

CENTRAL VALLEY ANGLER SURVEY: 2017 Recreational Harvest of Chinook Salmon



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2017 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

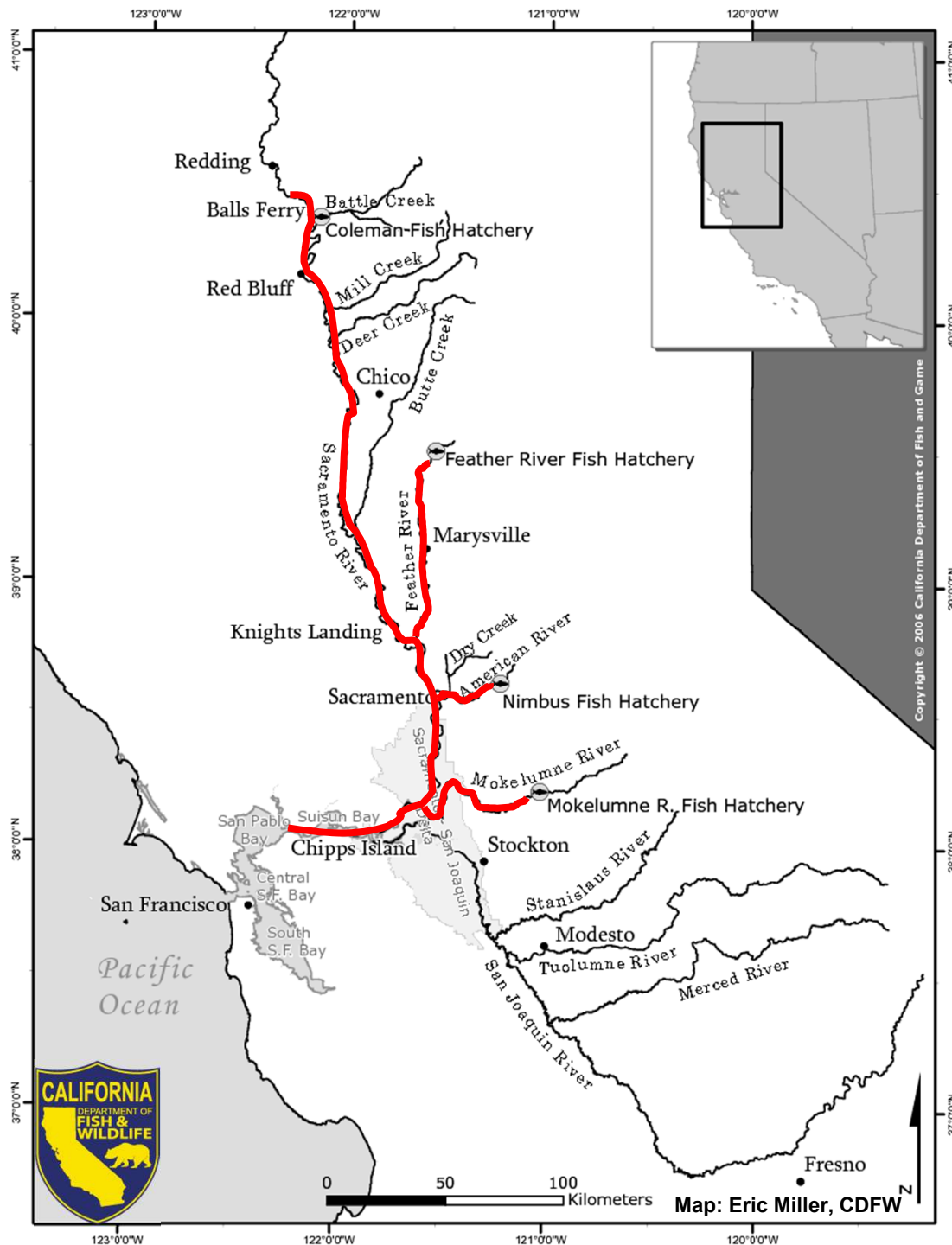
Low flow channel closed



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



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

Overview of 2017 Central Valley Sport Fishery for Chinook Salmon*

<i>Effort:</i>	816,261 angler hours
<i>Trips:</i>	162,926 angling days
<i>Total catch:</i>	67,852 salmon
<i>Harvest:</i>	41,571 salmon
<i>Release:</i>	26,281 salmon
<i>Pct retention:</i>	61%
<i>Harvest rate:</i>	5.1 salmon per 100 angler hours



* Based on fishery statistics for the American, Feather, Mokelumne and Sacramento rivers, July – December 2017.

