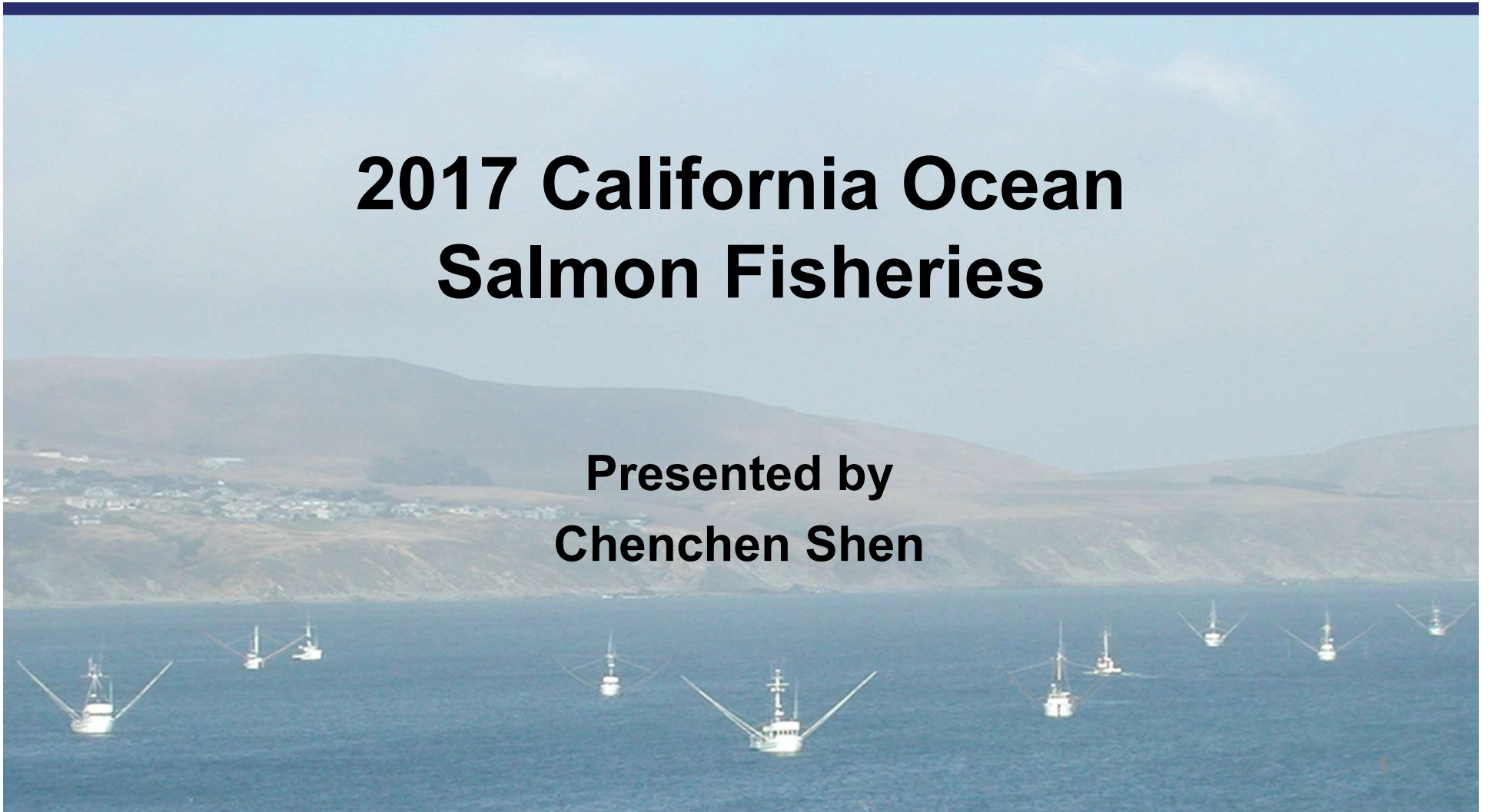




Department of Fish and Wildlife Ocean Salmon Project

2017 California Ocean Salmon Fisheries

**Presented by
Chenchen Shen**



Ocean Salmon Project Objectives

1. Estimate ocean salmon catch & fishing effort in CA for each management area by half month periods for both recreational and commercial fisheries
2. Determine the contribution rates of specific salmon stocks by fishery, time, and management area using coded-wire tag recoveries

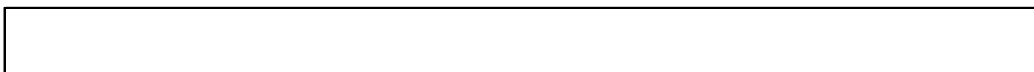


Recreational Salmon Fishery

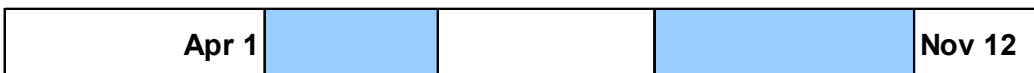


2017 California Recreational Season

Klamath Management Zone: OR/CA Border to Horse Mt. (closed)



Fort Bragg: Horse Mt. to Pt. Arena (151 days)



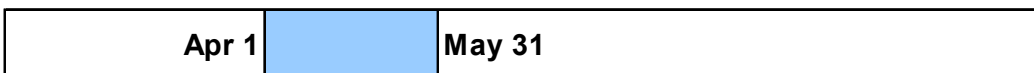
San Francisco: Pt. Arena to Pigeon Pt. (200 days)



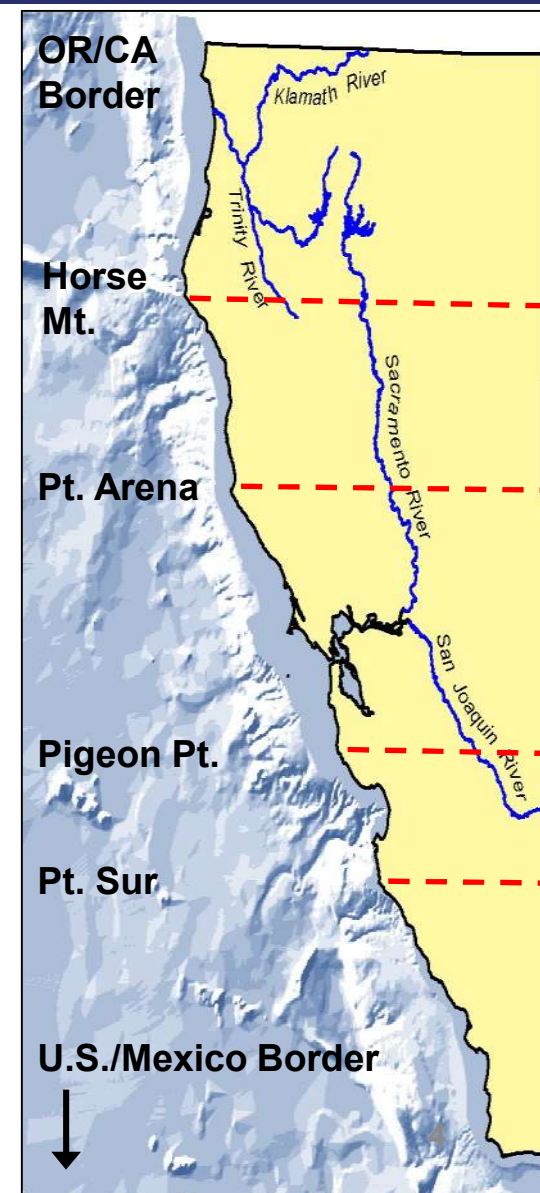
Monterey North: Pigeon Pt. to Pt. Sur (106 days)



Monterey South: Pt. Sur to U.S./Mexico Border (61 days)

