CENTRAL VALLEY ANGLER SURVEY: 2013 Recreational Harvest of Chinook Salmon

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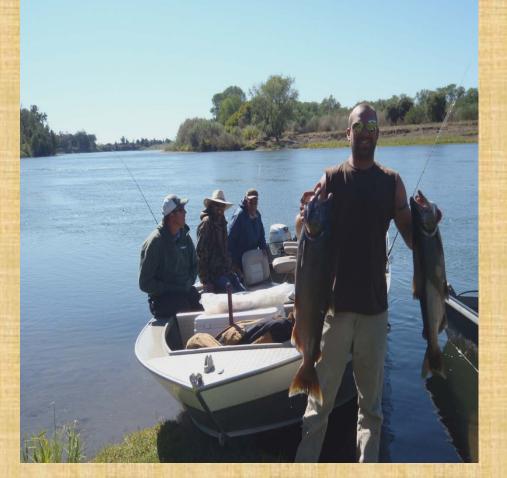


2013 Central Valley Salmon Season

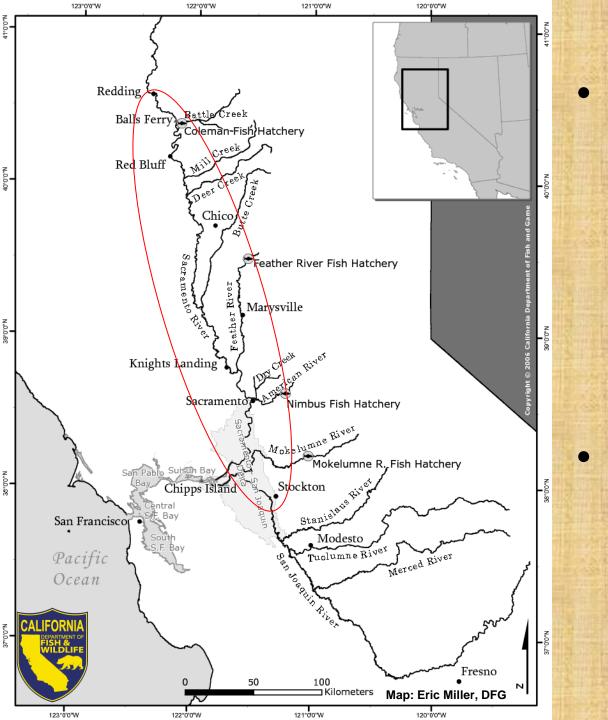


- Lower American River: Open July 16^{th-} December 31th
- Lower Feather River: Open July 16^{th-} December 16th Excluding the low flow channel
- Sacramento River Open July 16^{th-} December 16th Carquinez Bridge to Deschutes Road Bridge
- Mokelumne River: Open July 16^{th-} December 16th

Central Valley Angler Survey



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



Sampling Design: 19 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, harvest and stock identification





Data collection via:

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

Recovery

Overview of 2013 Central Valley Sport Fishery for Chinook Salmon*

- *Effort:* 1,488,192 angler hours
- Trips: 293,228 angling days
- Total catch: 95,976 salmon
- Harvest: 66,555 salmon
- Release: 29,421 salmon
- Pct retention: 69%



• *Harvest rate:* 4 salmon per 100 angler hours

* Based on fishery statistics for the American, Feather, Mokelumne and Sacramento rivers, July – December 2013.

Raw Statistics

- Contacted over 11,300 fishing parties
- 4,388 salmon reported kept
- 3,846 Salmon observed or 5.8% of the Estimated Harvest
 797 adipose fin-clipped Salmon, or 20.7%
- 790 heads taken for CWT recovery, or 99%



Coded Wire Tag Recoveries

781 CWTs successfully recovered and read

- 39.0% Coleman National Fish Hatchery fall-run
- 27.2% Feather River Hatchery fall-run
- 12.2% Coleman National Fish Hatchery late-fall-run
- 9.4% Nimbus Hatchery fall-run
- 7.7% Mokelumne River Hatchery fall-run*
- 4.1% Feather River spring-run
- 0.5% Merced River Fish Facility fall-run
- 0% Winter-run

* 2009 Mokelumne River Hatchery production was 100% marked and coded wire tagged.

