

Agenda
California Department of Fish and Wildlife
2021 Salmon Information Meeting

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Thursday, February 25, 2021
10:00 a.m. – 4:00 p.m.

Actual times may vary depending on meeting progress.

Welcome - Moderator Opening Comments and Review Agenda	Brett Kormos, CDFW 10:00 a.m.
2020 Central Valley Chinook Spawning Escapement	Audrey Dean, CDFW 10:15 a.m.
2020 Central Valley Chinook River Sport Fisheries	Erin Ferguson, CDFW 10:35 a.m.
BREAK (15 minutes)	10:55 a.m.
2020 Klamath Basin Chinook Spawning Escapement, Harvest and Age Composition	Ken Lindke, CDFW 11:10 a.m.
2020 California Ocean Salmon Sport and Commercial Fisheries a.m.	Kandice Morgenstern, CDFW 11:30
LUNCH BREAK (1 hour)	11:50 a.m.
NMFS 2021 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. 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
Ms. Megan Waters, PFMC-SAS, Conservation
Dr. Michael O'Farrell, NMFS SWFSC, PFMC-STT Chair
Mr. Alex Letvin, CDFW Marine Region, PFMC-STT
Mr. Robert Dooley, PFMC, California Obligatory Appointment
Mr. Marc Gorelnik, PFMC, At Large Appointment
Mr. Louis Zimm, PFMC, At Large Appointment

Public Comment to California Salmon Management Panel

(1:40 p.m.)

- 2021 Ocean Sport Fishery Regulations
- 2021 Ocean Commercial Fishery Regulations
- 2021 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

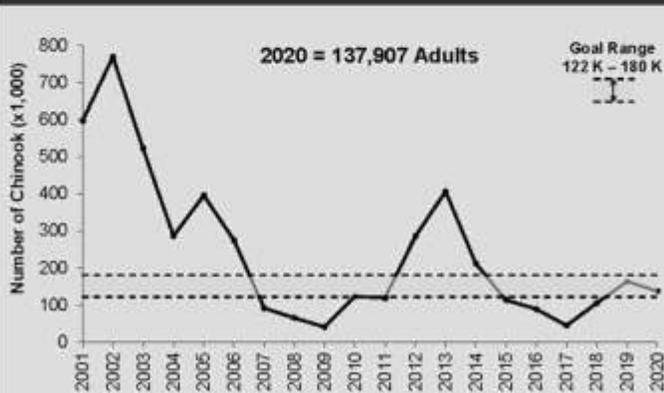
2020 Central Valley Chinook Salmon Spawning Escapement

Presented by
Audrey Dean

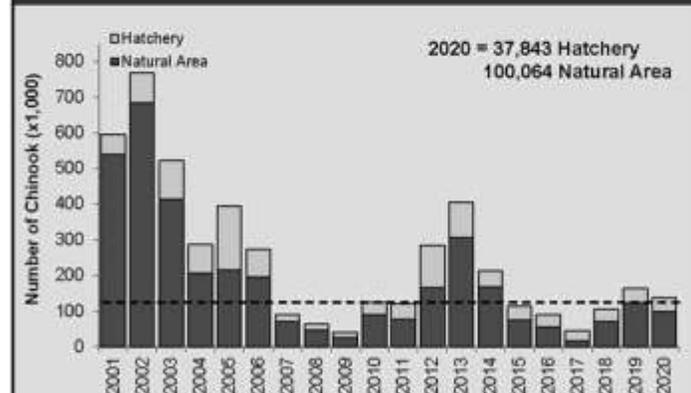
The Central Valley

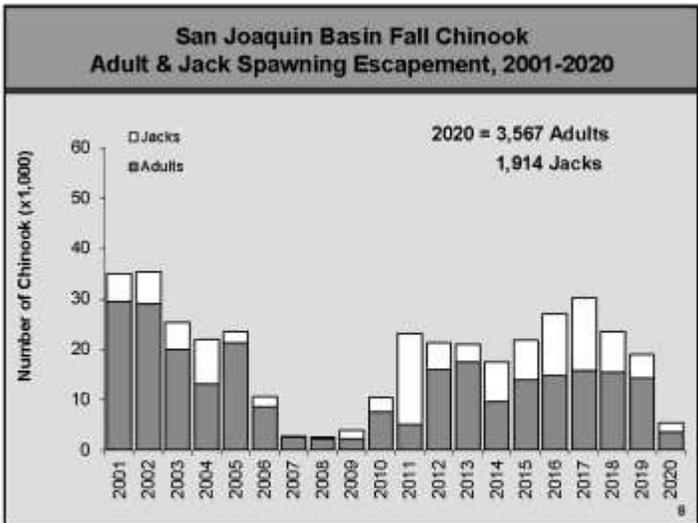
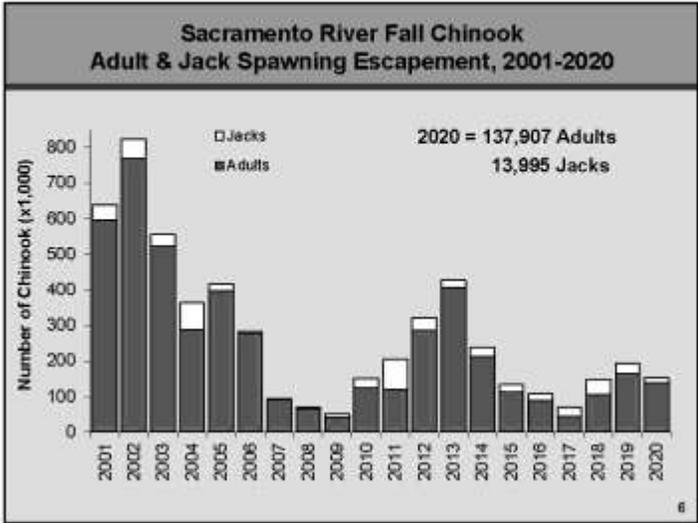
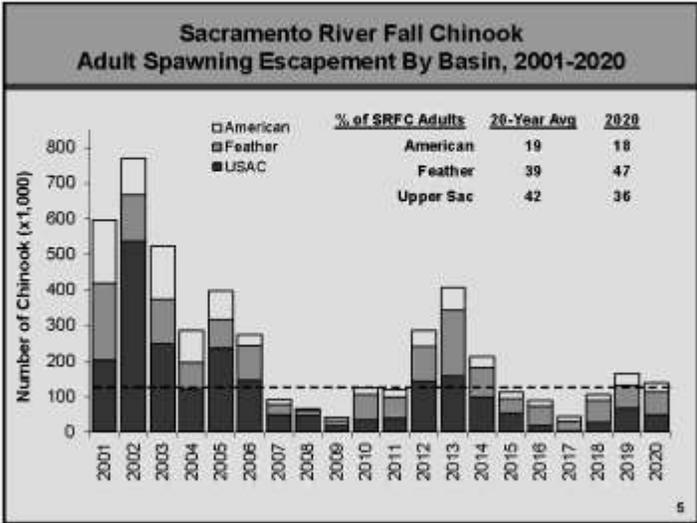


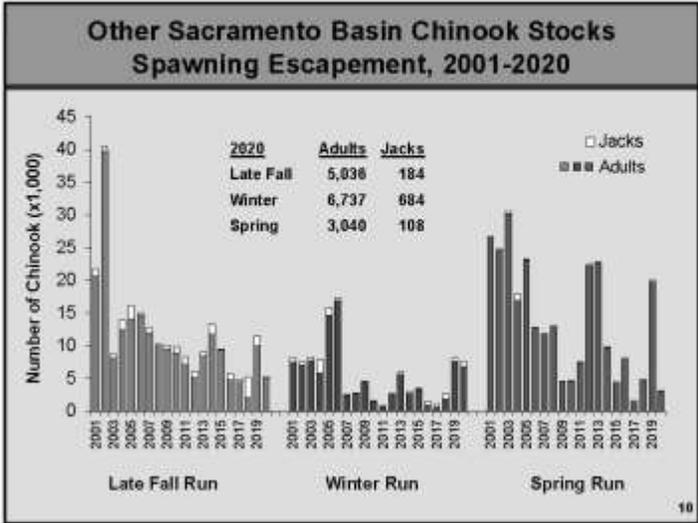
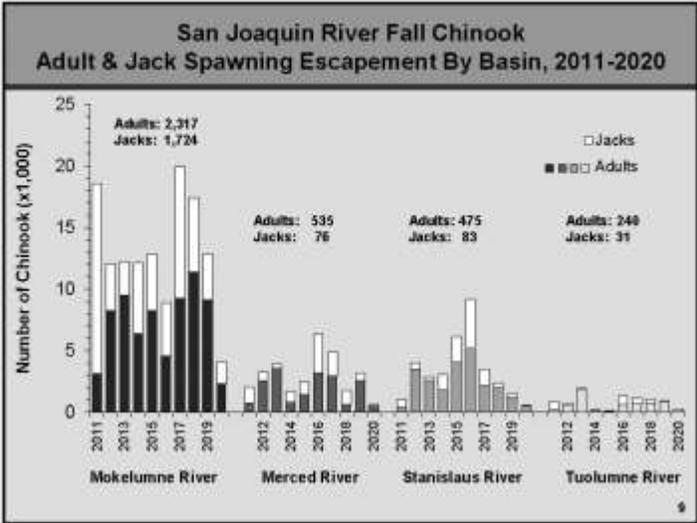
Sacramento River Fall Chinook Adult Spawning Escapement, 2001-2020



