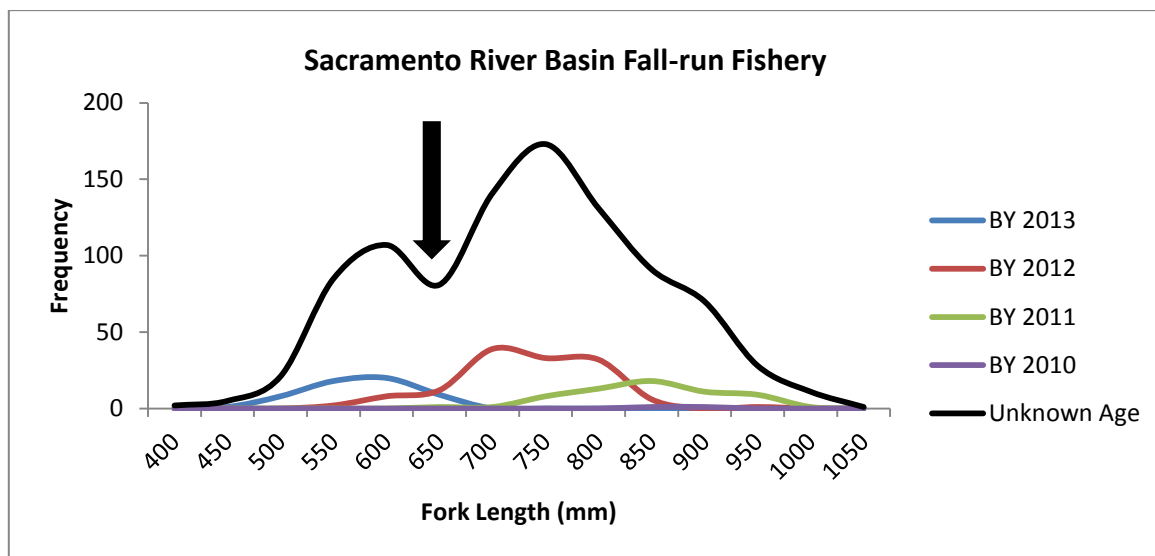


Figure. Fork length frequency distribution of Chinook salmon harvested in the 2015 Sacramento River Basin fall-run Chinook salmon fishery. Brood year was determined from CWT recoveries and was used for age class determination.

Acknowledgment

The California Department of Fish and Wildlife would like to thank the angling public for their cooperation in working with the Central Valley Angler Survey to provide data on their angling effort and catch, and for surrendering salmon heads for tag recovery.

Note: All statistics presented in this summary are preliminary and subject to change as they are finalized.

*This number corresponds to total Chinook salmon harvested in the Sacramento River fall Chinook fishery and excludes harvest in the Mokelumne River and the late-fall management zone, regardless of CWT origin.



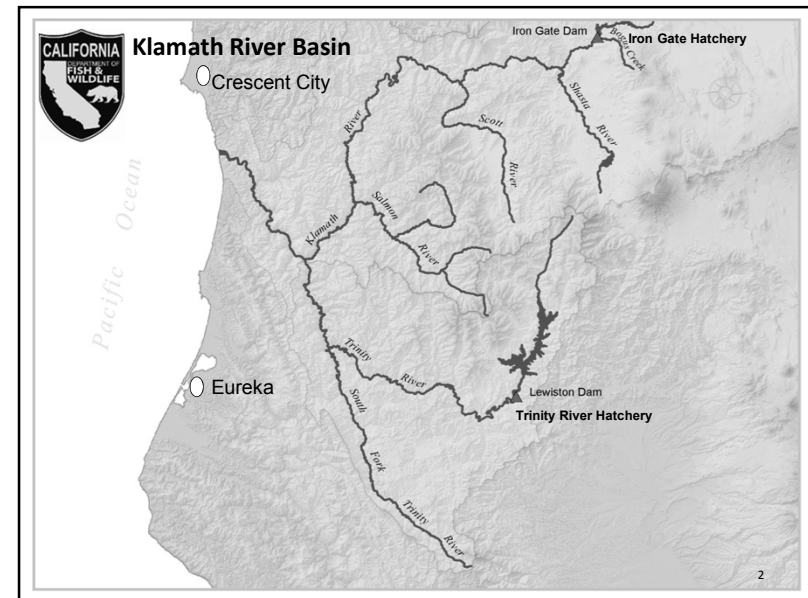
California Department of Fish and Wildlife

