

Agenda

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE 2019 SALMON INFORMATION MEETING

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

~

**Wednesday, February 27, 2019
10:00 a.m. – 4:00 p.m.**

Welcome - Moderator Opening Comments and Review Agenda	Brett Kormos, CDFW 10:00 a.m.
2018 Central Valley Chinook Spawning Escapement	Vanessa Gusman, CDFW (p.3) 10:15 a.m.
2018 Central Valley Chinook River Sport Fisheries	Shawn Simkins, CDFW (p.7) 10:35 a.m.
BREAK (15 minutes)	10:55 a.m.
2018 Klamath Basin Chinook Spawning Escapement, Harvest and Age Composition	Wade Sinnen, CDFW (p.16) 11:10 a.m.
2018 California Ocean Salmon Sport and Commercial Fisheries	Barry Miller, CDFW (p.19) 11:30 a.m.
LUNCH BREAK (1 hour)	11:50 a.m.
NMFS 2019 Ocean Salmon Fishery Guidance	Jeromy Jording, NMFS (p.25) 12:50 p.m.
Abundance Forecasts and Harvest Model Results	Dr. Michael O'Farrell, NMFS (p.28) 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. John Koeppen, PFMC-SAS, CA Troll Representative
Mr. Jim Yarnall, PFMC-SAS, CA Sport Fishery Representative
Mr. James Stone, PFMC-SAS, CA Sport Fishery Representative
Mr. John Atkinson, PFMC-SAS, CA Charter Boat Representative
Dr. Michael O'Farrell, NMFS SWFSC, PFMC-STT Chair
Mr. Alex Letvin, CDFW Marine Region, PFMC-STT

Public Comment to California Salmon Management Panel

(1:40 p.m.)

- 2019 Ocean Sport Fishery Regulations
- 2019 Ocean Commercial Fishery Regulations
- 2019 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

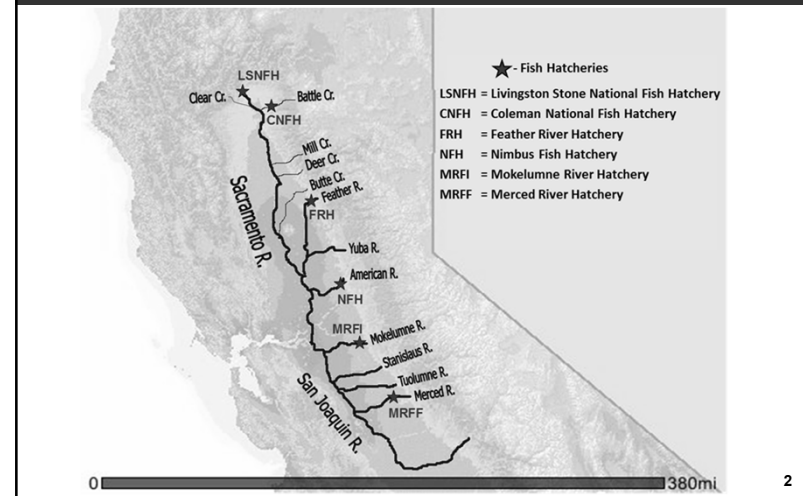


Department of Fish and Wildlife Ocean Salmon Project

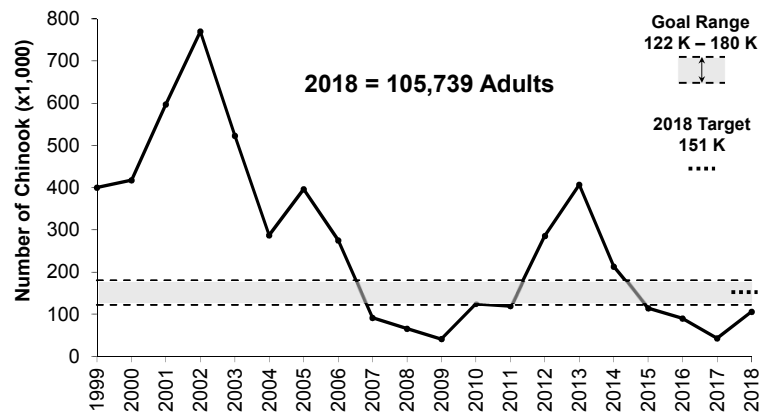
2018 Central Valley Chinook Salmon Spawning Escapement

Presented by
Vanessa Gusman

The Central Valley

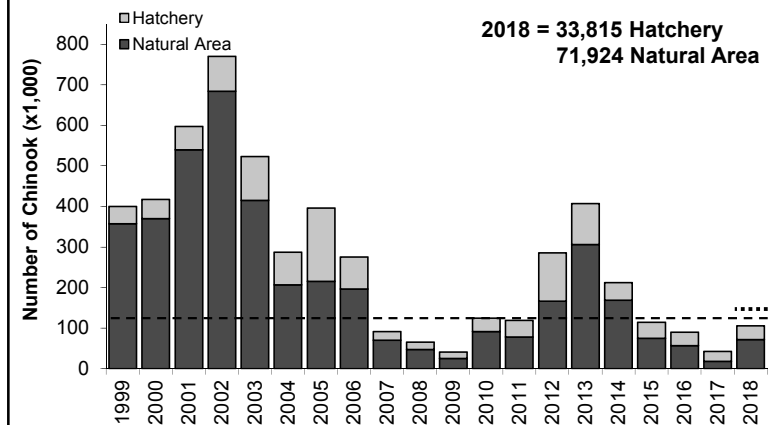


Sacramento River Fall Chinook Adult Spawning Escapement, 1999-2018



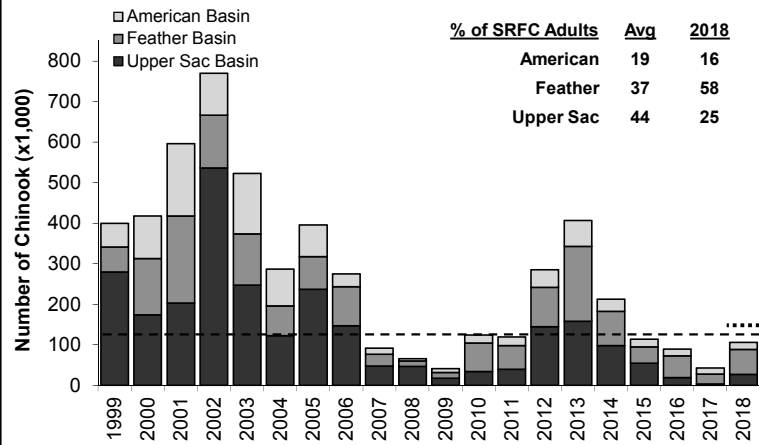
3

Sacramento River Fall Chinook Hatchery & Natural Area Adult Spawning Escapement, 1999-2018



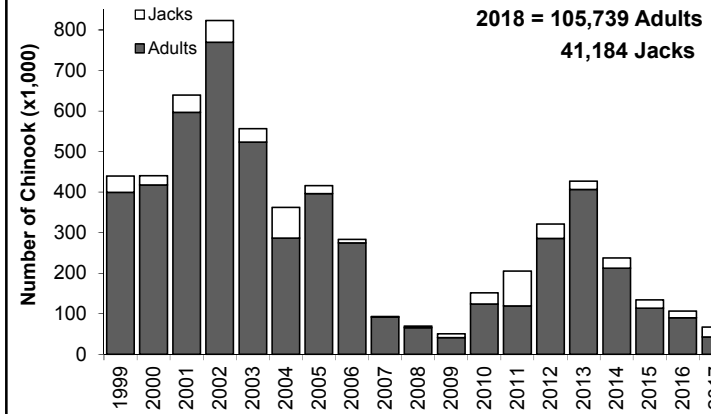
4

Sacramento River Fall Chinook Adult Spawning Escapement By Basin, 1999-2018



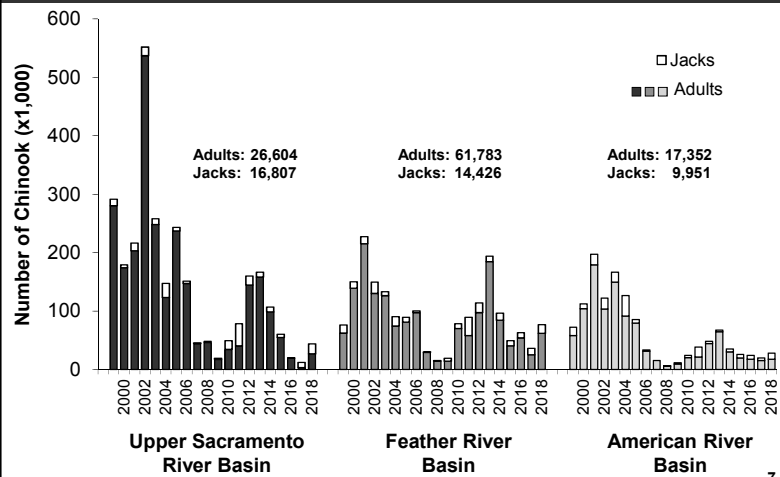
5

Sacramento River Fall Chinook Adult & Jack Spawning Escapement, 1999-2018



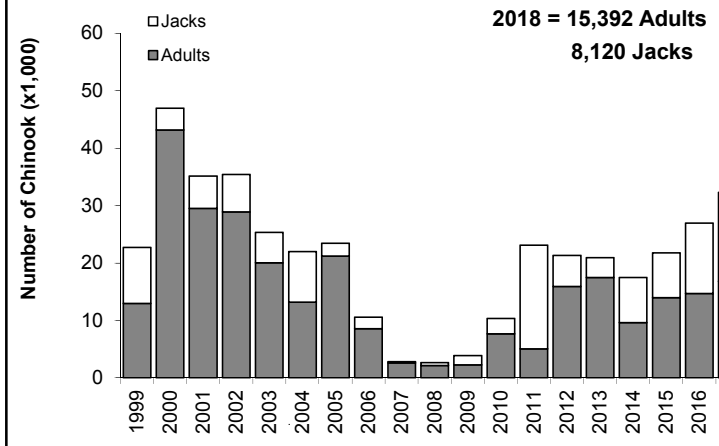
6

Sacramento River Fall Chinook Adult & Jack Spawning Escapement By Basin, 1999-2018