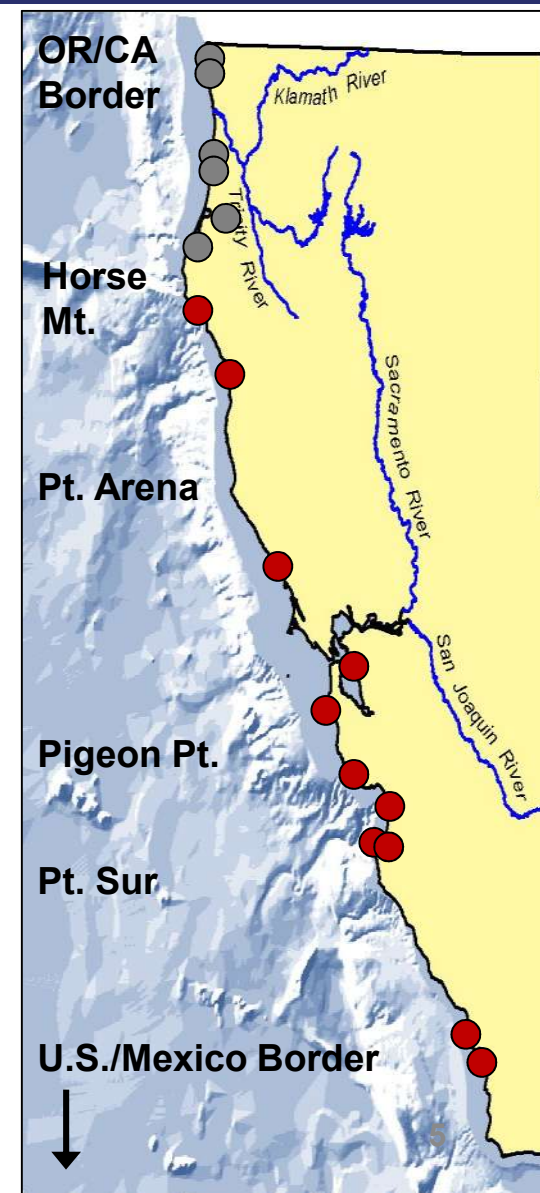


Minimum size 20" north of Pt. Arena and in SF after April 30
 Minimum size 24" south of Pigeon Pt. and in SF through April 30
 Bag limit: 2 fish per day



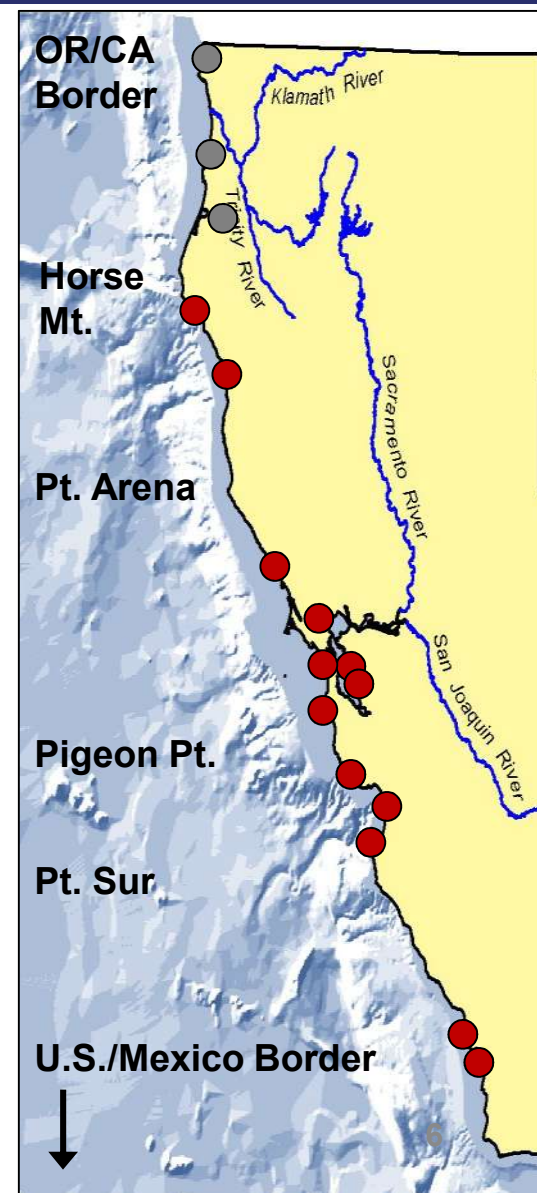
Sample Design – Private Skiff Fishery

- Sampling unit: skiff day (all skiff trips made at a sample site for an entire day)
- CRFS samples $\geq 20\%$ of all skiff days in each management area and period
 - 17 primary salmon skiff sample sites
 - Average 7 sample days per month at each site
 - 321 skiff days were sampled during the 2017 ocean salmon season
 - Random stratified sampling design using weekday and weekend/holiday strata
- Samplers observe, identify to species, and count all salmon landed
- Each salmon inspected for missing adipose fin
- Adipose fin-clipped salmon are set aside and the heads are collected for coded-wire tag extraction

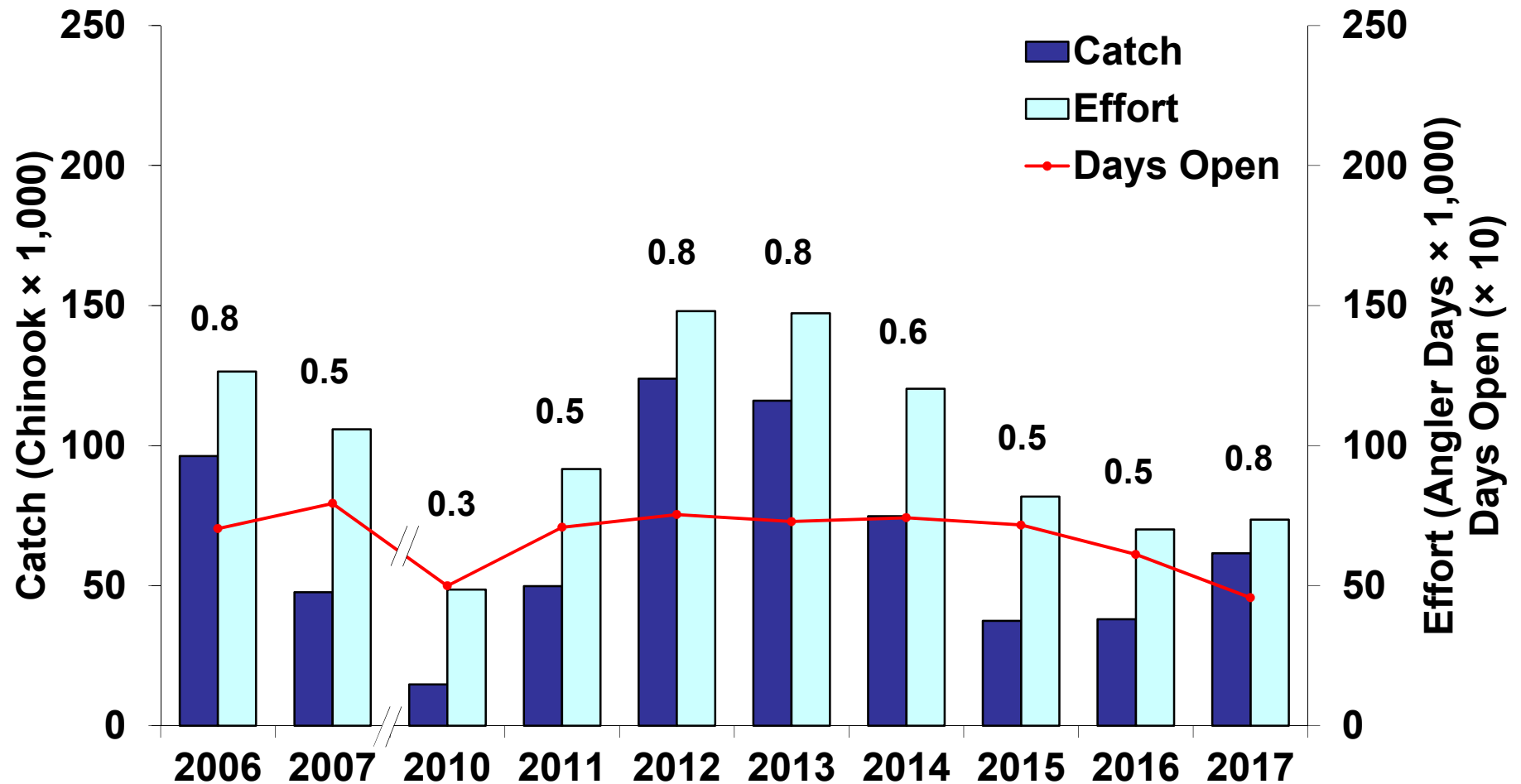


Sample Design – CPFV Fishery

- Sampling unit: each CPFV trip
- Sample $\geq 20\%$ of all salmon-targeting CPFV trips in each management area and period
 - 16 primary salmon CPFV sample sites
 - 90 CPFVs participated in the 2017 ocean salmon fishery
 - 904 salmon-targeting CPFV trips were sampled during the 2017 ocean salmon season
- Samplers observe, identify to species, and count all salmon landed
- Each salmon inspected for missing adipose fin
- Adipose fin-clipped salmon are set aside and the heads are collected for coded-wire tag extraction

