

## Agenda

### CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE 2017 SALMON INFORMATION MEETING

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

~  
**Wednesday, March 1, 2017**  
**10:00 a.m. – 4:00 p.m.**

Welcome - Moderator Opening Comments and Review Agenda	Brett Kormos, CDFW (10:00 a.m.)
2016 Central Valley Chinook Spawner Escapement	Vanessa Gusman, CDFW (10:15 a.m.)
2016 Central Valley Chinook River Sport Fisheries	Rob Titus, CDFW (10:35 a.m.)
BREAK (15 minutes)	(10:55 a.m.)
2016 Klamath Basin Chinook Spawner Escapement, Harvest and Age Composition	Sara Borok, CDFW (11:10 a.m.)
2016 California Ocean Salmon Sport and Commercial Fisheries Overview	Kandice Morgenstern, CDFW (11:30 a.m.)
LUNCH BREAK (1 hour)	(11:50 a.m.)
NMFS 2017 Ocean Salmon Fishery Guidance	Jeromy Jording, NMFS (12:50 p.m.)
Abundance Forecasts and Harvest Model Results	Dr. Michael O'Farrell, NMFS (1:05 p.m.)

Introduction of California Salmon Management Panel

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

Panel members:

Mr. Brett Kormos, CDFW Marine Region, PFMC-CDFW Designee  
Mr. Marc Gorelnik, CA PFMC member  
Mr. David Crabbe, CA PFMC member  
Mr. Dave Bitts, PFMC-SAS, CA Troll Representative  
Mr. Jim Yarnall, 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. Alex Letvin, CDFW Marine Region, PFMC-STT

Public Comment to California Salmon Management Panel

(1:40 p.m.)

- 2017 Ocean Sport Fishery Regulations
- 2017 Ocean Commercial Fishery Regulations
- 2017 Inland Fishery Regulations
  - Klamath River Basin
  - Sacramento River Basin and Delta

Closing Comments and Evaluation Form

Brett Kormos, CDFW  
(3:45 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

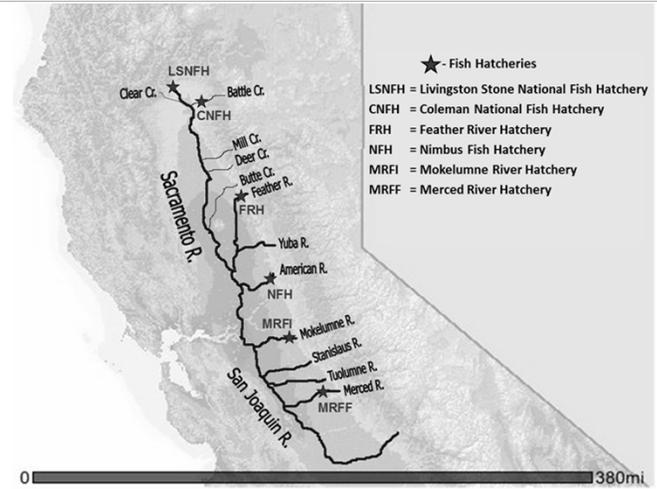


**Department of Fish and Wildlife  
Ocean Salmon Project**

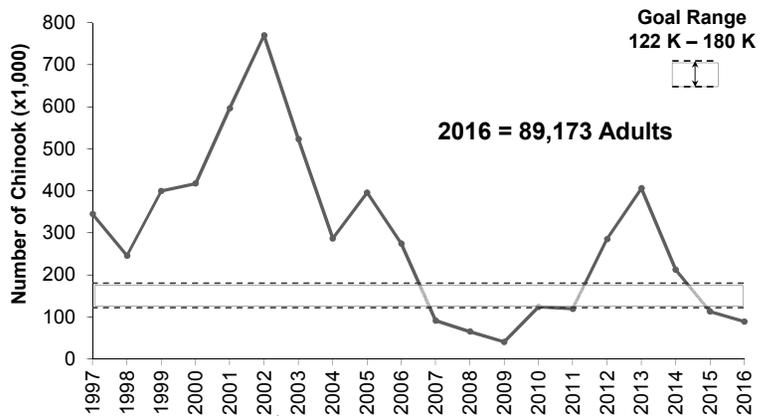
**2016 Central Valley  
Chinook Salmon Spawning  
Escapement**

**Presented by  
Vanessa Gusman**

**The Central Valley**

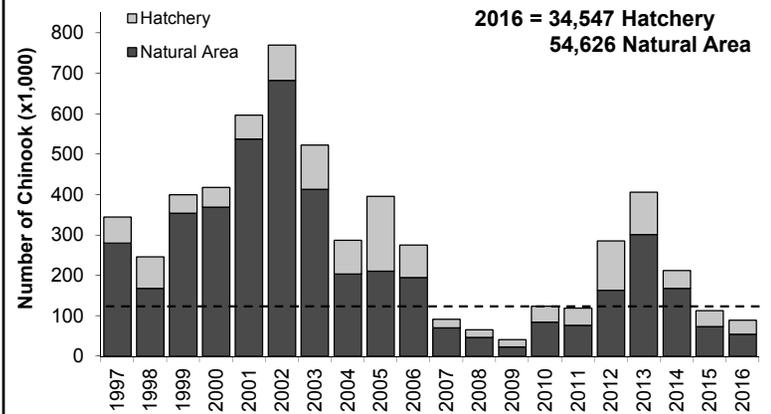


**Sacramento River Fall Chinook  
Adult Spawning Escapement, 1997-2016**



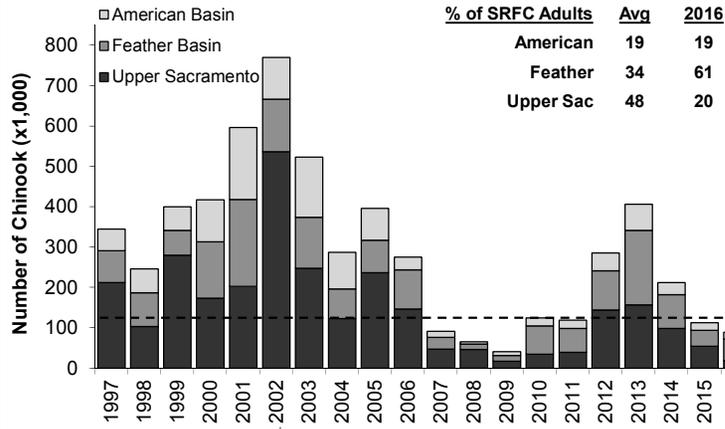
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**Sacramento River Fall Chinook  
Hatchery & Natural Area Adult Spawning Escapement, 1997-2016**



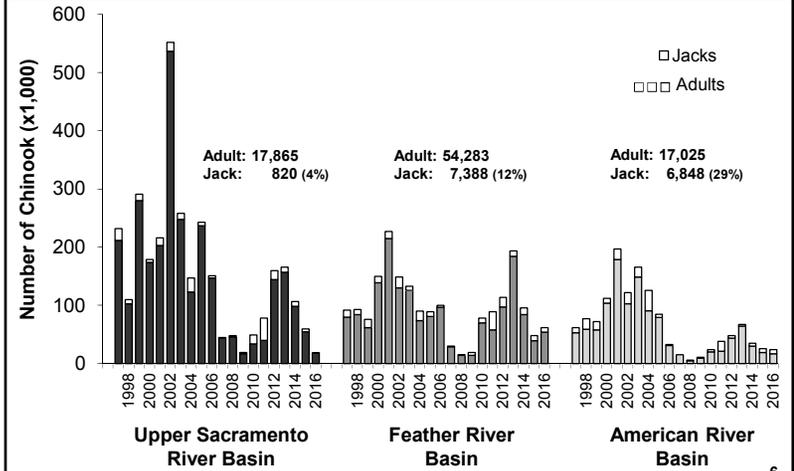
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### Sacramento River Fall Chinook Adult Spawning Escapement By Basin, 1997-2016



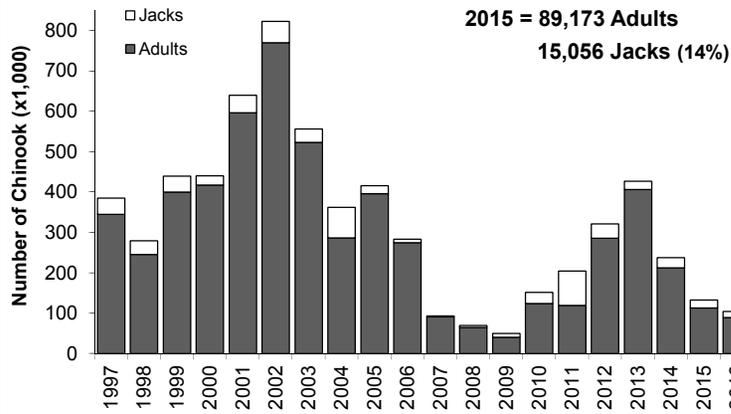
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### Sacramento River Fall Chinook Adult & Jack Spawning Escapement By Basin, 1997-2016