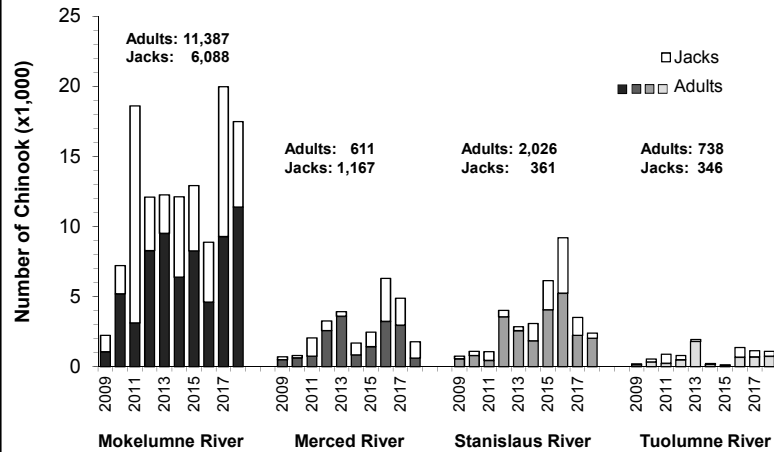
7

San Joaquin Basin Fall Chinook Adult & Jack Spawning Escapement, 1999-2018



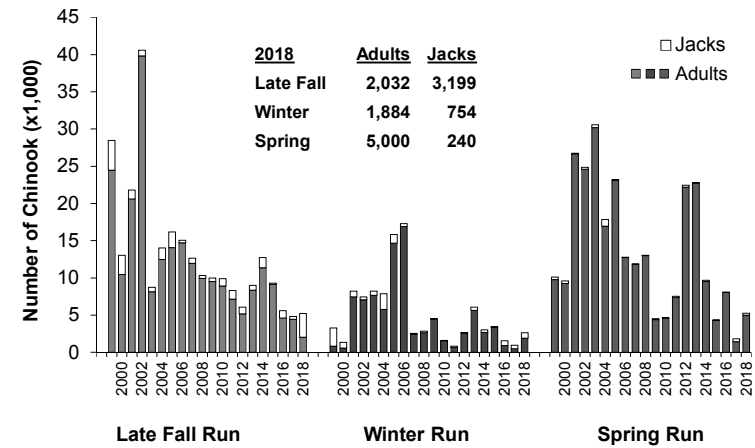
8

San Joaquin River Fall Chinook Adult & Jack Spawning Escapement By Basin, 2009-2018



9

Other Sacramento Basin Chinook Stocks Spawning Escapement, 1999-2018



10



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

11

2018 Sacramento River Fall Chinook Hatchery and Natural Area Escapement

		Jacks	Adults	Total	% Jack	% Nat	% SRFC Total
Upper Sacramento River Basin	Hatchery	5,393	8,780	14,173	38%		10%
	Natural	<u>11,414</u>	<u>17,824</u>	<u>29,238</u>	<u>39%</u>	67%	<u>20%</u>
		16,807	26,604	43,411	39%		30%
Feather River Basin (including Yuba River)	Hatchery	6,778	20,549	27,327	25%		19%
	Natural	<u>7,648</u>	<u>41,234</u>	<u>48,882</u>	<u>16%</u>	64%	<u>33%</u>
		14,426	61,783	76,209	19%		52%
American River Basin	Hatchery	1,726	4,486	6,212	28%		4%
	Natural	<u>8,225</u>	<u>12,866</u>	<u>21,091</u>	<u>39%</u>	77%	<u>14%</u>
		9,951	17,352	27,303	36%		18%
Total 2018 SRFC Escapement		41,184	105,739	146,923	28%	68%	100%

**2018 Other Central Valley Chinook Stocks
Hatchery and Natural Area Escapement**

		Jacks	Adults	Total	% Jack	% Nat
Central Valley Late Fall Chinook	Hatchery	3,138	767	3,905	80%	
	Natural	<u>61</u>	<u>1,265</u>	<u>1,326</u>	<u>5%</u>	25%
		3,199	2,032	5,231	61%	
Sacramento River Winter Chinook	Natural	<u>754</u>	<u>1,884</u>	<u>2,638</u>	<u>29%</u>	100%
		754	1,884	2,638	29%	
Central Valley Spring Chinook	Hatchery	240	1,870	2,110	11%	
	Natural	<u>---</u>	<u>3,130</u>	<u>3,130</u>	<u>---</u>	60%
		240	5,000	5,240	---	
San Joaquin Fall Chinook	Hatchery	3,042	5,042	8,084	38%	
	Natural	<u>5,078</u>	<u>10,350</u>	<u>15,428</u>	<u>33%</u>	66%
		8,120	15,392	23,512	35%	

CENTRAL VALLEY ANGLER SURVEY: 2018 Recreational Harvest of Chinook Salmon



Shawn Simkins, James Lyons, & Rob Titus

California Department of Fish and Wildlife
Fisheries Branch
Central Valley Salmonid Monitoring & Research
Sacramento, California



1

2018 Central Valley Salmon Season

General season: July 16 – December 16

Exceptions:

Lower American River

July 16–December 31

Upper Sacramento River

August 1–December 16

RBDD to Deschutes Road Bridge

Feather River

July 16–October 15

From Live Oak to the Thermalito outfall

Low flow channel closed



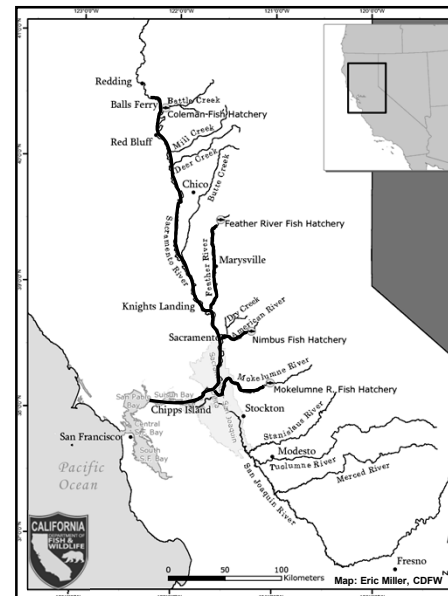
2

Central Valley Angler Survey



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

3



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*

4

Estimates of Chinook Salmon Effort, Catch, and Harvest



Data collection via:

- Roving angler counts
- Roving angler interviews
- Access point interviews

5

Overview of 2018 Central Valley Sport Fishery for Chinook Salmon*

Effort:	794,812 angler hours
Trips:	202,682 angling days
Total catch:	31,174 salmon
Harvest:	26,131 salmon
Released:	5,043 salmon
Pct. retention:	84%
Catch rate:	3.9 salmon per 100 angler hours



* Based on fishery statistics for the American, Feather, Mokelumne and Sacramento rivers, July – December 2018.

6

Raw Statistics

Contacted over 7,899 fishing parties

2,008 salmon reported kept

1,744 salmon observed

- or 6.7% of the Estimated Harvest

398 adipose fin-clipped, 23% of observed salmon

370 heads (93%) taken for CWT recovery



7

Coded Wire Tag Recoveries

361 CWTs (98%) successfully recovered and read

Percent	Count	
48%	173	Feather River Hatchery fall run
18%	66	Coleman National Fish Hatchery fall run
13%	47	Coleman National Fish Hatchery late-fall run
11%	41	Mokelumne River Hatchery fall run
6%	21	Nimbus Hatchery fall run
3%	10	Feather River spring run
1%	2	San Joaquin spring run
0%	1	Livingston Stone National Fish Hatchery winter run

8

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 with a daily bag limit of 1 Chinook Salmon and 2 in possession ⁹

SRFC Inland Harvest

SRFC comprised 96% of all Chinook Salmon harvest in the Central Valley in 2018



10

Final SRFC Harvest Estimate

Nearly 35% of the harvest were grilse

16,274 adult

8,735 grilse

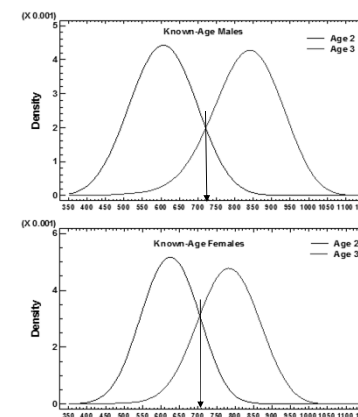
25,009 Total SRFC



11

Grilse Cutoff Males vs. Females

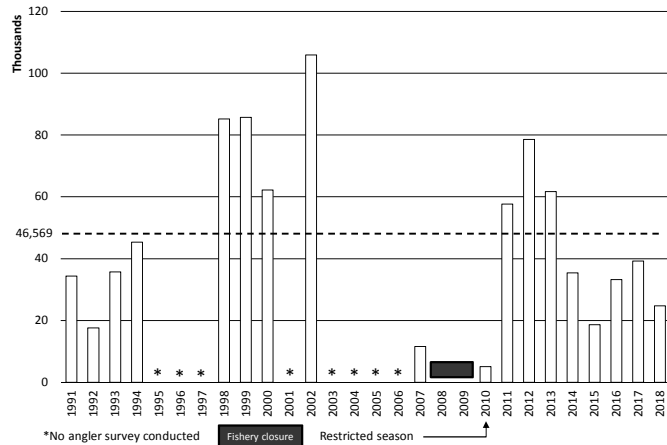
- Males
 - FL cutoff of 721 mm
 - 50% Grilse
- Females
 - FL cutoff of 703 mm
 - 16% Grilse



12

SRFC Harvest Trend

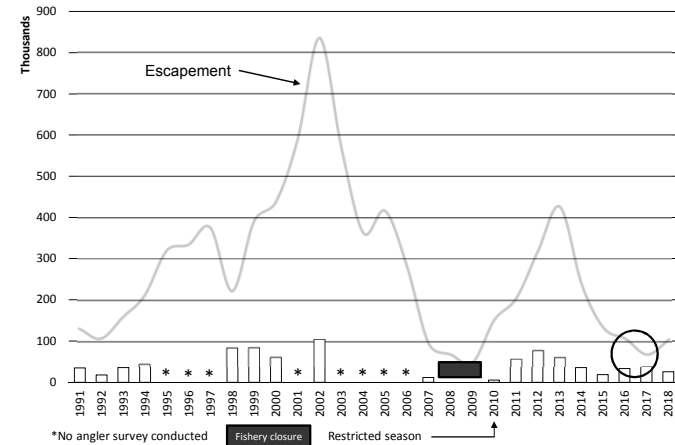
Grilse + Adults



13

SRFC Harvest Trend

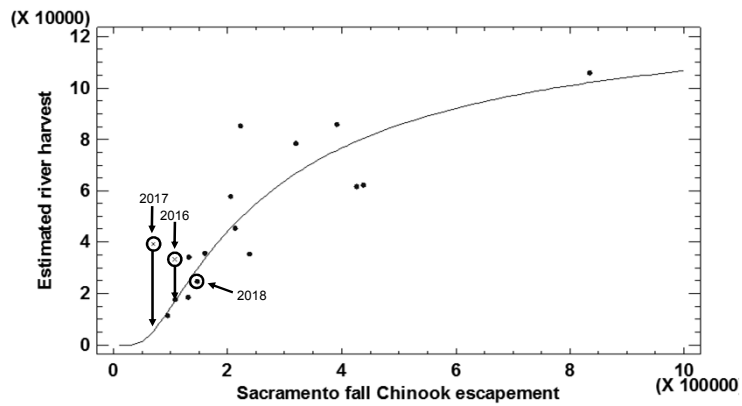
Grilse + Adults



14

River harvest was slightly lower than expected
in 2018 relative to escapement

River harvest = 25,009, Escapement = 146,923



15

2018 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 1 Chinook Salmon, 2 possession limit



16

Sacramento River Late-Fall-Run Chinook Salmon Fishery



- **Effort:** 15,991 angler hours
- **Trips:** 4,078 angler trips
- **Catch rate:** 3.4 salmon per 100 angler hours
- **Harvest:** 474 salmon

17

2018 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 was 4 salmon



18

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



- **Effort:** 30,722 angler hours
- **Trips:** 7,834 angler trips
- **Catch rate:** 2.3 salmon per 100 angler hours
- **Harvest:** 648 salmon

19

Hatchery vs. Natural Origin

Percent hatchery vs. natural origin by management zone¹

	Hatchery	Natural
Lower Sacramento River	78%	22%
Upper Sacramento River	73%	27%
Feather River	71%	29%
American River	97%	3%
Mokelumne River	82%	18%
System-wide	74%	26%

¹ Based on expansions of coded-wire tag recoveries.

