

CENTRAL VALLEY ANGLER SURVEY: 2019 Recreational Harvest of Chinook Salmon



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2019 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 31

From Live Oak to the Thermalito outfall

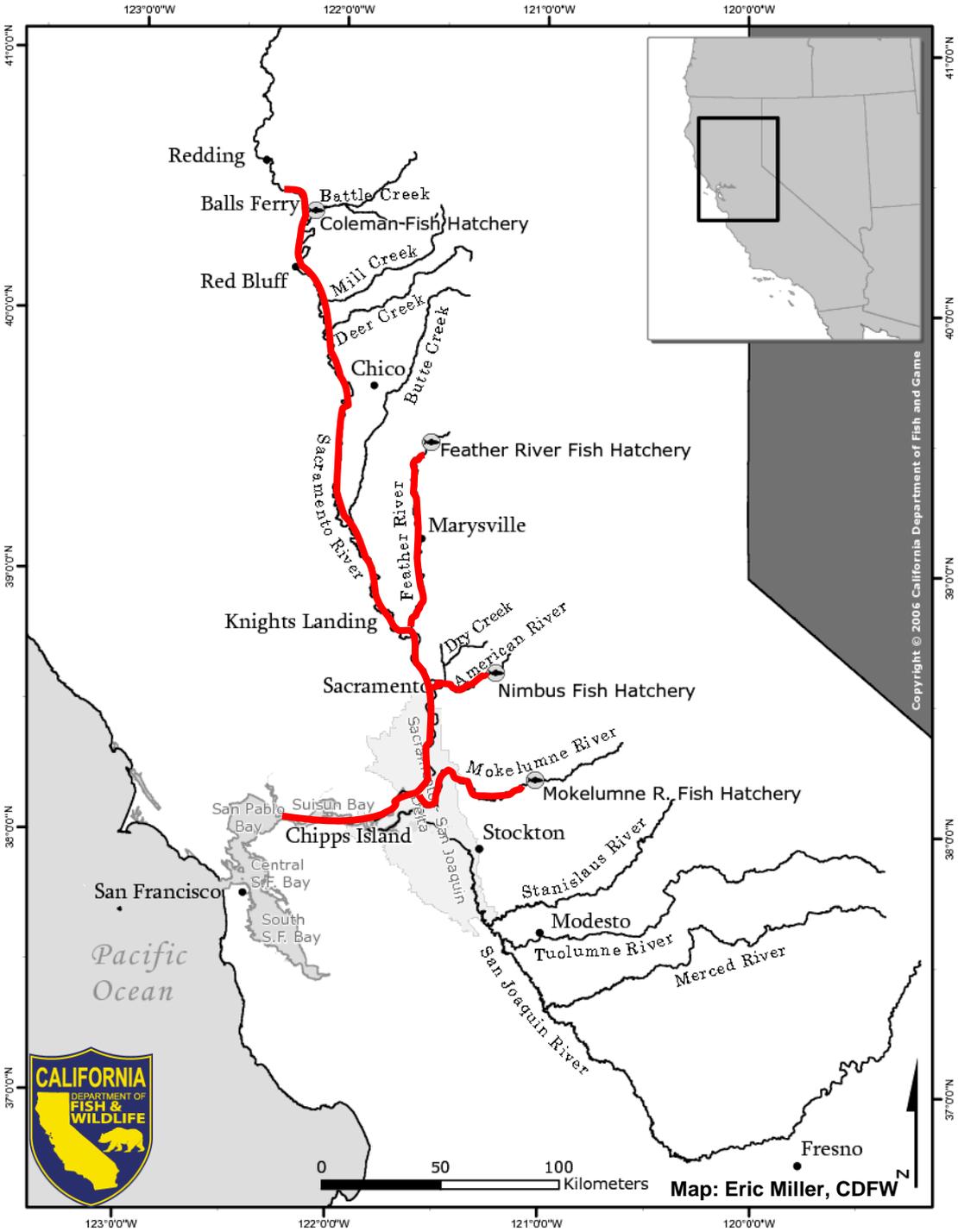
Low flow channel closed



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:

- 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 2019 Central Valley Sport Fishery for Chinook Salmon*

<i>Effort:</i>	892,901 angler hours
<i>Trips:</i>	214,214 angling days
<i>Total catch:</i>	33,347 salmon
<i>Harvest:</i>	30,612 salmon
<i>Released:</i>	2,735 salmon
<i>Pct. retention:</i>	92%
<i>Catch rate:</i>	3.7 salmon per 100 angler hours



* Based on fishery statistics for the American, Feather, Mokelumne and Sacramento rivers, July – December 2019.