Klamath-Trinity Project

Klamath Basin Chinook Salmon

Spawning Escapement, Harvest and Age Composition

Salmon Information Public Meeting
 Santa Rosa, CA March 2, 2016
 Morgan Knechtle




SISKIYOU COUNTY
Office of Education

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

THE GREAT SEAL OF THE
HUPA VALLEY TRIBE

Siskiyou River Restoration Council

CALIFORNIA
FISH & WILDLIFE

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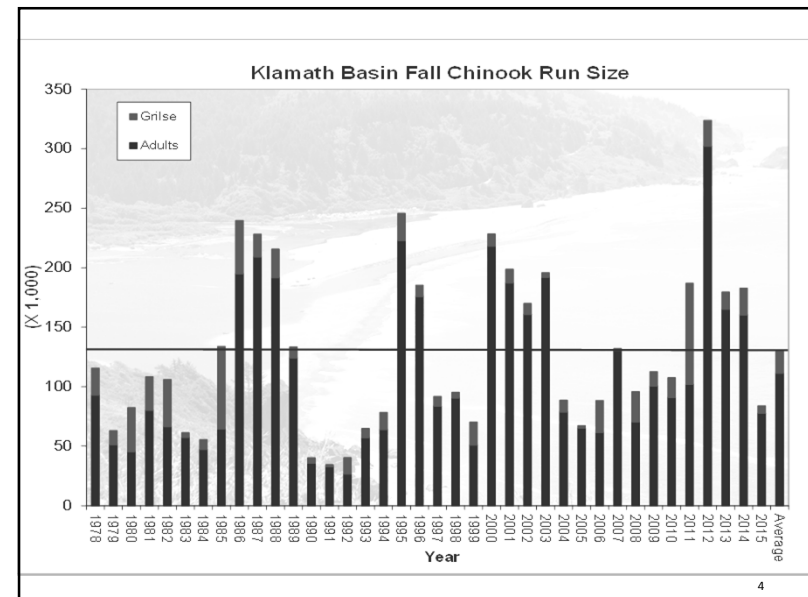
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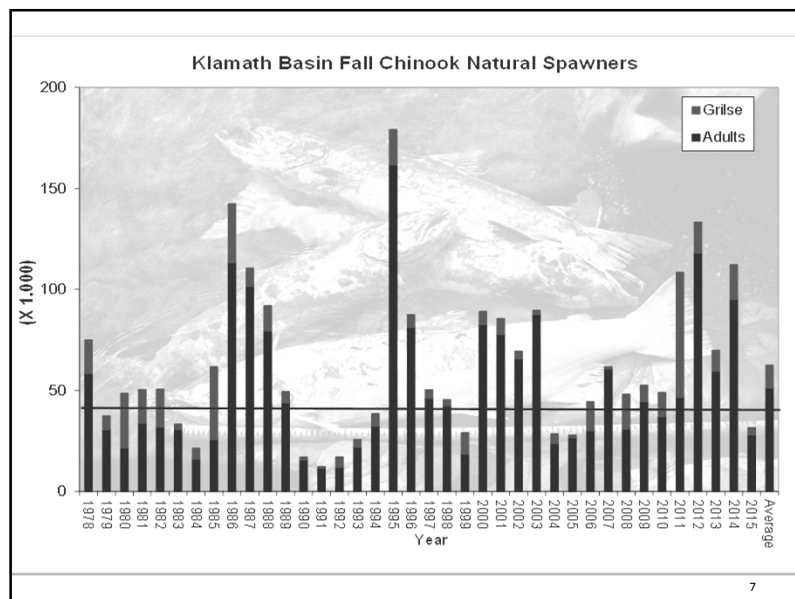
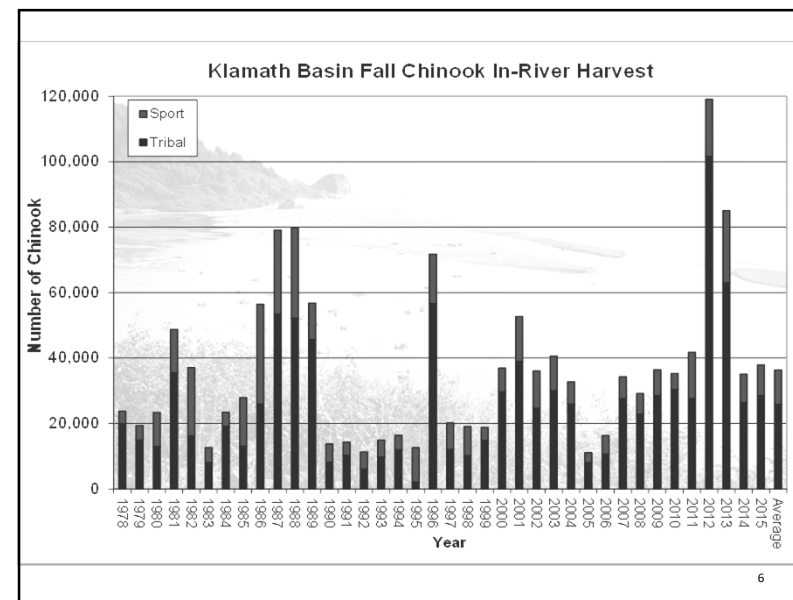
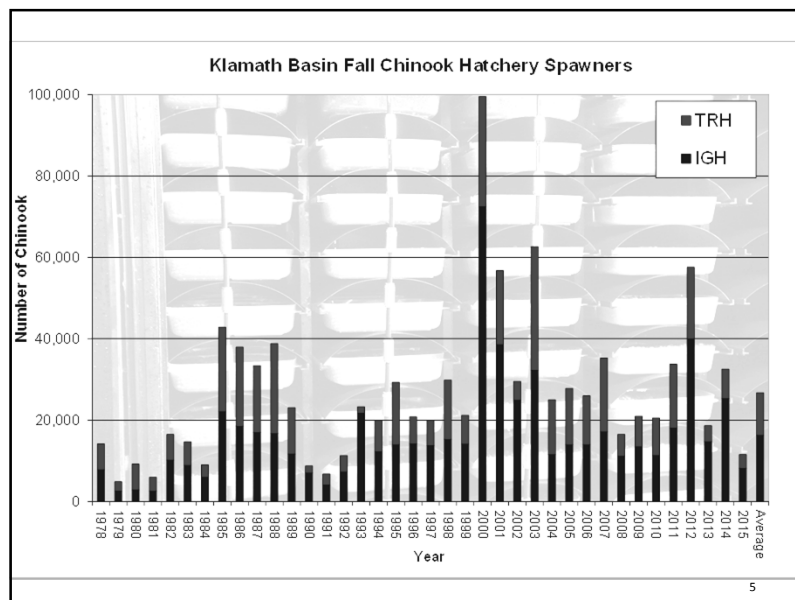
Mid Klamath Watershed Council

U.S. FISH & WILDLIFE SERVICE

RED
SISKIYOU COUNTY

AND LANDOWNERS





Age composition of the 2015 Klamath River fall Chinook run*.

	AGE				Total Adults	Total Run
Escapement & Harvest	2	3	4	5		
Hatchery Spawners						
Iron Gate Hatchery	220	3,657	4,073	226	7,956	8,176
Trinity River Hatchery	224	1,832	1,258	39	3,129	3,353
Hatchery Spawner subtotal	444	5,489	5,331	265	11,085	11,529
					14%	14%
Natural Spawners						
Klamath River subtotal	749	13,542	8,665	1,065	23,272	24,022
Trinity River subtotal	2,727	1,549	2,829	470	4,848	7,574
Natural Spawners subtotal	3,476	15,091	11,494	1,535	28,120	31,596
					36%	38%
Recreational Harvest						
Klamath River harvest	1,580	4,450	2,645	640	7,735	9,315
Trinity River harvest	24	32	31	0	63	87
Recreational Harvest subtotal	1,604	4,482	2,676	640	7,798	9,402
					10%	11%
Tribal Harvest						
Klamath River harvest	449	9,978	11,852	4167	25,997	26,446
Trinity River harvest	47	614	1,294	112	2,020	2,067
Tribal Harvest subtotal	496	10,592	13,146	4,279	28,017	28,513
					36%	34%
Dropoff Mortality	76	1,012	1,198	396	2,606	2,682
Disease Monitoring	1	36	69	17	122	123
					4%	3%
Total River Run	6,097	36,702	33,914	7,133	77,749	83,846
	7.3%	43.8%	40.4%	8.5%		8

*KRTAT 2016

2015 Preliminary results/findings

The 2015 Klamath Basin fall Chinook run estimate ranks 12th lowest in the 38 year time series.

The adult Chinook returns to the basin were 65 percent of the projected forecast (119,800 pre vs. 77,700 post).

The adult fall Chinook natural escapement conservation threshold of 40,700 was not met this season.

The number of jacks (6,097) is the 8th lowest for the 38 year time series.

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Department of Fish and Wildlife Ocean Salmon Project

2015 California Ocean Salmon Fisheries

Presented by
Alex Letvin



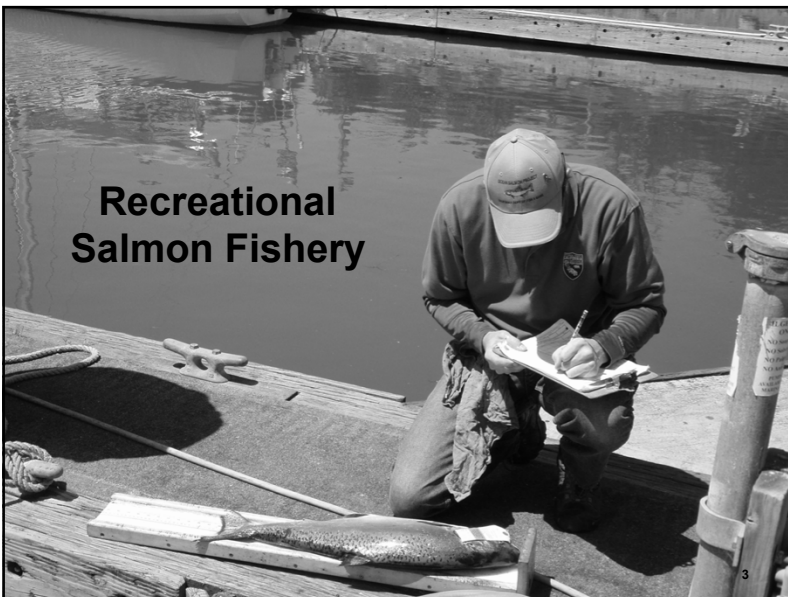
1

Ocean Salmon Project Objectives

1. Estimate salmon harvest & fishing effort for each management area by half month periods for all California ocean salmon fisheries
2. Determine contribution rates of specific salmon stocks by age using coded-wire tag recoveries by fishery, time, and management area

2

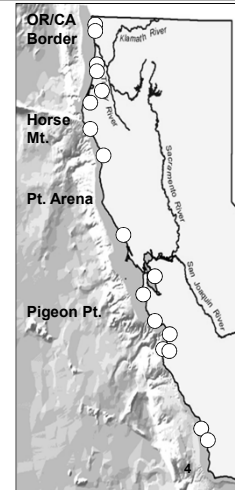
Recreational Salmon Fishery



3

Sample Design – Private Skiff Fishery

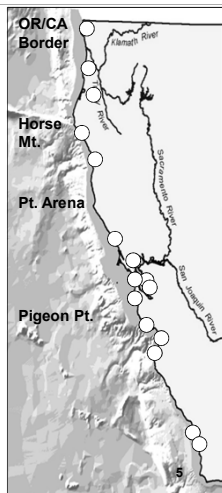
- Random stratified sampling design using weekday and weekend/holiday strata (i.e., skiff days)
- Sampling unit: all skiff trips made at a sample site for an entire day
- CRFS samples $\geq 20\%$ of all skiff days in each management area and period
 - 17 primary salmon skiff sample sites
 - Average 7 sample days per month at each site
 - 617 skiff days sampled during the 2015 ocean salmon season
- Samplers observe, identify to species, and count all salmon landed
- Each salmon inspected for missing adipose fin
- Adipose fin-clipped salmon are set aside and the heads are collected for coded-wire tag extraction