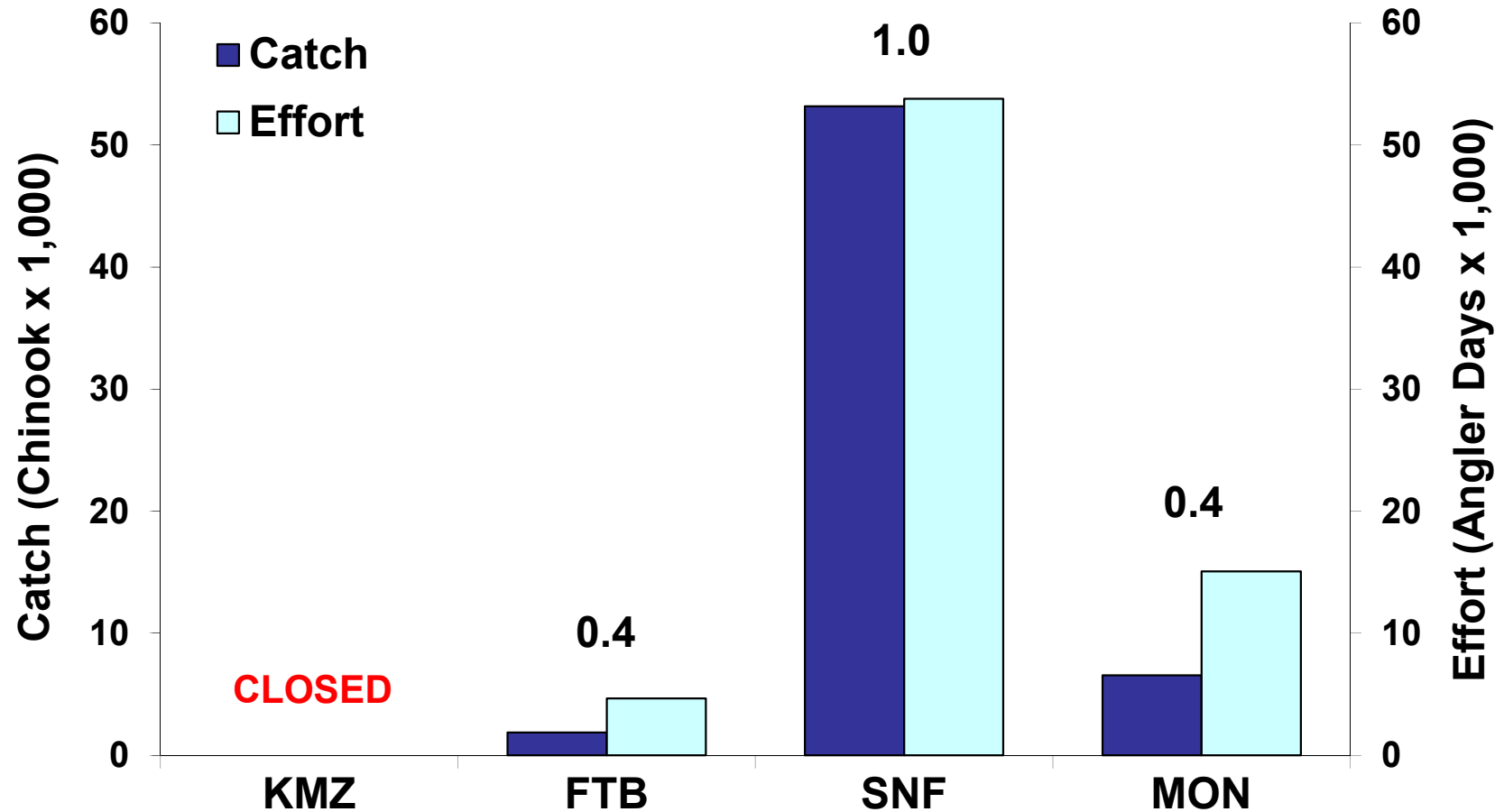


Recreational Catch and Effort, 2006-2017



Days Open = All four management areas combined (Monterey treated as one area)

2017 Recreational Catch and Effort by Management Area



<i>Days Open</i>	0	151	200	106	TOTAL
<i>Total Chinook</i>	0	1,886	53,176	6,554	61,616
<i>Angler Days</i>	0	4,678	53,799	15,075	73,552



Commercial Salmon Fishery

2017 California Commercial Season

Klamath Mgmt. Zone: OR/CA Border to Humboldt S. Jetty (closed)

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Fort Bragg: Horse Mt. to Pt. Arena (22 days)

		Sep 1-30, F-Tues Quota = 3,000
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San Francisco: Pt. Arena to Pigeon Pt. (69 days)

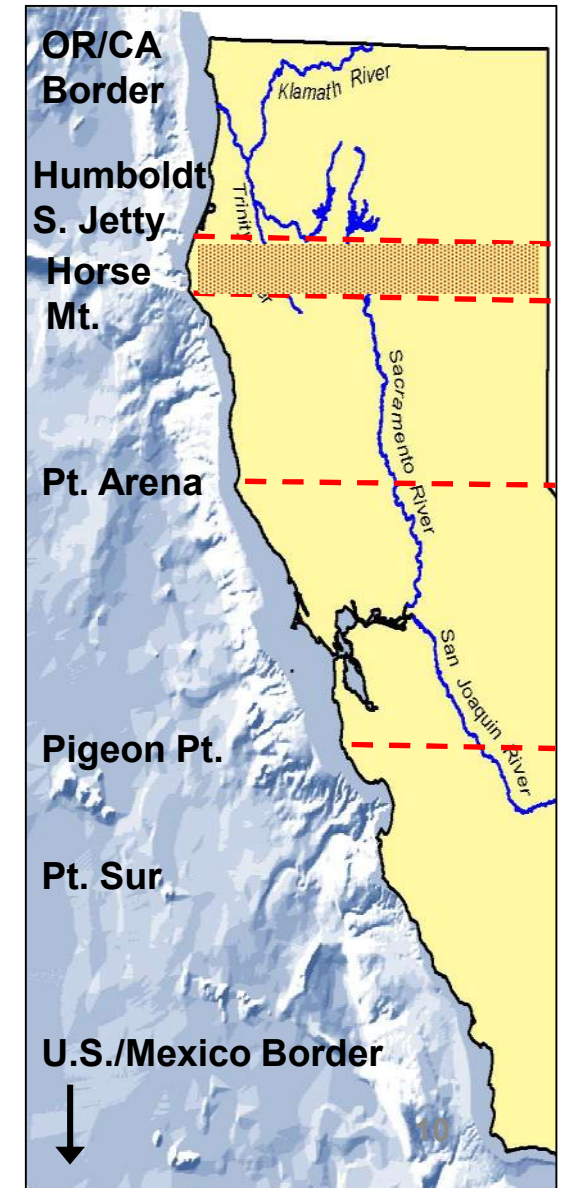
Aug 1		*	Oct 13
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Monterey: Pigeon Pt. to U.S./Mexico Border (61 days)

May 1		June 30
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* Oct 2-13 fishery: open Pt. Reyes to Pt. San Pedro Mon-Fri

Minimum size 27", except 26" in SF after Aug.