Sacramento River Fall Chinook Hatchery & Natural Area Adult Spawning Escapement, 2001-2020







Department of Fish and Wildlife Ocean Salmon Project

Thank You

Audrey Dean
Environmental Scientist
Audrey.Dean@wildlife.ca.gov
(707) 576-2892

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

2020 Sacramento River Fall Chinook Hatchery and Natural Area Escapement

		Jacks	Adults	Total	% Jack	% Nat	% SRFC Total
Upper Sacramento River Basin	Hatchery	1,258	12,341	13,599	9%		9%
	Natural	<u>3,717</u>	<u>36,566</u>	<u>40,283</u>	<u>9%</u>	75%	<u>27%</u>
		4,975	48,907	53,882	9%		36%
Feather River Basin (including Yuba River)	Hatchery	1,788	20,400	22,186	8%		15%
	Natural	<u>3,041</u>	<u>44,076</u>	<u>47,117</u>	<u>6%</u>	68%	<u>28%</u>
		4,827	64,476	69,303	7%		46%
American River Basin	Hatchery	1,159	5,102	6,261	18%		4%
	Natural	<u>3,034</u>	<u>19,422</u>	<u>22,456</u>	<u>14%</u>	78%	<u>15%</u>
		4,193	24,524	28,717	15%		19%
Total 2020 SRFC Escapement		13,995	137,907	151,902	9%	72%	100%

**2020 Other Central Valley Chinook Stocks
Hatchery and Natural Area Escapement**

		Jacks	Adults	Total	% Jack	% Nat
Central Valley Late Fall Chinook	Hatchery	134	3,257	3,391	4%	
	Natural	<u>50</u>	<u>1,779</u>	<u>1,829</u>	<u>3%</u>	36%
		184	5,036	5,220	3%	
Sacramento River Winter Chinook	Natural	584	6,737	7,421	9%	100%
		684	6,737	7,421	9%	
Central Valley Spring Chinook	Hatchery	106	1,420	1,526	7%	
	Natural	<u>---</u>	<u>1,620</u>	<u>1,620</u>	<u>---</u>	51%
		106	3,040	3,146	---	
San Joaquin Fall Chinook	Hatchery	1,346	2,282	3,628	37%	
	Natural	568	1,285	1,853	31%	34%
		1,914	3,567	5,481	35%	

CENTRAL VALLEY ANGLER SURVEY: 2020 Recreational Harvest of Chinook Salmon



Erin Ferguson, James Lyons, Shawn Simkins,
& Rob Titus

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



2020 Central Valley Salmon Season

General Season: July 16th- December 16th (154 days)
2 fish daily bag, 4 in possession

Upper Sacramento River Management Zone
Knights Landing Bridge to Deschutes Road Bridge

Knights Landing Bridge to Red Bluff Diversion Dam (154 days)

July 16 Dec 16

Red Bluff Diversion Dam to Deschutes Road Bridge (153 days)

Aug 1 Dec 31

Lower Sacramento River Management Zone
Carquinez Bridge to Knights Landing Bridge

July 16 Dec 16

Mokelumne River Management Zone
Highway 12 overcrossing to Camanche Dam

Highway 12 overcrossing to confluence with Colusaes R. **

July 16 Dec 16



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2020 Central Valley Salmon Season

General Season: July 16th- December 16th (154 days)
2 fish daily bag, 4 in possession*

Feather River Management Zone*

Confluence with the Sac. River to unimproved
boat ramp above TAO

• **3 fish daily bag, 6 in possession**

Confluence with the Sac.R. to 200 yds below Live Oak boat ramp

July 16 Dec 16

200 yds above Live Oak boat ramp to unimproved boat ramp above TAO (108 days)

July 16 Dec 31

American River Management Zone

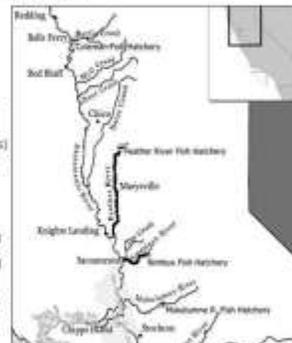
Confluence with the Sac. River to USGS cable crossing

Confluence with Sac. R. to Ancil Hoffman powerlines (169 days)

July 16 Dec 31

Ancil Hoffman powerlines to USGS cable crossing (108 days)

July 16 Dec 31



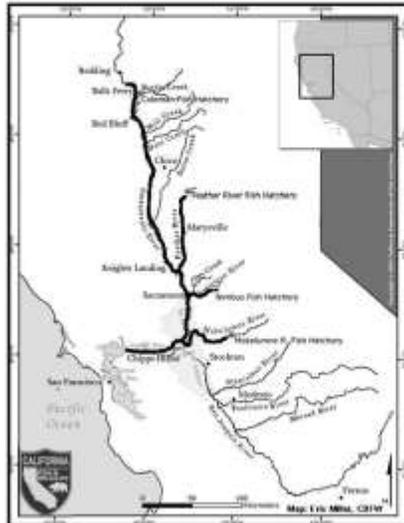
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Central Valley Angler Survey



- 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

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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*

Estimates of Chinook Salmon Effort, Catch, and Harvest



Data collection via:

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

Overview of 2020 Central Valley Sport Fishery for Chinook Salmon*

Effort:	906,072 angler hours	
Trips:	186,520 angling trips	
Total catch:	17,580 salmon	
Harvest:	16,858 salmon	
Est. pounds landed:	272,027 lbs	
Released:	722 salmon	
Pct. retention:	96%	
Average size (FL):	783 mm / 31 in.	
Catch rate:	1.9 salmon per 100 angler hours	

* Based on fishery statistics for the American, Feather, Mokelumne and Sacramento rivers, July – Dec. 2020.

Raw Statistics

- Contacted 6,596 fishing parties
- 1,393 salmon reported kept
- 1,187 salmon observed
 - or 7.0% of the estimated harvest
- 284 Adipose fin-clipped, 24% of observed salmon
- 280 heads (99%) taken for CWT recovery



Coded Wire Tag Recoveries

277 CWTs (99%) successfully recovered and read

Percent	Count	
31%	87	Feather River Hatchery fall run
25%	31	Coleman National Fish Hatchery fall run
7%	20	Feather River Hatchery spring run
7%	20	Mokelumne River Hatchery fall run
16%	43	Coleman National Fish Hatchery late-fall run
6%	16	Nimbus Hatchery fall run
3%	9	Livingston Stone National Fish Hatchery winter run
4%	1	Norwood River Fish Facility fall 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
Daily bag limit of 2 Chinook Salmon and 4 in possession**