Raw Statistics

Contacted over 6,900 fishing parties

2,979 salmon reported kept

2,559 salmon observed

- or 10% of the Estimated Harvest

684 adipose fin-clipped salmon, or 27%

644 heads taken for CWT recovery, or 94%



Coded Wire Tag Recoveries

629 CWTs successfully recovered and read

- 49% Feather River Hatchery fall run
- 18% Coleman National Fish Hatchery fall run
- 12% Mokelumne River Hatchery fall run
- 11% Coleman National Fish Hatchery late-fall run
- 8% Nimbus Hatchery fall run
- 1% Feather River spring run
- 1% Merced River Fish Facility fall run
- 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

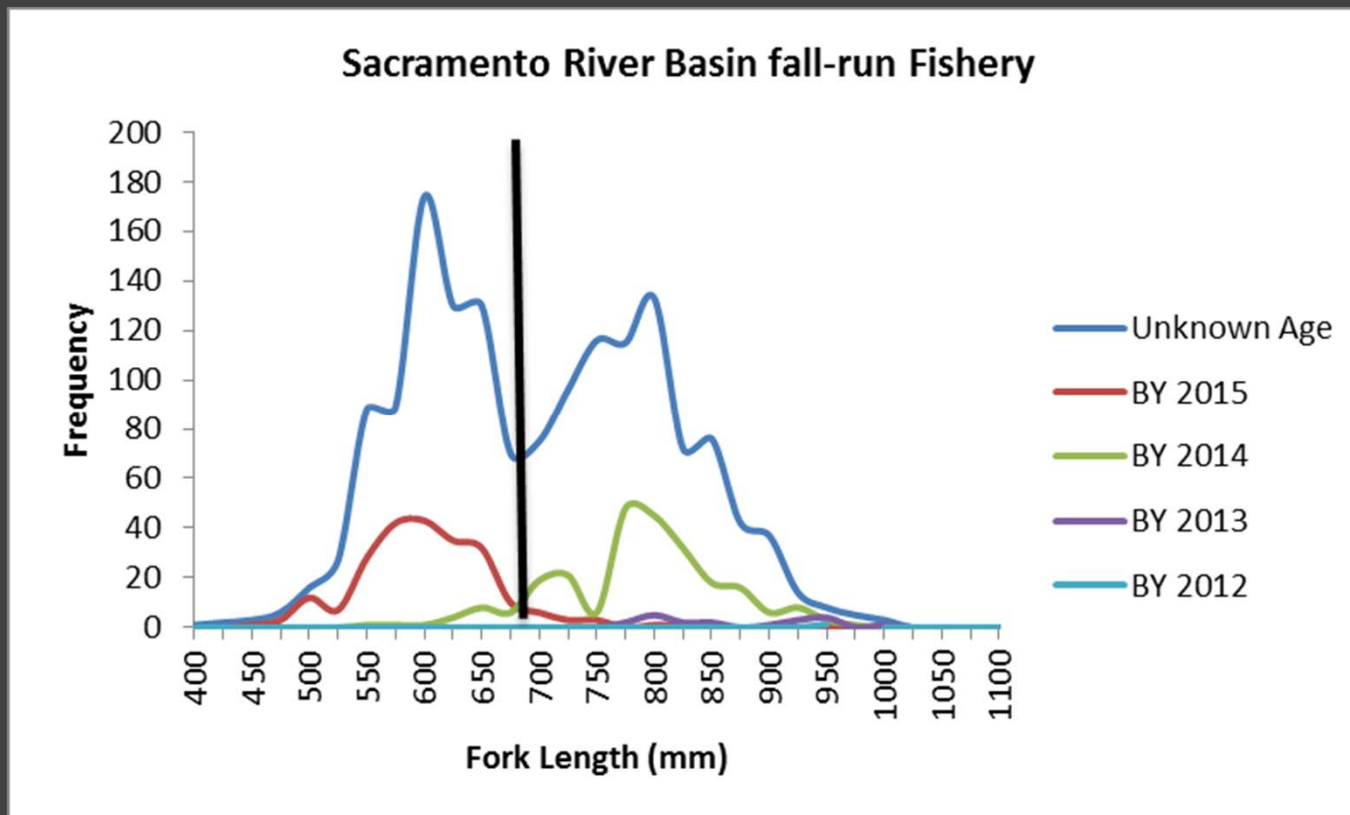
SRFC Inland Harvest

SRFC comprised 94% of all Chinook salmon harvest in the Central Valley in 2017



Fork Length Frequency Analysis

