

CENTRAL VALLEY ANGLER SURVEY: 2015 Recreational Harvest of Chinook Salmon



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2015 Central Valley Salmon Season

Open July 16th-December 16th

Exceptions:

Lower American River

July 16th –December 31st

Upper Sacramento River

August 1st to December 16th

RBDD to Deschutes Road Bridge

Feather River

July 16th to October 15th

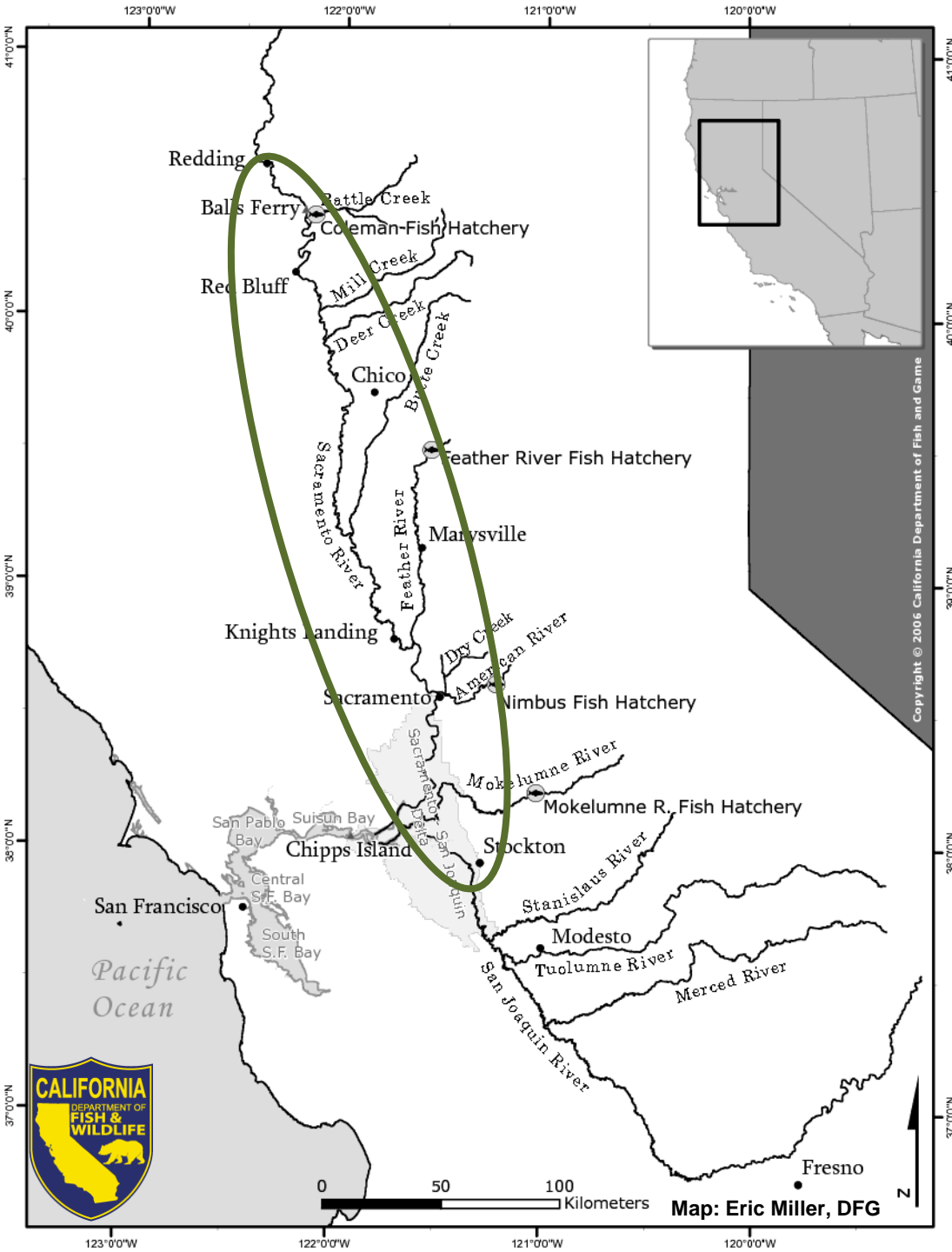
Low flow channel closed



Central Valley Angler Survey



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



Sampling Design:

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

Estimates of Chinook Salmon Effort, Catch, and Harvest



Data collection via:

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

Overview of 2015 Central Valley Sport Fishery for Chinook Salmon*

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



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

Raw Statistics

Contacted over 6,158 fishing parties

1,601 salmon reported kept

1,497 Salmon observed

- or 6.1% of the Estimated Harvest

359 adipose fin-clipped salmon, or 24%

345 heads taken for CWT recovery, or 96%



Coded Wire Tag Recoveries

340 CWTs successfully recovered and read

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

Sacramento River Fall-Run Chinook Salmon (SRFC) Harvest

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



Excludes

Harvest in the Mokelumne River.

Harvest in the Late-fall-run Chinook salmon fishery
Known non-SRFC from the recovery of coded wire tags

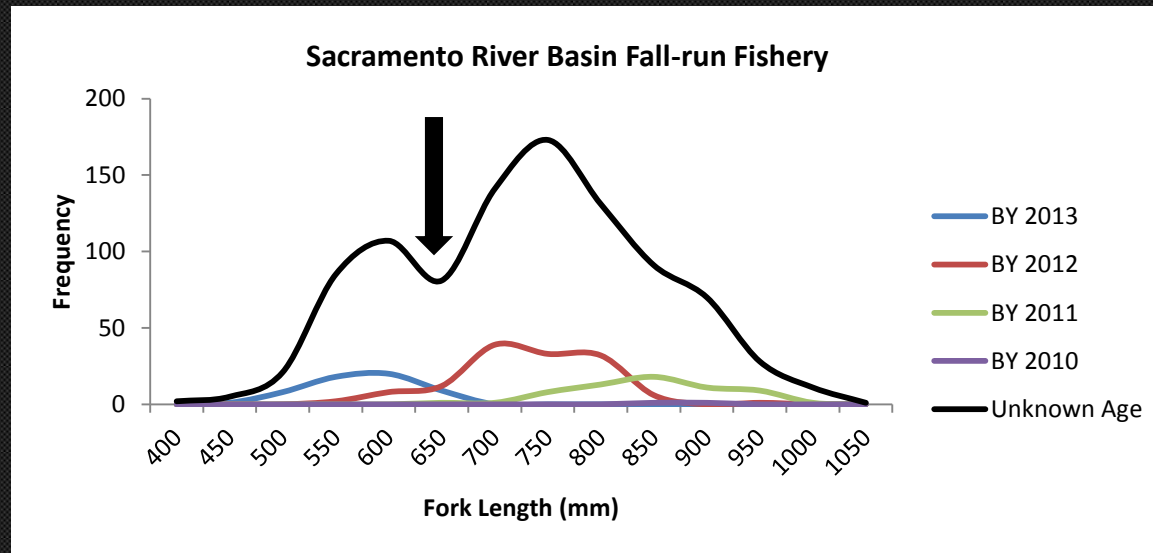
SRFC Inland Harvest

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



Fork Length Frequency Analysis