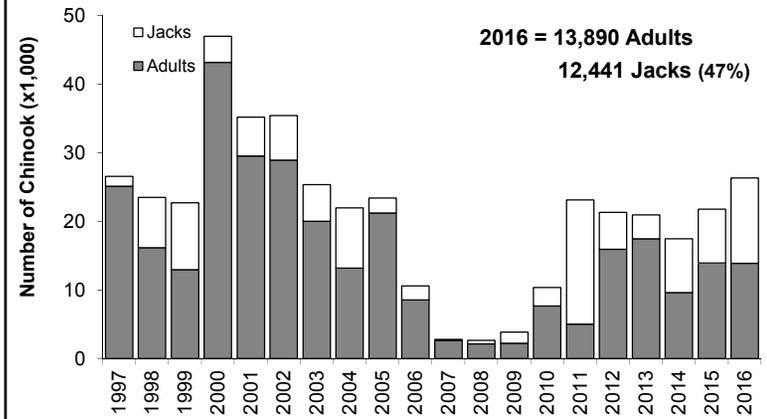
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### Sacramento River Fall Chinook Adult & Jack Spawning Escapement, 1997-2016



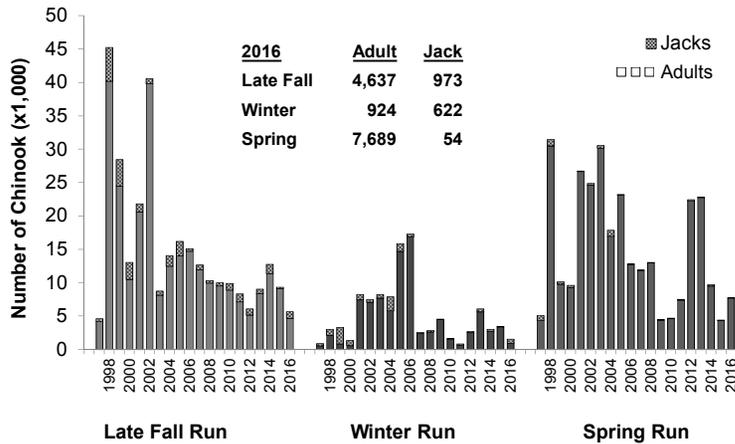
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### San Joaquin Basin Fall Chinook Adult & Jack Spawning Escapement, 1997-2016



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### Other Sacramento Basin Chinook Stocks Spawning Escapement, 1997-2016



2016	Adult	Jack
Late Fall	4,637	973
Winter	924	622
Spring	7,689	54



### Department of Fish and Wildlife Ocean Salmon Project



Thank You

Vanessa Gusman  
Environmental Scientist  
[Vanessa.Gusman@wildlife.ca.gov](mailto:Vanessa.Gusman@wildlife.ca.gov)  
(707) 576-2375

More information available at:  
[www.pccouncil.org/salmon](http://www.pccouncil.org/salmon)

### 2016 Sacramento River Fall Chinook Hatchery and Natural Area Escapement

		Jacks	Adults	Total	% Jack	% Nat	% SRFC Total
Upper Sacramento River Basin	Hatchery	279	8,247	8,526	3%		8%
	Natural	<u>541</u>	<u>9,618</u>	<u>10,159</u>	<u>5%</u>	54%	<u>10%</u>
		<b>820</b>	<b>17,865</b>	<b>18,685</b>	<b>4%</b>		<b>18%</b>
Feather River Basin (including Yuba River)	Hatchery	2,763	16,413	19,176	14%		18%
	Natural	<u>4,625</u>	<u>37,870</u>	<u>42,495</u>	<u>11%</u>	69%	<u>41%</u>
		<b>7,388</b>	<b>54,283</b>	<b>61,671</b>	<b>12%</b>		<b>59%</b>
American River Basin	Hatchery	3,502	9,887	13,389	26%		13%
	Natural	<u>3,346</u>	<u>7,138</u>	<u>10,484</u>	<u>32%</u>	44%	<u>10%</u>
		<b>6,848</b>	<b>17,025</b>	<b>23,873</b>	<b>29%</b>		<b>23%</b>
<b>Total 2016 SRFC Escapement</b>		<b>15,056</b>	<b>89,173</b>	<b>104,229</b>	<b>14%</b>	<b>61%</b>	<b>100%</b>

### 2016 Other Central Valley Chinook Stocks Hatchery and Natural Area Escapement

		Jacks	Adults	Total	% Jack	% Nat
Central Valley Late Fall Chinook	Hatchery	813	1,535	2,348	35%	
	Natural	<u>160</u>	<u>3,102</u>	<u>3,262</u>	<u>5%</u>	58%
		<b>973</b>	<b>4,637</b>	<b>5,610</b>	<b>17%</b>	
Sacramento River Winter Chinook	Natural	<u>622</u>	<u>924</u>	<u>1,546</u>	<u>40%</u>	100%
		<b>622</b>	<b>924</b>	<b>1,546</b>	<b>40%</b>	
Central Valley Spring Chinook	Hatchery	54	1,596	1,650	3%	
	Natural	---	<u>6,093</u>	<u>6,093</u>	---	79%
		<b>54</b>	<b>7,689</b>	<b>7,743</b>	<b>---</b>	
San Joaquin Fall Chinook	Hatchery	5,175	4,702	9,877	52%	
	Natural	<u>7,266</u>	<u>9,188</u>	<u>16,454</u>	<u>44%</u>	62%
		<b>12,441</b>	<b>13,890</b>	<b>26,331</b>	<b>47%</b>	

# CENTRAL VALLEY ANGLER SURVEY

## 2016 Recreational Harvest of Chinook Salmon



Rob Titus, Erin Ferguson, & James Lyons

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



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# 2016 Central Valley Salmon Season

Open July 16–December 16

Exceptions:

Lower American River

July 16 –December 31

Upper Sacramento River

August 1 to December 16

RBDD to Deschutes Rd Bridge

Feather River

July 16 to October 15

Low flow channel closed



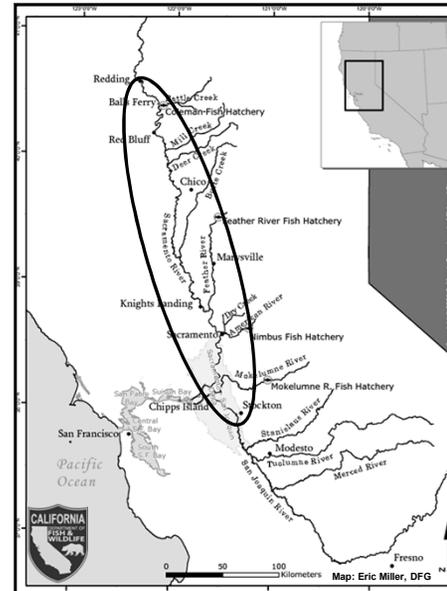
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# Central Valley Angler Survey



- 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

- 24 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

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## Raw Statistics

- Contacted over 6,800 fishing parties
- 1,571 salmon reported kept
- 1,482 salmon observed
  - or 4% of the estimated harvest
- 377 (25%) adipose fin-clipped salmon
- 375 (99%) heads taken for CWT recovery



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## Results of 2016 Central Valley Sport Fishery for Chinook Salmon\*

*Effort:* 929,757 angler hours

*Trips:* 170,598 angling days

*Catch:* 76,781 salmon

*Harvest:* 36,656 salmon

*Release:* 40,125 salmon

*Pct retention:* 48 %

*Harvest rate:* 4 salmon per 100 angler hours



\* Based on fishery statistics for the American, Feather, Mokelumne, and Sacramento rivers, July – December 2016.

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## Coded Wire Tag Recoveries

*366 CWTs successfully recovered and read*

- 39% Feather River Hatchery fall run
- 38% Coleman National Fish Hatchery fall run
- 13% Nimbus Hatchery fall run
- 5% Mokelumne River Hatchery fall run
- 2% Feather River spring run
- 3% Coleman National Fish Hatchery late-fall run
- <1% Merced River Fish Facility fall run
- 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

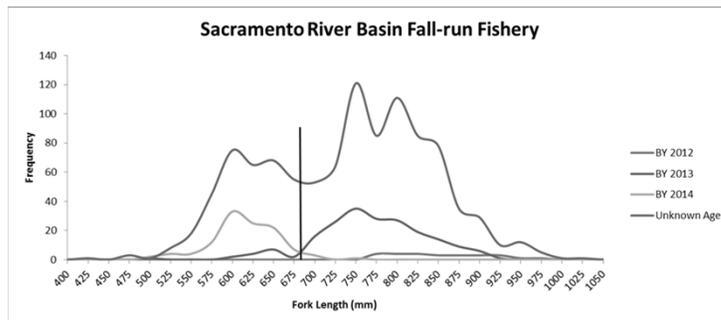
SRFC comprised 93% of all Chinook Salmon harvest in the Central Valley in 2016



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## Fork Length Frequency Analysis

Conducted for each management zone to determine the size break between 2-year-old (grilse) and older (adult) SRFC



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## Grilse Composition Varied Between Management Zones

- 48% Lower Sacramento
- 30% American River
- 34% Feather River
- 3% Upper Sacramento



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## Final SRFC Harvest Estimate

Overall, 33% of the harvest were grilse

23,018 adults

11,223 grilse

34,241 Total SRFC



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## 2016 Sacramento River Late-Fall-Run Chinook Salmon Season

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



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## Sacramento River Late-Fall-Run Chinook Salmon Fishery

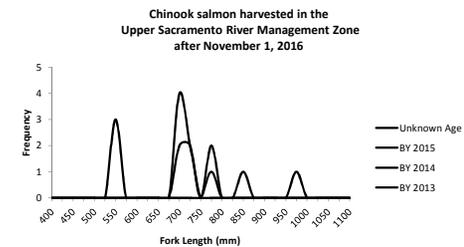


- *Effort:* 9,651 angler hours
- *Trips:* 1,771 angler trips
- *Harvest:* 130 salmon
- *Harvest rate:* 1.3 salmon per 100 angler hours