Sample Design – CPFV Fishery

Commercial Passenger Fishing Vessels (CPFV)

- Sampling unit: each CPFV trip
- Sample $\geq 20\%$ of all salmon-targeting CPFV trips in each management area and period
- Approximately 100 CPFVs target salmon at 16 primary sample sites
- Samplers observe, identify to species, and count all salmon landed
- Each salmon inspected for missing adipose fin
- Adipose fin-clipped salmon are set aside and the heads are collected for coded-wire tag extraction



2015 California Recreational Season

Klamath Management Zone: OR/CA Border to Horse Mt. (130 days)



Fort Bragg: Horse Mt. to Pt. Arena (219 days)



San Francisco: Pt. Arena to Pigeon Pt. (211 days)



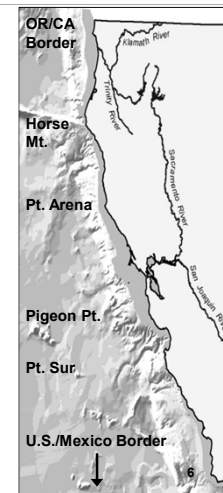
Monterey North: Pigeon Pt. to Pt. Sur (157 days)



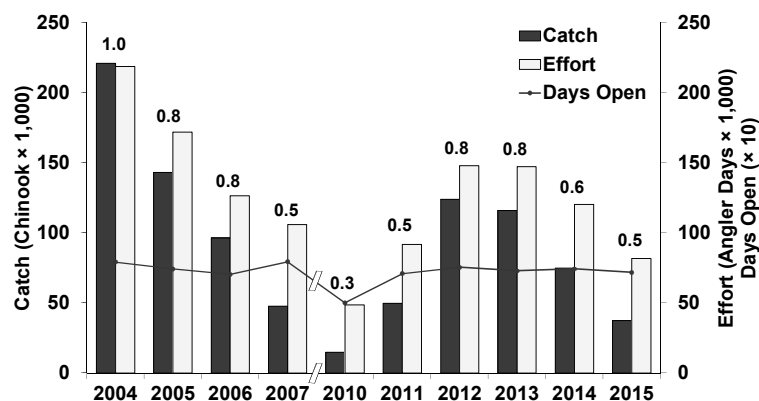
Monterey South: Pt. Sur to U.S./Mexico Border (107 days)



Minimum size limit 20", except 24" in San Francisco through April and in Monterey areas through May; 2 fish per day

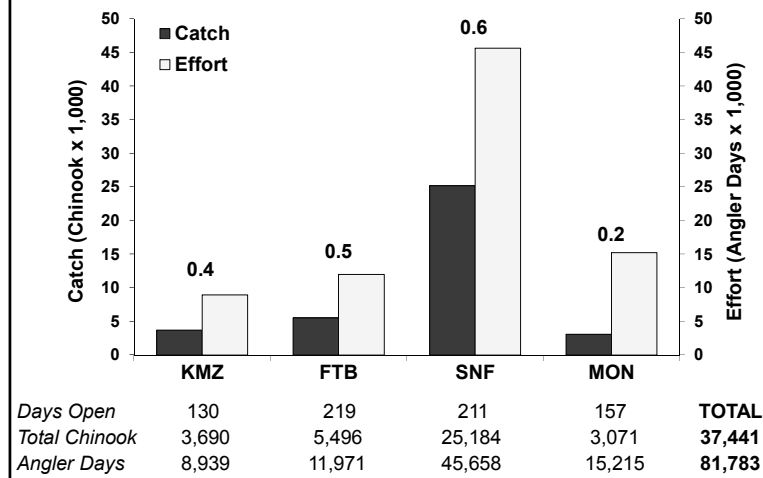


Recreational Catch and Effort, 2004-2015



Days Open = All four management areas combined (Monterey treated as one area)

2015 Recreational Catch and Effort by Management Area





Sample Design – Commercial Fishery

- Sample $\geq 20\%$ of all landings by weight in each management area and period
- Sampling unit: each commercial landing
- Samplers observe, identify to species, and count all salmon being offloaded
- Each salmon inspected for missing adipose fin and all marked fish are set aside and the heads are taken for coded-wire tag recovery
- Determine average weight and days fished from sampled landings by catch area and sample period

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2015 California Commercial Season

Klamath Mgmt. Zone: OR/CA Border to Humboldt S. Jetty (18 days)
 Sep 11-15, 18-30
 Quota = 3,000

Fort Bragg: Horse Mt. to Pt. Arena (123 days)

May 1 Sep 30

San Francisco: Pt. Arena to Pigeon Pt. (149 days)

May 1 Oct 15

Monterey North: Pigeon Pt. to Pt. Sur (94 days)

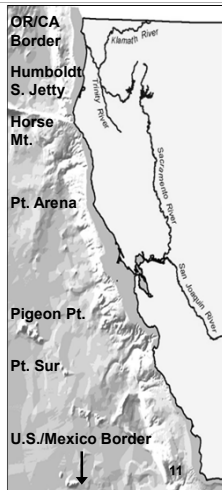
May 1 Aug 15

Monterey South: Pt. Sur to U.S./Mexico Border (79 days)

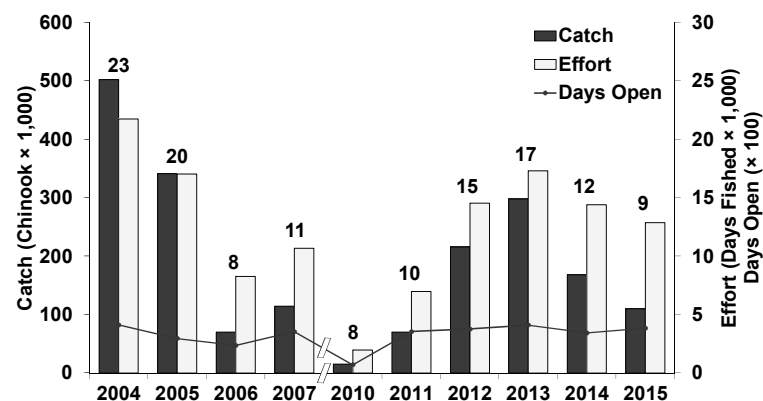
May 1 Jul 31

- Statewide closures during start of June and July, end of August
- Minimum size limit 27", except 26" in SF after Aug and 28" in KMZ