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



Grilse Composition Varied Between Management Zones

43% Lower Sacramento

22% American River

38% Feather River

82% Upper Sacramento



Final SRFC Harvest Estimate

Nearly 44% of the harvest were grilse

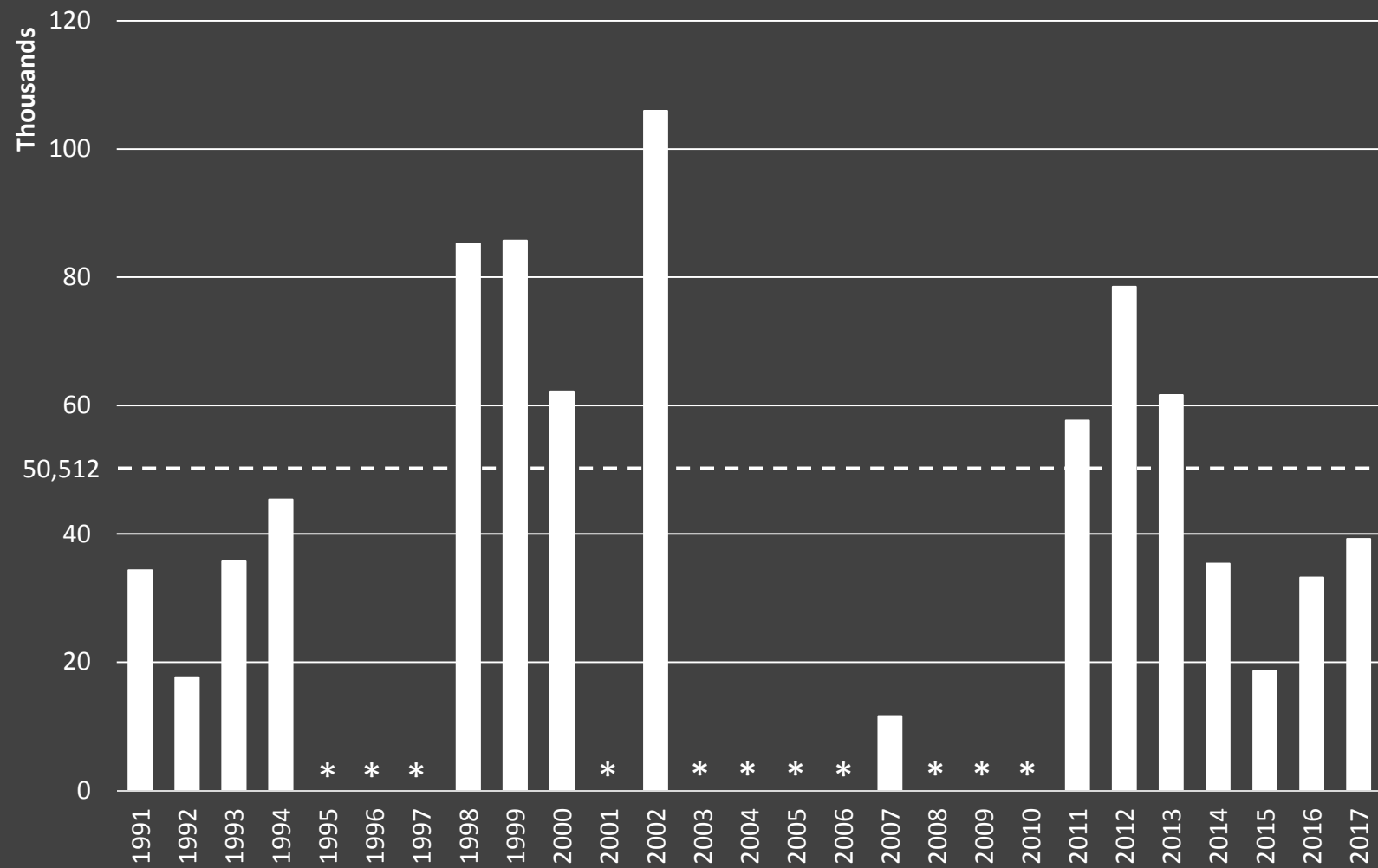
22,066 adult

17,171 grilse

39,237 Total SRFC

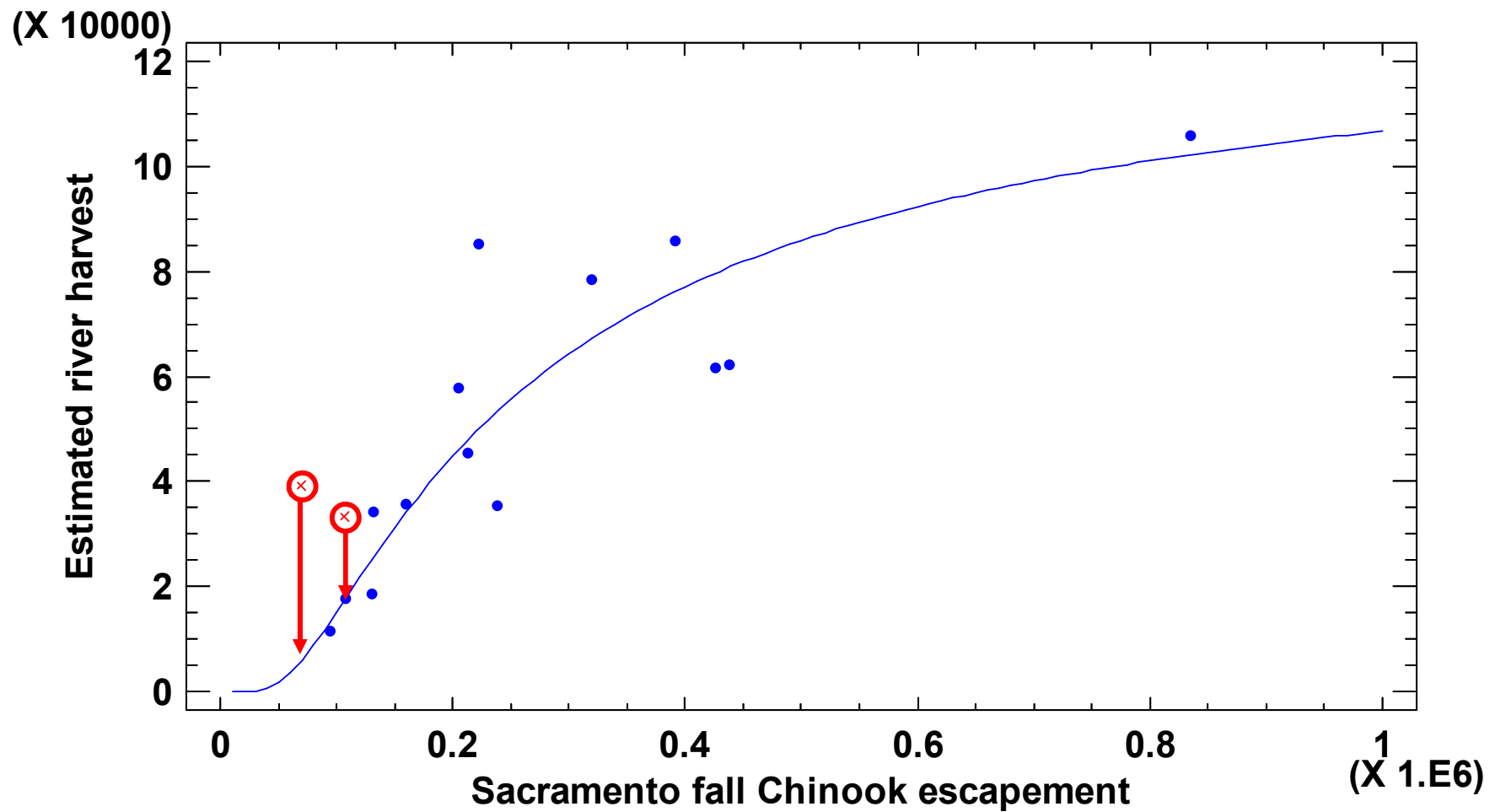


SRFC Harvest Trend



*No data