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## SRLFV Summary Statistics

- Expanded estimate: 130 salmon
- 55% catch was of known hatchery origin  
– 100% SRLFV
- Fork Length Frequency Analysis  
– Grilse cutoff difficult to determine ( $n = 20$ )



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## 2016 Mokelumne River Fall-Run Chinook Salmon Season

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



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

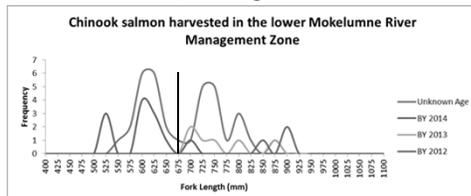


- *Effort:* 23,823 angler hours
- *Trips:* 4,371 angler trips
- *Harvest:* 1,006 salmon
- *Harvest rate:* 4.2 salmon per 100 angler hours

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## Mokelumne River Summary Statistics

- Expanded estimate: 2,076 salmon\*
- 30% catch was of known hatchery origin
  - 45% San Joaquin River Fall-run Chinook Salmon
  - 55% SRFC
- Fork Length Frequency Analysis
  - Grilse cutoff at 675 mm, or 50% grilse



- **Final SJRFC Estimate: 1,038 adult, 1,038 grilse**

\*Includes SJRFC caught in the LSRMZ and ARMZ

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## Contact Information

- Erin Ferguson  
CDFW/Central Valley Angler Survey,  
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[Erin.Ferguson@wildlife.ca.gov](mailto:Erin.Ferguson@wildlife.ca.gov)
- James Lyons  
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## SUMMARY OF THE 2016 CENTRAL VALLEY CHINOOK SALMON SPORT FISHERY

Prepared by Erin Ferguson and James Lyons  
California Department of Fish and Wildlife  
Fisheries Branch  
8175 Alpine Avenue, Suite F  
Sacramento, CA 95826  
Contact: [Erin.Ferguson@wildlife.ca.gov](mailto:Erin.Ferguson@wildlife.ca.gov)

### **Season**

Sport fishing for Chinook Salmon in Central Valley rivers opened on 16 July 2016 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 2016. Closing dates varied from 16 December through 31 December 2016. The varied closing dates were selected to avoid contact in the river sport fishery 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.

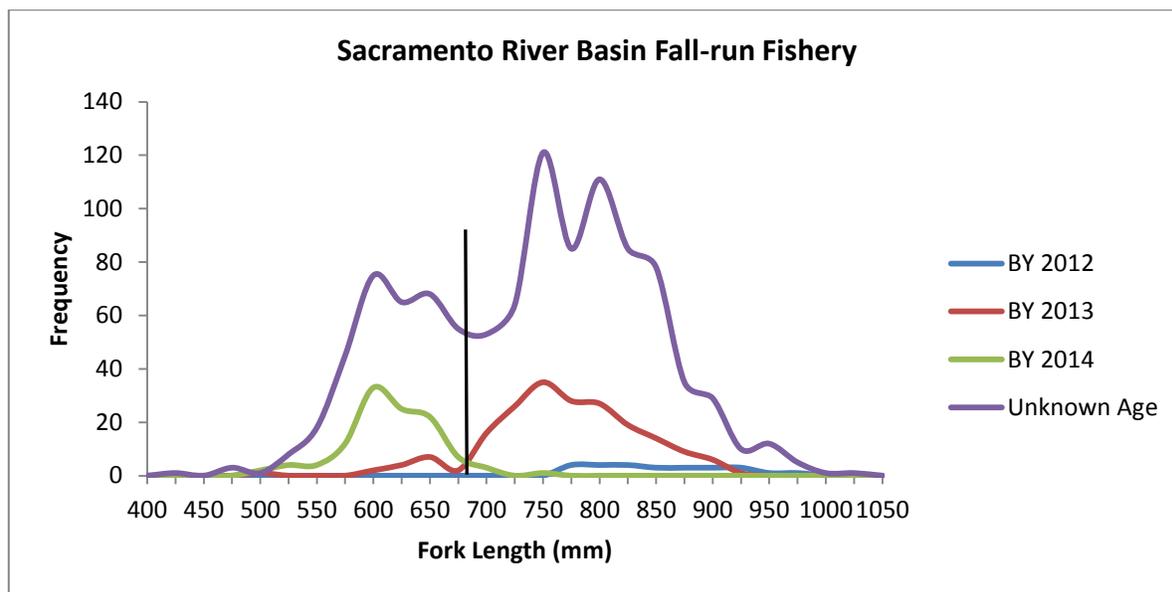
### **Methods**

The river sport 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 per survey run, roving interviews, and access point interviews. The 400+ mile fishery area was divided into 24 survey sections that were sampled 8 times per 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 sport fishery totaled 929,757 hours, corresponding to about 170,598 fishing trips. This level of effort was 21% higher than that estimated in 2015 (733,921 hours or 148,718 trips). Total harvest in the Central Valley river fishery was estimated at 36,656 salmon with an additional 40,125 salmon caught and released. Retention rate of salmon was approximately 48% of the catch, which was well below the expected rate of about 65%. Based on observed catch, 25% of the Chinook Salmon harvested were adipose fin clipped and coded wire tagged. Of the 366 CWTs recovered and read, 90% were Sacramento Basin fall-run Chinook Salmon, 3% were Coleman National Fish Hatchery late-fall-run Chinook Salmon, 5% were San Joaquin Basin fall-run Chinook Salmon, and 2% 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 during the Sacramento River fall-run season was 35,520\*. 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 675 to 700 mm FL in different sub-basins, resulting in 31% of the overall harvest consisting of grilse. Grilse percentage ranged from 3% to 50% in sub-basins. The total estimated harvest of Sacramento Basin fall-run Chinook consisted of 11,011 grilse and 24,509 adults.



**Figure.** Fork length frequency distribution of Chinook Salmon harvested in the 2016 Sacramento Basin fall-run Chinook Salmon sport 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.

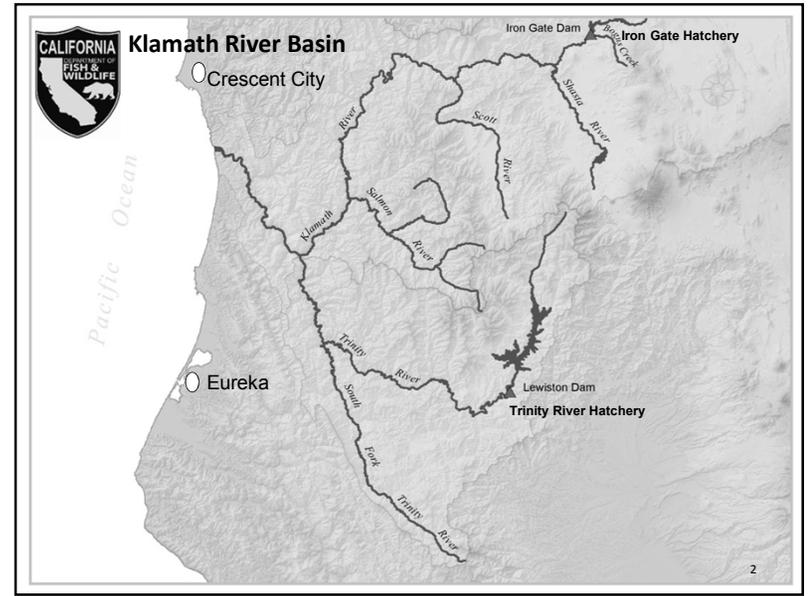
**Note: All statistics presented in this summary are preliminary and subject to change as they are finalized.**

\*This number corresponds to total Chinook Salmon harvested in the Sacramento River fall-run 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**

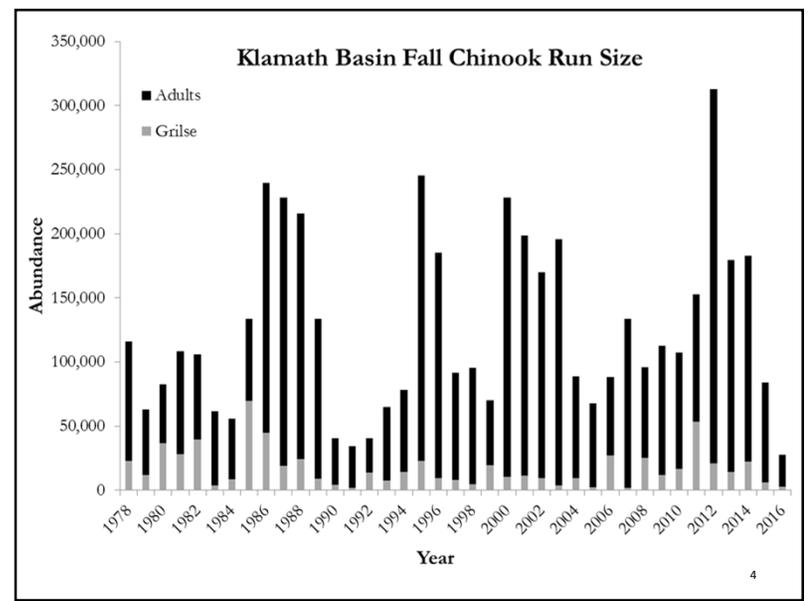
**Klamath Basin Chinook Salmon**  
**Spawning Escapement, Harvest and**  
**Age Composition**