* Oct 1-15 fishery: open between Pt. Reyes and Pt. San Pedro; Mon-Fri

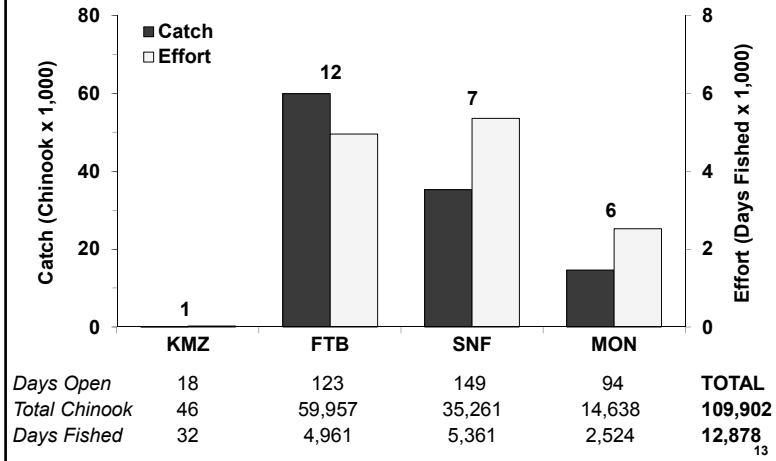


Commercial Catch and Effort, 2004-2015

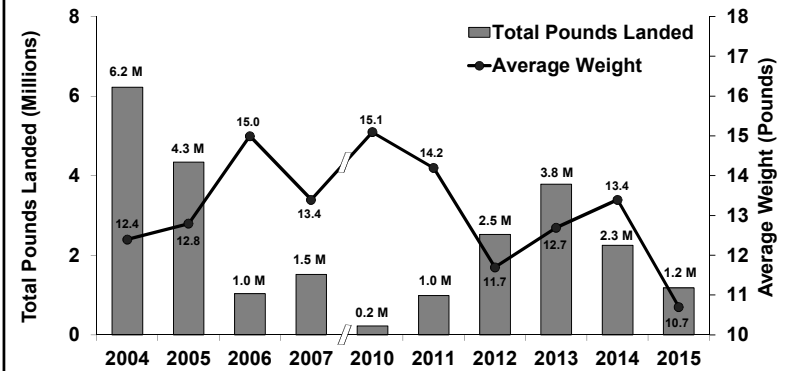


Days Open = All four management areas combined (Monterey treated as one area)₁₂

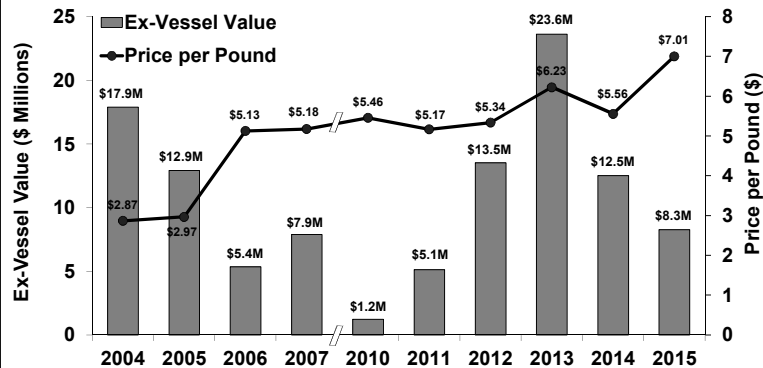
2015 Commercial Catch and Effort by Management Area



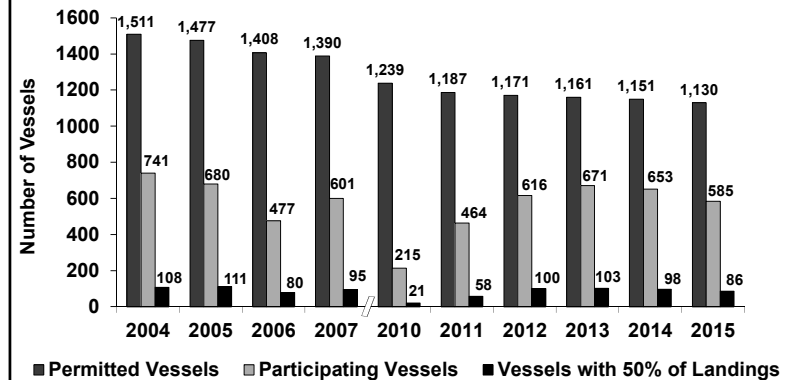
Total Commercial Pounds Landed and Average Weight, 2004-2015



Commercial Ex-Vessel Value and Price per Pound, 2004-2015



Number of Vessels with Landings Compared to Permitted Vessels, 2004-2015



2015 Klamath Management Zone September Quota Fishery

Season	Chinook Quota	Total Chinook Landed	Average Chinook Landed Per Day
Sep 11-15, 18-30 (18 Days)	3,000	46	3



Average Boats Participating Per Day	Average Daily Catch Per Boat
2	1

17

2015 Fall Ocean Fisheries Impacts on Age-4 Klamath River Fall Chinook

Area	Recreational	Commercial
Northern Oregon	0	0
Coos Bay	0	24
KMZ - Oregon	0	0
KMZ - California	0	0
Fort Bragg	0	0
San Francisco	0	0
Monterey	0	-
Total	0	24

- 24 age-4 Klamath River fall Chinook were harvested during 2015 fall ocean fisheries (September – November)
- Equates to a 0.1% age-4 harvest rate, which will be deducted from the 16.0% allowable harvest rate when determining the 2016 season structure

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Hatchery Contribution to 2015 CA Ocean Fisheries

Hatchery Chinook Stock	Recreational (69%) N = 3,099 CWTs	Commercial (55%) N = 7,401 CWTs
Sacramento River Fall	76%	73%
San Joaquin River Fall	18%	16%
Klamath River Fall	1%	4%
Central Valley Spring	4%	3%
Pacific Northwest Stocks	1%	2%
Central Valley Late-Fall	0.3%	1%
Other Northern California Stocks	0.3%	1%
Sacramento River Winter	0.01%	0.005%

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Sacramento River Hatchery Fall Chinook, Contribution by Hatchery – CA Ocean Fisheries

Sacramento River Hatchery	Recreational	Commercial
Feather River Hatchery <i>~7 million fall Chinook released annually</i>	63%	76%
Coleman National Fish Hatchery <i>~12 million fall Chinook released annually</i>	23%	14%
Nimbus Fish Hatchery <i>~4 million fall Chinook released annually</i>	14%	10%

20



Department of Fish and Wildlife Ocean Salmon Project

Thank You

Alex Letvin
Environmental Scientist
alexander.letvin@wildlife.ca.gov

2016 Ocean Salmon Fishery Information

West Coast
Regional
Office

California Department of Fish and Wildlife
Salmon Informational Meeting
March 2, 2016

Jeromy Jording
Sustainable Fisheries Division
West Coast Region

- All Guidance Preliminary; final at March Council Meeting

Indicator Stock	NOAA Guidance will achieve these escapement levels
Sacramento River fall Chinook	122,000 hatchery and natural area adult spawners
Klamath River fall Chinook	30,909 natural area adult spawners



U.S. Department of Commerce | National Oceanic and Atmospheric Administration | NOAA Fisheries | Page 2

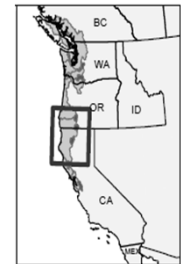
Endangered Species Act (ESA) Listed Stocks



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Coho Salmon

- Prohibit coho-directed fisheries off CA;
- Prohibit coho retention in Chinook-directed fisheries off CA
- Southern Oregon/Northern California Coho
 - ESA – Threatened
 - Recovery plan released September 2014 (79 FR 58750) – Next Steps: workshops to develop implementation plan
- Central California Coastal Coho
 - ESA – Endangered
 - Final recovery plan released 2012 Next Steps: Species in the Spotlight designation with NOAA Fisheries and the CDFW formed a "Priority Action Coho Team" to assemble State and Federal recovery plan priorities and actions



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California Coastal Chinook Salmon

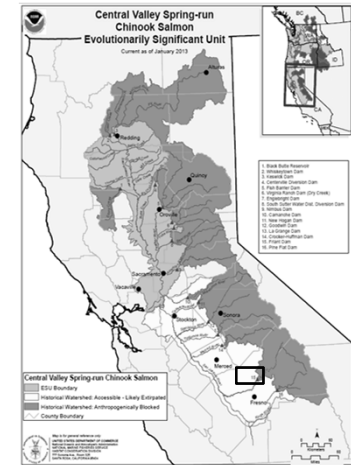
- ESA-threatened
- Draft multi-species recovery plan available for public comment through January 2016 (80 FR 75066)
- A maximum Klamath River fall Chinook age-4 ocean harvest rate of 16.0%



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Central Valley Spring Chinook Salmon

- ESA-threatened
- Recovery plan adopted July 2014 (79 FR 42504)
- Management constraints for other species continue to provide sufficient protection