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



Grilse Composition Varied Between Management Zones

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



Final SRFC Harvest Estimate

Overall 24% of the harvest were grilse

14,070 adult SRFC

4,549 grilse SRFC



2015 Sacramento River Late-Fall-Run Chinook Salmon Season

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



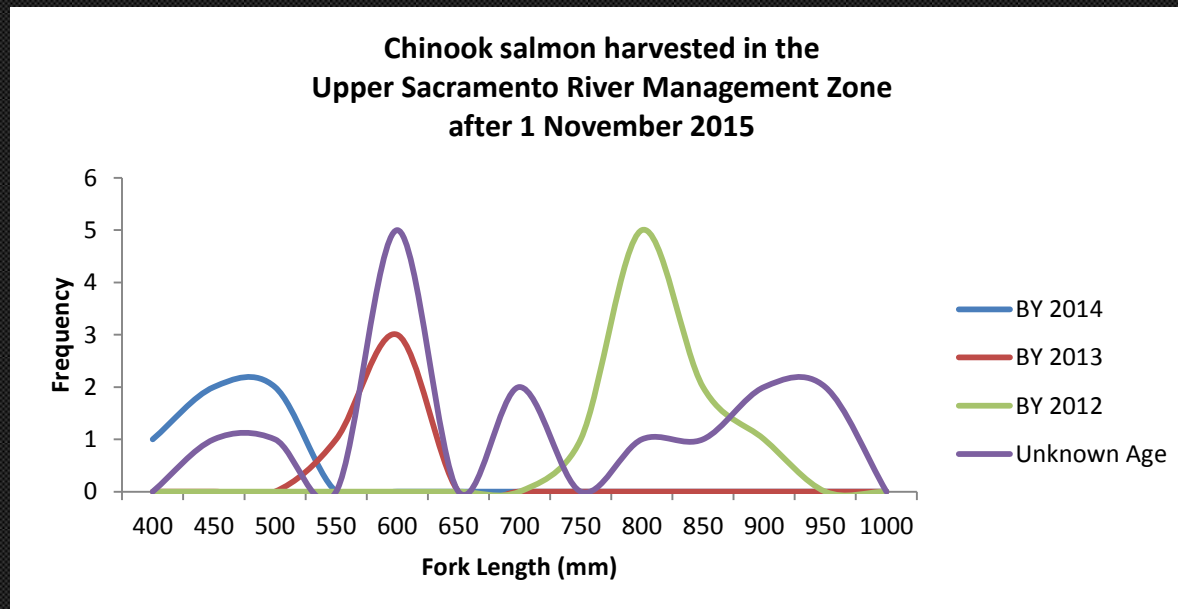
Sacramento River Late-Fall-Run Chinook Salmon Fishery



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

SRLFC Summary Statistics

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



2015 Mokelumne River Fall-Run Chinook Salmon Season

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



Mokelumne River Fishery

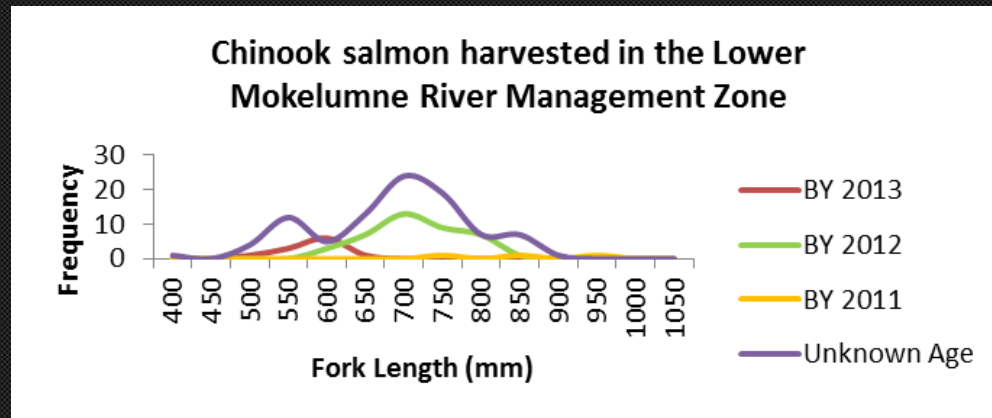
San Joaquin Fall-Run Chinook Salmon (SJRFC)



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

Mokelumne River Summary Statistics

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



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

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