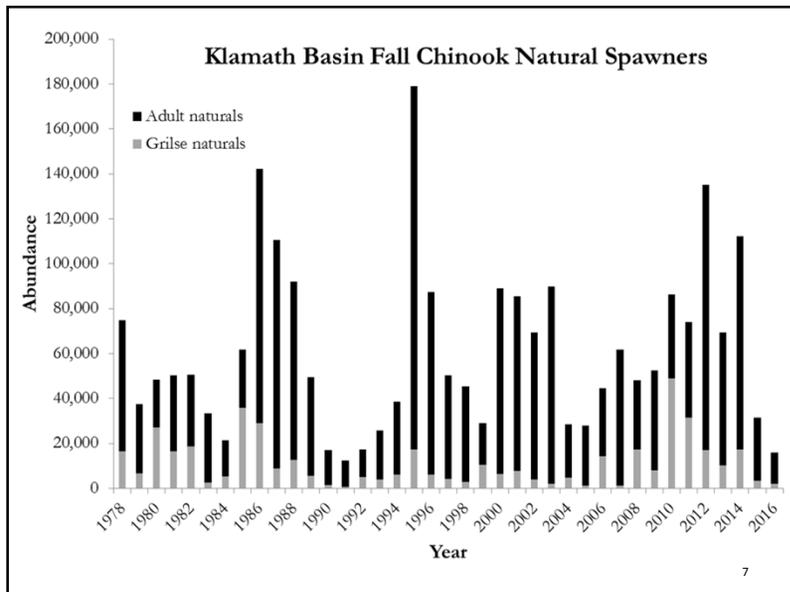
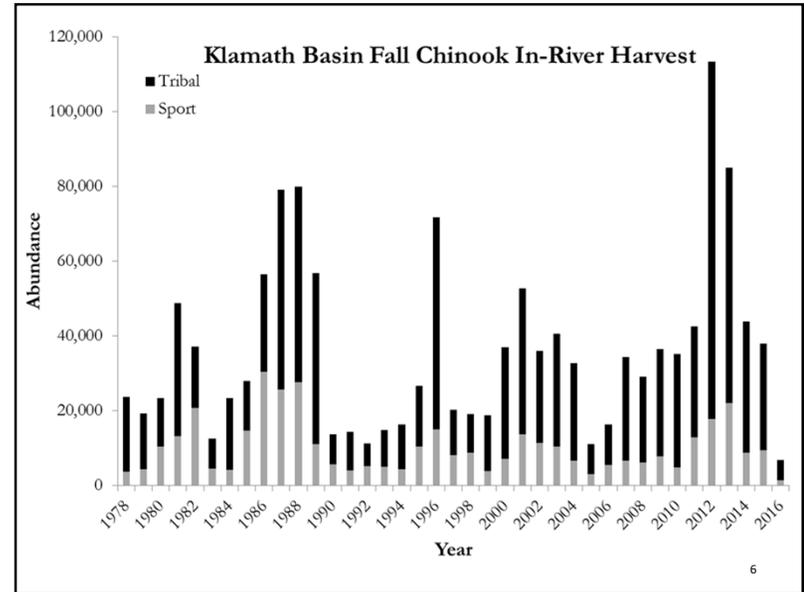
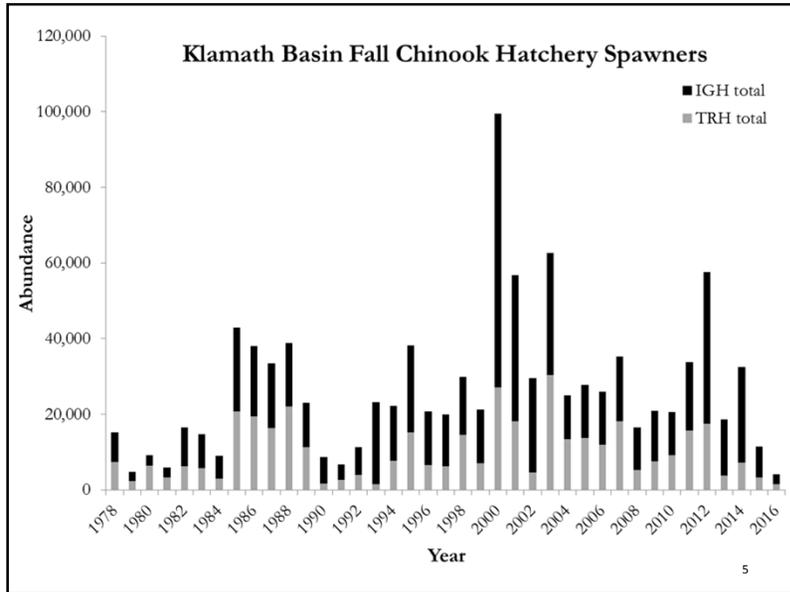
Salmon Information Public Meeting  
Santa Rosa, CA. March 1, 2017  
Sara Borok

**SISKIYOU COUNTY**  
Office of Education

**AND LANDOWNERS**





**Age Composition of the 2016 Klamath River fall Chinook Salmon run**

Escapement & Harvest	AGE				Total Adults	Total Run
	2	3	4	5		
<b>Hatchery Spawners</b>						
Iron Gate Hatchery	151	1,683	715	38	2,436	2,587
Trinity River Hatchery	401	722	412	8	1,142	1,543
<b>subtotal</b>	<b>552</b>	<b>2,405</b>	<b>1,127</b>	<b>46</b>	<b>3,578</b>	<b>4,130</b>
<b>Natural Spawners</b>						
Klamath Basin subtotal	554	2,702	7,596	65	10,363	10,917
Trinity Basin subtotal	1,340	2,056	1,424	81	3,561	4,901
<b>subtotal</b>	<b>1,894</b>	<b>4,758</b>	<b>9,020</b>	<b>146</b>	<b>13,924</b>	<b>15,818</b>
<b>Recreational Harvest</b>						
Klamath River harvest	146	371	860	10	1241	1387
Trinity River harvest	15	59	10	0	69	84
<b>subtotal</b>	<b>161</b>	<b>430</b>	<b>870</b>	<b>10</b>	<b>1,310</b>	<b>1,471</b>
<b>Tribal Harvest</b>						
Klamath River harvest	140	576	3,588	245	4409	4549
Trinity River harvest	20	341	378	31	750	770
<b>subtotal</b>	<b>160</b>	<b>917</b>	<b>3,966</b>	<b>276</b>	<b>5,159</b>	<b>5,319</b>
<b>Dropoff Mortality</b>						
Klamath River Ich disease testing	17	90	371	24	485	502
	2	15	89	7	111	113
					2.4%	2.2%
<b>Total River Run</b>	<b>2,786</b>	<b>8,615</b>	<b>15,443</b>	<b>509</b>	<b>24,567</b>	<b>27,353</b>
	10.2%	31.5%	56.5%	1.9%		

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Source: 2016 KRTT

## 2016 Preliminary results/findings

The 2016 Klamath Basin fall Chinook run estimate is the lowest in the 38 year record, and 21% of the 38-year average.

The adult Chinook returns to the basin were 47 percent of the projected forecast (52,100 pre vs. 24,600 post).

The adult fall Chinook natural escapement conservation threshold of 30,909 was not met this season.

The number of jacks (2,786) is the 4<sup>th</sup> lowest in the 38 year record.

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## Department of Fish and Wildlife Ocean Salmon Project

### 2016 California Ocean Salmon Fisheries

Presented by  
Kandice Morgenstern



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### 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

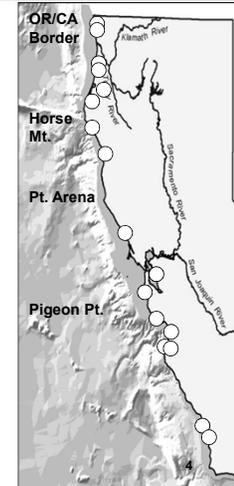
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### Recreational Salmon Fishery

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### Sample Design – Private Skiff Fishery

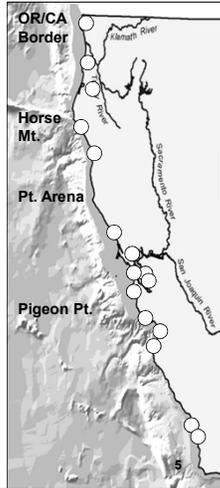
- Random stratified sampling design using weekday and weekend/holiday strata (i.e., skiff days)
- Sampling unit: all skiff trips made at a sample site for an entire day
- CRFS samples  $\geq 20\%$  of all skiff days in each management area and period
  - 17 primary salmon skiff sample sites
  - Average 7 sample days per month at each site
  - 453 skiff days sampled during the 2016 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

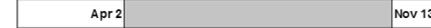


## 2016 California Recreational Season

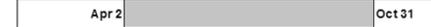
Klamath Management Zone: OR/CA Border to Horse Mt. (68 days)



Fort Bragg: Horse Mt. to Pt. Arena (226 days)



San Francisco: Pt. Arena to Pigeon Pt. (213 days)



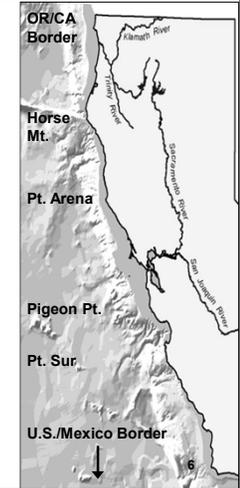
Monterey North: Pigeon Pt. to Pt. Sur (105 days)