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Sacramento River Winter Chinook Salmon

- ESA – Endangered
 - Recovery plan adopted July 2014 (79 FR 42504)
 - Guidance for 2016:
 - Continuation of consultation standards on minimum size limits and seasonal windows
 - Circle hook restrictions while mooching in the recreational fishery between Horse Mountain and Point Conception
 - Impact rate cap for 2016 = **19.9 %***
- * : Council took a more conservative approach in 2015



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Sacramento River Winter Chinook Salmon

- NMFS issued a Notice of Availability and Request for Comment on January 23, 2014 (79 FR 3783)
- NMFS will not be reconsidering the control rule prior to 2016 fisheries, other than precaution due to CA drought and recent ocean conditions
- NMFS review and consideration of winter Chinook ocean fishery management is a work in progress and in 2015 the Council decided to form an *ad hoc* SRWCWorkgroup to develop and explore possible alternatives



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Thank You

Jeromy.Jording@noaa.gov

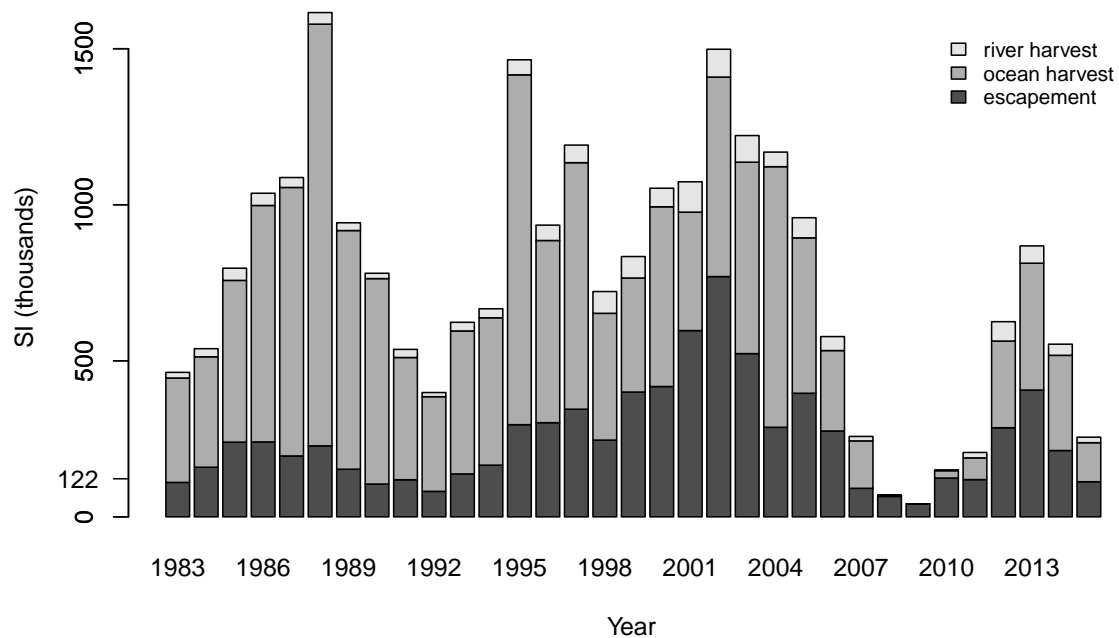
Peter.Dygert@noaa.gov

Special thanks to:

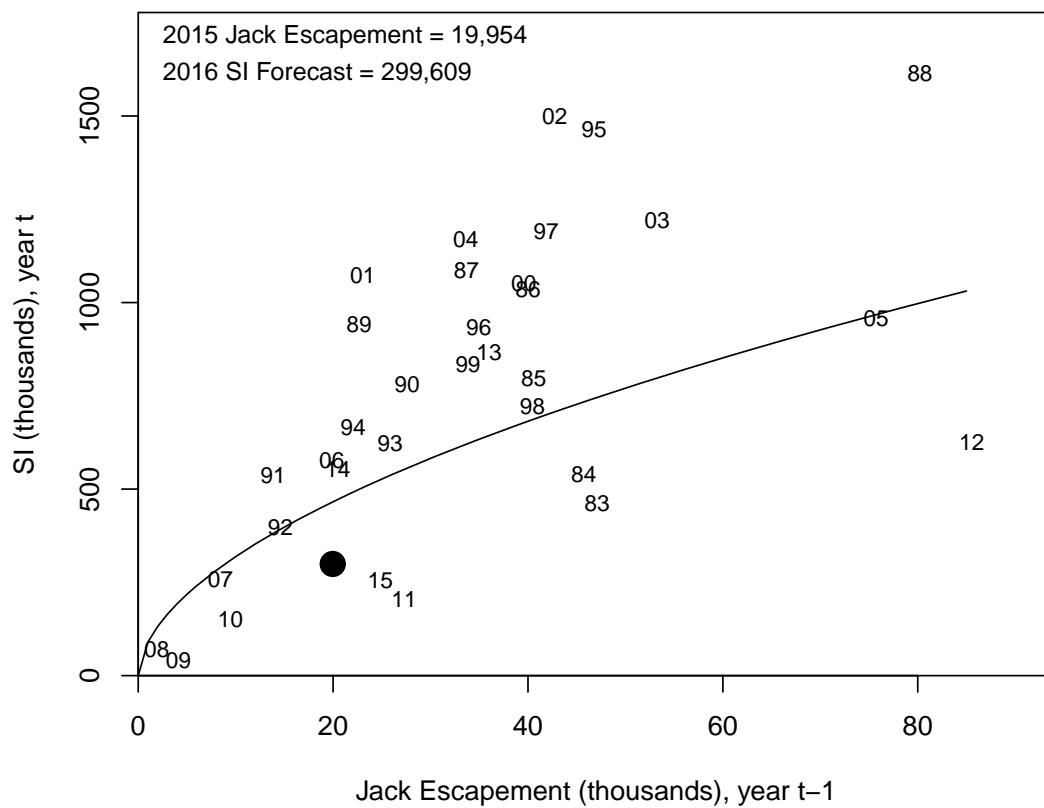
Heidi Taylor SFD WCR & Michael O'Farrell SWFSC