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SRFC Inland Harvest

SRFC comprised 96% of all Chinook Salmon harvest in the Central Valley in 2020



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Final SRFC Harvest Estimate

14,897 adult

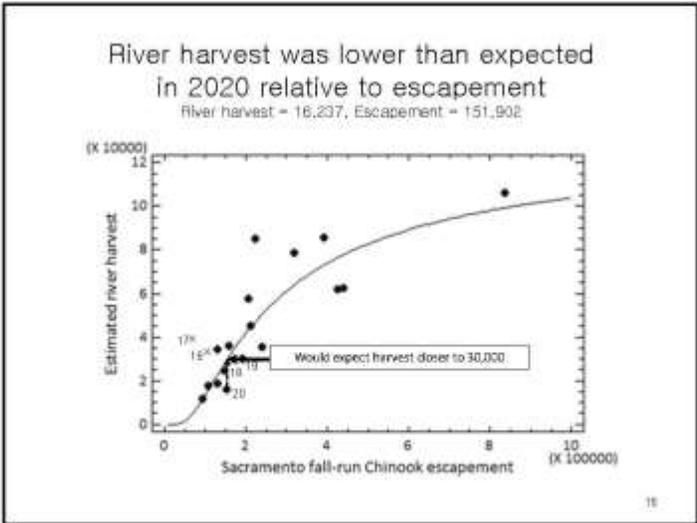
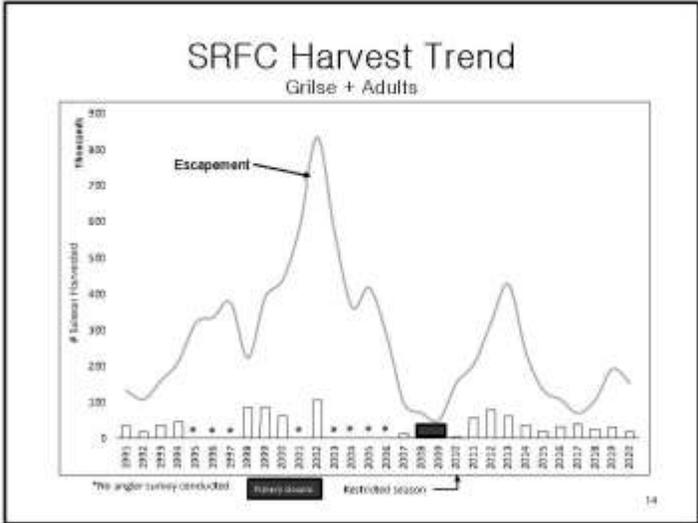
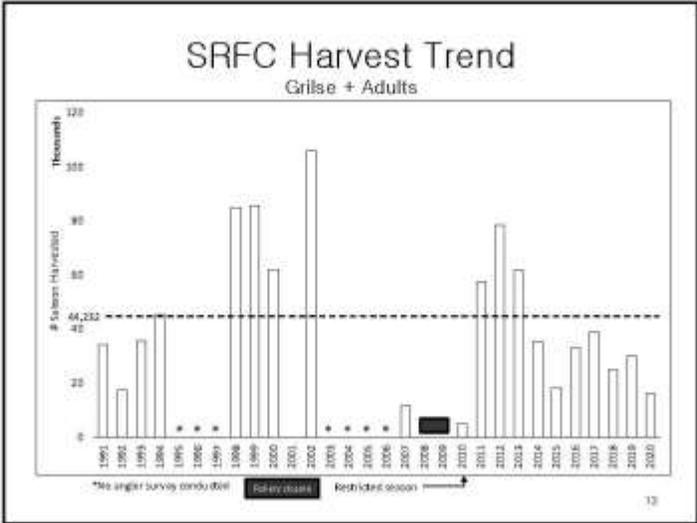
1,340 grilse*

16,237 Total SRFC

*8.25% of the harvest were grilse



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Metrics by Management Zones

	American	Feather	Lower Sacramento	Upper Sacramento
(Frost) (hours)	60,580	129,798	430,797	135,840
Est. SRFC Harvest	2,038	3,368	5,186	5,645
% SRFC Harvest ²	13.8	20.7	31.9	34.8
Ave. FL (mm)	787.3	779.0	742.4	806.5
Ave. Wt. (kg)	7.2	7.0	6.3	8.1
% Grilse ¹	4.2	8.0	13.1	4.3

¹ Sacramento River Fall-run Chinook Fishery, excludes late-fall and Mokelumne River harvest

² Based on expansions of coded-wire tag recoveries.

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2020 Sacramento River Late-Fall-Run Chinook Salmon Season

Upper Sacramento River Management Zone

- November 1st – December 16th
 - Knights Landing to Deschutes Road Bridge
- December 17th – December 31st
 - RBDD to Deschutes Road Bridge
- 2 Chinook Salmon daily bag
- 4 possession limit



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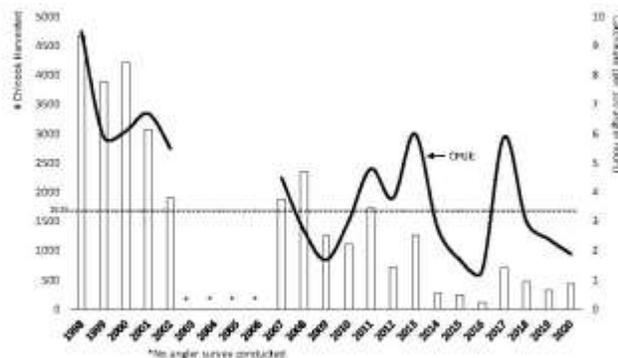
Sacramento River Late-Fall-Run Chinook Salmon Fishery



- **Effort:** 22,546 angler hours
- **Catch rate:** 1.9 salmon per 100 angler hours
- **Harvest:** 438 salmon
- **Ave. Fl (mm):** 752.6 ± 124.3 mm
- **Ave. wt (Kg):** 7.0 ± 3.3 mm
- **Grilse %** not enough age 2 CWT's recovered

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SRLFC Harvest Trend Grilse + Adults



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2020 Mokelumne River Fall-Run Chinook Salmon Season

- Camanche Dam to Highway 12 overcrossing
 - Survey includes North and South forks Mokelumne River from confluence of Cosumnes River to Hwy 12 overcrossing, as well as Beaver, Hog, and Sycamore sloughs
- Open July 16 – December 16
- Daily bag limit of 2 Chinook Salmon, possession of 4 salmon



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

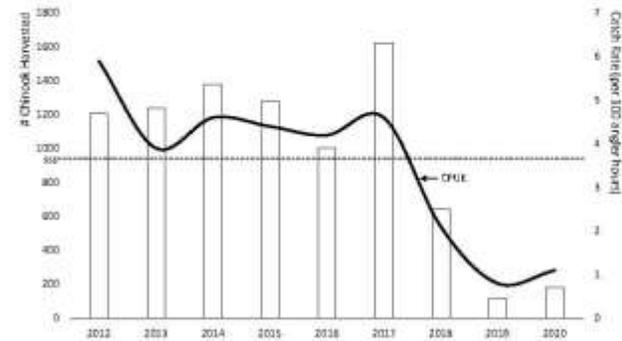


- **Effort:** 17,412 angler hours
- **Catch rate:** 1.1 salmon per 100 angler hours
- **Harvest:** 183 salmon
- **Ave. Fl (mm):** 742.4 ± 79.5 mm
- **Ave. wt (Kg):** 5.8 ± 1.7 mm
- **Grilse %** no age 2 CWT's recovered

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MOK Harvest Trend

Grilse + Adults



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Hatchery vs. Natural Origin

Percent hatchery vs. natural origin by management zone¹

	Hatchery	Natural
American River	51%	49%
Lower Sacramento River	81%	19%
Feather River	69%	31%
Upper Sacramento River	76%	24%
Mokelumne River	49%*	51%*
System-wide	73%	27%

¹ Based on expansions of coded-wire tag recoveries.

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CVAS Staff Contact Information

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James Lyons
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February 25, 2021

California Department of Fish and Wildlife
Annual Salmon Information Meeting

SUMMARY OF THE 2020 CENTRAL VALLEY CHINOOK SALMON SPORT

Interested Parties:

The purpose of this document is to provide a brief summary of the 2020 Central Valley Chinook Salmon sport fishery. Several key questions about the fishery are addressed, as highlighted below.

When and where did fishing occur?

Sport fishing for Chinook Salmon in Central Valley rivers opened on July 16, 2020 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 August 1, 2020. Closing dates varied among river sections from October 31 through December 31, 2020. 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 2 salmon with a 4 salmon possession limit for each licensed angler. There was an exception for the Feather River. In the areas open to salmon fishing, the daily bag limit was 3 salmon with a 6 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 about 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 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. Angler interviews were used to estimate 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 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 906,072 hours, corresponding to about 186,520 fishing trips. This level of effort was 1.5% more than that estimated in the 2019 fishery (892,901) but represented 12.9% fewer fishing trips (214,214 trips in 2019). Total harvest in the Central Valley river fishery was estimated at 16,858 salmon with an additional 722 salmon caught and released. Retention rate of salmon was approximately 96% of the catch. Based on observed catch, 24% of the Chinook Salmon harvested were adipose fin clipped and coded wire tagged. Of the 277 coded-wire tags recovered and read, 66% were from Sacramento Basin fall-run Chinook Salmon, 16% were from Coleman National Fish Hatchery late-fall-run Chinook Salmon, 8% were from San Joaquin Basin fall-run Chinook Salmon, 7% were from Feather River Hatchery spring-run Chinook Salmon, and 3% were from Livingston Stone National Fish Hatchery winter-run Chinook Salmon, and none were from San Joaquin River spring-run Chinook Salmon.

Due to a low number of age-2 coded-wire tag recoveries and significant overlap in size distributions, we were unable to reliably determine the delineation between 2-year-old (grilse) and older (adult) Sacramento River fall-run Chinook using a fork length (FL) frequency analysis. Instead, an expansion of known-age Sacramento River fall-run Chinook from coded-wire tags caught in the river fishery resulted in an estimated 8.25% of the harvest consisting of grilse. The total estimated harvest of Sacramento River fall-run Chinook was 1,340 grilse and 14,897 adults, for a total harvest of 16,237¹.

Based on expansions of coded-wire tags, the hatchery contribution of Chinook Salmon in the Central Valley river sport harvest varied from 76% in the Upper Sacramento River to 51% in the American River. Overall, hatchery-origin Chinook Salmon comprised an estimated 73% of the harvest.

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 (Sacramento River above Knights Landing after October 31), regardless of origin as determined by coded-wire tags.

Acknowledgments

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. The Central Valley Angler Survey is supported by a grant under the Federal Aid in Sport Fish Restoration Act (16 U.S.C. §§ 777–777I).