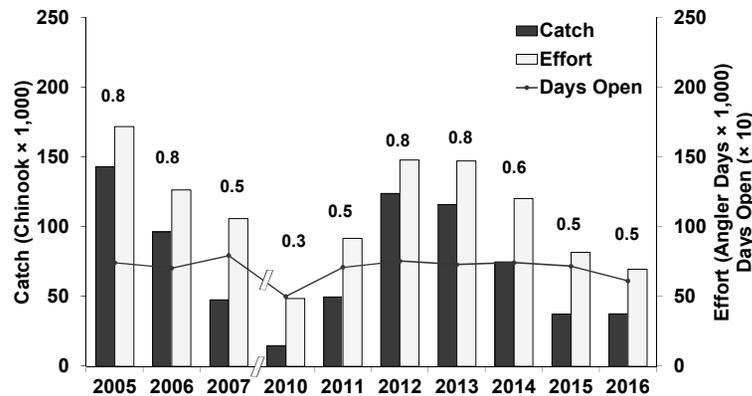
Monterey South: Pt. Sur to U.S./Mexico Border (60 days)



Minimum size limit 20" north of Pt. Arena and in San Francisco after April 30. 24" south of Pigeon Pt. and in San Francisco through April 30; 2 fish per day

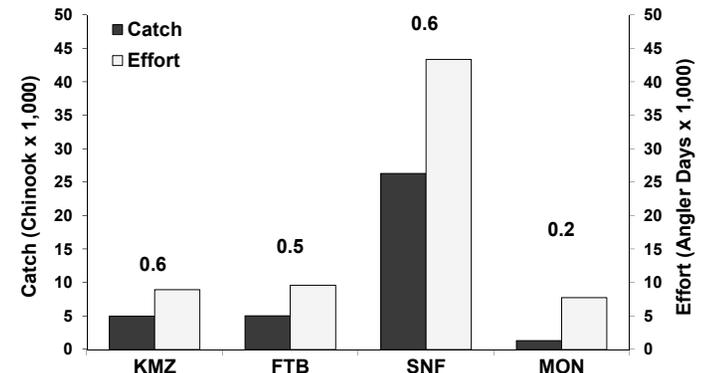


## Recreational Catch and Effort, 2005-2016



Days Open = All four management areas combined (Monterey treated as one area) 7

## 2016 Recreational Catch and Effort by Management Area



	KMZ	FTB	SNF	MON	TOTAL
Days Open	68	226	213	105	
Total Chinook	5,000	5,037	26,308	1,335	37,680
Angler Days	8,953	9,607	43,366	7,761	69,687

## Commercial Salmon Fishery

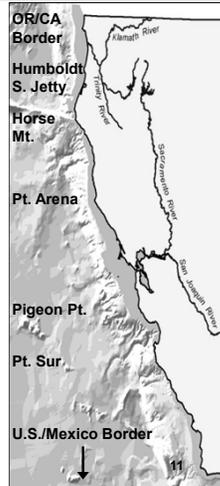
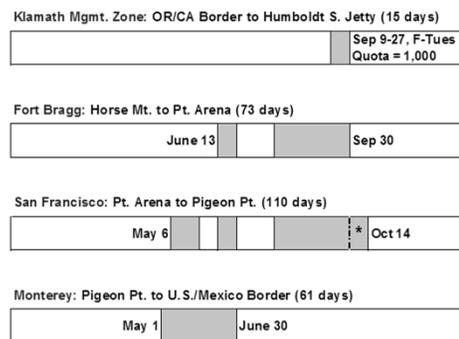
9

## 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 snouts are taken for coded-wire tag recovery
- Determine average weight and days fished from sampled landings by catch area and sample period

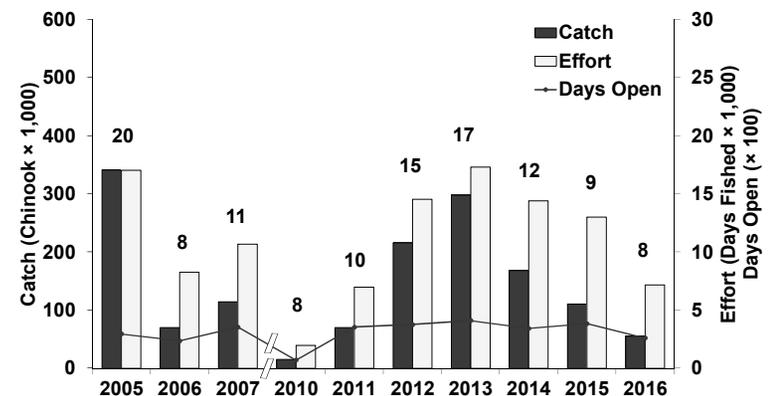
10

## 2016 California Commercial Season



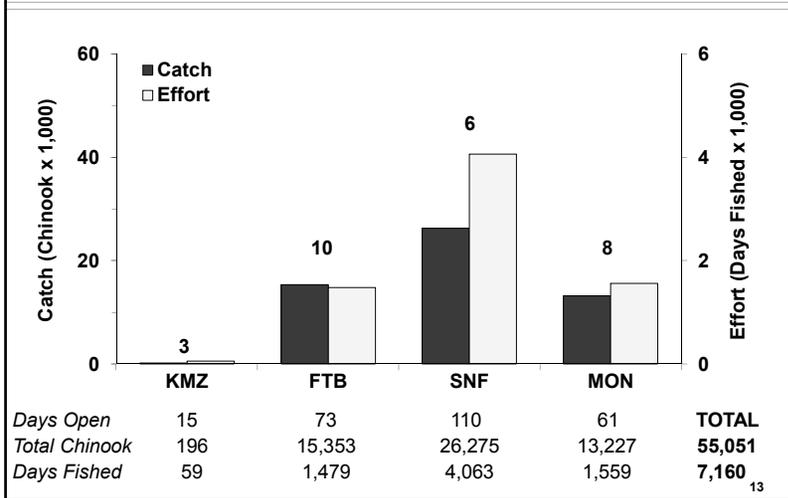
- Statewide closures during July, end of August
- Minimum size limit 27", except 26" in SF after Aug and 28" in KMZ
- \* Oct 1-14 fishery: open between Pt. Reyes and Pt. San Pedro; Mon-Fri

## Commercial Catch and Effort, 2005-2016

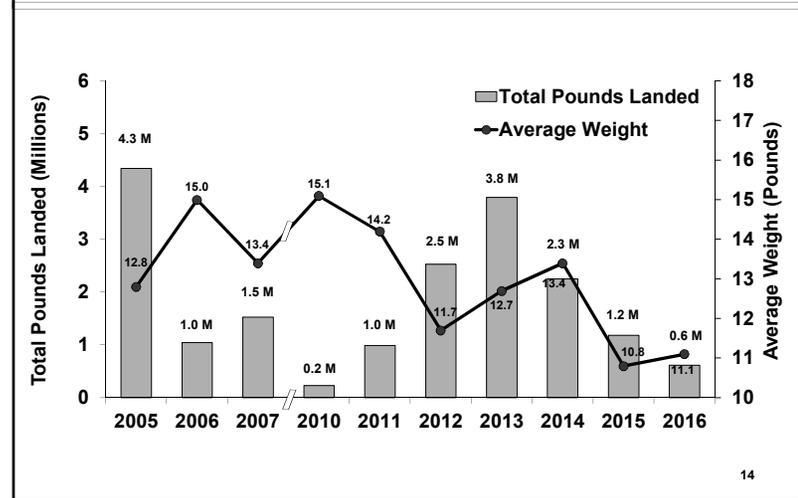


Days Open = All four management areas combined (Monterey treated as one area)<sub>12</sub>

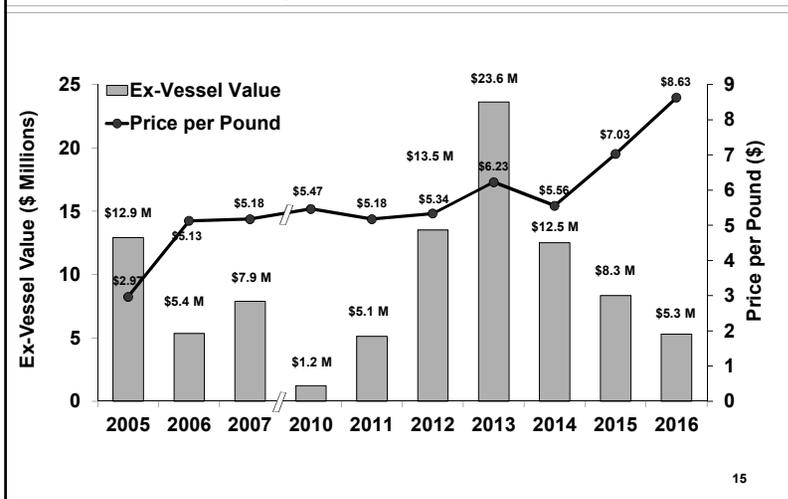
### 2016 Commercial Catch and Effort by Management Area