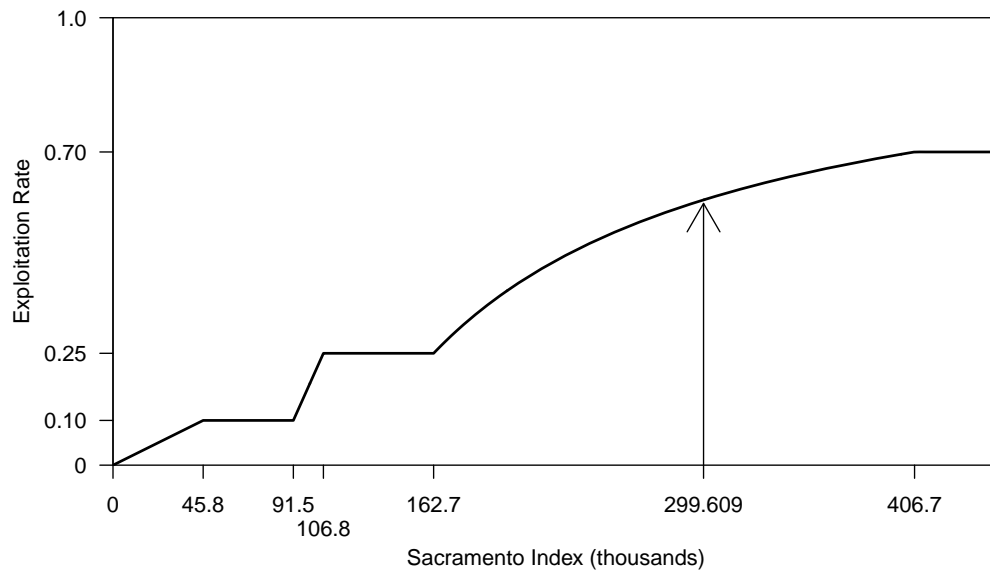
2015 Sacramento Index (SI): 255,287



2016 SI forecast: 299,609

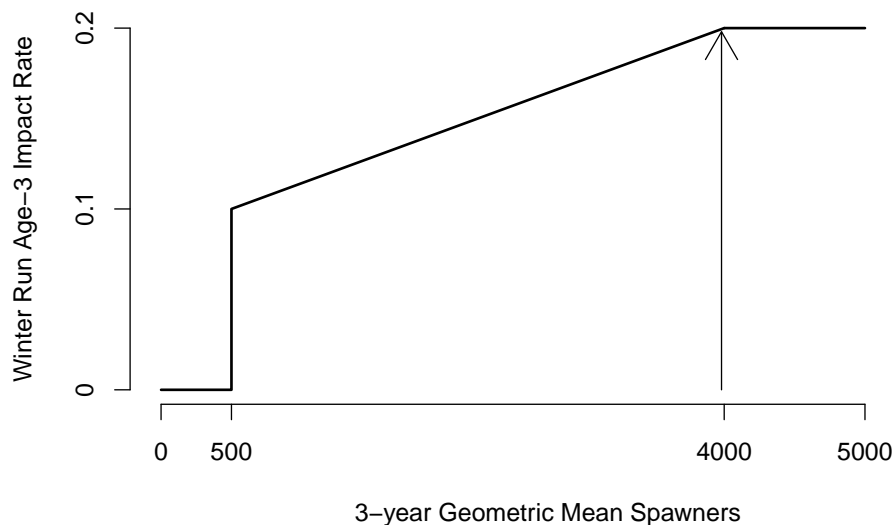


2016 management



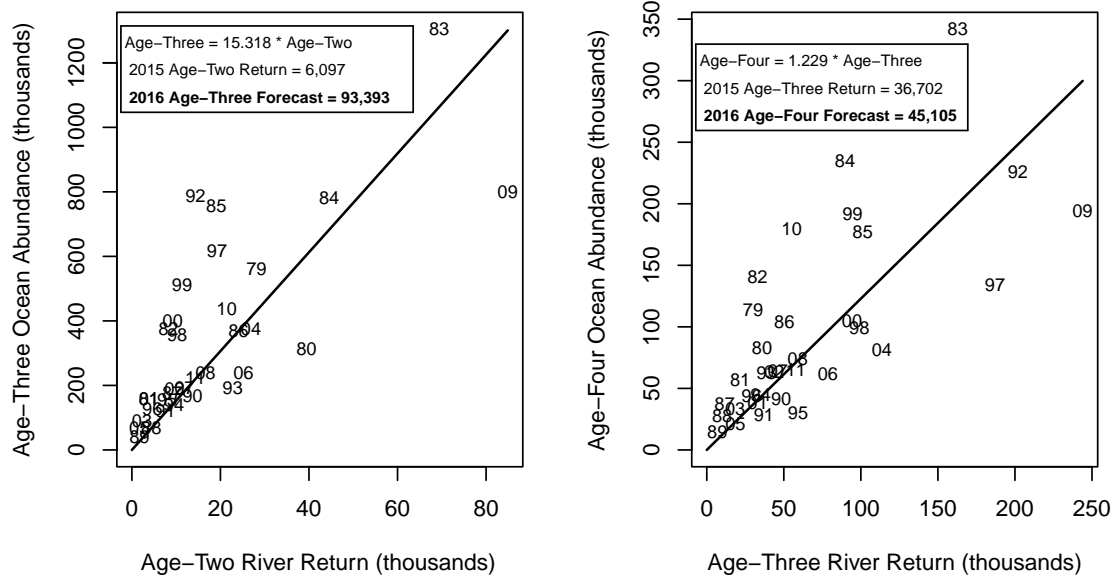
- ▶ Abundance forecast reduced substantially from 2015
- ▶ Must target an escapement of at least 122,000 (59% exploitation rate)
- ▶ 2015 regs: preliminary escapement prediction of 153,300
- ▶ Unlikely to constrain 2016 fisheries

2016 winter Chinook management



- ▶ Geometric mean: 3981
- ▶ Maximum allowable age-3 impact rate: 19.9%
- ▶ 2015 regs: preliminary prediction of 17.1%
- ▶ Likely to constrain 2016 fisheries south of Point Arena

2016 Klamath abundance forecast

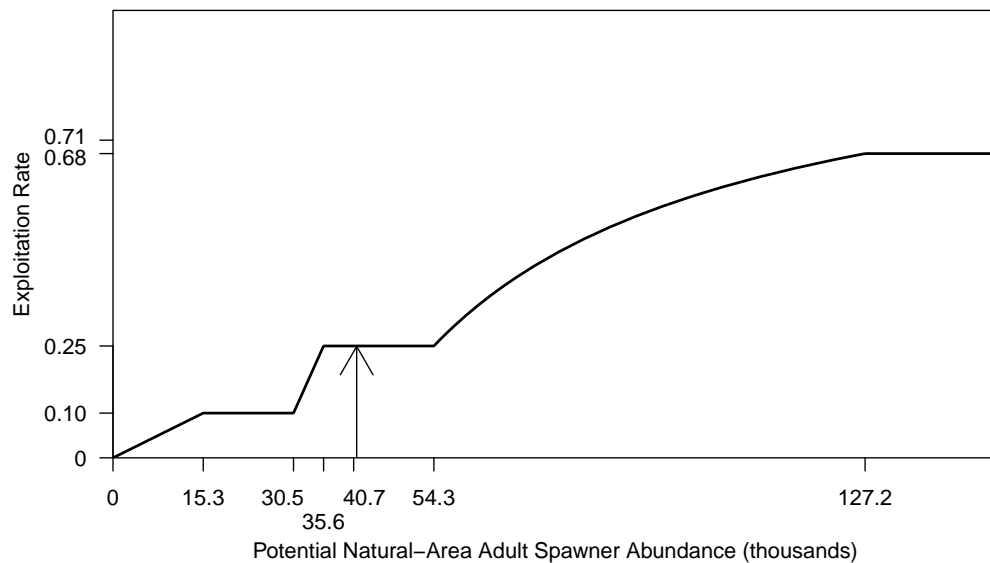


age-3: 93,393

age-4: 45,105

age-5: 3,671

2016 management



- ▶ Potential spawner abundance forecast: 41,211
- ▶ Must target an escapement of at least 30,909 (25% exploitation rate)

2016 management, contd.

- ▶ 2015 regs:
 - ▶ Tribal allocation: 50% of total harvest
 - ▶ River recreational allocation: 32.4% of non-tribal harvest
 - ▶ Natural-area adult spawners prediction: 14,540
 - ▶ Exploitation Rate: 65%
- ▶ Will constrain 2016 fisheries south of Cape Falcon, OR

2016 California Coastal Chinook

- ▶ Max allowable KRFC age-4 ocean harvest rate of 16%
- ▶ 2015 fisheries: preliminary prediction of 17.4%
- ▶ Unlikely to constrain 2016 fisheries

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2016 California Ocean Salmon Preseason Process: Calendar of Events

March 9-14, 2016 - Pacific Fishery Management Council Meeting

DoubleTree by Hilton Sacramento, 2001 Point West Way, Sacramento, CA 95815

The Council will determine if any in-season action for fisheries scheduled to open in April is needed. They will also adopt three regulatory alternatives for ocean salmon fisheries in effect on or after May 1. Final alternatives for public review will be decided on March 14.

March 15-21, 2016 - Pacific Fishery Management Council Workshop

The Salmon Technical Team (STT) completes *Preseason Report II: Proposed Alternatives and Environmental Assessment Part 2 for 2016 Ocean Salmon Fishery Regulations*, available online March 22, 2016 at: www.pcouncil.org

March 15, 2016 - California Fish and Game Commission Meeting - Teleconference

Commission Conference Room 1320, 1416 9th St., Sacramento, CA 95814

Proposed changes to Ocean Salmon Sport Fishing Regulations for 2016 will be addressed at this meeting. The Commission will take final action on Ocean Salmon Sport Fishery Regulations in effect during April 2016. The public may address and/or ask questions of the Commission relating to the implementation of its policies or any other matter within the jurisdiction of the Commission. Agenda and audio available online at: www.fgc.ca.gov.