Central Valley Angler Survey Contacts

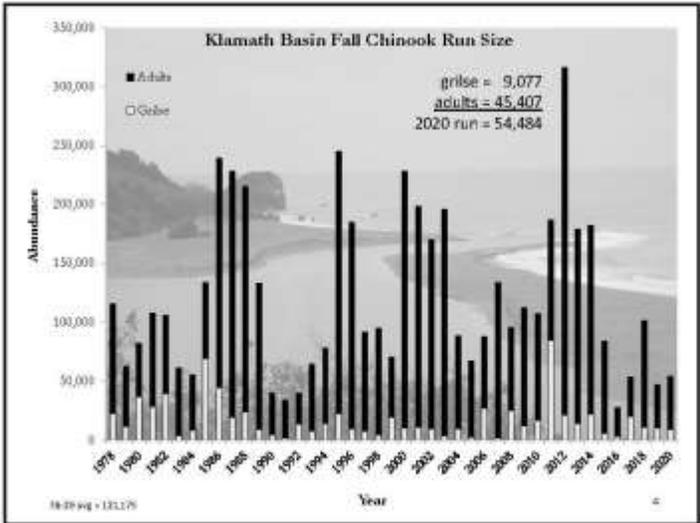
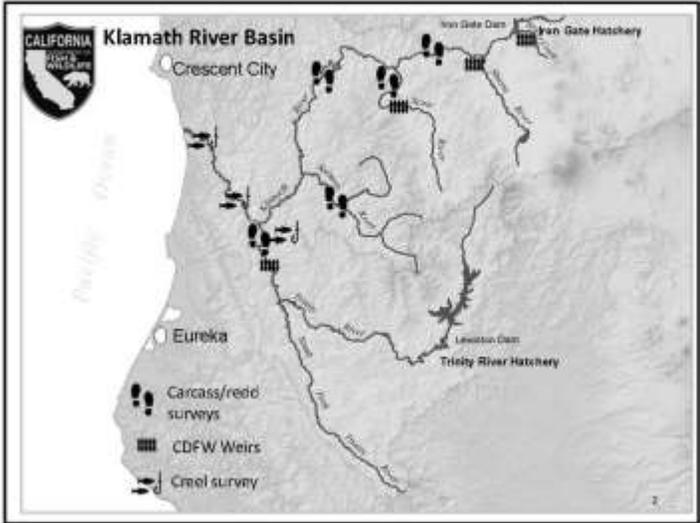
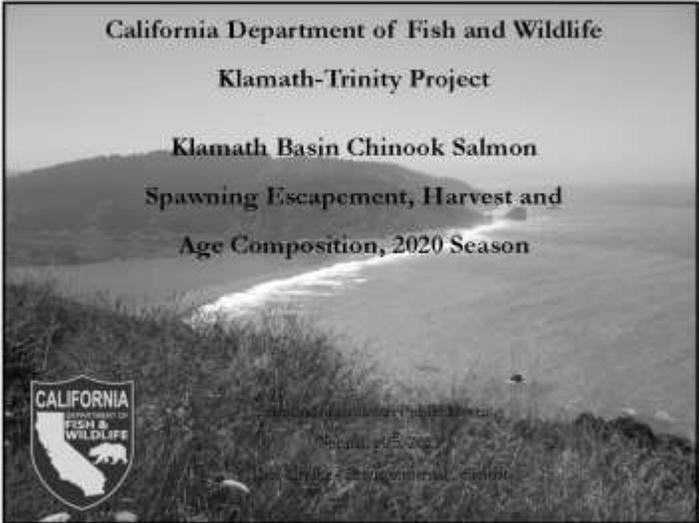
Erin.Ferguson@wildlife.ca.gov

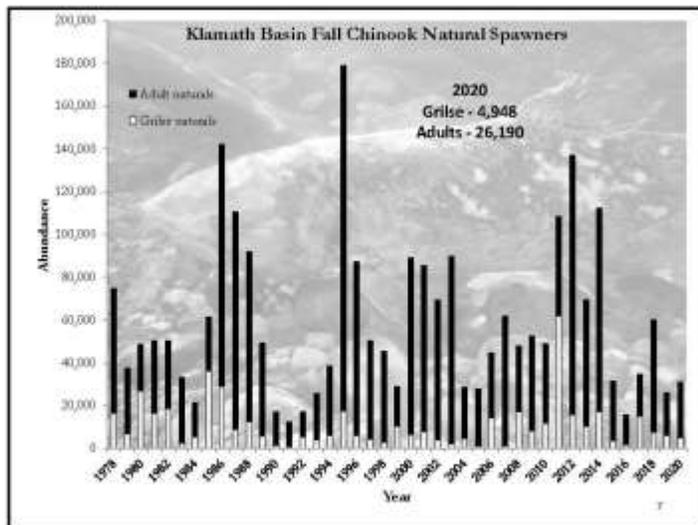
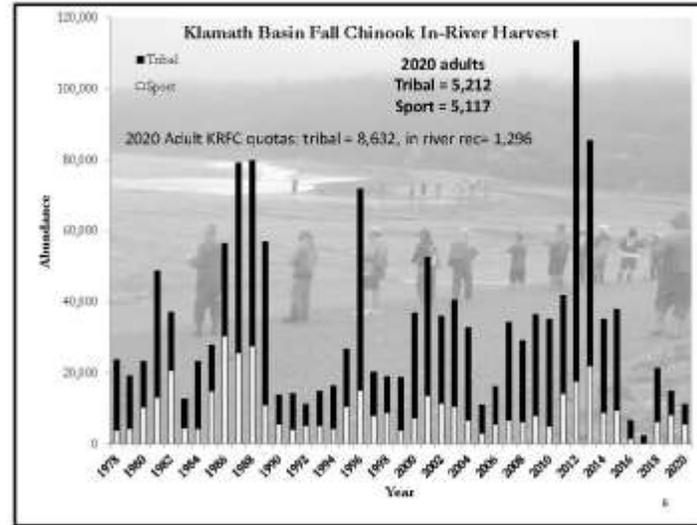
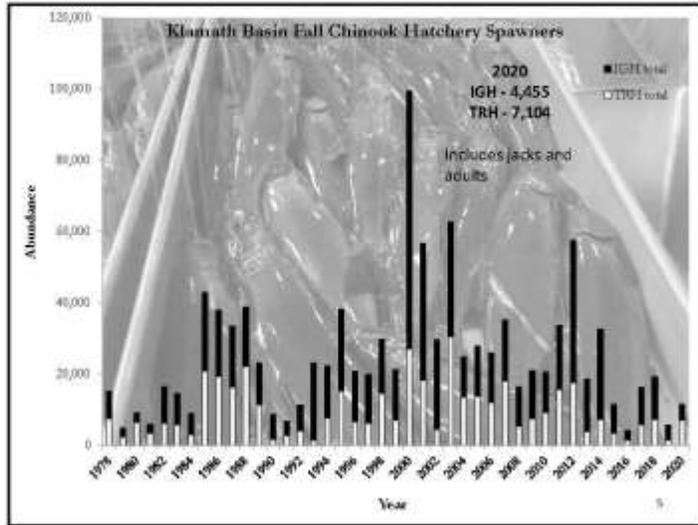
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Rob.Titus@wildlife.ca.gov

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





Age Composition of the 2020 Klamath Basin fall Chinook Salmon run

Escapement & Harvest	AGE				Total Adults	Total Run
	2	3	4	5		
Hatchery Spawners						
Iron Gate Hatchery	413	1,198	843	1	4,042	4,455
Trinity River Hatchery	2,815	4,076	229	0	4,289	7,104
subtotal	3,228	7,268	1,062	1	8,331	11,559
					18.3%	21.2%
Natural Spawners						
Klamath Basin subtotal	929	9,974	1,843	0	11,817	127,46
Trinity Basin subtotal	4,019	12,672	1,731	0	16,771	16,182
subtotal	4,948	22,646	3,544	0	24,190	31,138
					57.7%	57.2%
Recreational Harvest						
Klamath River harvest	516	4,180	580	1	4,741	5,257
Trinity River harvest	17	375	1	0	378	391
subtotal	533	4,555	581	1	5,117	5,658
					11.7%	10.4%
Tribal Harvest						
Klamath River harvest	241	2,348	1,879	6	4,333	4,474
Trinity River harvest	87	649	330	0	979	1,096
subtotal	328	3,997	2,209	6	5,212	5,544
					11.8%	10.2%
Despail Mortality						
Klamath River fish disease testing	40	354	203	0	597	597
	0	0	0	0	0	0
					1.2%	1.7%
Total River Run	9,677	37,820	7,579	8	45,487	54,484

Source: 2021 KORT

2020 Preliminary results/findings

The 2020 Klamath Basin fall Chinook run estimate is 45% of the 43-year average.

The number of 2 year-old fish (9,077) is 52% of the long-term average

The adult Chinook returns to the basin were 77% percent of the projected forecast (59,100 pre vs. 45,407 post).

The adult fall Chinook natural escapement objective was 36,206 under *de minimis* fishing and was not met.