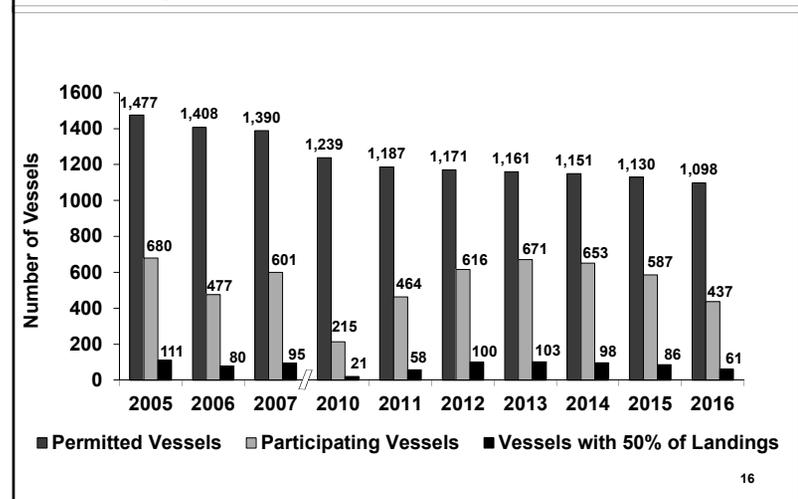
### Total Commercial Pounds Landed and Average Weight, 2005-2016



### Commercial Ex-Vessel Value and Price per Pound, 2005-2016



### Number of Vessels with Landings Compared to Permitted Vessels, 2005-2016



### 2016 Klamath Management Zone September Quota Fishery

Season	Chinook Quota	Total Chinook Landed	Average Chinook Landed Per Day
Sep 9-13, 16-20, 23-27 (15 Days)	1,000	196	13



Average Boats Participating Per Day	Average Daily Catch Per Boat
4	3.3

17

### 2016 Fall Ocean Fisheries Impacts on Age-4 Klamath River Fall Chinook

Area	Recreational	Commercial
Northern Oregon	0	0
Coos Bay	0	0
KMZ - Oregon	38	0
KMZ - California	67	0
Fort Bragg	0	0
San Francisco	0	0
Monterey	0	-
<b>Total</b>	<b>105</b>	<b>0</b>

- 105 age-4 Klamath River fall Chinook were harvested during 2016 fall ocean fisheries (September – November)
- Equates to a 1% age-4 harvest rate, which will be deducted from the 16.0% allowable harvest rate when determining the 2017 season structure

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### Hatchery Contribution to 2016 CA Ocean Fisheries

Hatchery Chinook Stock	Recreational (75%) N = 2,729 CWTs	Commercial (63%) N = 3,102 CWTs
Sacramento River Fall	79%	82%
San Joaquin River Fall	19%	16%
Central Valley Spring	1%	0.7%
Klamath River Fall	0.3%	0.7%
Pacific Northwest Stocks	0.3%	0.2%
Central Valley Late-Fall	0.2%	0.3%
Other Northern California Stocks	0.0%	0.3%
Sacramento River Winter	0.1%	0.1%

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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>	38.4%	38.1%
Coleman National Fish Hatchery <i>~12 million fall Chinook released annually</i>	44.2%	44.9%
Nimbus Fish Hatchery <i>~4 million fall Chinook released annually</i>	17.4%	17.0%

20



**Department of Fish and Wildlife  
Ocean Salmon Project**

**Thank You**

**Kandice Morgenstern  
Environmental Scientist  
[Kandice.morgenstern@wildlife.ca.gov](mailto:Kandice.morgenstern@wildlife.ca.gov)**

# 2017 Ocean Salmon Fishery Information

West Coast  
Regional  
Office

California Department of Fish and Wildlife  
Salmon Informational Meeting  
March 1, 2017

Jeremy Jording  
Sustainable Fisheries Division  
West Coast Region

- All Guidance Preliminary; final at March Council Meeting

Indicator Stock	NOAA Guidance
Sacramento River fall Chinook	2017 recommendation is to follow FMP control rules (these will be covered in Dr. Michael O'Farrell's presentation)
Klamath River fall Chinook	



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

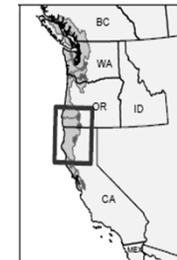
# Endangered Species Act (ESA) Listed Stocks



U.S. Department of Commerce | National Oceanic and Atmospheric Administration | NOAA Fisheries | Page 3

# Coho Salmon

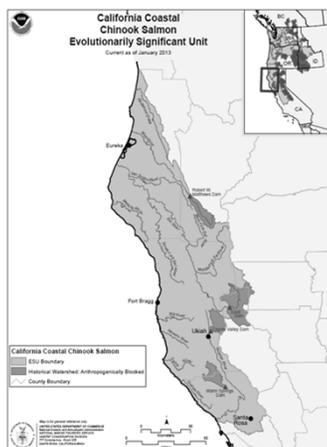
- Prohibit coho-directed fisheries off CA;
- Prohibit coho retention in Chinook-directed fisheries off CA
- Southern Oregon/Northern California Coho
  - ESA – Threatened
  - Recovery plan released September 2014 (79 FR 58750) – Current Steps: workshops to develop implementation plan
- Central California Coastal Coho
  - ESA – Endangered
  - Final recovery plan released 2012
  - Current 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



U.S. Department of Commerce | National Oceanic and Atmospheric Administration | NOAA Fisheries | Page 4

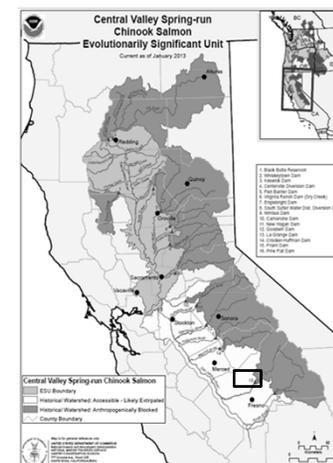
## California Coastal Chinook Salmon

- 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%



## Central Valley Spring-run Chinook Salmon

- ESA-threatened
- Recovery plan adopted July 2014 (79 FR 42504)
- Current framework continues to provide sufficient protection



## Sacramento River Winter Chinook Salmon

- ESA – Endangered
- Recovery plan adopted July 2014 (79 FR 42504)
- Guidance for 2017:
  - 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 2017 = **15.8 %**\*
    - \* : Council took a more conservative approach in 2016

## Sacramento River Winter Chinook Salmon

- NMFS will not be reconsidering the control rule prior to 2017 fisheries, other than recommending precaution due to CA drought and recent ocean conditions
- NMFS review and consideration of winter Chinook fishery management is a work in progress and in 2015 the Council decided to form an *ad hoc* Workgroup to develop and explore possible alternative SRWC control rules
- The next *ad hoc* Workgroup meeting is during the April Council meeting, on April 6<sup>th</sup> in Sacramento, and these are open to the public

## Thank You

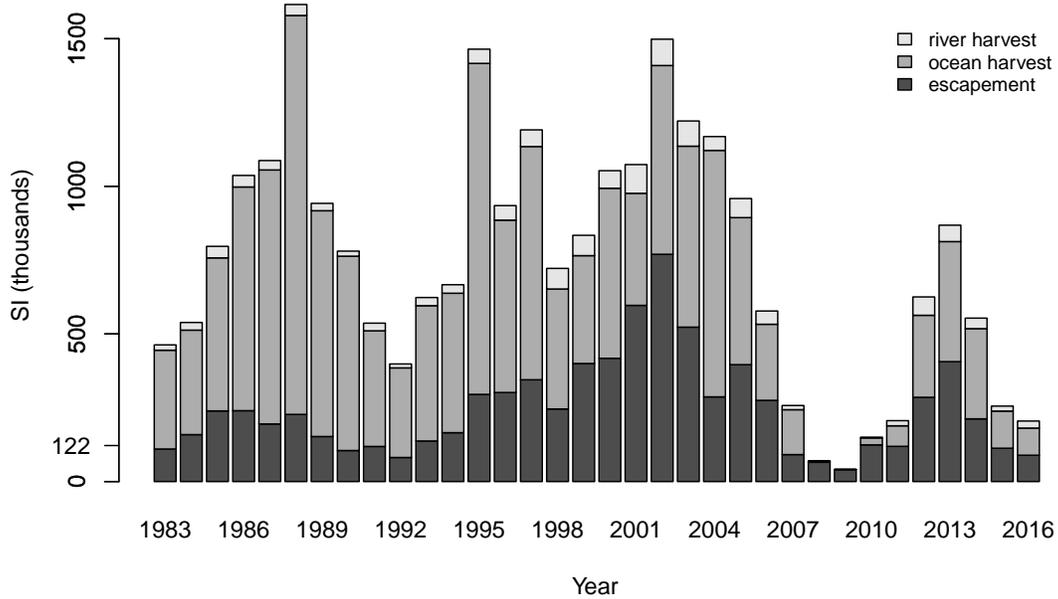
[Jeromy.Jording@noaa.gov](mailto:Jeromy.Jording@noaa.gov)

[Peter.Dygert@noaa.gov](mailto:Peter.Dygert@noaa.gov)