20

Contact Information

- Shawn Simkins
CDFW/Central Valley Angler Survey
Sacramento
(916) 375-6080
Shawn.Simkins@Wildlife.Ca.Gov
- James Lyons
CDFW/Central Valley Angler Survey
Red Bluff
(530) 529-3295
James.Lyons@Wildlife.Ca.Gov



21

Photo: Shawn Simkins, CDFW

SUMMARY OF THE 2018 CENTRAL VALLEY CHINOOK SALMON SPORT FISHERY

California Department of Fish and Wildlife
Fisheries Branch – Central Valley Angler Survey
980 Riverside Parkway, Suite 100
West Sacramento, CA 95605

Contacts: Rob.Titus@wildlife.ca.gov James.Lyons@wildlife.ca.gov Shawn.Simkins@wildlife.ca.gov

When and where did fishing occur?

Sport fishing for Chinook Salmon in Central Valley rivers opened on 16 July 2018 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 2018. Closing dates varied among river sections from 15 October through 31 December 2018. The varied closing dates were developed to avoid contact in the river sport fishery with threatened spring-run and endangered winter-run Chinook Salmon. The daily bag limit was 1 salmon with a 2 salmon possession limit for each licensed angler.

What methods were used to monitor the fishery and estimate harvest?

The Central Valley Angler Survey monitored the river sport fishery using a random-stratified sampling design and roving survey method to cover the 400+ mile fishery area. We divided the fishery area into 24 survey sections and sampled each section on eight randomly selected days per month, resulting in a sampling rate of 27% of total available fishing days. We started survey runs with a roving count to estimate angler use on a given sample day. This first angler use count was followed by roving interviews of anglers from which data on fishing effort and catch were collected from individual fishing parties. The second run through a survey section during which interviews were conducted also provided as a second angler use count.

Some survey sections were more amenable to access point interviews, where surveyors contacted anglers as they left the water – for example, at a popular boat launch – and collected whole trip data. These data were especially useful for estimating catch per unit of fishing effort, which was used along with the average angler use count to estimate the number of Chinook Salmon harvested in a given survey section on a given survey day. These data were then used to develop monthly estimates of Chinook Salmon harvest in each survey section, which were then combined to yield a season total harvest.

Biological data, including length, weight, and sex, were collected on all harvested Chinook Salmon. Coded-wire tags (CWT) from adipose fin-clipped salmon were used for hatchery stock identification and to estimate age structure of the catch.

How did the fishery perform and what was the composition of the harvest?

Estimated angling effort in the Central Valley Chinook Salmon sport fishery totaled 794,812 hours, corresponding to about 202,682 fishing trips. This level of effort was 2.6% less than that estimated in the 2017 fishery (816,261 hours), but represented 24% more fishing trips

(162,926 trips in 2017). Total harvest in the Central Valley river fishery was estimated at 26,131 salmon with an additional 5,043 salmon caught and released. Retention rate of salmon was approximately 84% of the catch. Based on observed catch, 23% of the Chinook Salmon harvested were adipose fin clipped and coded wire tagged. Of the 361 CWTs recovered and read, 72% were from Sacramento Basin fall-run Chinook Salmon, 13% were from Coleman National Fish Hatchery late-fall-run Chinook Salmon, 11% were from San Joaquin Basin fall-run Chinook Salmon, less than 3% were from Feather River Hatchery spring-run Chinook Salmon, less than 1% were from San Joaquin River spring-run Chinook Salmon, and less than 1% was from Livingston Stone National Fish Hatchery winter-run Chinook Salmon.

Fork length (FL) frequency analysis (**Figure 1** below) was used to determine the delineation between 2-year-old (grilse) and older (adult) Sacramento River fall-run Chinook. The size break between the two age groups was 721 mm FL for males and 703 mm FL for females, resulting in nearly 35% of the harvest consisting of grilse. The total estimated harvest of Sacramento River fall-run Chinook was 8,735 grilse and 16,274 adults, for a total harvest of 25,009¹.

Based on expansions of coded-wire tags, the hatchery contribution of Chinook Salmon in the Central Valley river sport harvest varied from 71% in the Feather River to 97% in the American River. Overall, hatchery-origin Chinook Salmon comprised an estimated 74% of the harvest.

Acknowledgment

The California Department of Fish and Wildlife would like to thank Central Valley fishing guides and 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 coded-wire tag recovery.

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

¹ 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 origin as determined by coded-wire tags.

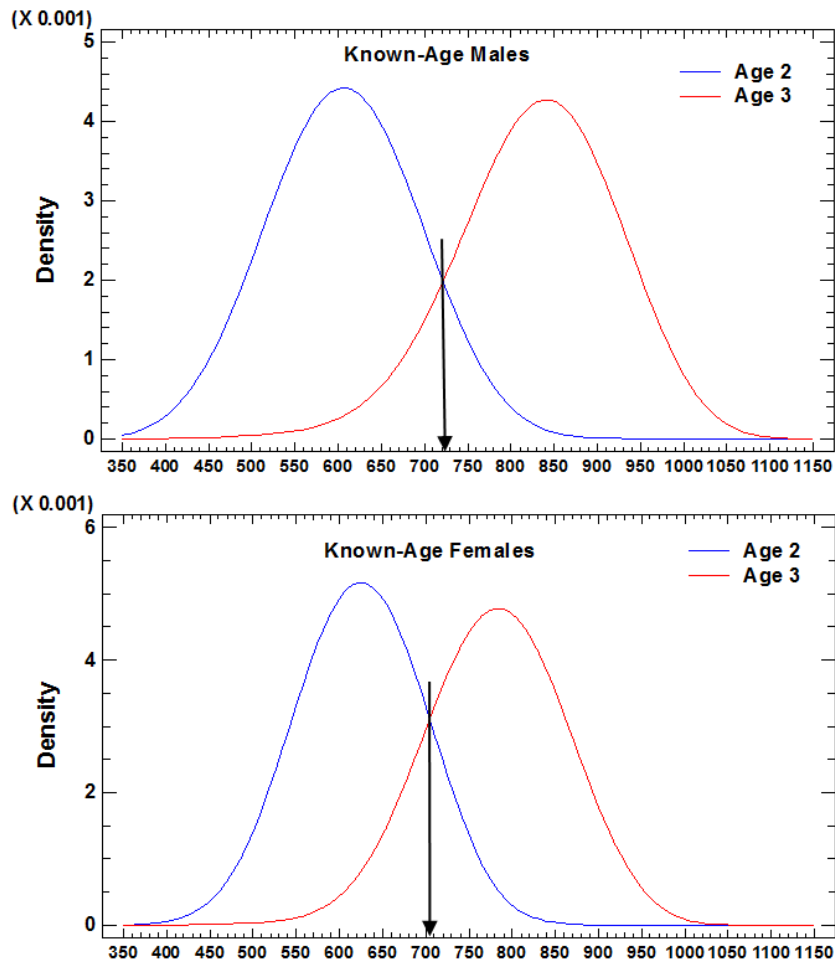


Figure 1. Fork-length frequency distributions of age-2 and age-3 male (top) and female (bottom) Chinook Salmon harvested in the 2018 Sacramento Basin fall-run Chinook Salmon sport fishery. Distributions were determined with density trace analysis. Age was determined from coded-wire tag recoveries of known-age Chinook Salmon. The vertical black line indicates the estimated break between grilse (to the left) and adults (to the right), recognizing significant overlap in size between age classes.

California Department of Fish and Wildlife

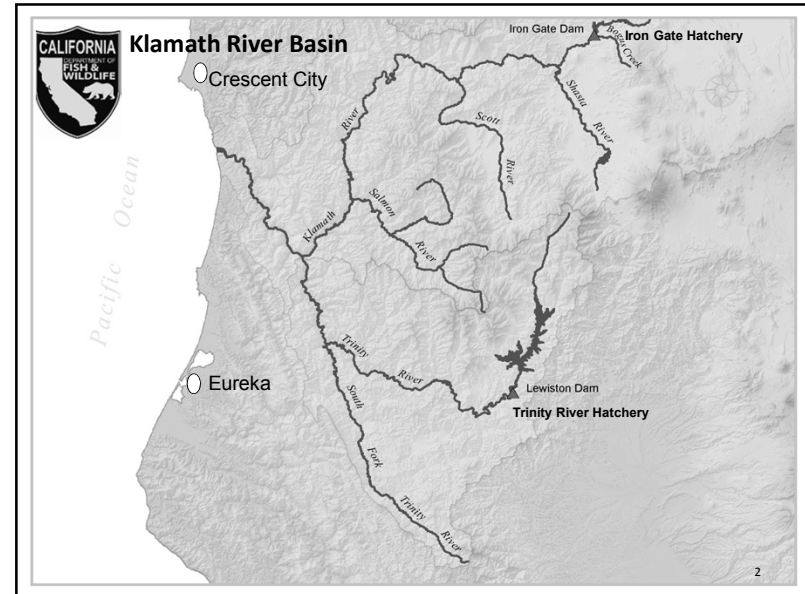
Klamath-Trinity Project

Klamath Basin Chinook Salmon Spawning Escapement, Harvest and Age Composition, 2018 Season



Salmon Information Public Meeting
Santa Rosa, CA. February 27, 2019
Wade Sinnen- Senior Environmental Scientist