The geometric mean of adult natural escapement for the past three years is 30,167.

A 2021 natural area escapement of ~64,400 adults is necessary to “rebuild” the stock (achieve 3-year geometric mean of 40,700).





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

**2020 California Ocean
Salmon Fisheries**

Presented by
Kandice Morgenstern



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



**Recreational
Salmon Fishery**



2020 California Recreational Season

Klamath Management Zone: OR/CA Border to Horse Mt. (93 days)	June 8	Aug 9
Fort Bragg: Horse Mt. to Pt. Arena (192 days)	May 1	Nov 8
San Francisco: Pt. Arena to Pigeon Pt. (192 days)	May 1	Nov 8
Monterey and south: Pigeon Pt. to U.S./Mexico Border (157 days)	May 1	Oct 4

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



Sample Design – Private Skiff Fishery

- CRFS samples ≥ 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
 - All the skiff trips made at a sample site for an entire day are sampled
 - 338 skiff days were sampled during the 2020 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

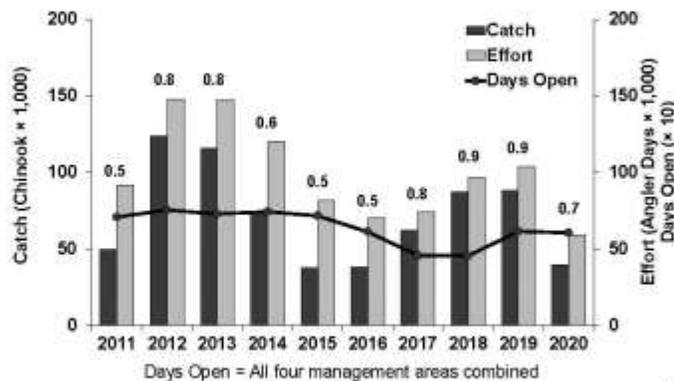


Sample Design – CPFV Fishery

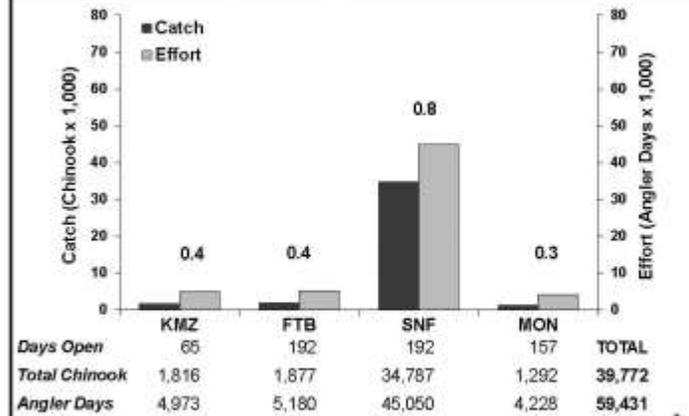
- Sample ≥ 20% of all salmon-targeting CPFV trips in each management area and period
 - 15 primary salmon CPFV sample sites
 - 104 CPFVs participated in the 2020 ocean salmon fishery
 - 1,084 salmon-targeting CPFV trips were sampled during the 2020 ocean salmon season
- Samplers observe, identify to 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

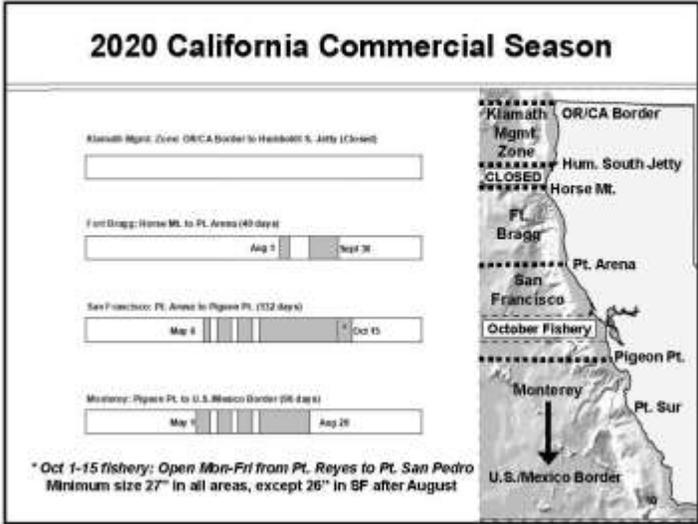


Recreational Catch and Effort, 2011-2020



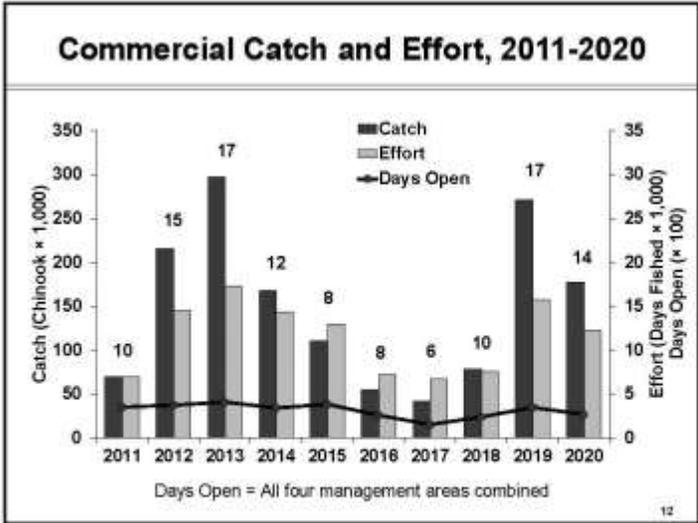
2020 Recreational Catch and Effort by Management Area

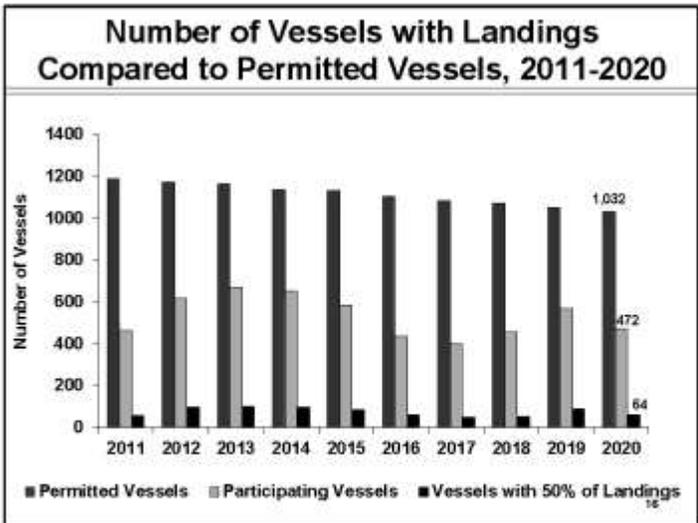
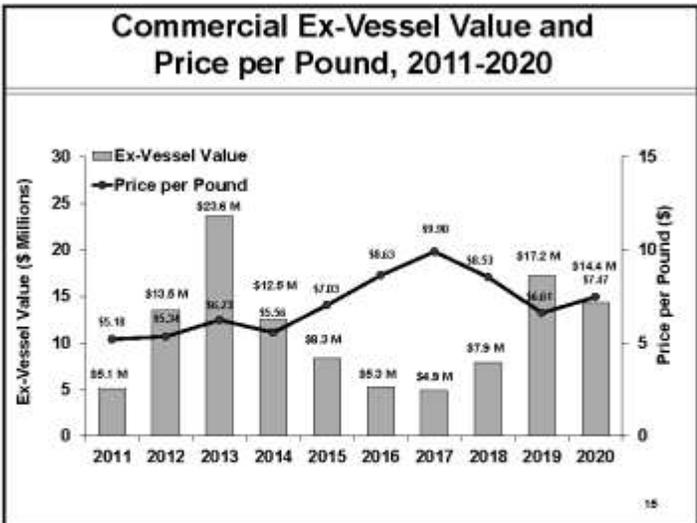
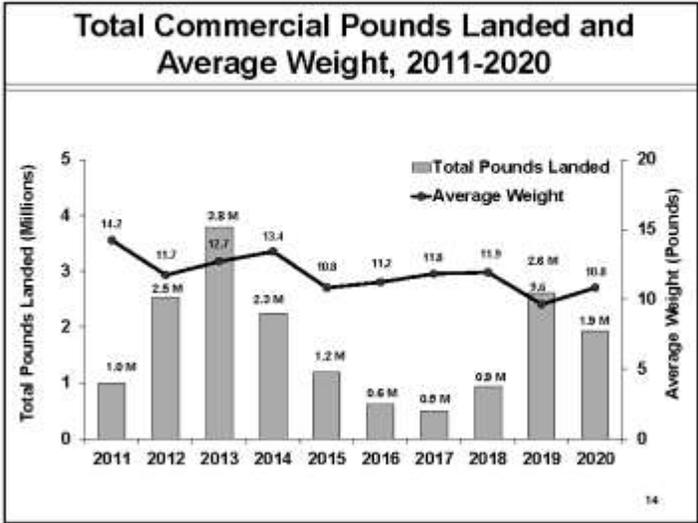
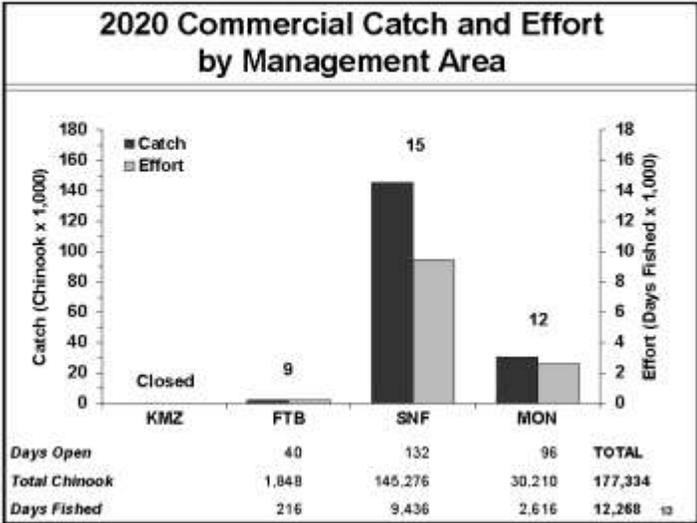