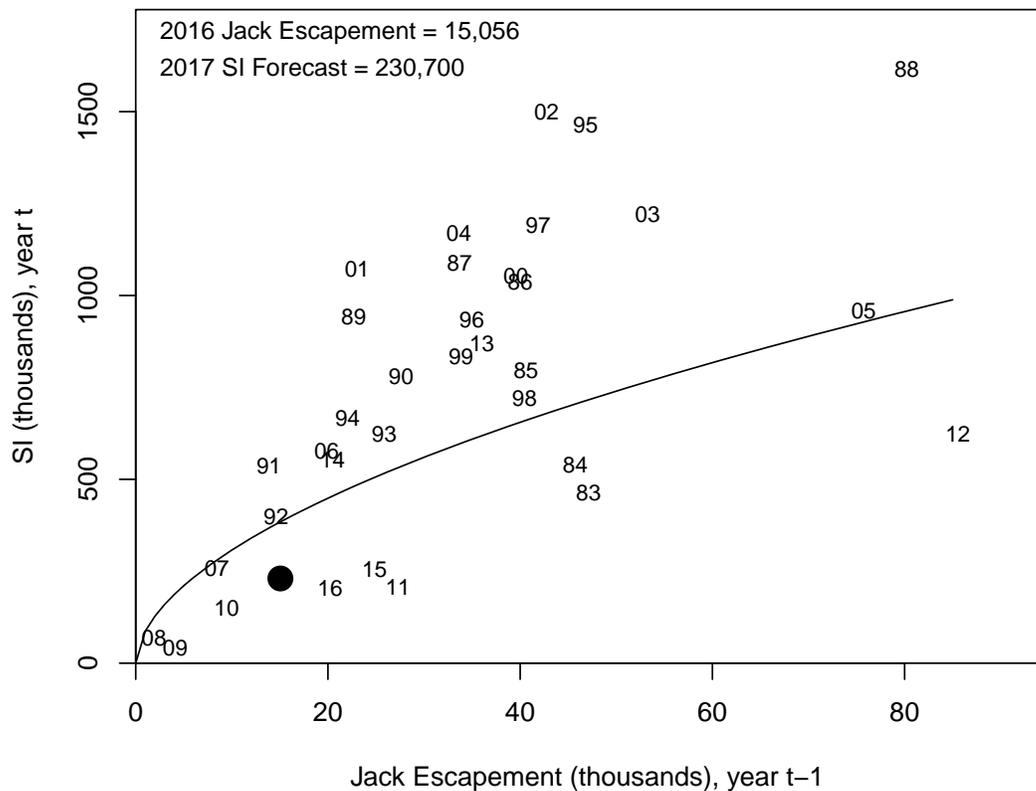
Special thanks to:  
Michael O'Farrell SWFSC



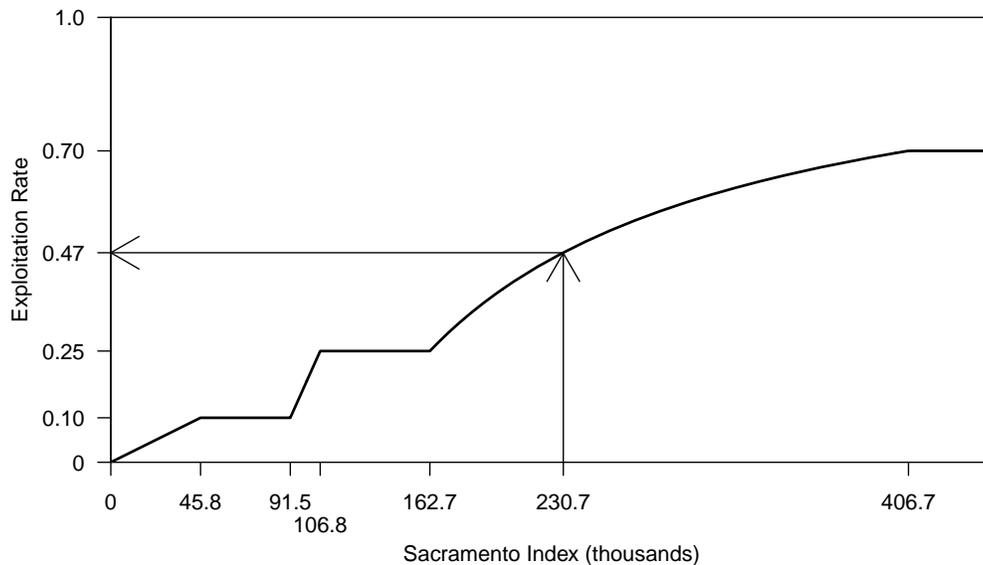
# 2016 Sacramento Index (SI): 205,023



# 2017 SI forecast: 230,700

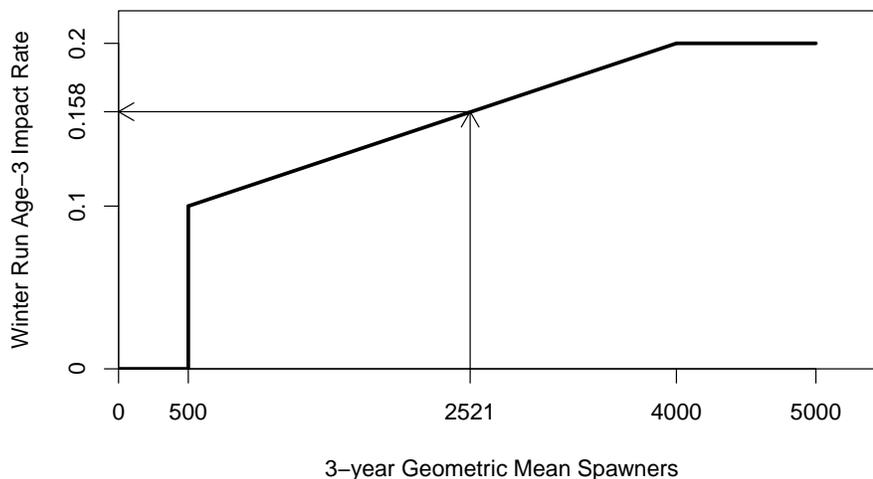


## 2017 management



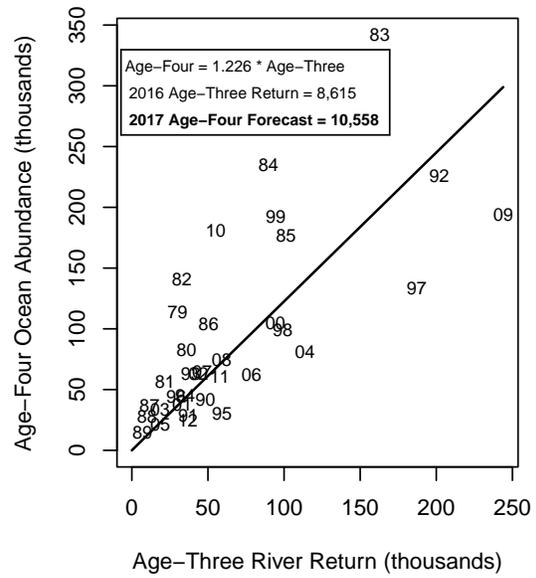
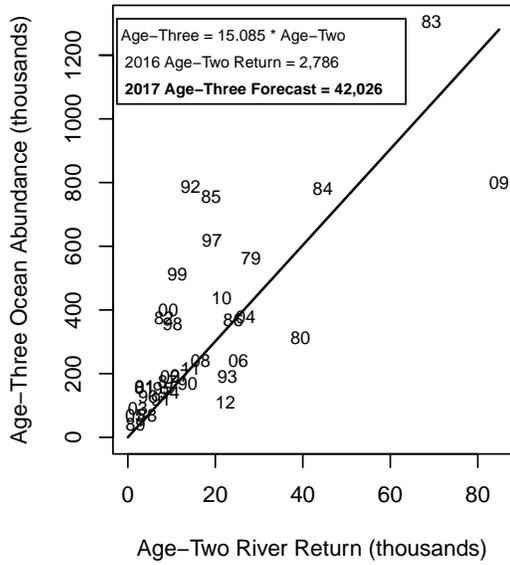
- ▶ Abundance forecast reduced from 2016
- ▶ Must target an escapement of at least 122,000 (47% exploitation rate)
- ▶ 2016 regs: preliminary escapement prediction of 116,400
- ▶ Unlikely to constrain 2017 fisheries

## 2017 winter Chinook management



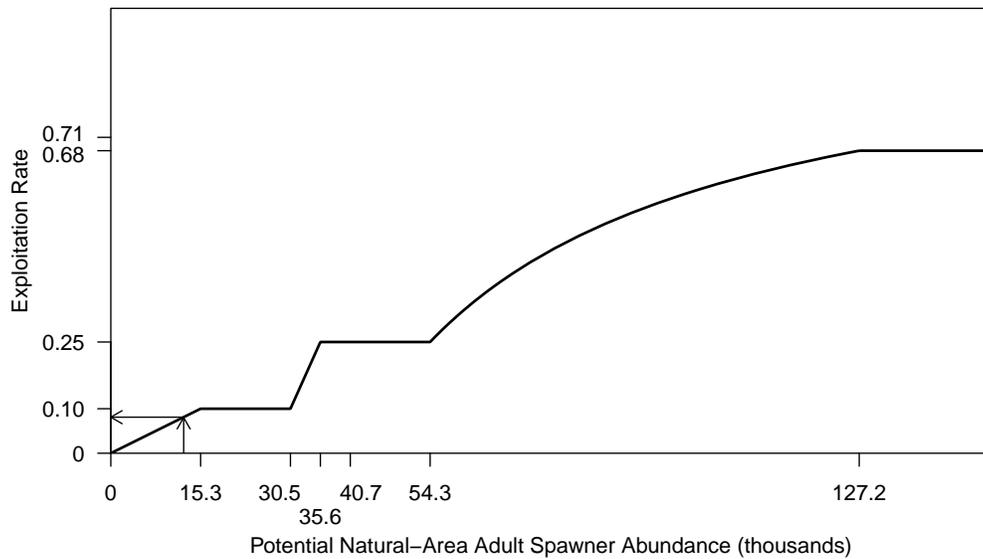
- ▶ Geometric mean: 2521
- ▶ Maximum allowable age-3 impact rate: 15.8%
- ▶ 2016 regs: preliminary prediction of 11.6%
- ▶ Council took precautionary approach in 2016
- ▶ Likely to constrain 2017 fisheries south of Point Arena

## 2017 Klamath abundance forecast



age-3: 42,026  
age-4: 10,558  
age-5: 1,662

## 2017 management



- ▶ Potential spawner abundance forecast: 12,383
- ▶ Must target an escapement of at least 11,379 (8.1% exploitation rate)

## 2017 management, contd.

- ▶ 2016 regs:
  - ▶ Tribal allocation: 50% of total harvest
  - ▶ River recreational allocation: 15% of non-tribal harvest
  - ▶ Natural-area adult spawners prediction: 9,397
  - ▶ Exploitation Rate: 24.1%
  
- ▶ Will heavily constrain 2017 fisheries south of Cape Falcon, OR

## 2017 California Coastal Chinook

- ▶ Max allowable KRFC age-4 ocean harvest rate of 16%
- ▶ 2016 fisheries: preliminary prediction of 9%
- ▶ Unlikely to constrain 2017 fisheries

## **2017 California Ocean Salmon Preseason Process: Calendar of Events**

### **March 7-13, 2017 - Pacific Fishery Management Council Meeting**

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

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 13.