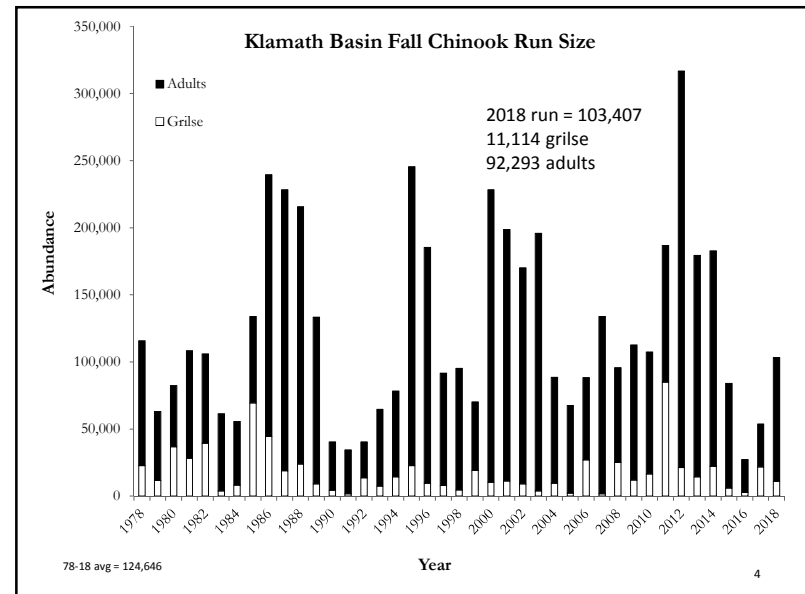
1



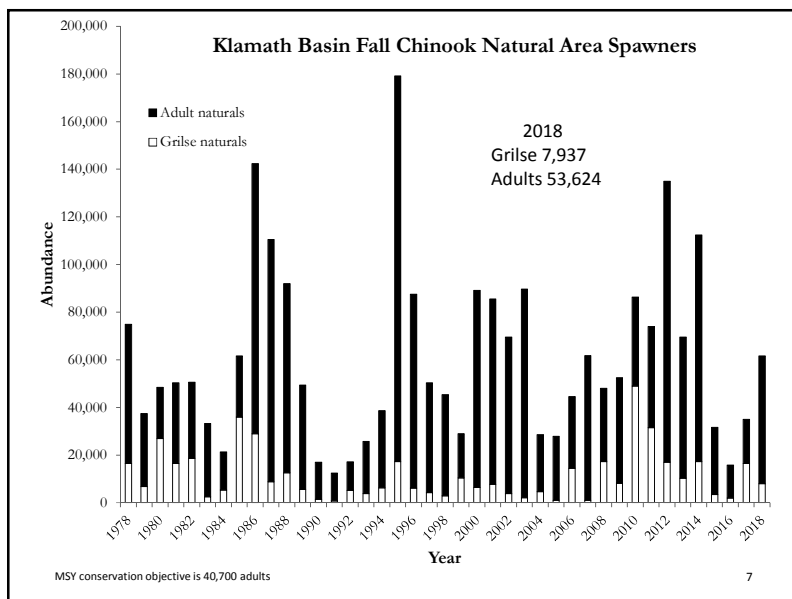
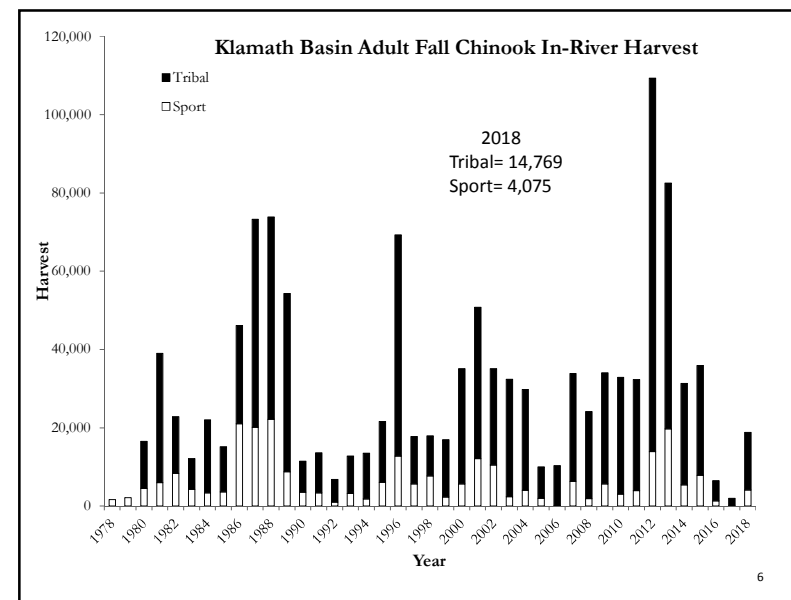
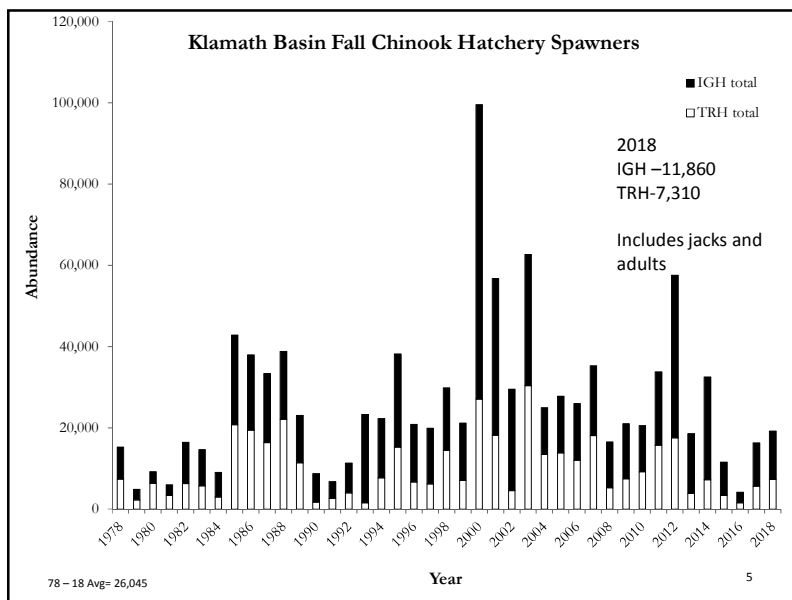
2



3



4



Age Composition of the 2018 Klamath River fall Chinook Salmon run

Escapement & Harvest	AGE				Total Adults	Total Run
	2	3	4	5		
Hatchery Spawners						
Iron Gate Hatchery	435	10,666	759	0	11,425	11,860
Trinity River Hatchery	171	7,054	85	0	7,139	7,310
subtotal	606	17,720	844	0	18,564	19,170
					20.0%	18.3%
Natural Spawners						
Klamath Basin subtotal	3,490	35,083	2,411	9	37,503	40,993
Trinity Basin subtotal	4,447	15,962	159	0	16,121	20,568
subtotal	7,937	51,045	2,570	9	53,624	61,561
					58.1%	59.3%
Recreational Harvest						
Klamath River harvest	1,978	2,886	179	0	3,065	5,043
Trinity River harvest	228	1,010	0	0	1,010	1,228
subtotal	42	23	43	5	4,075	6,281
					4.4%	6.1%
Tribal Harvest						
Klamath River harvest	128	10,721	1,723	0	12,444	12,572
Trinity River harvest	180	2,233	92	0	2,325	2,505
subtotal	308	12,954	1,815	0	14,769	15,077
					16.0%	14.6%
Dropoff Mortality						
	57	1,102	159	0	1,261	1,318
					1.4%	1.3%
Total River Run						
	11,114	86,717	5,567	9	92,293	103,407
	10.7%	83.9%	5.4%	0.0%		

8

Source: 2019 KRS

8
Source: 2019 KRTT

2018 Preliminary results/findings

The 2018 Klamath Basin fall Chinook run estimate is 83% of the 40-year average.

The number of 2 year-old fish (11,114) is below the long term average

The adult Chinook returns to the basin were 100% percent of the projected forecast (91,900 pre vs. 92,300 post).

The adult fall Chinook natural escapement conservation threshold of 40,700 was managed for and surpassed this season. The geometric mean of adult natural escapement for the past three years is 24,594, below the minimum stock size threshold (MSST) of 30,525. The stock is still considered to be in an “overfished state”. A 2019 natural area escapement of @63,000 adults is necessary to “rebuild” the stock (achieve 3 year geometric mean of 42,700).

9

Questions?





Department of Fish and Wildlife Ocean Salmon Project

2018 California Ocean Salmon Fisheries

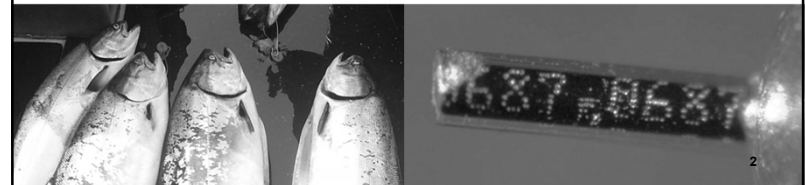
Presented by
Barry Miller



1

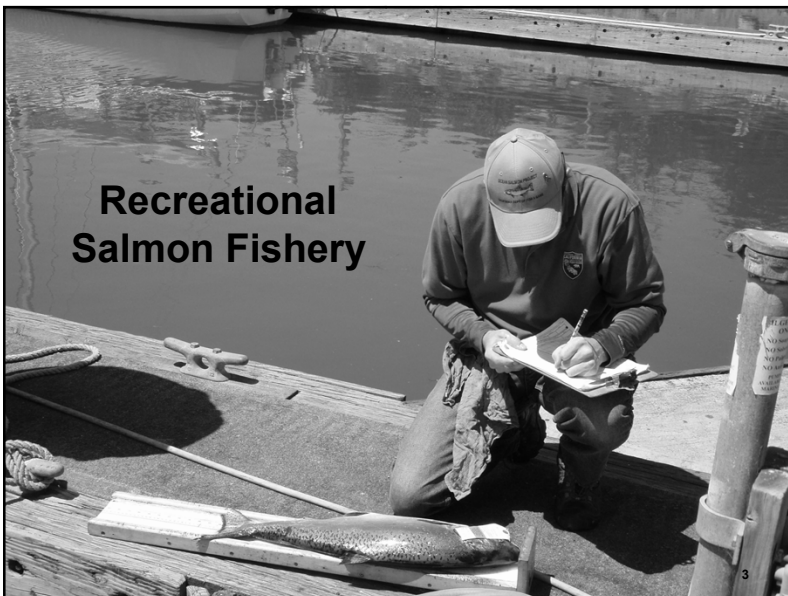
Ocean Salmon Project Objectives

1. Estimate ocean salmon catch & fishing effort in CA for each management area by half month periods for both recreational and commercial fisheries
2. Determine the contribution rates of specific salmon stocks by fishery, time, and management area using coded-wire tag recoveries



2

Recreational Salmon Fishery



3

2018 California Recreational Season

Klamath Management Zone: OR/CA Border to Horse Mt. (95 days)

Jun 1 Sep 3

Fort Bragg: Horse Mt. to Pt. Arena (137 days)

Jun 17 Oct 31

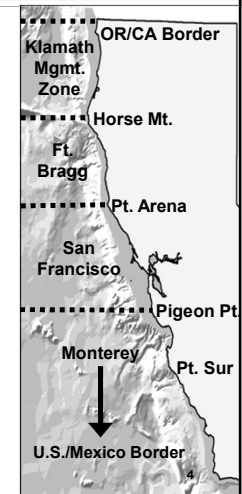
San Francisco: Pt. Arena to Pigeon Pt. (137 days)

Jun 17 Oct 31

Monterey and south: Pigeon Pt. to U.S./Mexico Border (87 days)

Apr 7 Jul 2

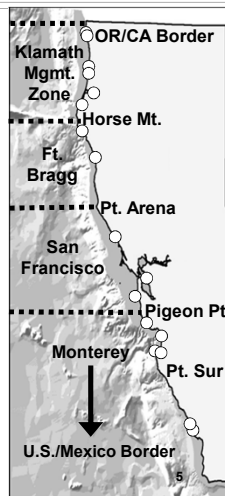
Minimum size: 20" north of Pigeon Pt.
Minimum size: 24" south of Pigeon Pt.
Bag limit: 2 fish per day



4

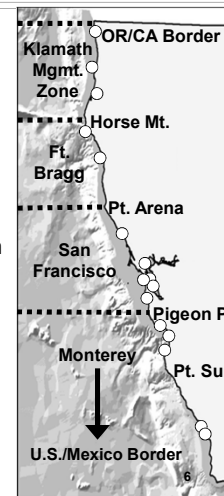
Sample Design – Private Skiff Fishery

- Sampling unit: skiff day (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
 - 409 skiff days were sampled during the 2018 ocean salmon season
 - Random stratified sampling design using weekday and weekend/holiday strata
- 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