Sample Design – Commercial Fishery

- 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





2020 Fall Ocean Fisheries Impacts on Age-4 Klamath River Fall Chinook

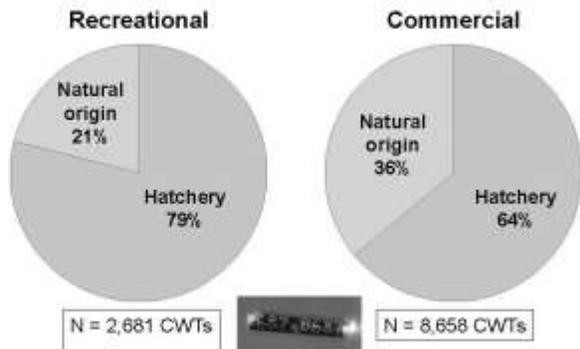
Area	Recreational	Commercial
Northern Oregon	0	0
Coos Bay	0	0
KMZ - Oregon	0	0
KMZ - California	0	0
Fort Bragg	0	0
San Francisco	0	51
Monterey	0	0
Total	0	51



0.11% age-4 ocean harvest rate in fall fisheries, which will be deducted from the 16% allowable ocean harvest rate when determining the 2021 season structure

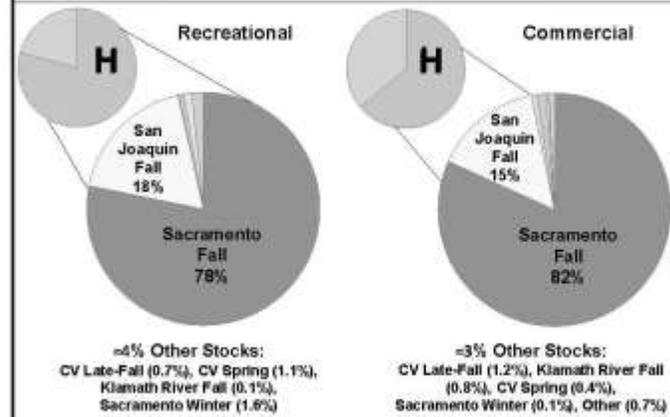


Hatchery Contribution to 2020 CA Ocean Fisheries

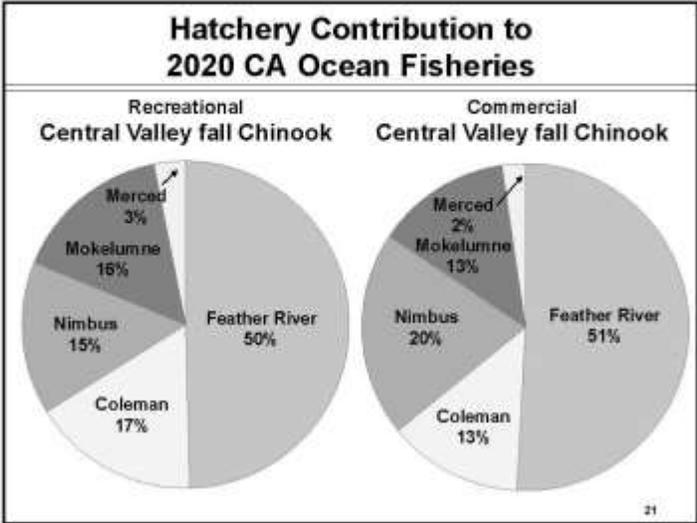


19

Hatchery Contribution to 2020 CA Ocean Fisheries



20



Department of Fish and Wildlife
Ocean Salmon Project

Thank You

Kandice Morgenstern
Environmental Scientist
Kandice.Morgenstern@wildlife.ca.gov

2021 Ocean Salmon Fishery Information

California Department of Fish and Wildlife
Salmon Informational Meeting
February 25, 2021

Jeremy Jording
Sustainable Fisheries Division
West Coast Region

West Coast
Regional
Office



U.S. Department of Commerce | National Oceanic and Atmospheric Administration | 5010 Highway 1 | Page 1

All Guidance Preliminary; final at March Council Meeting

2021 recommendation is to follow the Salmon FMP, which requires use of the Council adopted rebuilding plans. (forecasts will be covered in Michael O'Farrell's presentation)

Indicator Stock	NOAA Guidance will achieve these escapement levels
Sacramento River fall Chinook	122,000 hatchery and natural area adult spawners
Klamath River fall Chinook	31,574 natural area adult spawners



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Endangered Species Act (ESA) Listed Stocks



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Coho Salmon

- Southern Oregon/Northern California Coho**
 - ESA – Threatened
 - Recovery plan released September 2014 (79 FR 56750)
 - In April 2020, the Council formed an ad-hoc working group to develop a harvest control rule for the SONOC coho salmon ESU for Council consideration by November 2021. In the meantime, guidance for Council salmon fisheries is based on the consultation standard in the 1993 biological opinion.
- Central California Coastal Coho**
 - ESA – Endangered
 - Final recovery plan released 2012

Preliminary Guidance for 2021

- Prohibit coho-directed fisheries off CA;
- Prohibit coho retention in Chinook-directed fisheries off CA
- Limit fisheries to achieve an ocean exploitation rate on Rogue/Klamath coho hatchery stocks of no more than 13%




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California Coastal Chinook Salmon

- ESA-threatened
- Multi-species recovery plan was available for public comment through January 2016 (80 FR 75066)

Preliminary Guidance for 2021

- A maximum Klamath River fall Chinook age-4 ocean harvest rate of 16.0%



Central Valley Spring Chinook Salmon

- ESA-threatened
- Recovery plan adopted July 2014 (79 FR 42504)

Preliminary Guidance for 2021

- Council fisheries should be managed to meet the consultation standard for SRWC (following slides) to be sufficiently protective of the Central Valley spring-run Chinook salmon ESU.



Sacramento River Winter Chinook Salmon

- ESA – Endangered
- Recovery plan adopted July 2014 (79 FR 42504)

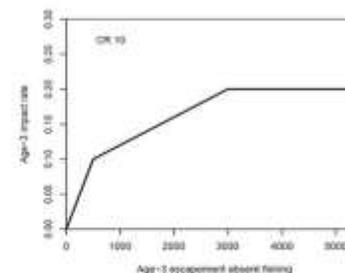
Preliminary Guidance for 2021

- 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



Sacramento River Winter Chinook Salmon

- Current HCR:



- Based on this rule, and the current forecast absent fishing, NMFS preliminary guidance for an allowable impact rate in 2021 is: 20.0%

Southern Resident Killer Whales

- ESA – Endangered
 - Final recovery plan released 2008
 - Since 2009, the population has declined from 87 whales down to a near historic low of 72 whales (+three calves born after the 2020 census).
- On April 12, 2019, NMFS re-initiated ESA consultation on the Council salmon fisheries, and asked for the Council's assistance in assessing the effects of implementing the FMP in 2019 and beyond.
- In response the Council proposed and formed an Ad Hoc Workgroup tasked with reassessing the effects of Council-area ocean salmon fisheries on SRKW and recommend conservation measure(s) or management tool(s) that limit PFMC fishery impacts to prey availability for SRKW.



Southern Resident Killer Whales

- Based on the Workgroup's review and recommendations the Council proposed amending the salmon fishery management plan in November of 2020. As part of our approval process NMFS will make the proposal, when ready, available for comment in the spring of 2021.
- The amendment would establish an arithmetic mean of the seven lowest years of pre-fishing Chinook salmon abundance in the area North of Cape Falcon (Washington coast area) (1994-1996, 1998-2000, and 2007, currently estimated at 966,000) as a low abundance management threshold.
- NMFS is now working on a new ESA opinion that will apply to fisheries in 2021 evaluating the proposed amendment.