River harvest trended high in 2016 and 2017
relative to escapement



2017 Sacramento River Late–Fall–Run Chinook Salmon Season

- Restricted to the Upper Sacramento River

Knights Landing to Deschutes
Road Bridge

- Open November 1 – December 16
- Daily bag limit of 2 Chinook salmon, 4 possession limit



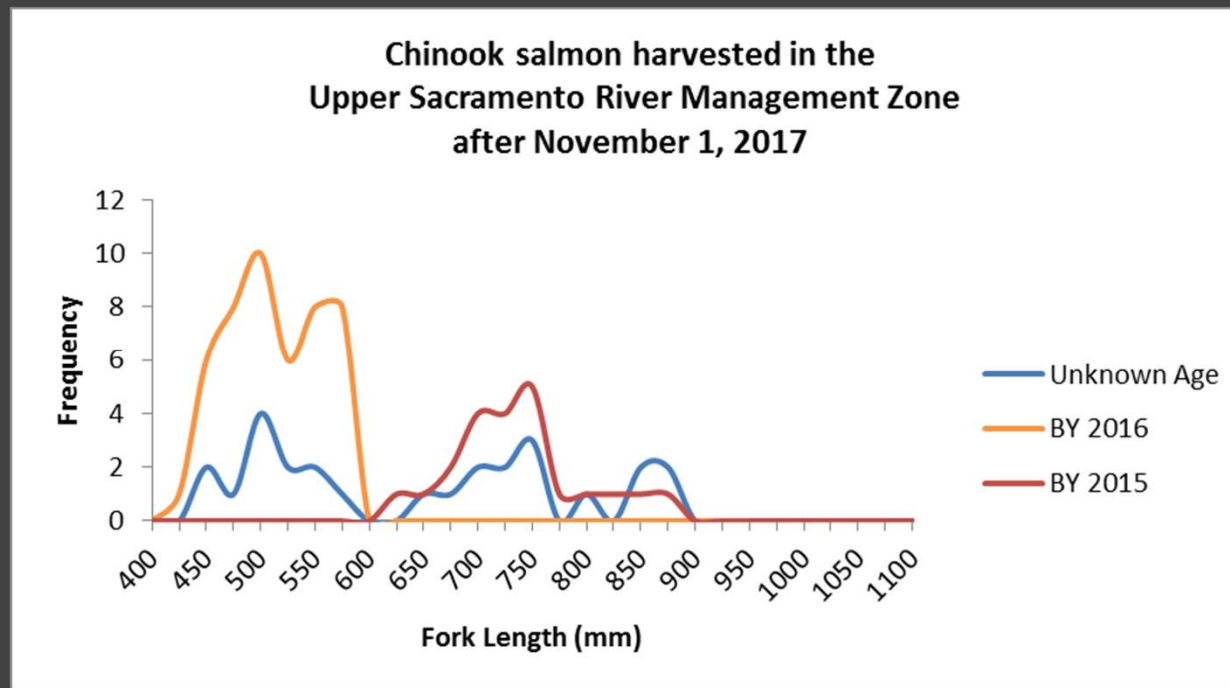
Sacramento River Late–Fall–Run Chinook Salmon Fishery