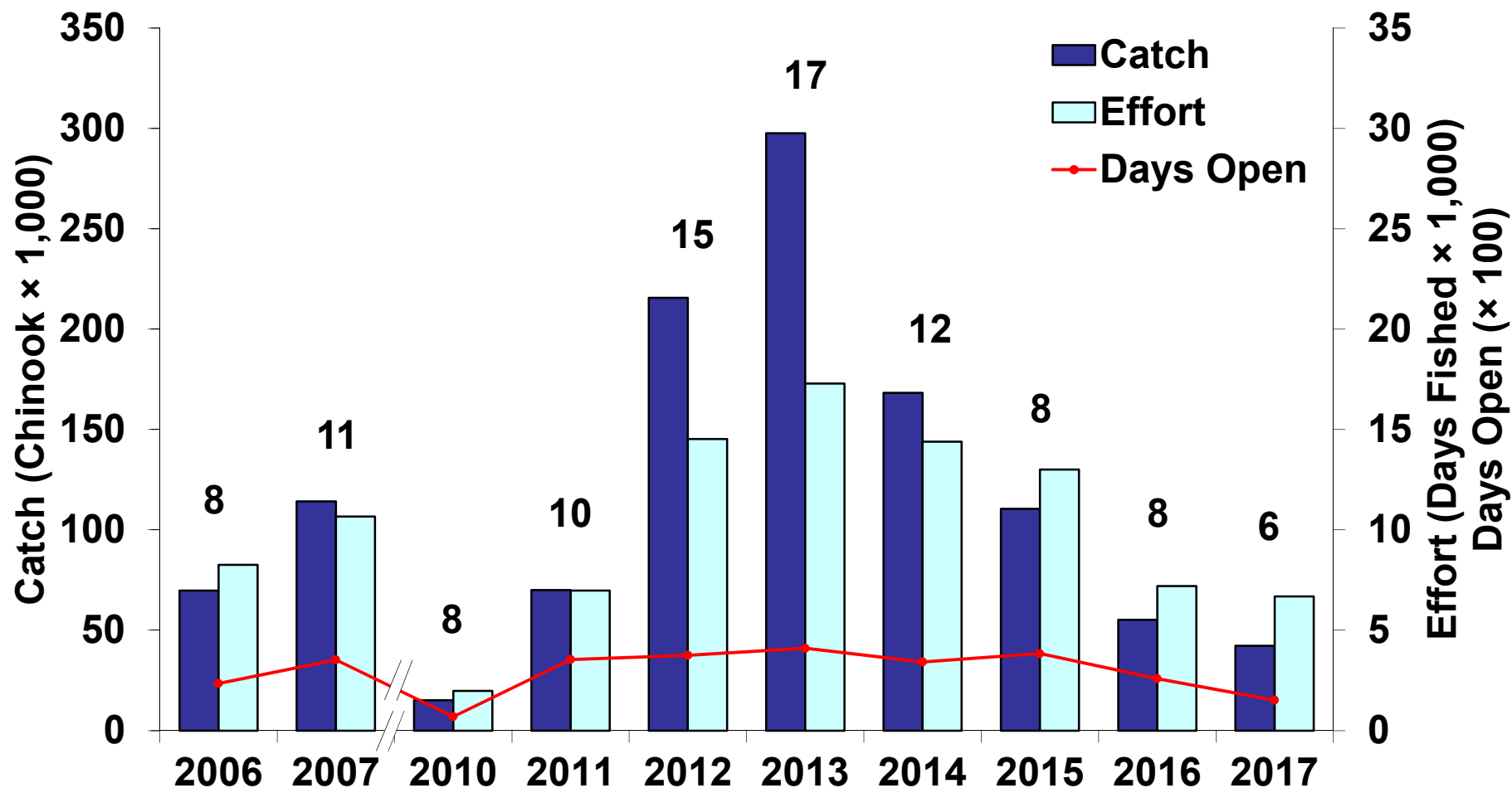


Sample Design – Commercial Fishery

- Sampling unit: each commercial landing
- Sample $\geq 20\%$ of all commercial landings by weight in each management area and period
- Samplers observe, identify to species, and count all salmon being offloaded
- Each salmon inspected for missing adipose fin
- Adipose fin-clipped salmon are set aside and the snouts are collected for coded-wire tag extraction