Southern Resident Killer Whales

- Management measures proposed for California fisheries when the pre-fishing abundance is projected to fall below the threshold include:
 - Close California (& Oregon) waters of the Klamath Management Zone to commercial and recreational salmon fisheries from October 1 through March 31 of the following year.
 - Increase the duration of the Klamath Control Zone area expansion beginning September 1 through March 31 of the following year.
 - Close commercial and recreational salmon fisheries in the Monterey management area from October 1 through March 31 of the following year.



Southern Resident Killer Whales

Preliminary Guidance for 2021

- NMFS expects the Council salmon fisheries in the coastal waters of the EEZ will continue to meet the conservation objectives for ESA-listed salmon and continue to be responsive to the abundance of salmon stocks similar to that over this last decade when the whale status has declined
- Using the methodology adopted by the Council's Ad Hoc Workgroup, we advise the Council to assess the pre-fishery forecasted abundance levels (FRAM time step one) by spatial aggregate (the North of Cape Falcon, Cape Falcon south to Humbug Mountain, and aggregated South of Humbug Mountain management areas).



Southern Resident Killer Whales

Preliminary Guidance for 2021

- If the NOF abundance is equal to or less than the average in the seven lowest years of abundance (1994 – 1996, 1998 – 2000 and 2007) (FRAM time step one, refer to PFMC 2020 Appendix E, Table 2), the Council should the management measures as adopted at its November 2020 meeting across the SRKW geographic range (this includes salmon fisheries in Washington, Oregon, and California waters) to benefit the whales.

Thank You

Jeromy.Jording@noaa.gov

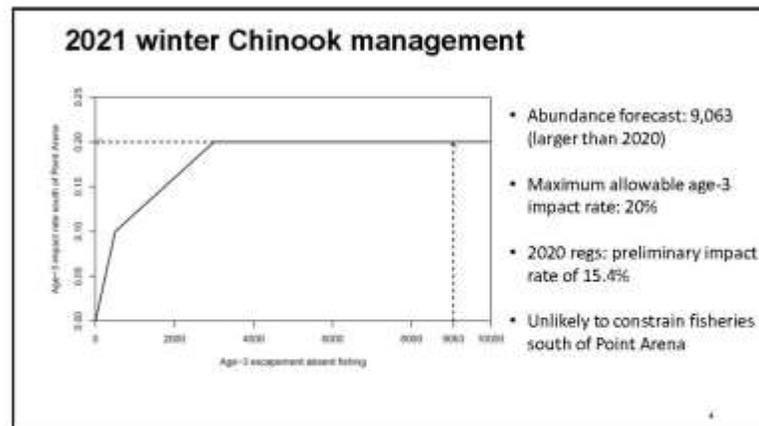
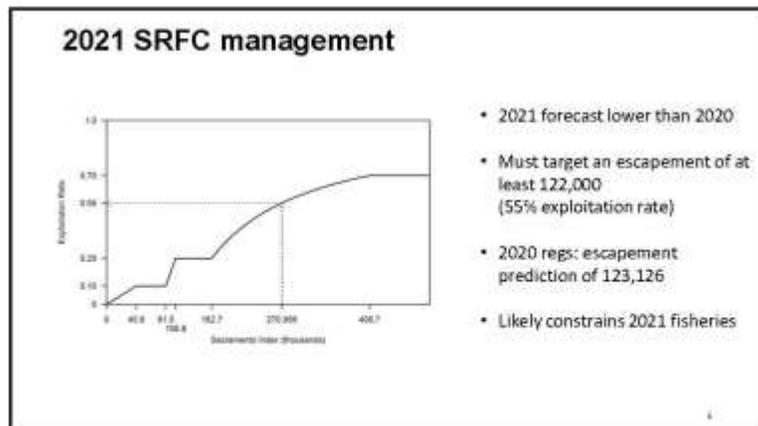
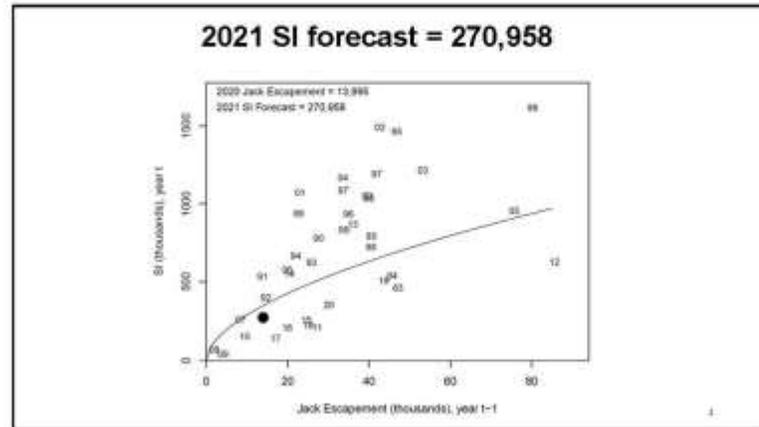
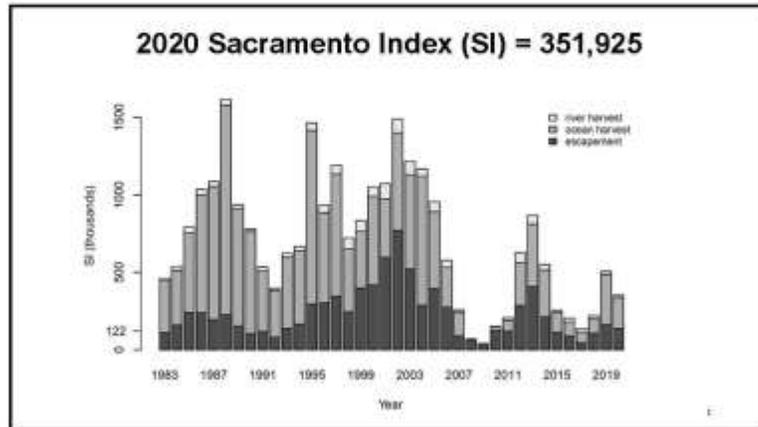
Susan.Bishop@noaa.gov

Special thanks to:

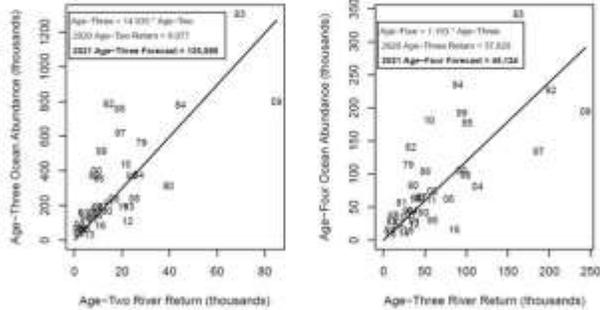
Dr. Michael O'Farrell SWFSC

Teresa Mongillo WCR PRD

Dr. Laura Koehn WCR PRD



2021 Klamath abundance forecast

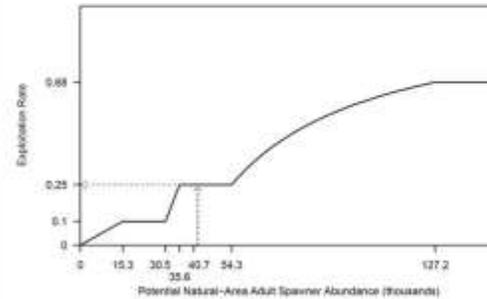


Age-3:
135,569

Age-4:
45,124

Age-5:
815

2021 Klamath fall Chinook management



- Potential spawner abundance: 42,098
- Max exploitation rate: 25%
- Minimum escapement: 31,574

2020 KRFC management, contd.

- 2020 regs applied to 2021 abundance
 - Tribal allocation: 50% of total harvest
 - River recreational allocation: 15% of non-tribal harvest
 - Natural-area adult spawner prediction: 30,388
 - Exploitation rate: 27.8%
 - Will constrain 2021 fisheries

2021 California coastal Chinook

- Max allowable KRFC age-4 ocean harvest rate of 16%
- 2020 fisheries: preliminary prediction of 9.9%
- Unlikely to constrain 2020 fisheries

2021 California Ocean Salmon Preseason Process: Calendar of Events

March 2-5 and 8-11, 2021 - Pacific Fishery Management Council March Meeting Webinar Only

The Council will determine if any in-season action for fisheries scheduled to open prior to May 16 is needed. They will also craft three regulatory alternatives for ocean salmon fisheries in effect on or after May 16. Final alternatives for public review will be adopted on March 11.

Preseason Report II: Proposed Alternatives and Environmental Assessment Part 2 for 2021 Ocean Salmon Fishery Regulations will be available online in late March at:

www.pcouncil.org.

March 23, 2021 - Pacific Fishery Management Council Public Hearing Webinar Only

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 6-9 and 12-15, 2021 - Pacific Fishery Management Council April Meeting Webinar Only

The Council will tentatively adopt final regulatory measures for analysis by the Salmon Technical Team during this meeting. Final adoption of recommendations to the National Marine Fisheries Service will also occur and is tentatively scheduled for April 14.