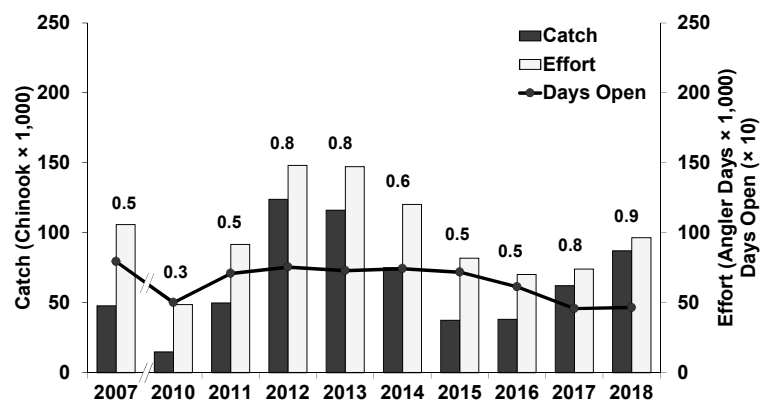


Sample Design – CPFV Fishery

- Sampling unit: each CPFV trip
- Sample $\geq 20\%$ of all salmon-targeting CPFV trips in each management area and period
 - 16 primary salmon CPFV sample sites
 - 125 CPFVs participated in the 2018 ocean salmon fishery
 - 1,340 salmon-targeting CPFV trips were sampled during the 2018 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



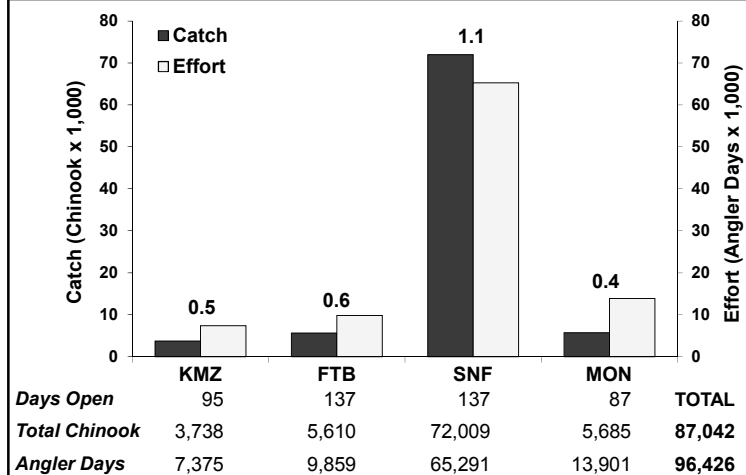
Recreational Catch and Effort, 2007-2018



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

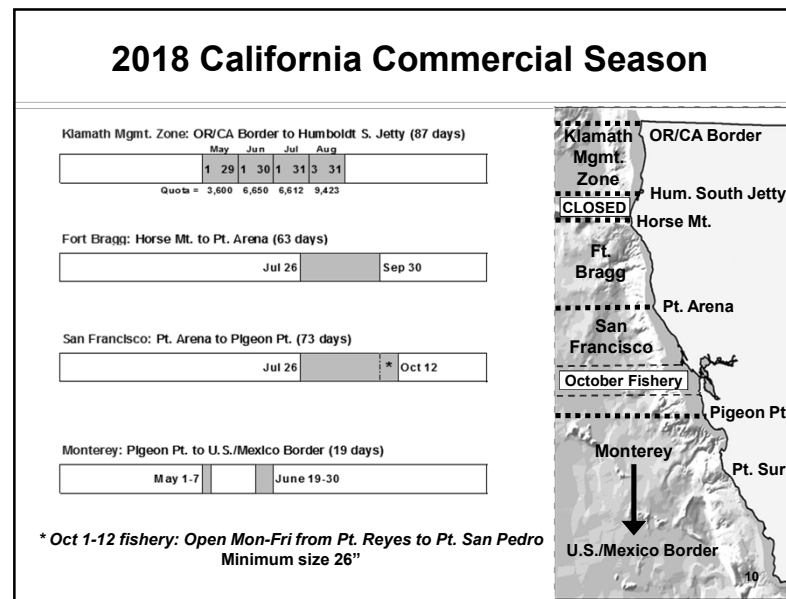
7

2018 Recreational Catch and Effort by Management Area



Days Open	95	137	137	87	
Total Chinook	3,738	5,610	72,009	5,685	87,042
Angler Days	7,375	9,859	65,291	13,901	96,426

8

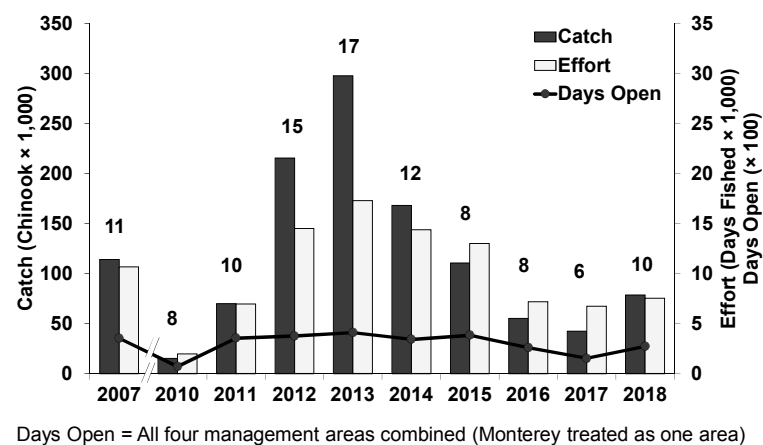


Sample Design – Commercial Fishery

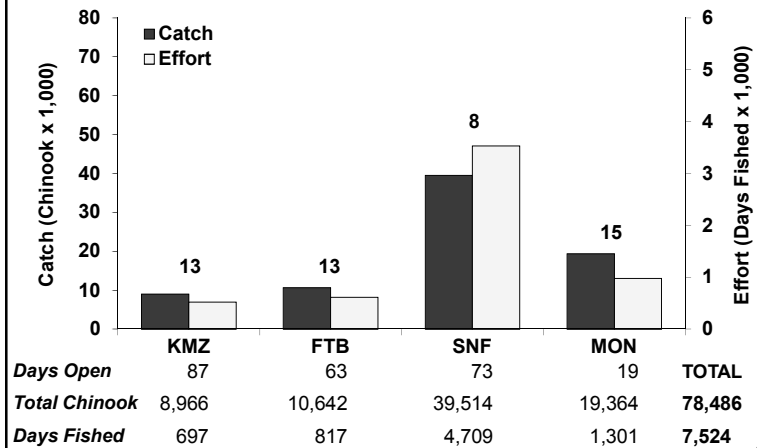
- Sampling unit: each commercial landing
- Sample $\geq 20\%$ of all commercial landings by weight in each management area and period
- Samplers observe, identify to species, and count all salmon being offloaded
- Each salmon inspected for missing adipose fin
- Adipose fin-clipped salmon are set aside and the snouts are collected for coded-wire tag extraction



Commercial Catch and Effort, 2007-2018

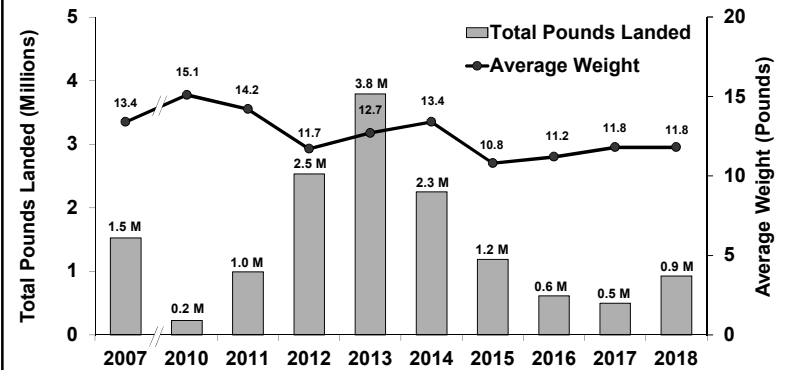


2018 Commercial Catch and Effort by Management Area



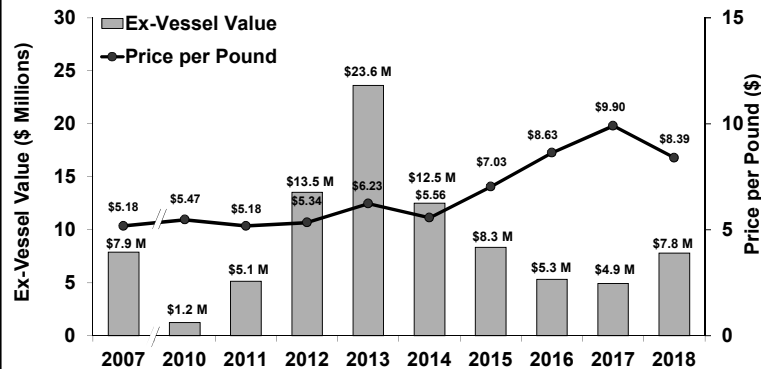
13

Total Commercial Pounds Landed and Average Weight, 2007-2018



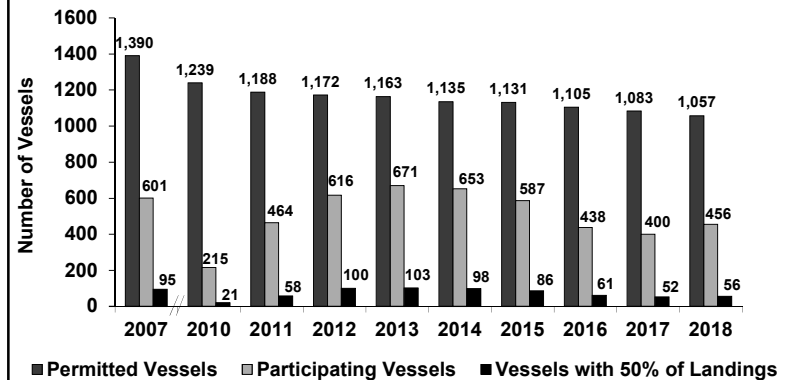
14

Commercial Ex-Vessel Value and Price per Pound, 2007-2018



15

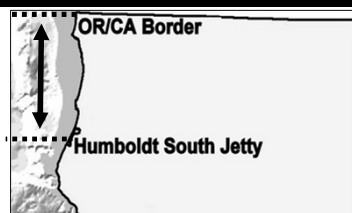
Number of Vessels with Landings Compared to Permitted Vessels, 2007-2018



16

2018 KMZ Quota Fisheries

- Open 5 days/week (Fri.-Tue.)
- Total boats participating: **85**
- Average weight: **9.5 lbs** (state avg. = 11.7)
- Ex-vessel value: **\$716,400**
- Average price/lb: **\$8.42** (state avg. = \$8.13)



	May 1-29	June 1-30	July 1-31	August 3-31
Quota	3,600	6,650*	6,612*	9,423*
		Preseason = 4,000	Preseason = 4,000	Preseason = 4,000
Catch (% of quota)	938 (26%)	2,477 (37%)	1,774 (27%)	3,777 (40%)
Landing Limit	20	20	20, 40**	50
Total Participants	46	58	37	47