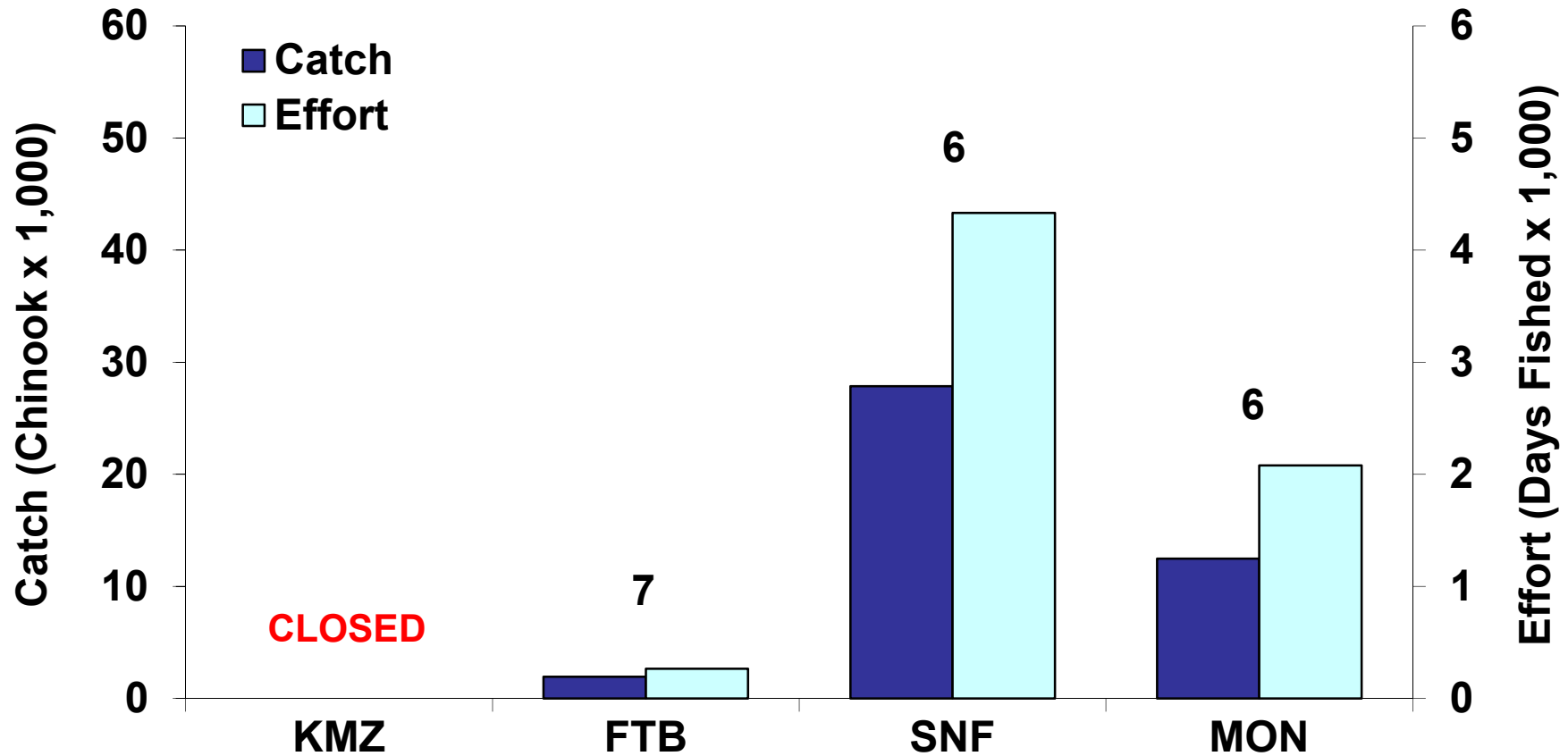


Commercial Catch and Effort, 2006-2017



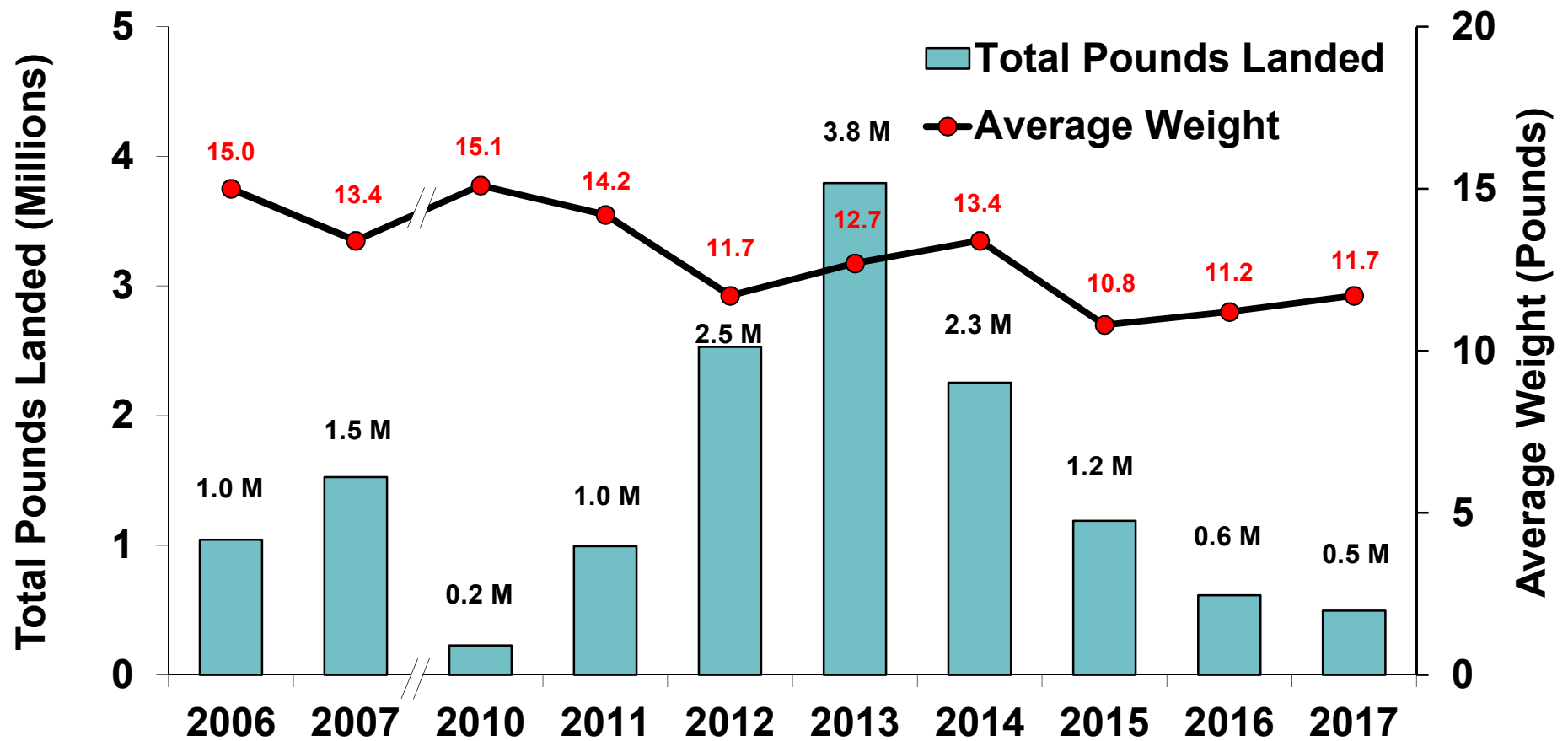
Days Open = All four management areas combined (Monterey treated as one area)

2017 Commercial Catch and Effort by Management Area

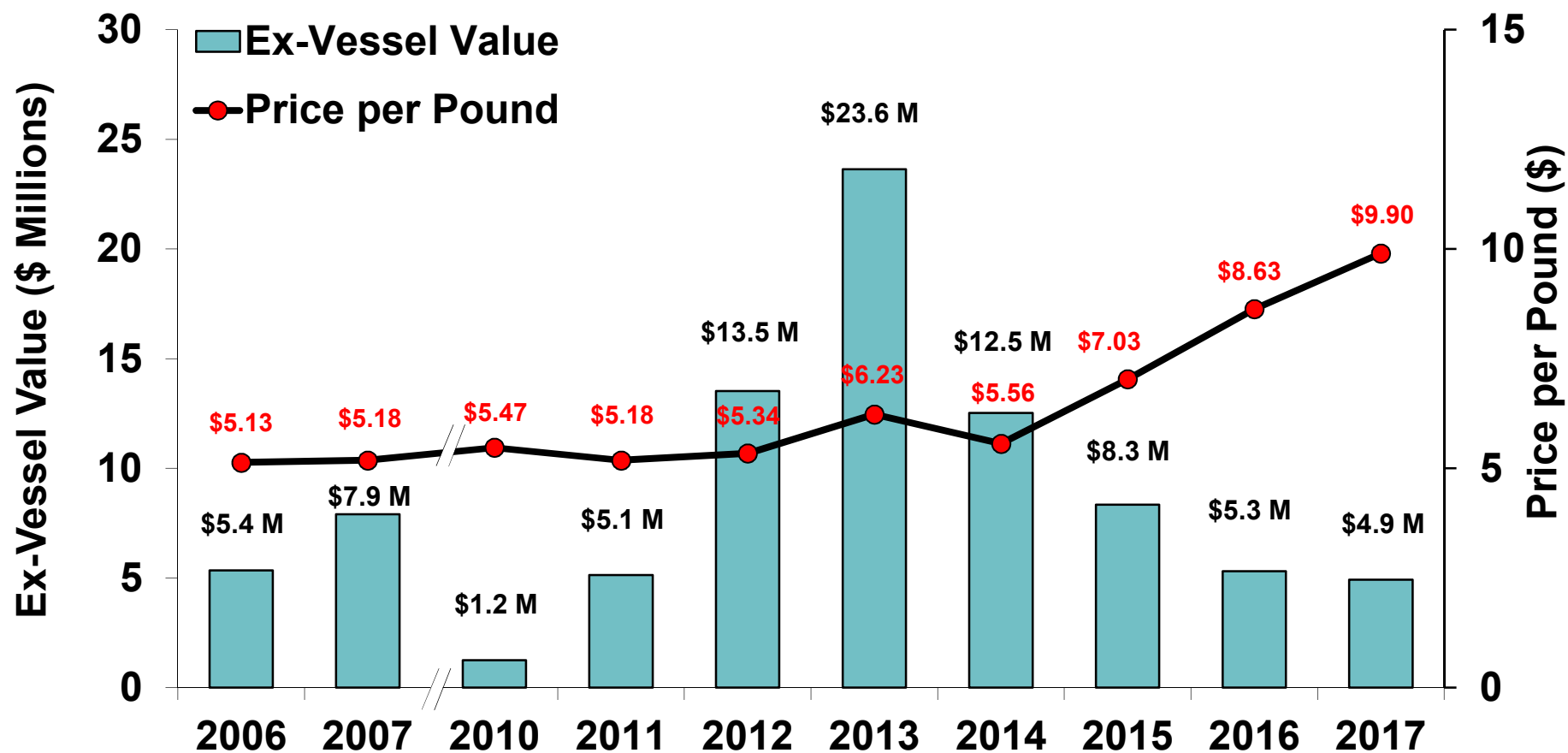


<i>Days Open</i>	0	22	69	61	TOTAL
<i>Total Chinook</i>	0	1,941	27,848	12,472	42,261
<i>Days Fished</i>	0	267	4,332	2,080	6,679