- **Effort:** 11,931 angler hours
- **Trips:** 2,381 angler trips
- **Harvest:** 709 salmon
- **Harvest rate:** 5.9 salmon per 100 angler hours

SRLFC Summary Statistics

- **65.5% Catch was of known hatchery origin**
 - 98% SRLFC
- **Fork Length Frequency Analysis**
 - Grilse cutoff at 600 mm or 62% grilse



2017 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**



Mokelumne River Fishery

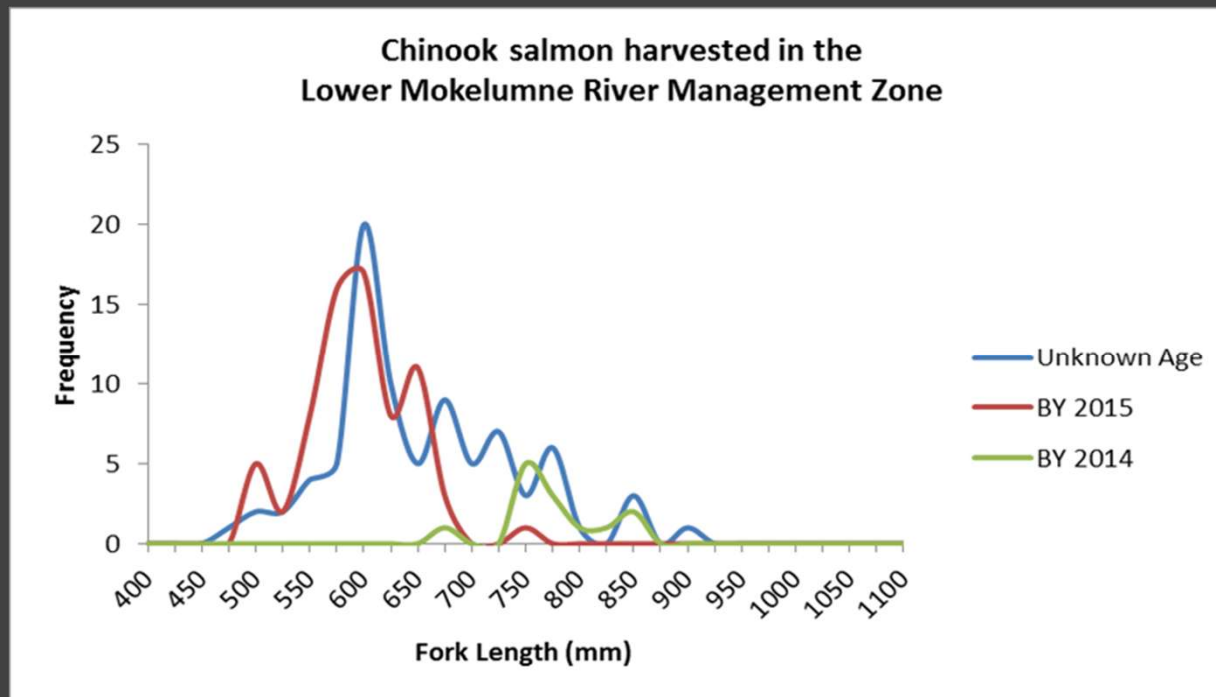
San Joaquin Fall–Run Chinook Salmon (SJRFC)



- **Effort:** 34,664 angler hours
- **Trips:** 6,919 angler trips
- **Harvest:** 1,625 salmon
- **Harvest rate:** 4.7 salmon per 100 angler hours

Mokelumne River Summary Statistics

- **25% Catch was of known hatchery origin**
 - 68% San Joaquin River Fall-run Chinook Salmon
 - 32% SRFC
- **Fork Length Frequency Analysis**
 - Grilse cutoff at 675 mm or 69% grilse



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Photo: Terry Linton, CDFW