Preseason Report III: Council-Adopted Management Measures and Environmental Assessment Part 3 for 2021 Ocean Salmon Fishery Regulations will be available online in late April at: www.pcouncil.org.

April 14-15, 2021 - California Fish and Game Commission Meeting Webinar Only

The Commission will receive an update on ocean salmon sport fishery regulations in effect prior to May 16 and on the proposed alternatives for the May 16 through November 2021 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 16-17, 2021 - California Fish and Game Commission Meeting Webinar only

The Commission will receive an update on ocean salmon sport fishery regulations in effect May 16 through November 2021. 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.pcouncil.org/contact.

Online Resources:

Review of 2020 Ocean Salmon Fisheries

Available online at: <https://www.pcouncil.org/safe-documents-3/>

Preseason Report I: Stock Abundance Analysis for 2021 Ocean Salmon Fishery Regulations

Available online in March at: <https://www.pcouncil.org/safe-documents-3/>

Klamath Basin Age Composition and Stock Projection Reports

Available online in March at: <https://www.pcouncil.org/salmon-document-library/>



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



2020 Ocean Salmon Commercial Regulations

OR/CA Border to Horse Mountain (KMZ):

Closed

Horse Mountain to Point Arena:

August 1-10, September 1-30

- Minimum size limit: 27 inches total length
- All salmon must be landed in California and north of Point Arena

Point Arena to Pigeon Point:

May 6-12, 18-31; June 1-6, 14-30; July 13-31;
 August 1-28; September 1-30

- Minimum size limit: 27 inches total length through August, 26 inches thereafter
- All salmon caught in the area prior to September must be landed and offloaded by 11:59 pm August 30th
- During September, all salmon must be landed south of Point Arena

Point Reyes to Point San Pedro:

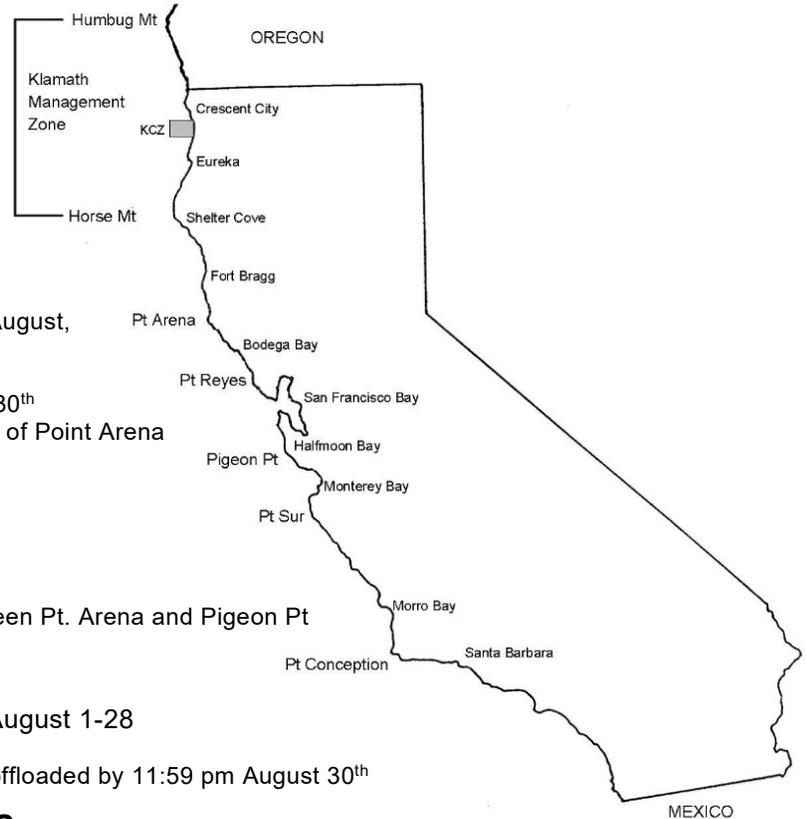
October 1-2, 5-9, 12-15

- 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 1-12, 18-31; June 1-6, 14-30; July 13-31; August 1-28

- Minimum size limit: 27 inches total length
- All salmon caught in the area must be landed and offloaded by 11:59 pm August 30th



General Commercial Regulations

- **All salmon except coho; all commercial salmon must be landed in California**
- **Single point, single shank barbless hooks are required**
- **No more than 6 lines are allowed per vessel**
- **Compliance with minimum size or other special restrictions:** All salmon on board a vessel must meet the minimum size and other special requirements for the area being fished and the area in which they are landed if that area is open or has been closed less than 48 hours. Salmon may be landed in an area that is closed more than 48 hours only if they meet the minimum size and other special requirements for the area in which they were caught AND it is not otherwise prohibited in the regulations.
- **Electronic Reporting Requirements:** Any fish receiver or fisherman with a fisherman's retail license shall record landing information on an electronic fish ticket (§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 electronic fish ticket. Please see federal regulations for incidental Pacific halibut harvest requirements and restrictions.



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



2020 Ocean Salmon Sport Regulations

OR/CA Border to Horse Mountain (KMZ):

June 6 – August 9*

- 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):

May 1 – November 8*

- Minimum size limit: 20 inches total length

Point Arena to Pigeon Point (San Francisco):

May 1 – November 8*

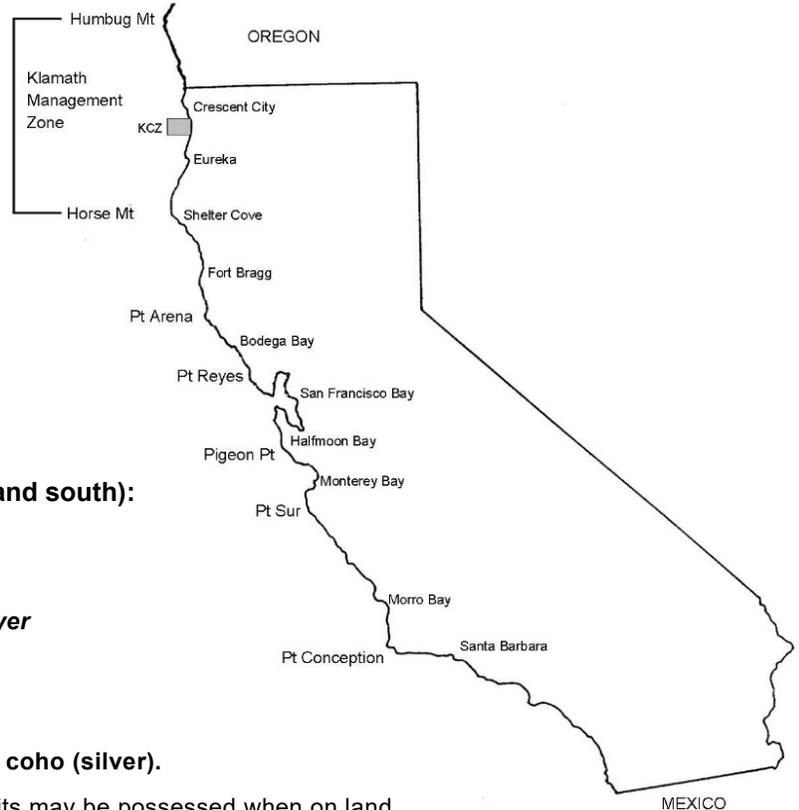
- Minimum size limit: 20 inches total length

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

May 1 – October 4*

- Minimum size limit: 24 inches total length

**See in-season management on the back of this flyer for potential changes.*



General Sport Regulations

- **Daily bag limit: 2 salmon of any species except coho (silver).**
- **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 (silver) 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 and 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 and 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).
- **In-season management:** NMFS may by in-season action close recreational fisheries between May 1 and June 15, 2020 in the Fort Bragg, San Francisco, and Monterey subareas on the recommendation of the California Department of Fish and Wildlife. The recommendation to close would be informed by an evaluation of actions or orders enacted by jurisdictions in these subareas to address public health concerns related to COVID-19 that would make access to the ocean salmon recreational fishery impracticable (e.g., restrictions on activities or closure of harbors, launch ramps and other forms of access). If NMFS closes these subareas May 1-15, May 16-31, June 1-15, or an additive combination of these specific date ranges in succession; NMFS may by in-season action extend the season in the California KMZ beyond August 9 not to exceed August 31 if the STT determines that such opening would not increase impacts to stocks in the FMP beyond those described in Table 5 of Pre-III for 2020, and would otherwise meet the objectives described in that table, including but not limited to 50/50 harvest sharing with the Klamath River Tribes (Yurok and Hoopa Valley Tribe).

**NATIONAL MARINE FISHERIES SERVICE OCEAN SALMON REGULATIONS HOTLINE
(800) 662-9825**

**CDFW OCEAN SALMON REGULATIONS HOTLINE
(707) 576-3429**