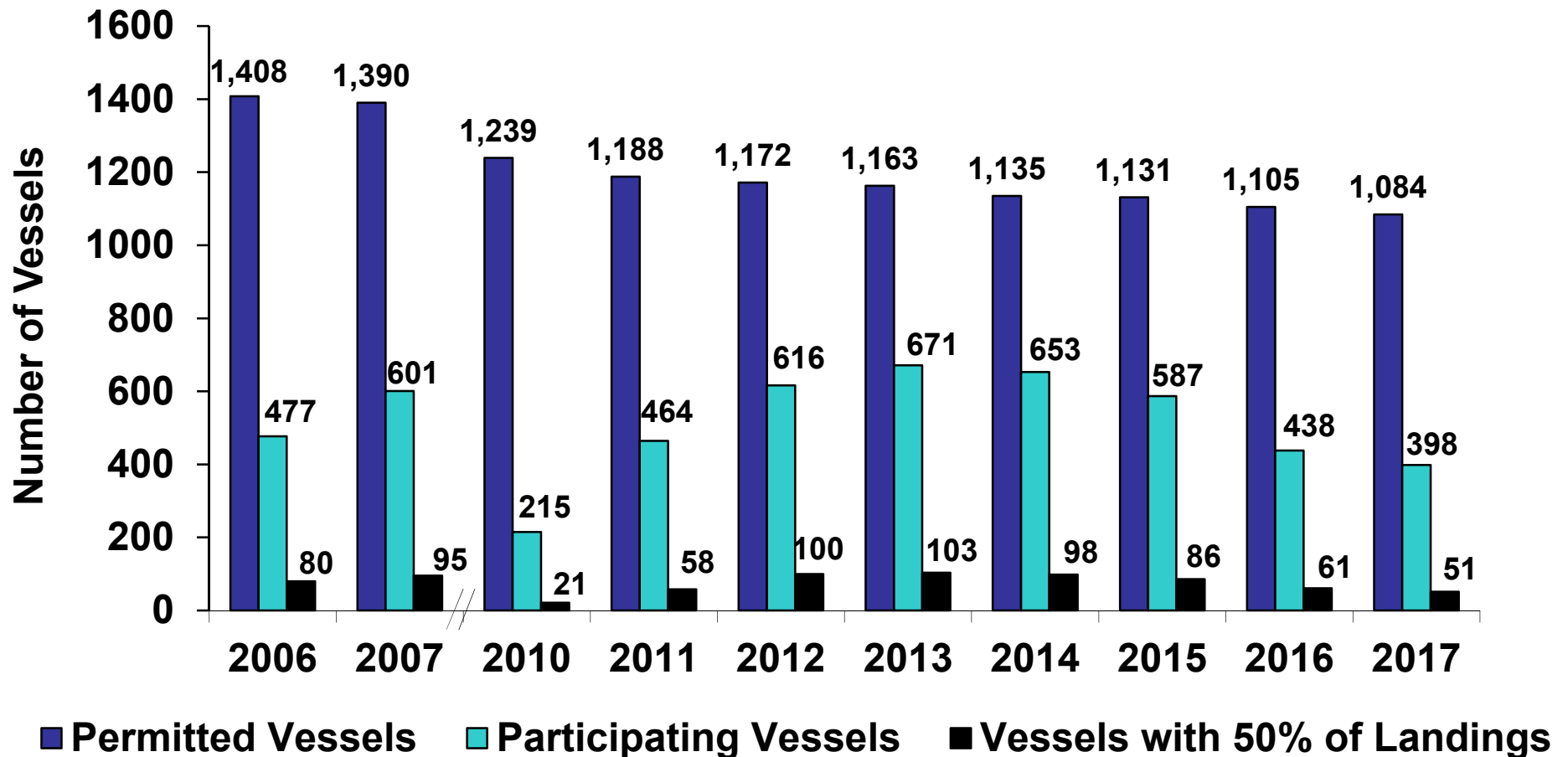
Total Commercial Pounds Landed and Average Weight, 2006-2017



Commercial Ex-Vessel Value and Price per Pound, 2006-2017



Number of Vessels with Landings Compared to Permitted Vessels, 2006-2017

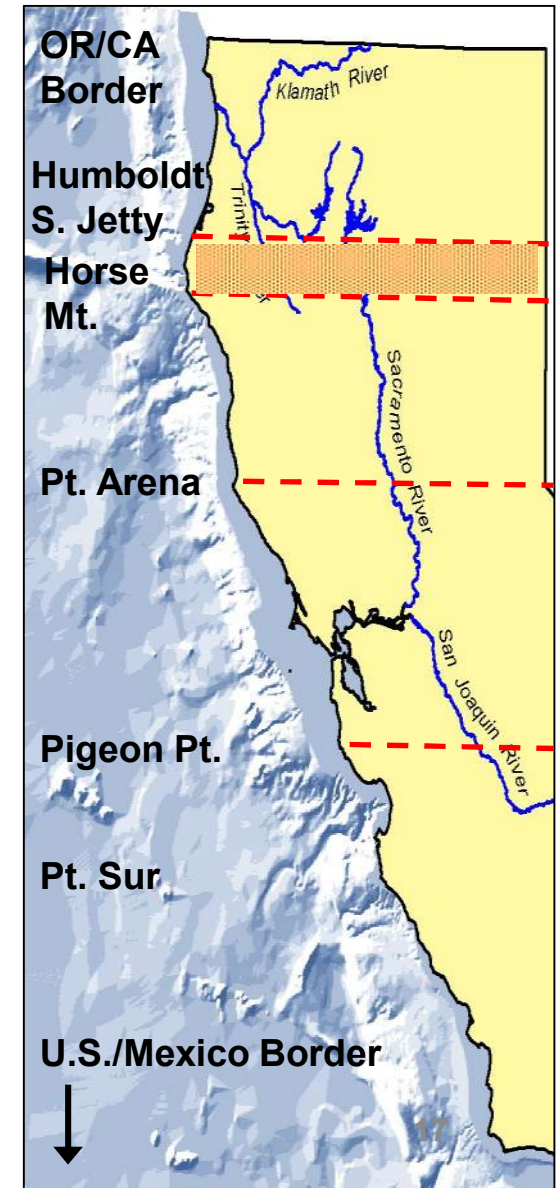


2017 Fort Bragg Management Area September Quota Fishery

Fort Bragg: Horse Mt. to Pt. Arena (22 days)

	Sep 1-30, F-Tues Quota = 3,000
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- Quota: 3,000 Chinook
- Catch: 1,941 Chinook
 - 85% landed in first period
- Landing limit: 60 Chinook/open period
- 12% of landings reached 60 Chinook
 - All in first period
- Total boats participating: 63
- Ex-vessel value: \$193,875
- Average price/lb: \$9.56

