

CENTRAL VALLEY ANGLER SURVEY: 2012 Recreational Harvest of Chinook Salmon

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2012 Central Valley Salmon Season



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

CENTRAL VALLEY ANGLER SURVEY



- Estimate angler effort targeting Chinook salmon
- Estimate harvest of Chinook salmon
- Estimate catch-per-unit-effort (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 2012 Central Valley Sport Fishery for Chinook Salmon*

- ***Effort:*** 1,480,412 angler hours
- ***Trips:*** 289,194 angling days
- ***Total catch:*** 117,076 salmon
- ***Harvest:*** 83,136 salmon
- ***Release:*** 33,940 salmon
- ***Pct retention:*** 71%
- ***Harvest rate:*** 6 salmon per 100 angler hours



* Based on fishery statistics for the American, Feather, Mokelumne and Sacramento rivers, July – December 2012.

Raw Statistics

- Contacted 10,253 fishing parties
- 4,580 salmon reported kept
- 4,043 Salmon observed
 - or 4.9% of the Estimated Harvest
- 966 adipose fin-clipped salmon
- 953 heads taken for CWT recovery, or 99%



Coded Wire Tag Recoveries

933 CWTs successfully recovered and read

- 38% Coleman National Fish Hatchery fall-run
- 20% Feather River Hatchery fall-run
- 19% Mokelumne River Hatchery fall-run*
- 16% Nimbus Hatchery fall-run
- 5% Coleman National Fish Hatchery late-fall-run
- 3% Feather River spring-run
- 2% 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

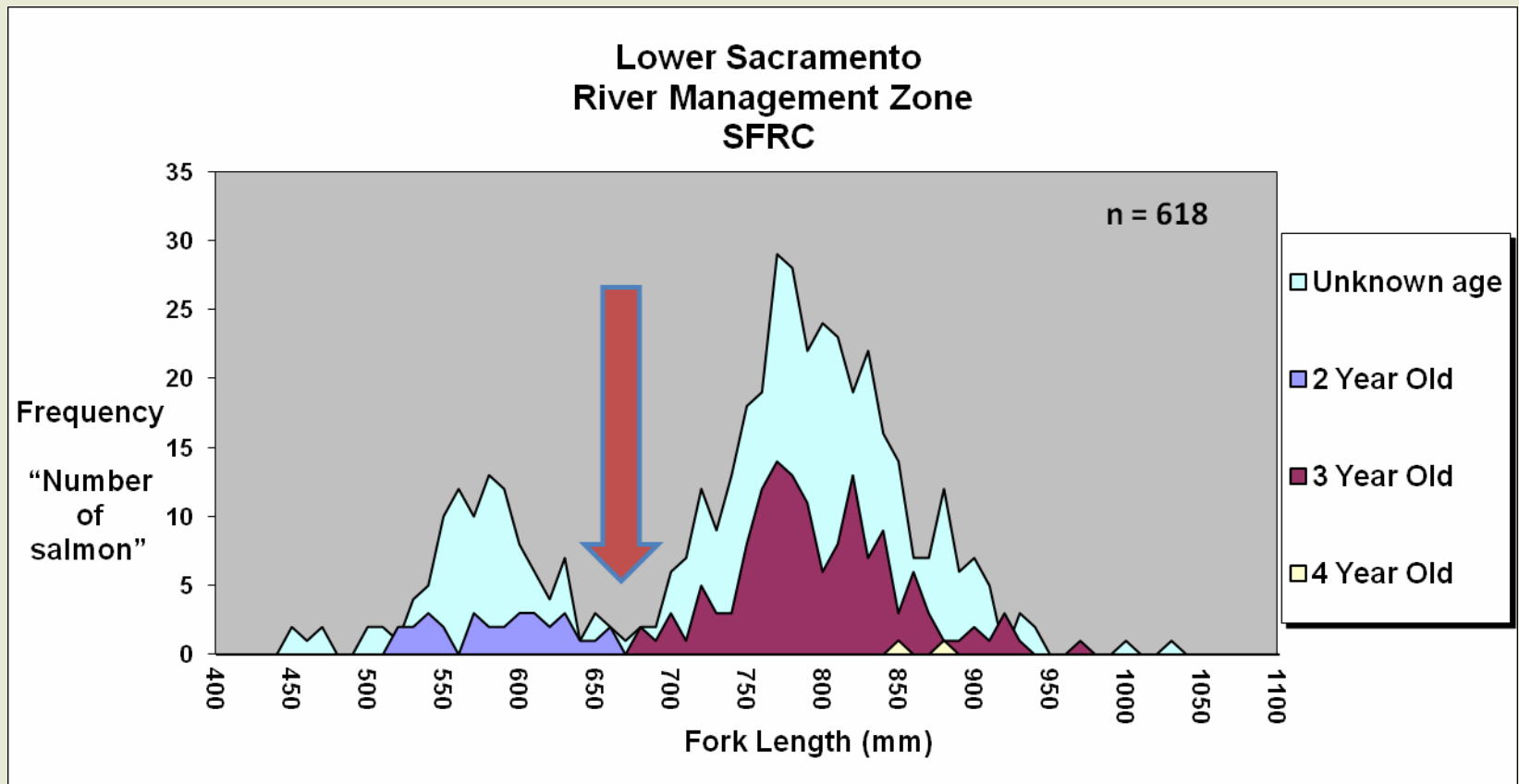
SRFC Inland Harvest

- 81,206 SRFC in 2012, or 98% 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 cut off criteria and composition varied between management zones

- 22% < 660mm Feather River
- 22% < 670mm Lower Sacramento River
- 13% < 680mm Upper Sacramento River
- 21% < 700mm American River



Final SRFC Harvest Estimate

Overall 19% of the harvest were grilse

- 62,189 adult SRFC
- 14,429 grilse SRFC

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