March 29, 2016 (7 p.m.) - Pacific Fishery Management Council Public Hearing - California

Motel 6 Convention Room, 400 S. Main St., Fort Bragg, CA 95437

The Council will receive comments from the public on the three California ocean salmon fishery management regulatory alternatives adopted by the Council in March. More information is available at: www.pcouncil.org.

April 9-14, 2016 - Pacific Fishery Management Council Meeting

Hilton Vancouver Washington, 301 W. Sixth Street, Vancouver, WA 98660

The Council will tentatively adopt final regulatory measures for analysis by the STT during this meeting. Final adoption of recommendations to the National Marine Fisheries Service (NMFS) is scheduled to be completed by April 13.

April 15-22, 2016 - Pacific Fishery Management Council Workshop

The PFMC and STT complete *Preseason Report III: Analysis of Council-Adopted Management Measures and Environmental Assessment Part 3 for 2016 Ocean Salmon Fishery Regulations*, available online April 22 at: www.pcouncil.org

April 18, 2016 - California Fish and Game Commission Meeting - Teleconference

Commission Conference Room 1320, 1416 9th St., Sacramento, CA 95814

The Commission will take final action on Ocean Salmon Sport Fishery Regulations in effect on or after May 1, 2016. The public may address and/or ask questions of the Commission relating to the implementation of its policies or any other matter within the jurisdiction of the Commission. Agenda and audio available online at: www.fgc.ca.gov.

Who Can I Contact Regarding the Upcoming Salmon Season?

Contact a member of the Pacific Fishery Management Council's **Salmon Advisory Subpanel**:

Jim Hie Conservation	Pacific Marine Conservation Council 1423 Vista Ave. Napa, CA 94559	Telephone: (707) 695-8661 Email: jnahie@att.net
George Kautsky California Tribes	Hoopla Valley Tribal Fisheries PO Box 417 Hoopla, CA 95546	Telephone: (530) 625-4267 ext. 15 Email: hupafish@hoopa-nsn.gov
Dave Bitts California Troll	Pacific Coast Federation of Fishermen's Associations 2679 Sunnygrove McKinleyville, CA 95519	Telephone: (707) 498-3512 Email: dbitts@suddenlink.net
Marc Gorelnik California Sport Fisheries	Coastside Fishing Club 8042 Terrace Drive El Cerrito, CA 94530	Telephone: (415) 409-9529 Email: marc@gorelniklaw.com
John Atkinson California Charter Boat	Golden Gate Fisherman's Association 42 Seawolf Passage Corte Madera, CA 94925	Telephone: (415) 924-6851 Email: newrayann@comcast.net

To make comments directly to the **Pacific Fishery Management Council** regarding the upcoming salmon season, please visit the Council's website at www.pcouncil.org/contact, or contact the PFMC staff officer for salmon: Mike Burner (Mike.Burner@noaa.gov).

To make comments directly to the **Fish and Game Commission** regarding the upcoming salmon season, please visit the Commission's website at: www.fgc.ca.gov/contact.

Online Resources:

Review of 2015 Ocean Salmon Fisheries (includes in-river escapement data)

Available online at:

www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/

Preseason Report I: Stock Abundance Analysis for 2016 Ocean Salmon Fishery Regulations Available online at: www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/preseason-reports/

Klamath Basin Age Composition and Stock Projection Reports

Available online in March at:

www.pcouncil.org/salmon/background/document-library/



State of California
Department of Fish and Wildlife
Ocean Salmon Project – Marine Region
www.dfg.ca.gov/marine/oceansalmon.asp



2015 Ocean Salmon Sport Regulations

OR/CA Border to Horse Mountain:

- ♦ May 1 – September 7
 - minimum size limit: 20 inches total length
 - Klamath Control Zone* (KCZ) closed in August
 - additional closures around mouth of Klamath, Smith and Eel rivers (see CDFW regulation §27.75)

Horse Mountain to Point Arena (Fort Bragg):

- ♦ April 4 – November 8
 - minimum size limit: 20 inches total length

Point Arena to Pigeon Point (San Francisco):

- ♦ April 4 – October 31
 - minimum size limit: 24 inches total length through April 30
 - 20 inches total length thereafter

Pigeon Point to Point Sur (Monterey North):

- ♦ April 4 – September 7
 - minimum size limit: 24 inches total length through May 31
 - 20 inches total length thereafter

Point Sur to U.S./Mexico Border (Monterey South):

- ♦ April 4 – July 19
 - minimum size limit: 24 inches total length through May 31
 - 20 inches total length thereafter

General Sport Regulations

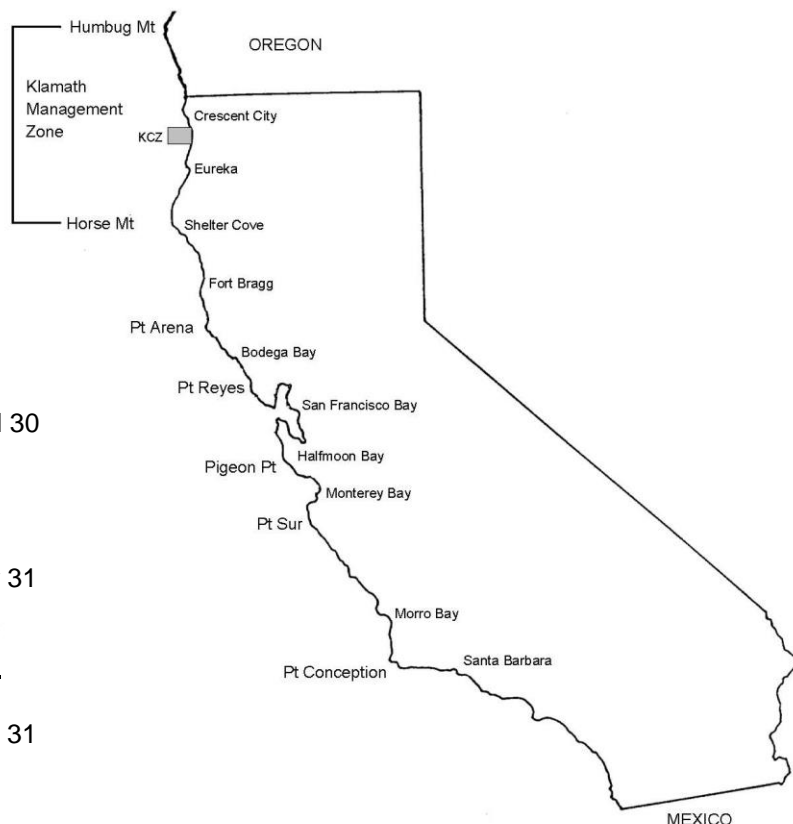
- **Daily bag limit:** 2 salmon of any species except coho.
- **Possession limit:** No more than two daily bag limits may be possessed when on land. On a vessel in ocean waters, no person shall possess or bring ashore more than one daily bag limit.
- **Retention of coho salmon or steelhead trout is prohibited in any ocean fishery.**
- **Salmon may not be filleted on any boat or prior to being brought ashore.**
- **Salmon may only be taken by angling as defined in Section 1.05.** No sinkers or weights exceeding 4 lbs may be used, except that a fishing line may be attached to a sinker or weight of any size if such sinker or weight is suspended by a separate line & the fishing line is released automatically by a mechanical device from the sinker or weight when any fish is hooked.
- **North of Point Conception:** No more than two single-point, single-shank barbless hooks shall be used & no more than one rod per angler when fishing for salmon or fishing from a boat with salmon on board.
- **Horse Mountain to Point Conception:** When fishing with bait and angling by any means other than TROLLING¹, no more than two single-point, single-shank barbless circle hooks² shall be used. The distance between the two hooks must not exceed 5 inches when measured from the top of the eye of the top hook to the inner base of the curve of the lower hook and both hooks must be permanently tied in place (hard tied).