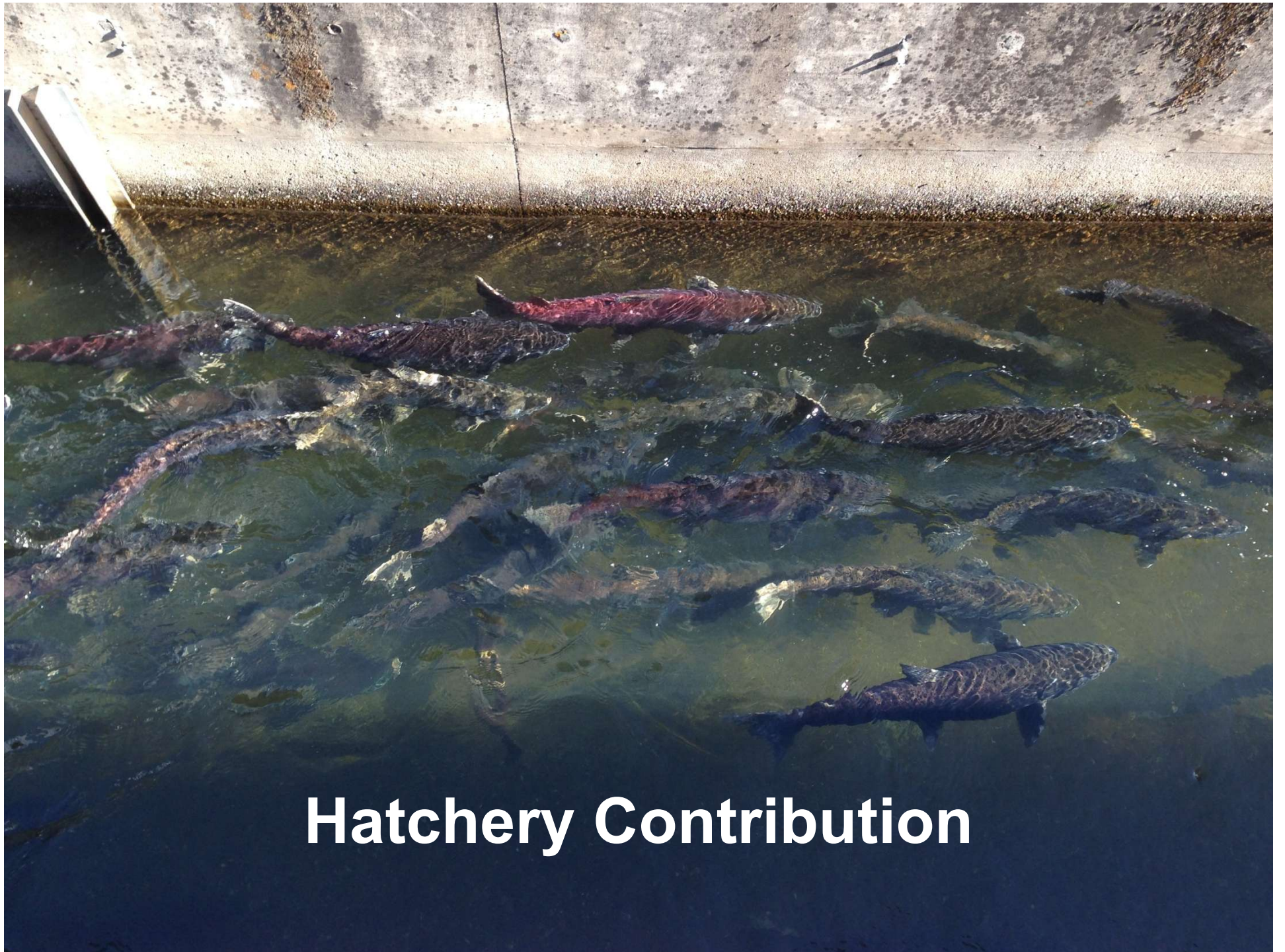


2017 Fall Ocean Fisheries Impacts on Age-4 Klamath River Fall Chinook

Area	Recreational	Commercial
Northern Oregon	0	0
Coos Bay	0	0
KMZ - Oregon	0	0
KMZ - California	-	-
Fort Bragg	0	139
San Francisco	0	31
Monterey	0	-
Total	0	170

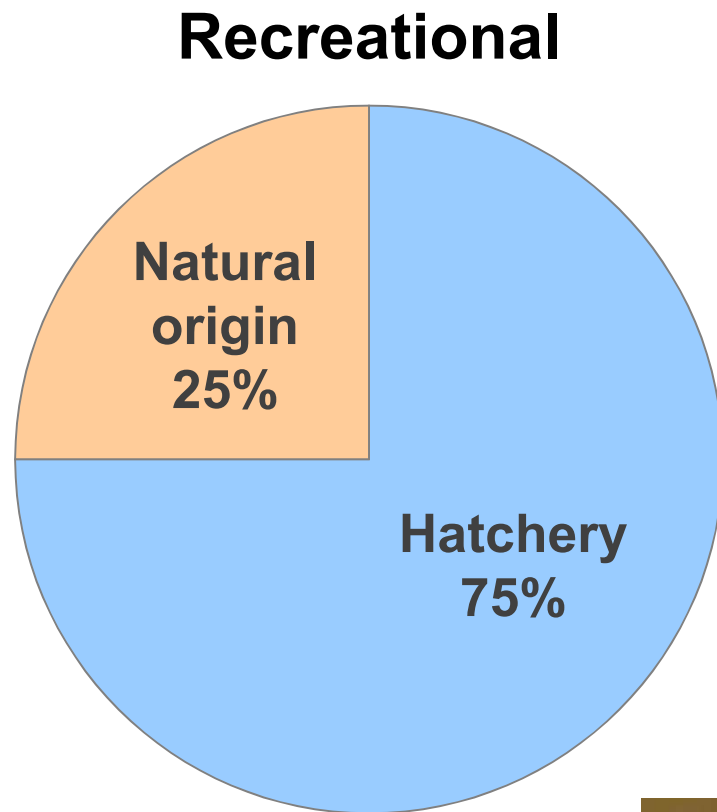
**0.6% age-4 ocean harvest rate in fall fisheries,
which will be deducted from the 16% allowable
ocean harvest rate when determining the 2018
season structure**