**Includes rollover from previous month

**Effective July 20

17

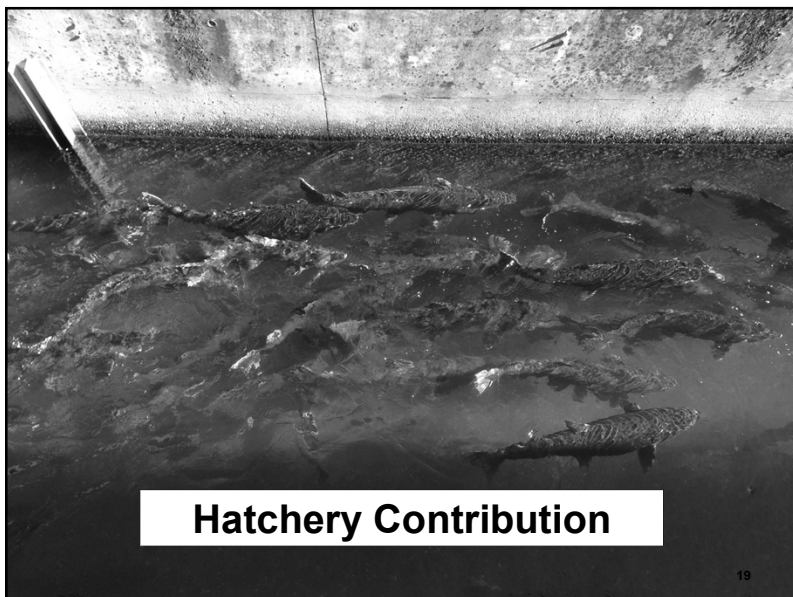
2018 Fall Ocean Fisheries Impacts on Age-4 Klamath River Fall Chinook

Area	Recreational	Commercial
Northern Oregon	31	85
Coos Bay	0	0
KMZ - Oregon	0	0
KMZ - California	0	-
Fort Bragg	0	44
San Francisco	0	0
Monterey	-	-
Total	31	129

0.2% age-4 ocean harvest rate in fall fisheries, which will be deducted from the 16% allowable ocean harvest rate when determining the 2019 season structure



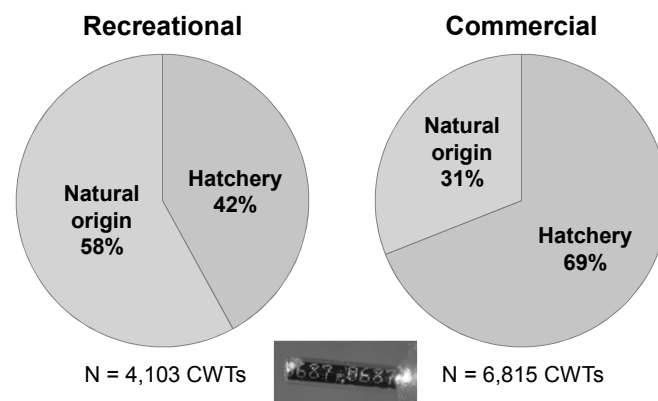
18



Hatchery Contribution

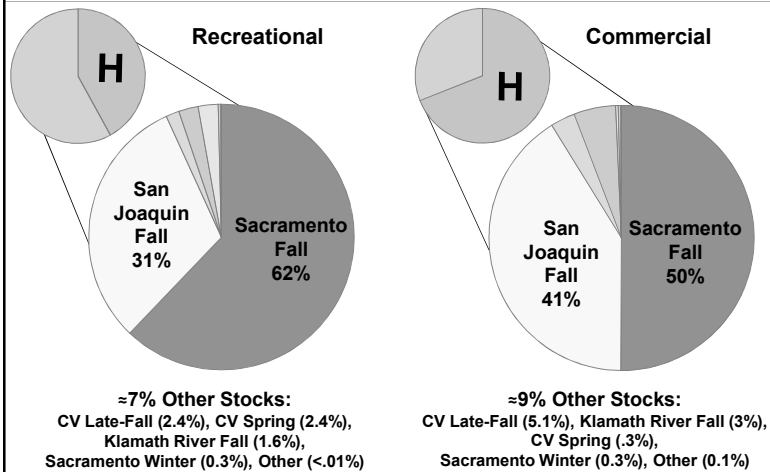
19

Hatchery Contribution to 2018 CA Ocean Fisheries

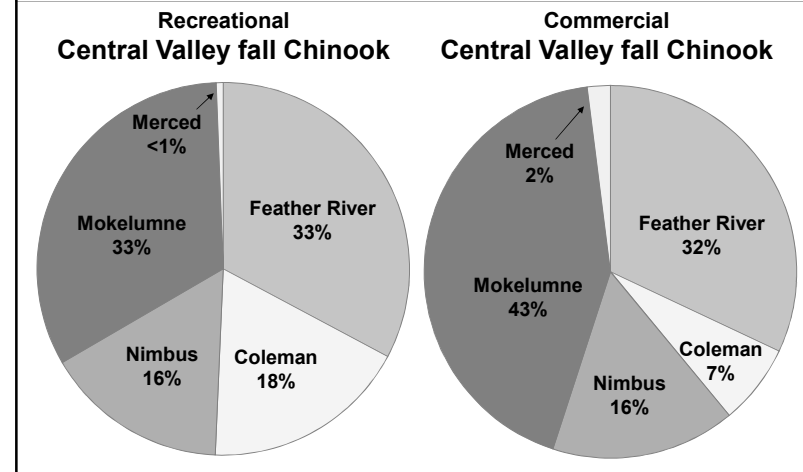


20

Hatchery Contribution to 2018 CA Ocean Fisheries



Hatchery Contribution to 2018 CA Ocean Fisheries



Department of Fish and Wildlife Ocean Salmon Project

Thank You

Barry Miller
Environmental Scientist
Barry.Miller@wildlife.ca.gov

2019 Ocean Salmon Fishery Information

West Coast
Regional
Office

California Department of Fish and Wildlife
Salmon Informational Meeting
February 27, 2019

Jeromy Jording
Sustainable Fisheries Division
West Coast Region

- All Guidance Preliminary; final at March Council Meeting

Indicator Stock	NOAA Guidance
Sacramento River fall Chinook	2019 recommendation is to follow the Salmon FMP which requires the Council to structure Council area fisheries to reduce the likelihood of the stock remaining overfished and to mitigate the effects on stock status. (forecasts will be covered in 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

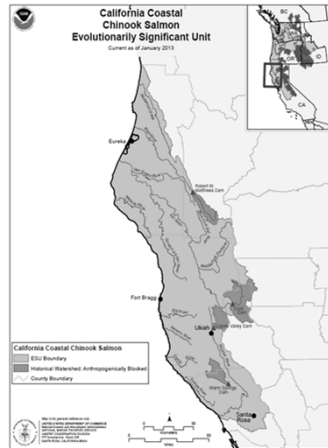
- Prohibit coho-directed fisheries off CA;
- Prohibit coho retention in Chinook-directed fisheries off CA
- Southern Oregon/Northern California Coho
 - ESA – Threatened
 - Recovery plan released September 2014 (79 FR 58750) – Current Steps: workshops to develop implementation plan
- Central California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

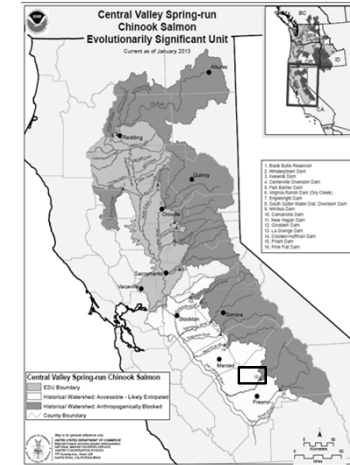
- ESA-threatened
- Multi-species recovery plan was available for public comment through January 2016 (80 FR 75066)
- A maximum Klamath River fall Chinook age-4 ocean harvest rate of 16.0%



U.S. Department of Commerce | National Oceanic and Atmospheric Administration | NOAA Fisheries | Page 5

Central Valley Spring Chinook Salmon

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



U.S. Department of Commerce | National Oceanic and Atmospheric Administration | NOAA Fisheries | Page 6

Sacramento River Winter Chinook Salmon

- ESA – Endangered
- Recovery plan adopted July 2014 (79 FR 42504)
- Guidance for 2018:
 - 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



U.S. Department of Commerce | National Oceanic and Atmospheric Administration | NOAA Fisheries | Page 7

Sacramento River Winter Chinook Salmon

- In December 2017, the Council formally requested that NOAA Fisheries consider this new harvest control rule for use in managing fisheries that affect winter-run Chinook in 2018 and beyond
- NMFS finalized that opinion in 2018.



U.S. Department of Commerce | National Oceanic and Atmospheric Administration | NOAA Fisheries | Page 8

Sacramento River Winter Chinook Salmon

- Here is the new HCR:



- Based on this new rule NMFS preliminary guidance for an allowable impact rate in 2019 is: 15.7%