### **March 15-21, 2017 – Preseason Report II Preparation**

The Salmon Technical Team (STT) completes *Preseason Report II: Proposed Alternatives and Environmental Assessment Part 2 for 2017 Ocean Salmon Fishery Regulations*, available online in late March 2017 at: [www.pcouncil.org](http://www.pcouncil.org).

### **March 15, 2017 - California Fish and Game Commission Meeting - Teleconference**

Commission Conference Room 1320 - 1416 9<sup>th</sup> St., Sacramento, CA 95814

Proposed changes to ocean salmon sport fishing regulations for 2017 will be addressed at this meeting. The Commission will take final action on ocean salmon sport fishery regulations in effect during April 2017. The public may address and/or ask questions to the Commission relating to the implementation of its policies or any other matter within the jurisdiction of the Commission.

Agenda, audio, and additional meeting locations available online at:

[www.fgc.ca.gov](http://www.fgc.ca.gov).

### **March 28, 2017 (7 p.m.) - Pacific Fishery Management Council Public Hearing - California**

Town Hall - 363 South Main Street, 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](http://www.pcouncil.org).

### **April 6-11, 2017 - Pacific Fishery Management Council Meeting**

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

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 is tentatively scheduled to occur on April 10.

### **April 13-21, 2017 - Preseason Report III Preparation**

The PFMC and STT complete *Preseason Report III: Council-Adopted Management Measures and Environmental Assessment Part 3 for 2017 Ocean Salmon Fishery Regulations*, available online April 21, 2017 at: [www.pcouncil.org](http://www.pcouncil.org).

### **April 13, 2017 - California Fish and Game Commission Meeting - Teleconference**

Commission Conference Room 1320 - 1416 9<sup>th</sup> St., Sacramento, CA 95814

The Commission will take final action on ocean salmon sport fishery regulations in effect on or after May 1, 2017. The public may address and/or ask questions to the Commission relating to the implementation of its policies or any other matter within the jurisdiction of the Commission. Agenda, audio, and additional meeting locations available online at: [www.fgc.ca.gov](http://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	Hoopa Valley Tribal Fisheries PO Box 417 Hoopa, 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
Jim Yarnall California Sport Fisheries	California Sport Fisheries 6308 Eggert Road Eureka, CA 95503	Telephone: (707) 443-2496 Email: jimyarnall@gmail.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](http://www.pcouncil.org/contact), or contact the PFMC staff officer for salmon: Robin Ehlke ([Robin.Ehlke@noaa.gov](mailto:Robin.Ehlke@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](http://www.fgc.ca.gov/contact).

### Online Resources:

#### Review of 2016 Ocean Salmon Fisheries (includes in-river escapement data)

Available online at:

[www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/](http://www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/)

#### Preseason Report I: Stock Abundance Analysis for 2017 Ocean Salmon Fishery Regulations

Available online at:

[www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/preseason-reports/](http://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/](http://www.pcouncil.org/salmon/background/document-library/)



**State of California**  
**Department of Fish and Wildlife**  
**Ocean Salmon Project – Marine Region**  
[www.wildlife.ca.gov/oceansalmon](http://www.wildlife.ca.gov/oceansalmon)



## 2016 Ocean Salmon Sport Regulations

### OR/CA Border to Horse Mountain:

- ◆ May 16-31; June 16-30; July 16 - August 16; September 1-5
  - minimum size limit: 20 inches total length
  - Klamath Control Zone\* (KCZ) closed in August
  - additional closures around mouth of Klamath, Smith & Eel rivers (see CDFW regulation §27.75)

### Horse Mountain to Point Arena (Fort Bragg):

- ◆ April 2 – November 13
  - minimum size limit: 20 inches total length

### Point Arena to Pigeon Point (San Francisco):

- ◆ April 2 – 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 2 – July 15
  - minimum size limit: 24 inches total length

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

- ◆ April 2 – May 31
  - minimum size limit: 24 inches total length

### 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 TROLLING<sup>1</sup>, no more than two single-point, single-shank barbless circle hooks<sup>2</sup> 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).





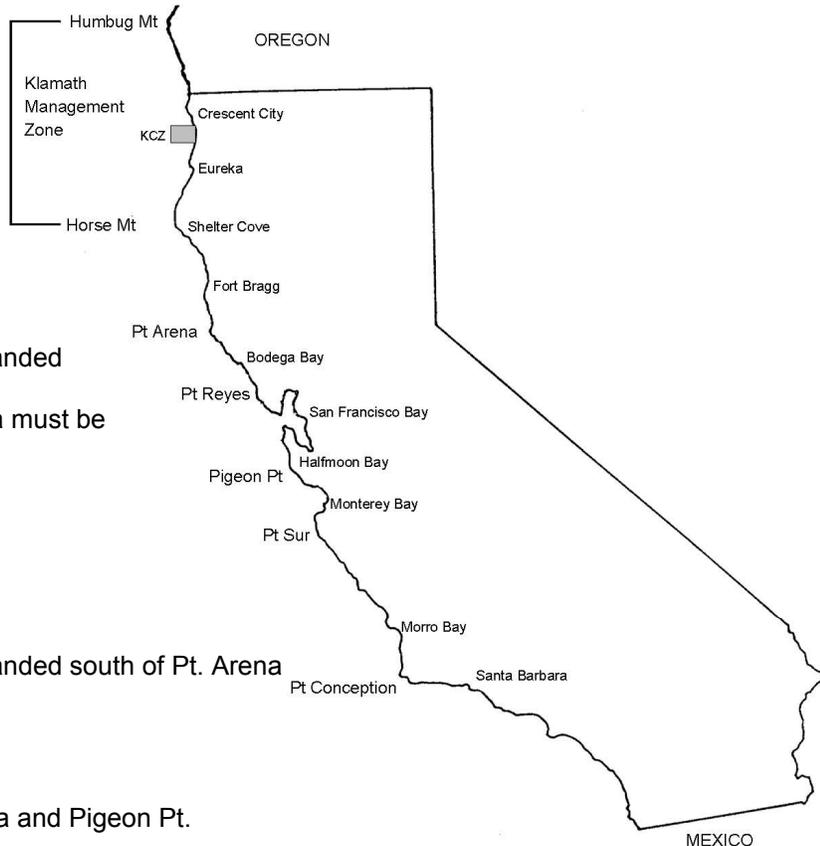
**State of California**  
**Department of Fish and Wildlife**  
**Ocean Salmon Project – Marine Region**  
[www.wildlife.ca.gov/oceansalmon](http://www.wildlife.ca.gov/oceansalmon)



## 2016 Commercial Ocean Salmon Regulations

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

- September 9-27 or 1,000 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 & 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:

- June 13-30; August 3-27\*; September 1-30
  - minimum size limit: 27 inches total length
  - during September, all fish caught in the area must be landed north of Pt. 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 6-31; June 13-30; August 3-28\*
  - 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 Pt. Arena

### Point Reyes to Point San Pedro:

- October 3-7, 10-14 (Monday through Friday)
  - minimum size limit: 26 inches total length
  - all salmon caught must be landed between Pt. Arena and Pigeon Pt.

### Pigeon Point to U.S./Mexico Border:

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

\* All salmon must be landed and offloaded by 11:59 pm August 30<sup>th</sup>

### 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 hooks<sup>1</sup> required when fishing with bait and fishing by any means other than trolling<sup>2</sup>**
  1. 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.
  2. **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. Please see federal regulations for incidental Pacific Halibut harvest requirements and restrictions.

## EVALUATION

To improve future *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 2016 Central Valley Chinook Spawner Escapement                             | <input type="checkbox"/> Review of 2016 Ocean Salmon Sport and Commercial Fisheries |
| <input type="checkbox"/> Review of 2016 Central Valley Chinook River Sport Fisheries                          | <input type="checkbox"/> NMFS 2017 Ocean Salmon Fishery Guidance                    |
| <input type="checkbox"/> Review of 2016 Klamath Basin Chinook Spawner Escapement, Harvest and Age Composition | <input type="checkbox"/> Abundance Forecasts and Harvest Model Results              |
|   | <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.