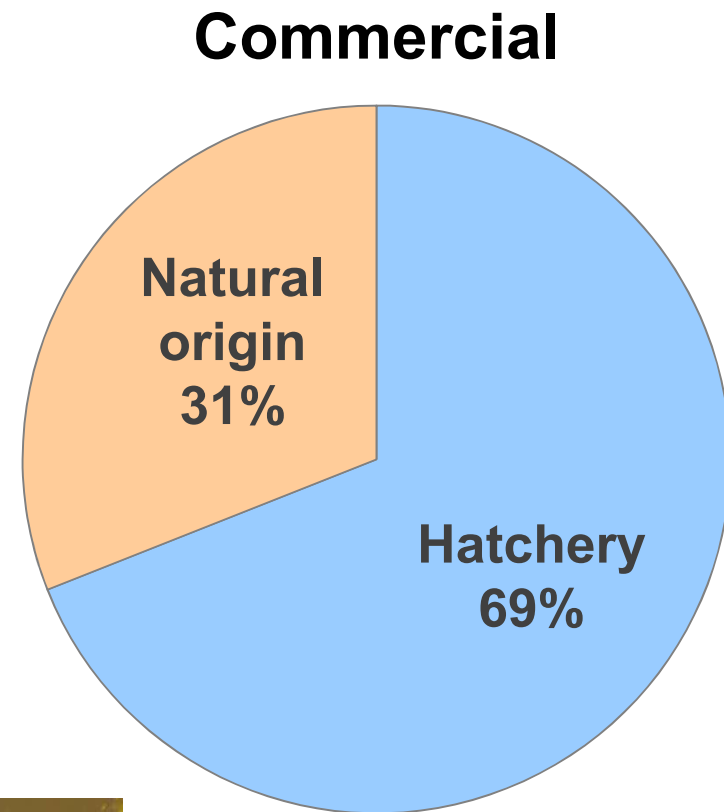


Hatchery Contribution

Hatchery Contribution to 2017 CA Ocean Fisheries

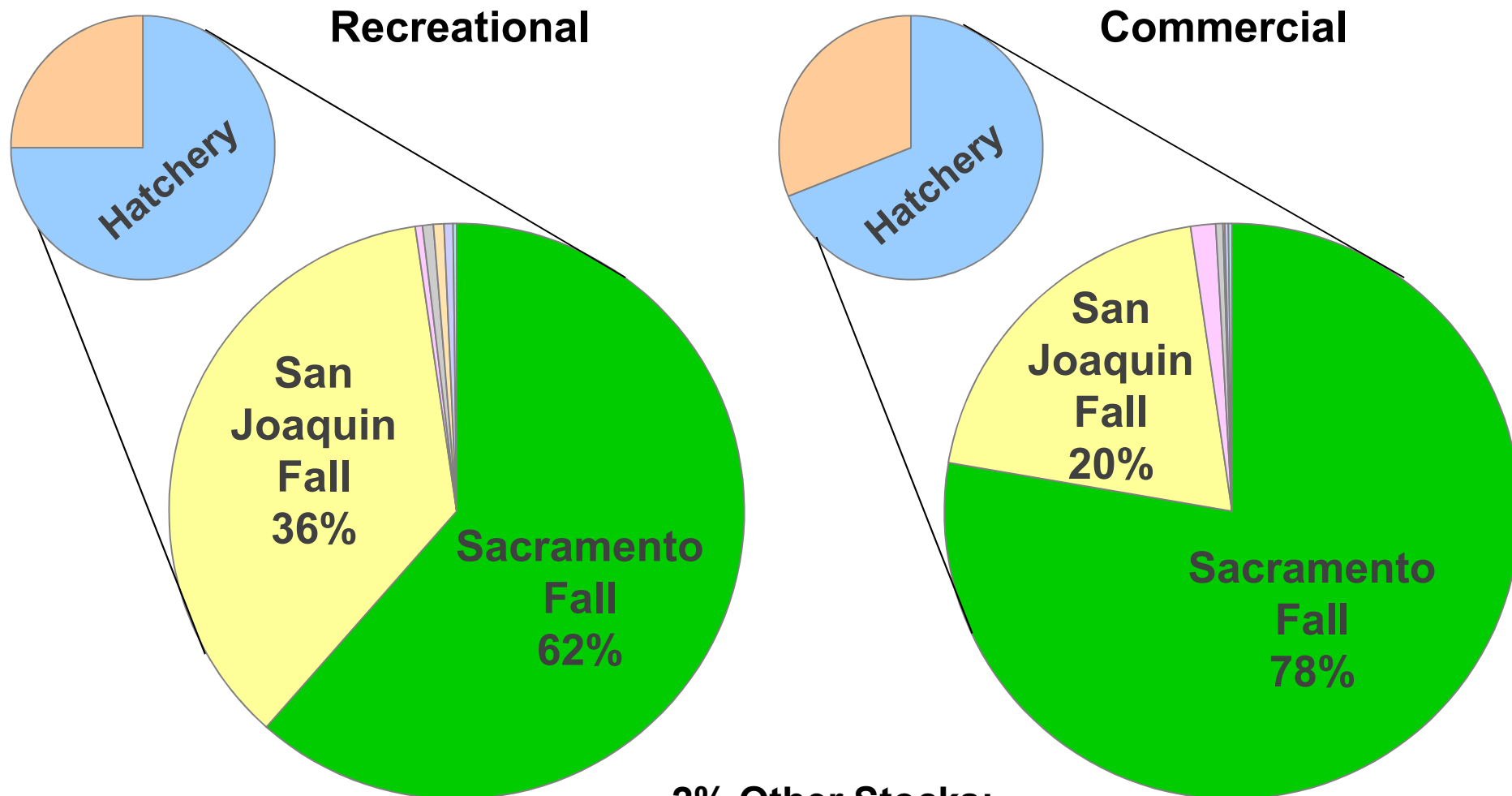


N = 4,331 CWTs



N = 2,692 CWTs

Hatchery Contribution to 2017 CA Ocean Fisheries

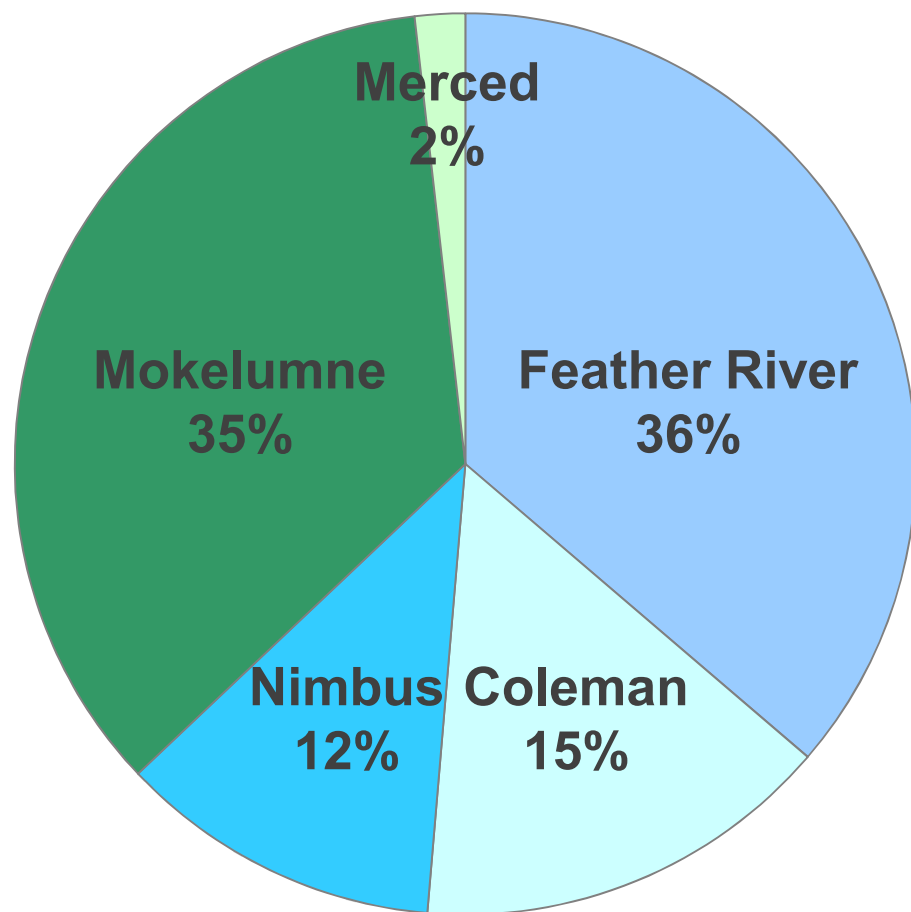


2% Other Stocks:

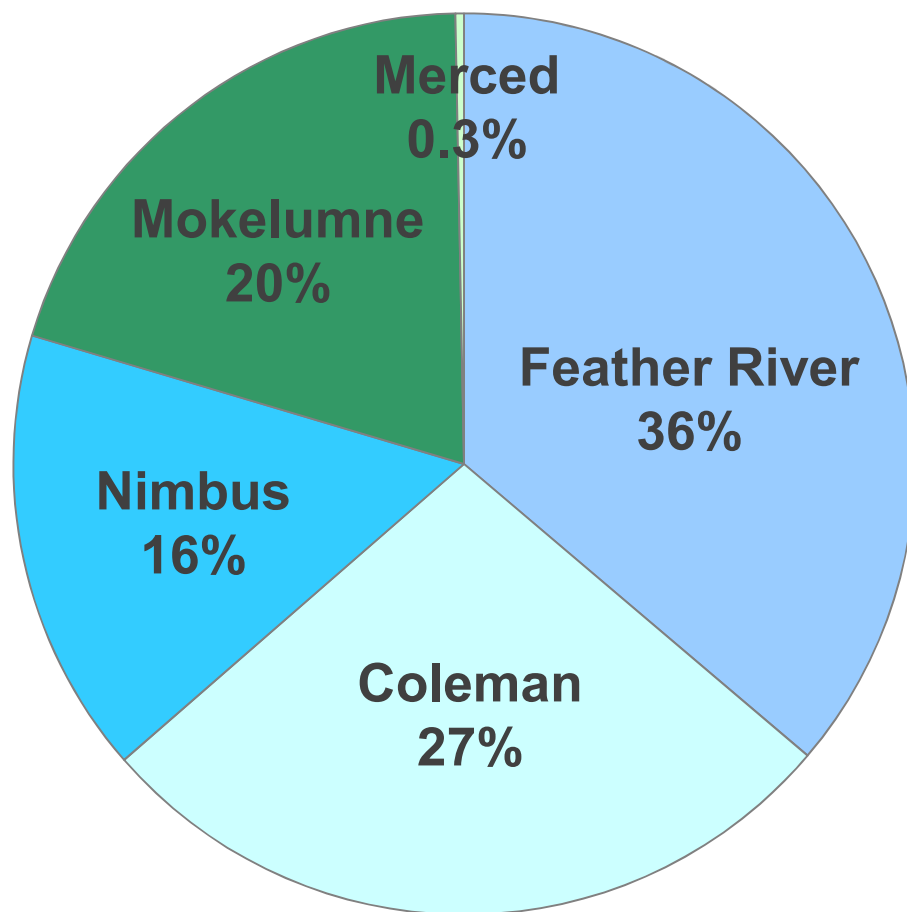
Klamath Fall (0.8%), Central Valley Late-Fall (0.5%),
Central Valley Spring (0.4%), Sacramento Winter (0.4%), Other (0.2%)

Hatchery Contribution to 2017 CA Ocean Fisheries

**Recreational
Central Valley fall Chinook**



**Commercial
Central Valley fall Chinook**





Department of Fish and Wildlife Ocean Salmon Project

Thank You



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