Raw Statistics

Contacted over 7,097 fishing parties

2,383 salmon reported kept

2,195 salmon observed

- or 7.2% of the estimated harvest

423 Adipose fin-clipped, 19% of observed salmon

402 heads (95%) taken for CWT recovery



Coded Wire Tag Recoveries

391 CWTs (97%) successfully recovered and read

Percent	Count	
40%	156	Feather River Hatchery fall run
30%	117	Coleman National Fish Hatchery fall run
11%	41	Feather River Hatchery spring run
7%	28	Mokelumne River Hatchery fall run
7%	26	Coleman National Fish Hatchery late-fall run
5%	21	Nimbus Hatchery fall run
0%	2	Livingston Stone National Fish Hatchery winter run
0%	0	San Joaquin spring 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

Daily bag limit of 2 Chinook Salmon and 4 in possession

SRFC Inland Harvest

SRFC comprised 99% of all Chinook Salmon harvest in the Central Valley in 2019



Final SRFC Harvest Estimate

Nearly 33% of the harvest were grilse

20,307 adult

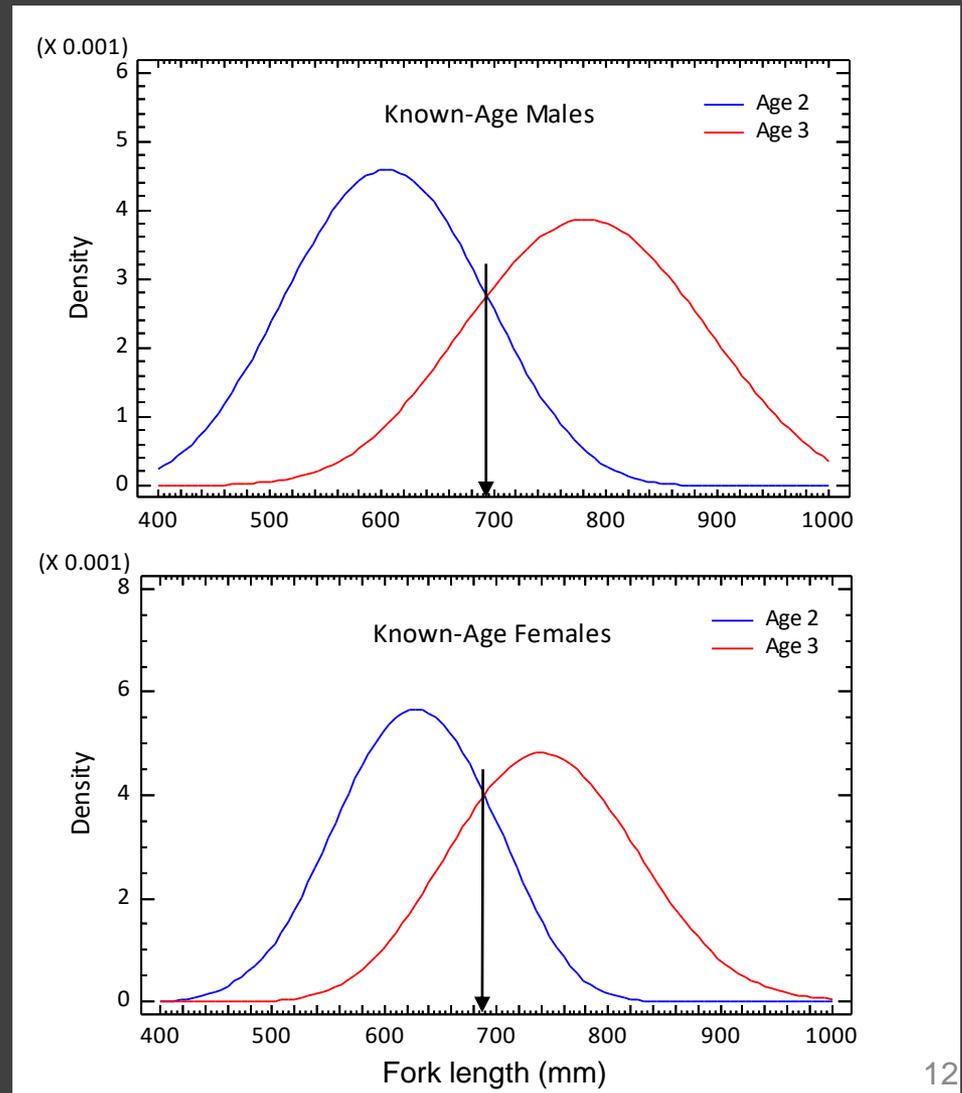
9,851 grilse

30,158 Total SRFC



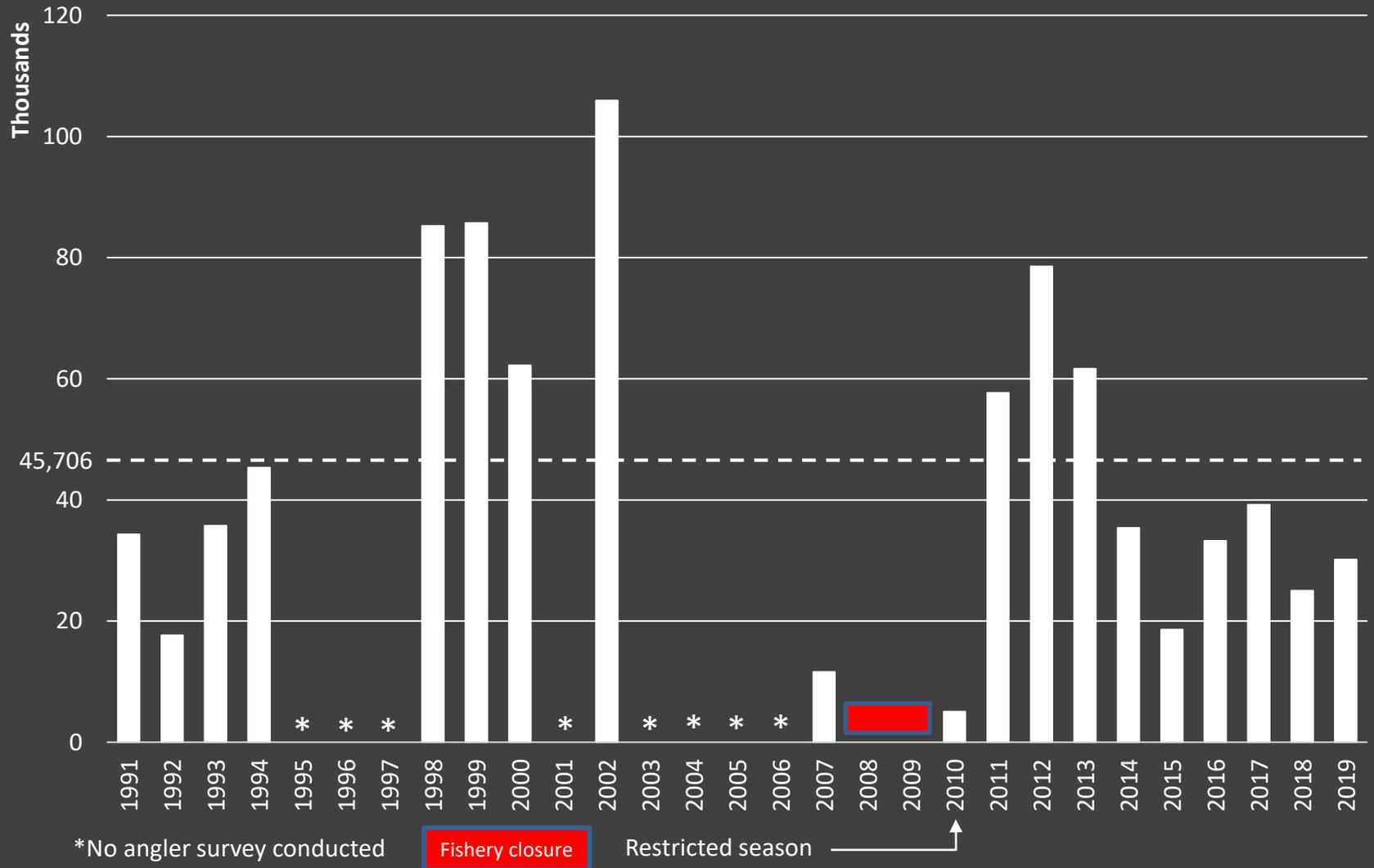
Grilse Cutoff Males vs. Females

- Males
 - FL cutoff of 694 mm
 - 40% Grilse
- Females
 - FL cutoff of 689 mm
 - 22% Grilse