Note: These special gear restrictions apply to each angler fishing for salmon or fishing from any boat or floating device with salmon on board.

1. *TROLLING is defined as angling from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.*
2. *A CIRCLE HOOK is defined as a hook with a generally circular shape and a point which turns inwards, pointing directly to the shank at a 90-degree angle.*

Recovery of coded-wire tag from salmon head: Any person in possession of a recreationally taken salmon with a missing adipose fin (the small, fleshy fin on the back of the fish between the back fin and tail) shall immediately relinquish the head of the salmon, upon request by an authorized agent or employee of the Department, to facilitate the recovery of any coded-wire tag (§1.73).

* **Klamath Control Zone:** The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west, by 124°23'00" W. long. (approximately 12 nautical miles off shore); and on the south, by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).





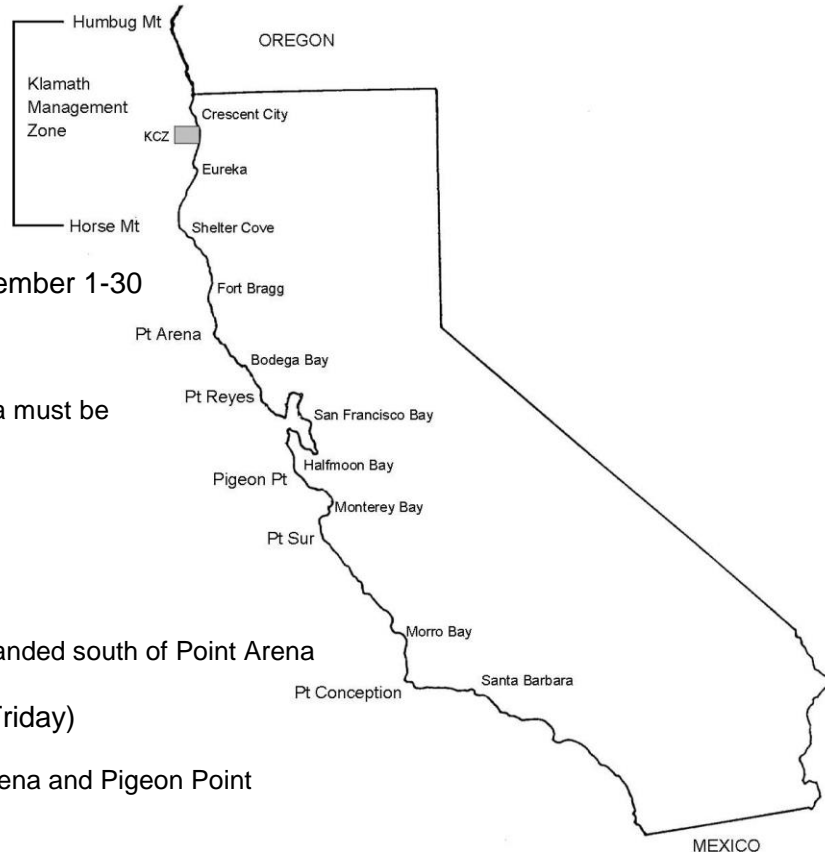
State of California
Department of Fish and Wildlife
Ocean Salmon Project – Marine Region
www.dfg.ca.gov/marine/oceansalmon.asp



2015 Commercial Ocean Salmon Regulations

OR/CA Border to Humboldt South Jetty (KMZ):

- September 11-30 or 3,000 Chinook quota
 - five days per week, open Friday through Tuesday
 - minimum size limit: 28 inches total length
 - landing and possession limit of 20 Chinook per day
 - all salmon caught must be landed within the area and within 24 hours of any closure of the fishery
 - Klamath Control Zone (KCZ) closed (12 mile square centered on Klamath River mouth)



Horse Mountain to Point Arena:

- May 1-31; June 15-30; July 12 - August 26*; September 1-30
 - minimum size limit: 27 inches total length
 - during September, all fish caught in the area must be landed north of Point Arena
 - when the KMZ quota is open, all fish caught in the area must be landed south of Horse Mountain

Point Arena to Pigeon Point:

- May 1-31; June 7-30; July 8 - August 29*
 - minimum size limit: 27 inches total length
- September 1-30
 - minimum size limit: 26 inches total length
 - during September, all fish caught in the area must be landed south of Point Arena

Point Reyes to Point San Pedro:

- October 1-2, 5-9, and 12-15 (Monday through Friday)
 - minimum size limit: 26 inches total length
 - all salmon caught must be landed between Point Arena and Pigeon Point

Pigeon Point to Point Sur:

- May 1-31; June 7-30; July 8-31; August 1-15*
 - minimum size limit: 27 inches total length

Point Sur to U.S./Mexico Border:

- May 1-31; June 7-30; July 8-31*
 - minimum size limit: 27 inches total length

** All salmon must be offloaded and landed by 11:59pm August 30th*

General Commercial Regulations

- All salmon except coho; all commercial salmon must be landed in California**
- Single point, single shank barbless hooks are required**
- No more than 6 lines are allowed per vessel**
- Compliance with minimum size or other special restrictions:** All salmon on board a vessel must meet the minimum size and other special requirements for the area being fished and the area in which they are landed if that area is open or has been closed less than 48 hours. Salmon may be landed in an area that is closed more than 48 hours only if they meet the minimum size and other special requirements for the area in which they were caught AND it is not otherwise prohibited in the regulations.
- Transit through closed area with salmon on board:** It is unlawful for a vessel to have troll gear in the water while transiting any area closed to salmon fishing while possessing salmon.
- Barbless circle hooks¹ required when fishing with bait and fishing by any means other than trolling²**
 - A **CIRCLE HOOK** is defined as a hook with a generally circular shape and a point which turns inwards, pointing directly to the shank at a 90-degree angle.
 - TROLLING** is defined as angling from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.

NOTE: Any person required to complete a landing receipt shall accurately record the total number of Chinook salmon landed in the "Note Pad" field of the landing receipt (Fish & Game Code § 8043, Title 14, §182). Federal regulations also require the total number of Pacific Halibut be recorded if caught and landed incidentally during commercial salmon fishing. 38

EVALUATION

To improve future *Ocean Salmon Information Meetings* and to better meet your needs, please take a few minutes to complete this evaluation. Your input is useful and appreciated.

1. Indicate the interest group with which you are affiliated.

- | | |
|-----------------------------------------------------|--------------------------------------------------|
| <input type="checkbox"/> Fishing Dependent Business | <input type="checkbox"/> Tribal |
| <input type="checkbox"/> Ocean Commercial | <input type="checkbox"/> Conservation |
| <input type="checkbox"/> Ocean Sport | <input type="checkbox"/> Resource Management |
| <input type="checkbox"/> River Sport | <input type="checkbox"/> Other (please describe) |

2. What information did you find most useful?

- | | |
|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <input type="checkbox"/> Review of 2015 Central Valley Chinook Spawner Escapement | <input type="checkbox"/> Review of 2015 Ocean Salmon Sport and Commercial Fisheries |
| <input type="checkbox"/> Central Valley Winter Run Chinook Current Status and Overview | <input type="checkbox"/> NMFS 2016 Ocean Salmon Fishery Guidance |
| <input type="checkbox"/> Review of 2015 Central Valley Chinook River Sport Fisheries | <input type="checkbox"/> Abundance Forecasts and Harvest Model Results |
| <input type="checkbox"/> Review of 2015 Klamath Basin Chinook Spawner Escapement, Harvest and Age Composition | <input type="checkbox"/> Public Comment to California Salmon Management Panel |

3. What information would you like presented in the future?

4. What meeting organization comments or suggestions do you have?

5. Additional comments or suggestions about the meeting are appreciated.

Any formal recommendations or comments that you would like forwarded to your representatives for the 2016 salmon management process?

Name_____ Affiliation_____

[illegible]

(Optional) Please provide your contact information so your representatives can ask follow up questions.

E-mail: _____ Phone: _____