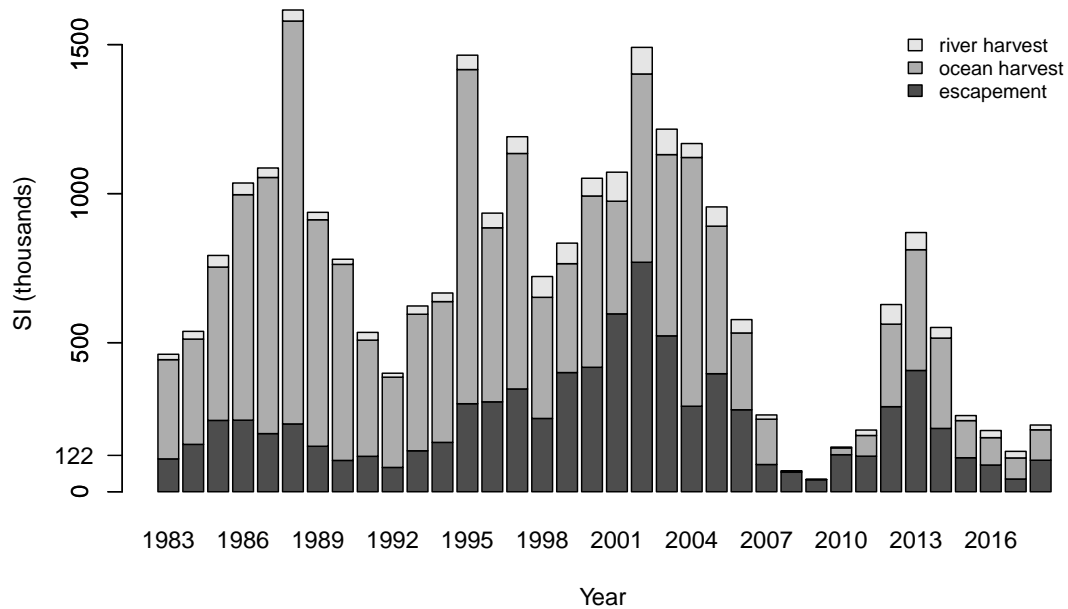
Thank You

Jeromy.Jording@noaa.gov

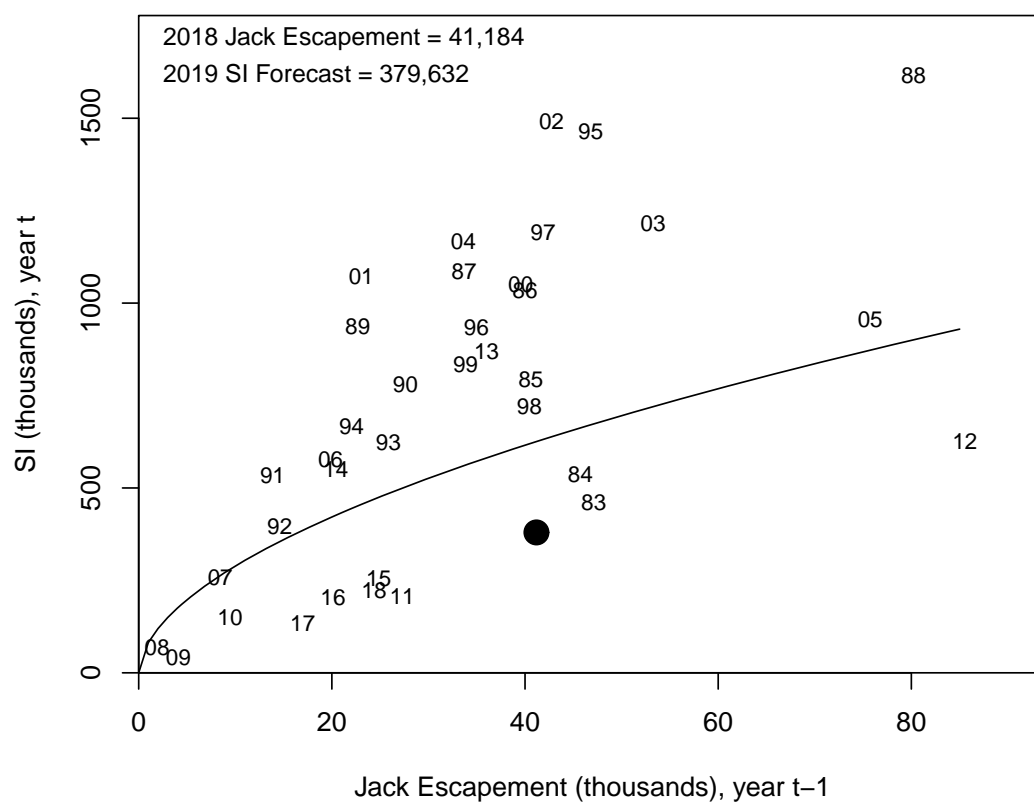
Susan.Bishop@noaa.gov

Special thanks to:
Michael O'Farrell SWFSC

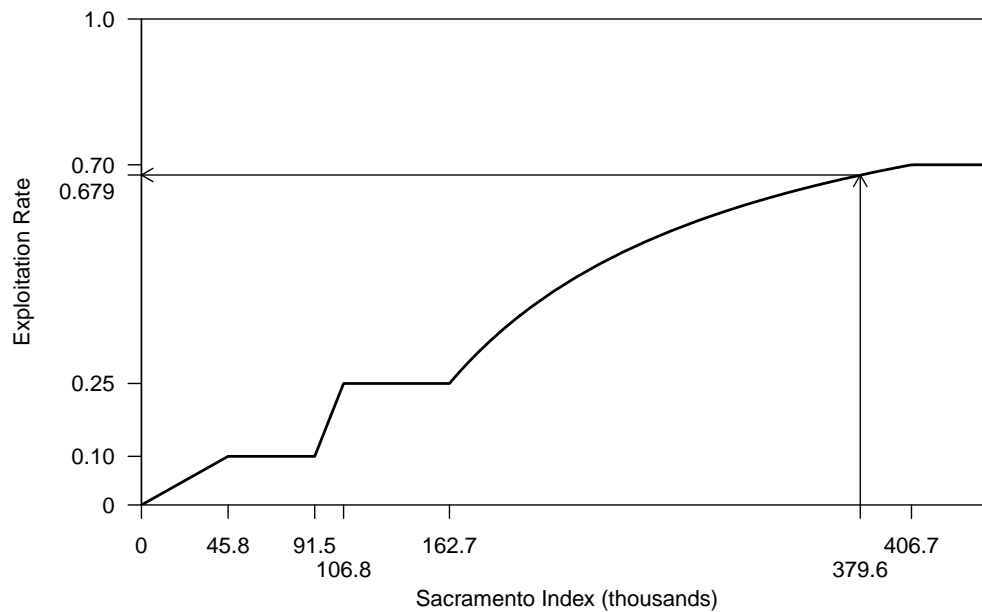
2018 Sacramento Index (SI): 223,854



2019 SI forecast: 379,632

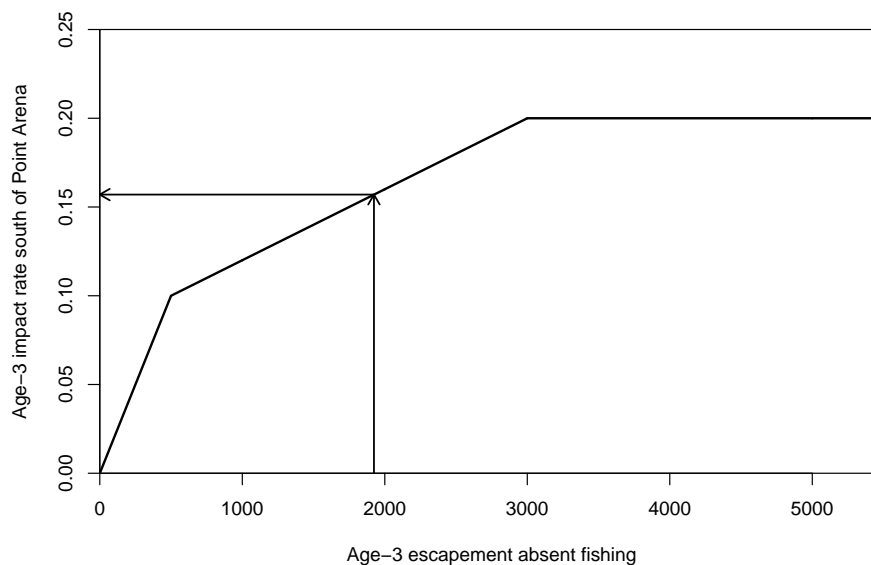


2019 SRFC management



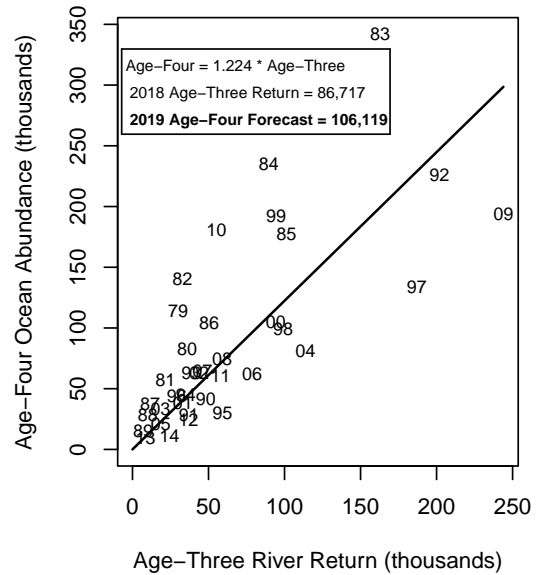
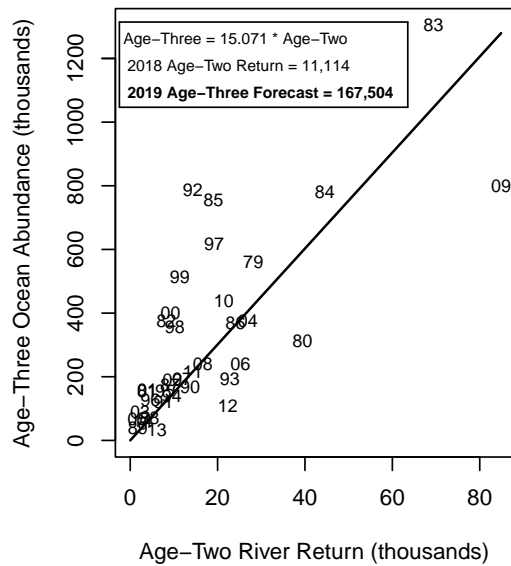
- ▶ 2019 forecast higher than 2018 forecast
- ▶ Must target an escapement of at least 122,000 (67.9% exploitation rate)
- ▶ 2018 regs: preliminary escapement prediction of 230,500
- ▶ May constrain 2019 fisheries

2019 winter Chinook management



- ▶ New control rule first used in 2018
- ▶ Abundance forecast: 1,924 (larger than 2018)
- ▶ Maximum allowable age-3 impact rate: 15.7%
- ▶ 2018 regs: preliminary prediction of 9.1%
- ▶ Likely to constrain 2019 fisheries south of Point Arena

2019 Klamath abundance forecast

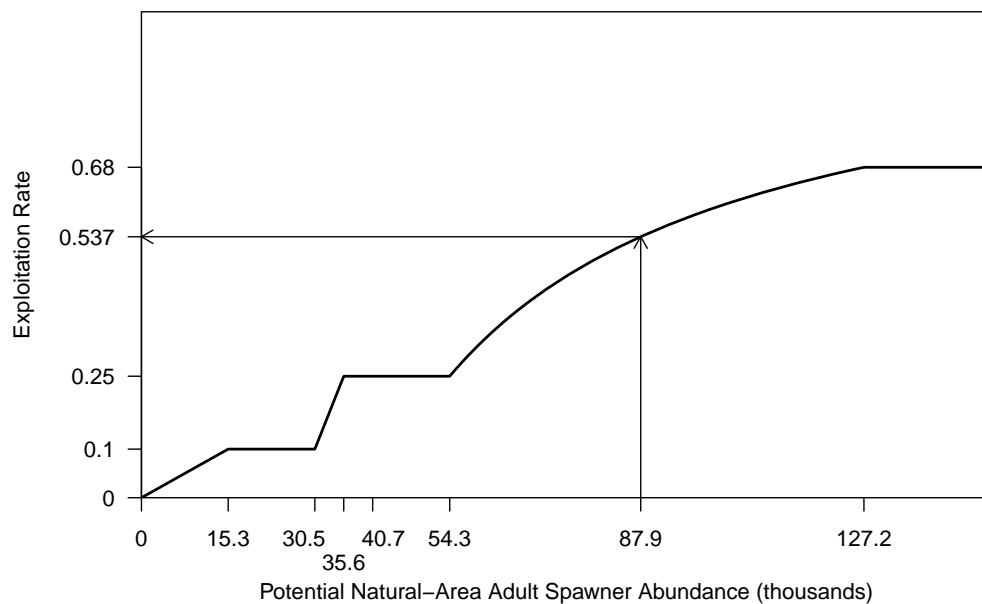


age-3: 167,504

age-4: 106,119

age-5: 599

2019 KRFC management



- ▶ Potential spawner abundance forecast: 87,893
- ▶ Must target an escapement of at least 40,700 (53.7% exploitation rate)

2019 KRFC management, contd.

- ▶ 2018 regs:
 - ▶ Tribal allocation: 50% of total harvest
 - ▶ River recreational allocation: 19.3% of non-tribal harvest
 - ▶ Natural-area adult spawners prediction: 58,700
 - ▶ Exploitation Rate: 33.2%

- ▶ Could constrain 2019 fisheries south of Cape Falcon, OR

2019 California Coastal Chinook

- ▶ Max allowable KRFC age-4 ocean harvest rate of 16%
- ▶ 2018 fisheries: preliminary prediction of 10.2%
- ▶ Could constrain 2019 fisheries

This page is intentionally left blank

2019 California Ocean Salmon Preseason Process: Calendar of Events

March 6-12, 2019 - 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 craft three regulatory alternatives for ocean salmon fisheries in effect on or after May 1. Final alternatives for public review will be adopted on March 12.