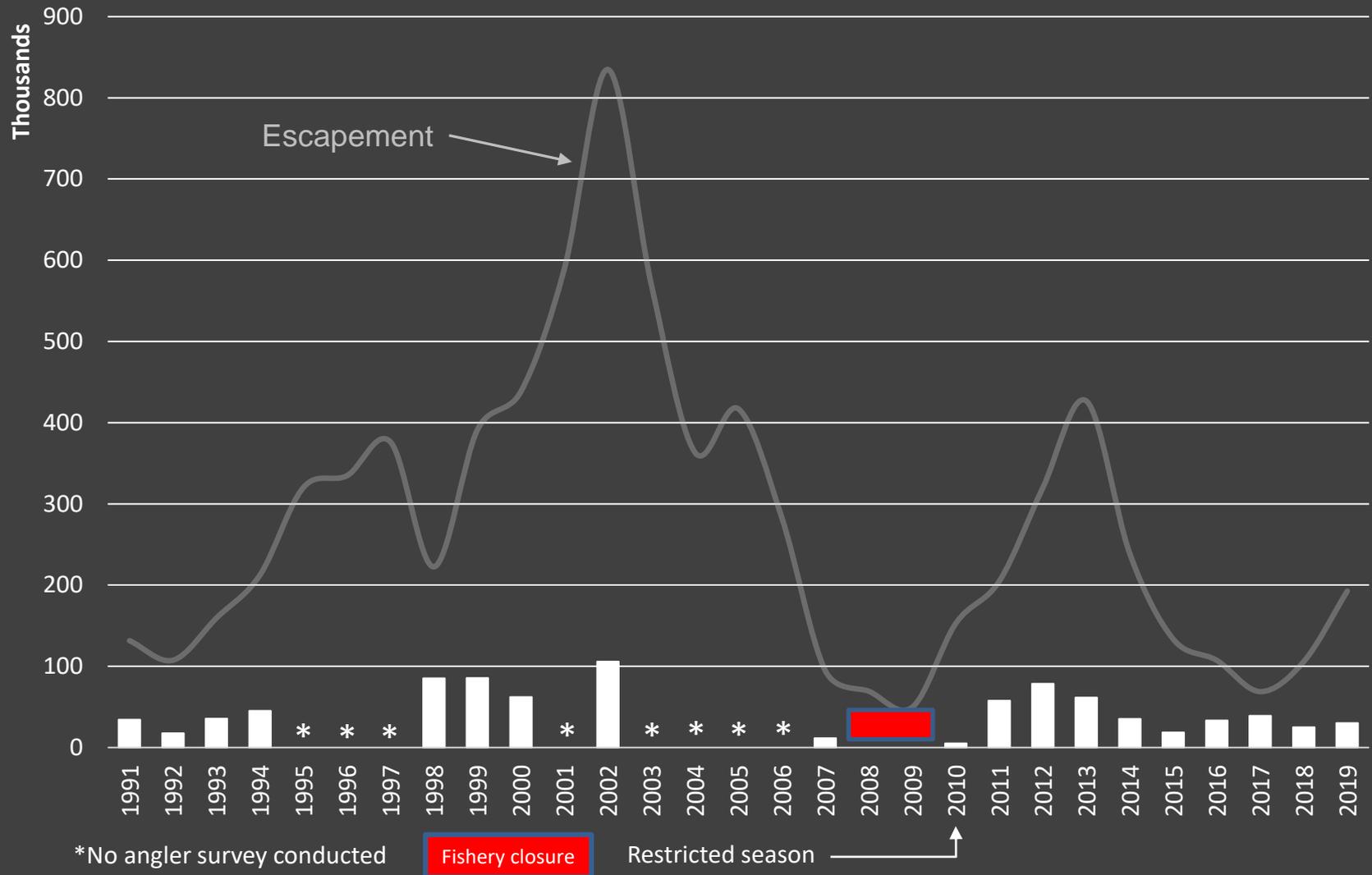
SRFC Harvest Trend

Grilse + Adults



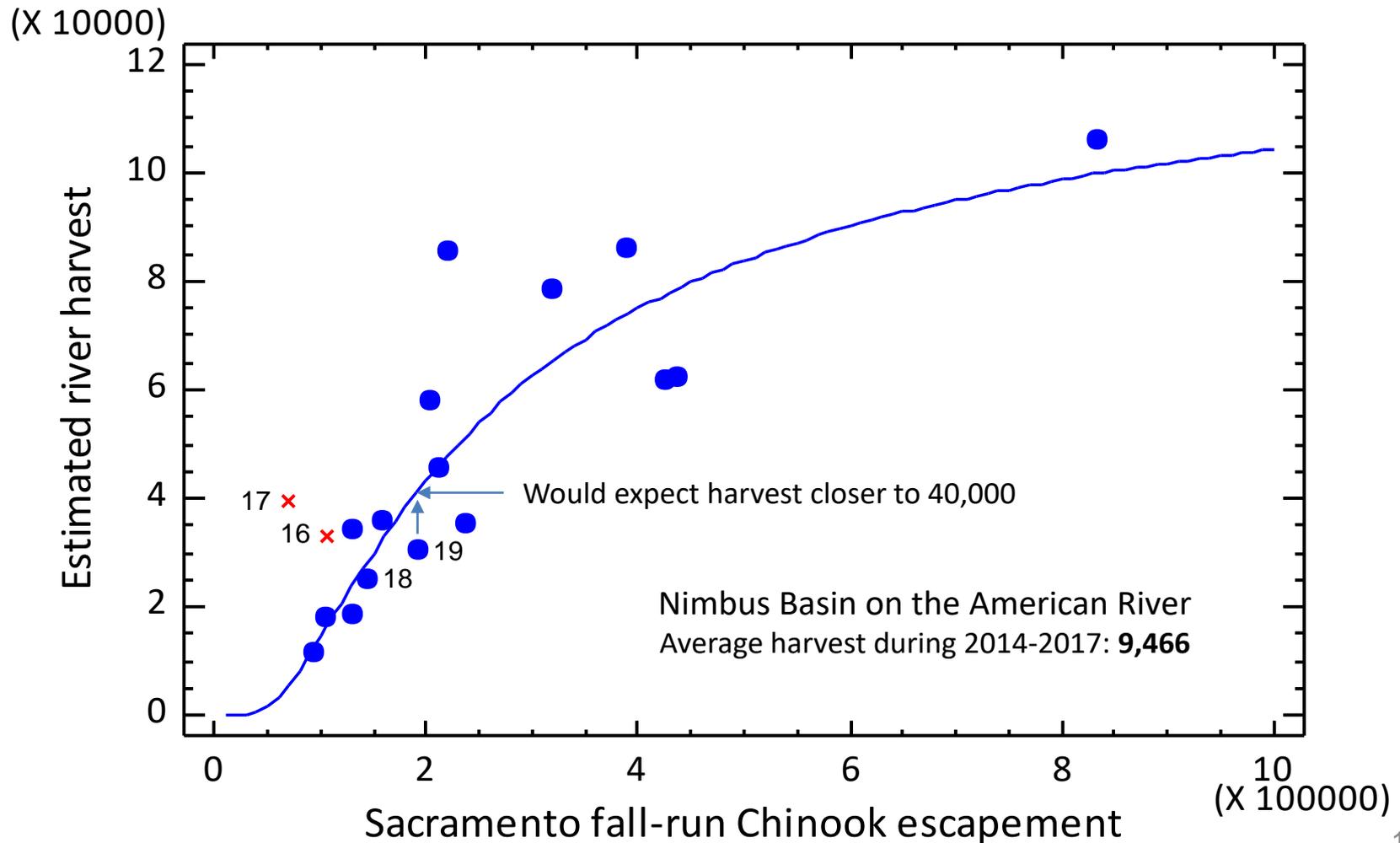
SRFC Harvest Trend

Grilse + Adults



River harvest was lower than expected in 2019 relative to escapement

River harvest = 30,158, Escapement = 192,476



2019 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:* 14,080 angler hours
- *Trips:* 3,378 angler trips
- *Catch rate:* 2.4 salmon per 100 angler hours
- *Harvest:* 336 salmon

2019 Mokelumne River Fall-Run Chinook Salmon Season

- Camanche Dam to Elliot Road
 - Open July 16 – October 15
- Elliot Road to Woodbridge Irrigation District Dam (including Lodi Lake)
 - Open July 16 – December 31
- Woodbridge Irrigation District Dam to the Lower Sacramento Road bridge
 - Closed to all fishing all year
- The Lower Sacramento Road bridge to the mouth
 - Open July 16 – December 16



*Daily bag limit of 2 Chinook salmon, possession limit of 4 salmon

Mokelumne River Fishery

San Joaquin Fall-Run Chinook Salmon (SJRFC)



- *Effort:* 14,930 angler hours
- *Trips:* 3,582 angler trips
- *Catch rate:* 0.8 salmon per 100 angler hours
- *Harvest:* 118 salmon

Hatchery vs. Natural Origin

Percent hatchery vs. natural origin by management zone¹

	Hatchery	Natural
American River	68%	33%
Lower Sacramento River	66%	34%
Feather River	63%	37%
Upper Sacramento River	56%	44%
Mokelumne River	0%	100%*
	*No coded-wire tag recoveries in the Mokelumne River	
System-wide	61%	39%

¹ Based on expansions of coded-wire tag recoveries.

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