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 cwts

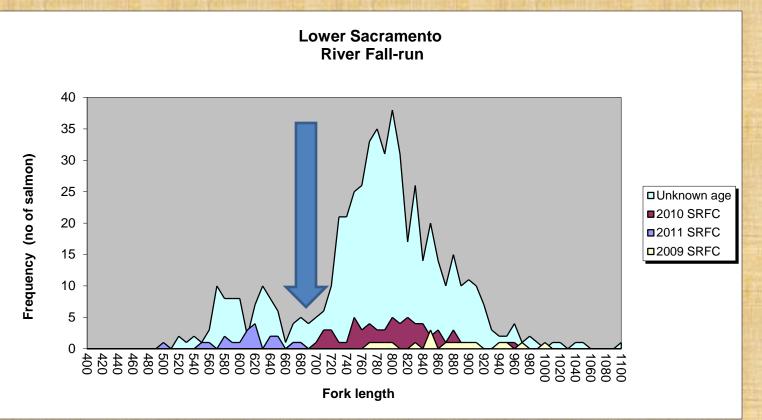
SRFC Inland harvest

• 61,672 SRFC in 2013, or 93% 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

- 17% Lower Sacramento
- 10% American River
- 9% Feather River
- 4% Upper Sacramento



Final SRFC Harvest Estimate

Overall 10% of the harvest were grilse

55,477 adult SRFC
6,195 grilse SRFC

2013 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 and possession limit of 2 Chinook salmon



Sacramento River Late-Fall-Run Chinook Salmon Fishery

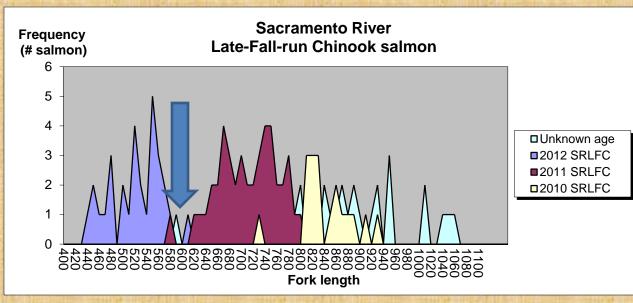


- Effort:
- Trips:
- Harvest:
- Harvest rate:

21,137 angler hours 3,702 angler trips 1,265 salmon 6 salmon per 100 angler hours

SRLFC Summary Statistics

- 58% Catch was of Hatchery Origin
 - 99% SRLFC
 - 1% SJRFC-Mokelumne River Hatchery
- Fork Length Frequency Analysis
 - Grilse cutoff at 600mm resulting in 23% grilse



• Final SRLFC Estimate: 958 age 3 and older SRLFC

2013 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 and possession limit of 2 Chinook salmon



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

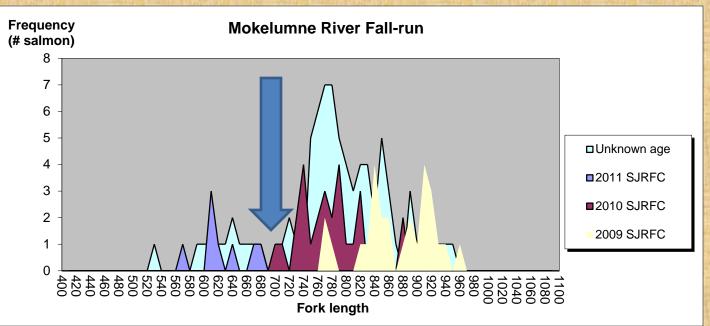


- Effort:
- Trips:
- Harvest:
- Harvest rate:

31,892 angler hours 5,695 angler trips 1,239 salmon 4 salmon per 100 angler hours

Mokelumne River Summary Statistics

- 30% Catch was of Hatchery Origin
 - 99% San Joaquin River Fall-run Chinook Salmon
 - 1% SRFC
- Fork Length Frequency Analysis
 - Grilse cutoff at 690mm or 23% grilse



• Final SJRFC Estimate: 958 adult, 247 grilse

Contact Information

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