March 14-21, 2019 - Preseason Report II Preparation

The Salmon Technical Team (STT) completes *Preseason Report II: Proposed Alternatives and Environmental Assessment Part 2 for 2019 Ocean Salmon Fishery Regulations*, available online March 21, 2019 at: www.pcouncil.org.

March 26, 2019 (7 p.m.) - Pacific Fishery Management Council Public Hearing - California

Hampton Inn Grand Ballroom, 1160 Airport Park Boulevard, Ukiah, CA 95482

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

April 9-16, 2019 - Pacific Fishery Management Council Meeting

DoubleTree by Hilton Sonoma, One Doubletree Drive, Rohnert Park, CA 94928

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 will also occur.

April 18-22, 2019 - Preseason Report III Preparation

The PFMC and STT complete *Preseason Report III: Council-Adopted Management Measures and Environmental Assessment Part 3 for 2019 Ocean Salmon Fishery Regulations*, available online April 23, 2019 at: www.pcouncil.org.

April 17, 2019 - California Fish and Game Commission Meeting

City of Santa Monica Civic Auditorium, East Wing, 1855 Main Street, Santa Monica, CA 90403

The Commission will receive an update on ocean salmon sport fishery regulations in effect during the month of April, 2019 and on the proposed alternatives for the May through November, 2019 season. 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.

June 12-13, 2019 - California Fish and Game Commission Meeting

Redding, CA (exact location TBD)

The Commission will receive an update on ocean salmon sport fishery regulations in effect during May through November, 2019. 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**:

Dave Hillemeier California Tribes	Yurok Tribe Fisheries PO Box 1027 Klamath, CA 95548	Telephone: (707) 482-1350 ext. 1315 Email: dave@yuroktribe.nsn.us
John Koeppen California Troll	F/V Lulu 10150 Phar Lap Dr. Cupertino, CA 95014	Telephone: (408) 257-1482 Email: jmkoeppen@comcast.net
Jim Yarnall California Sport Fisheries	California Sport Fisheries 6308 Eggert Road Eureka, CA 95503	Telephone: (707) 443-2496 Email: jimyarnall@gmail.com
James Stone California Sport Fisheries	Nor-Cal Guides & Sportsmen's Association PO Box 111 Sutter, CA 95982	Telephone: (530) 923-9440 Email: jstone@ncgasa.org
John Atkinson California Charter Boat	Golden Gate Fishermen'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.pccouncil.org/contact, or contact the PFMC staff officer for salmon: Robin Ehlke (Robin.Ehlke@noaa.gov).

Online Resources:

Review of 2018 Ocean Salmon Fisheries (includes in-river escapement data)

Available online at:

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

Preseason Report I: Stock Abundance Analysis for 2019 Ocean Salmon Fishery Regulations

Available online at:

www.pccouncil.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.pccouncil.org/salmon/background/document-library/#KlamathRiverSalLib



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



2018 Ocean Salmon Sport Regulations

OR/CA Border to Horse Mountain (KMZ):

- ♦ June 1 – September 3
 - minimum size limit: 20 inches total length
 - Klamath Control Zone* (KCZ) closed in August
 - additional closures around mouth of Klamath, Smith & Eel rivers (see §27.75 T14 CCR)

Horse Mountain to Point Arena (Fort Bragg):

- ♦ June 17 – October 31
 - minimum size limit: 20 inches total length

Point Arena to Pigeon Point (San Francisco):

- ♦ June 17 – October 31
 - minimum size limit: 20 inches total length

Pigeon Point to U.S./Mexico Border (Monterey and south):

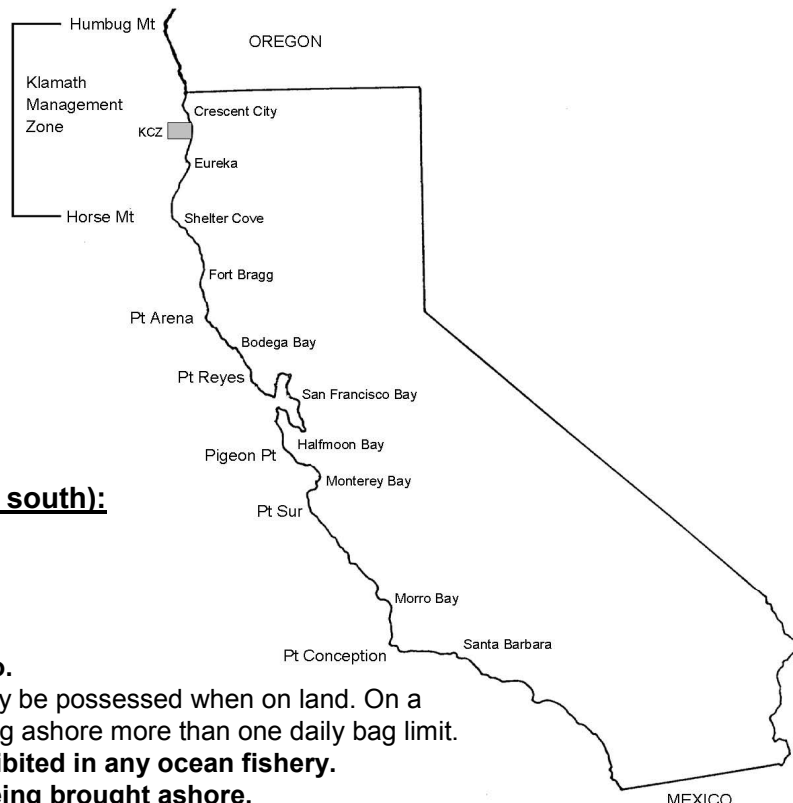
- ♦ April 7 – July 2
 - minimum size limit: 24 inches total length

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 §1.05 T14 CCR.** 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 T14 CCR).

***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).





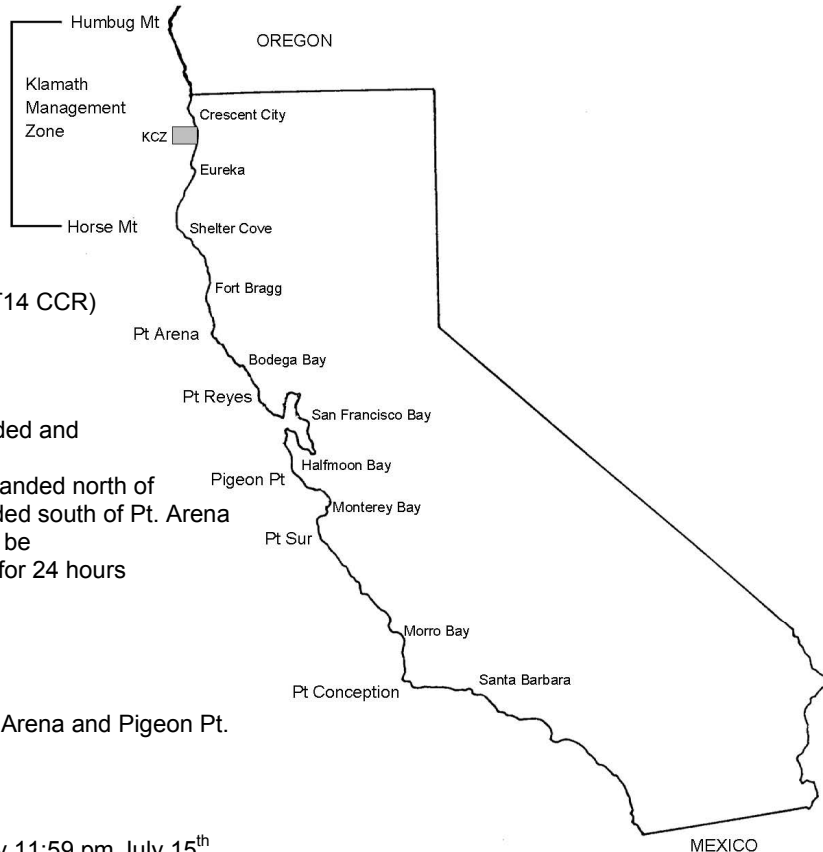
State of California
Department of Fish and Wildlife
Ocean Salmon Project – Marine Region
www.wildlife.ca.gov/oceansalmon



2018 Commercial Ocean Salmon Regulations

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

- May 1-29 or 3,600 Chinook quota
- June 1-30 or 4,000 Chinook quota
- July 1-31 or 4,000 Chinook quota
- August 3-31 or 4,000 Chinook quota
 - five days per week, open Friday through Tuesday
 - minimum size limit: 26 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)
 - additional closure around mouth of Smith River (see §27.75 T14 CCR)



Horse Mountain to Pigeon Point:

- July 26-31; August 3-29; September 1-30
 - minimum size limit: 26 inches total length
 - all salmon caught in the area prior to September must be landed and offloaded by 11:59 pm August 30th
 - during September, all fish caught north of Pt. Arena must be landed north of Pt. Arena and all fish caught south of Pt. Arena must be landed south of Pt. Arena
 - when the KMZ quota is open, all fish caught in the area must be landed south of Horse Mountain until the fishery has closed for 24 hours

Point Reyes to Point San Pedro:

- October 1-5, 8-12
 - five days per week, open Monday through Friday
 - minimum size limit: 26 inches total length
 - all salmon caught in the area must be landed between Pt. Arena and Pigeon Pt.

Pigeon Point to U.S./Mexico Border:

- May 1-7; June 19-30
 - minimum size limit: 26 inches total length
 - all salmon caught in the area must be landed and offloaded by 11:59 pm July 15th
 - when the KMZ quota is open, all fish caught in the area must be landed south of Horse Mountain until the fishery has closed for 24 hours

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.
- **Paper Reporting Requirements:** Any person required to complete a landing receipt for the landing of salmon shall on the same landing receipt accurately record the total number of salmon landed in the "Note Pad" field of the landing receipt. Any person who lands salmon shall keep a copy of all landing receipts documenting salmon landings on board the fishing vessel that caught the salmon until 15 days after the last salmon season closure for the calendar year (§182 T14 CCR, §8043 Fish & Game Code).
- **Electronic Reporting Requirements:** Beginning on July 1, 2018 any fish receiver or fisherman with a fisherman's retail license shall record the landing information using either a paper landing receipt or an electronic fish ticket, but not both (§197 T14 CCR).
- **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**
 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: When Pacific halibut are caught and landed incidentally in the commercial salmon troll fishery under an authorized license, both the number of Pacific halibut landed and the number of salmon landed must be recorded on the landing receipt or electronic fish ticket. 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 2018 Central Valley Chinook Spawning Escapement | <input type="checkbox"/> Review of 2018 Ocean Salmon Sport and Commercial Fisheries |
| <input type="checkbox"/> Review of 2018 Central Valley Chinook River Sport Fisheries | <input type="checkbox"/> NMFS 2019 Ocean Salmon Fishery Guidance |
| <input type="checkbox"/> Review of 2018 Klamath Basin Chinook Spawning 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.

Any formal recommendations or comments that you would like forwarded to your representatives for the 2019 salmon management process?

Name_____ Affiliation_____

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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

E-mail: _____ Phone: _____

Thank you!