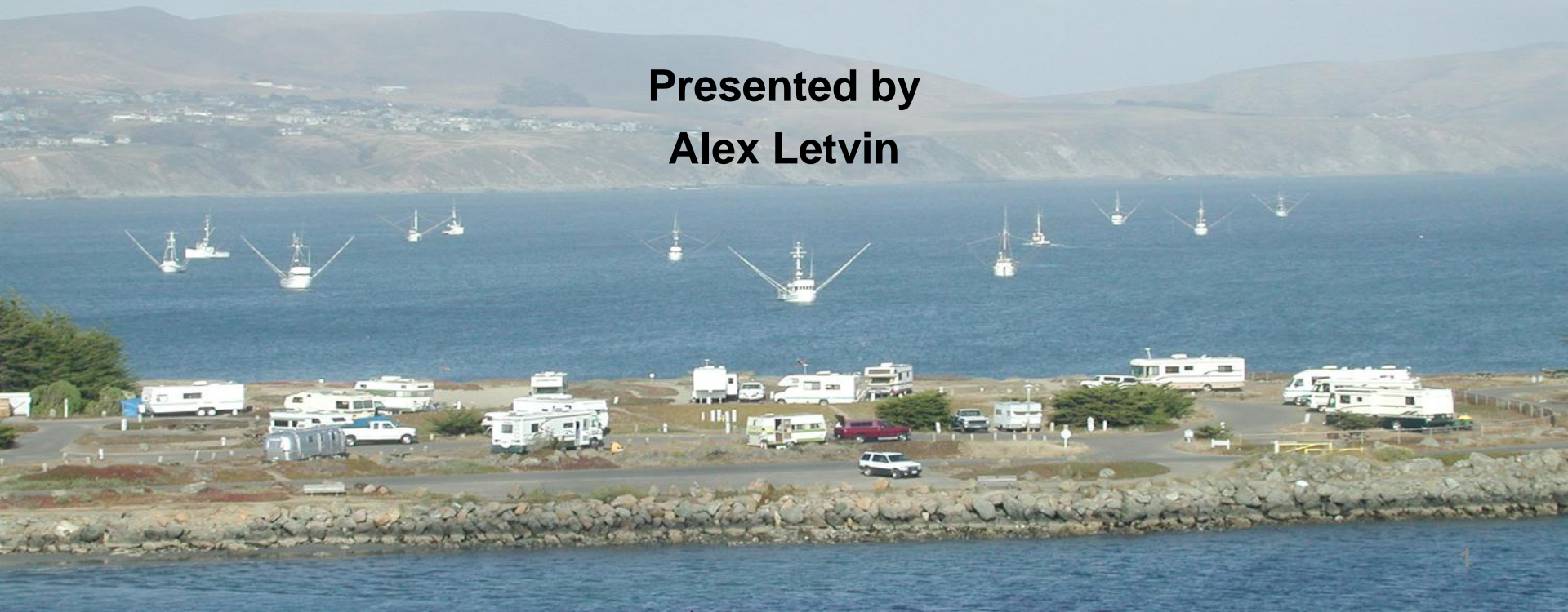




Department of Fish and Wildlife Ocean Salmon Project

2015 California Ocean Salmon Fisheries

Presented by
Alex Letvin



Ocean Salmon Project Objectives

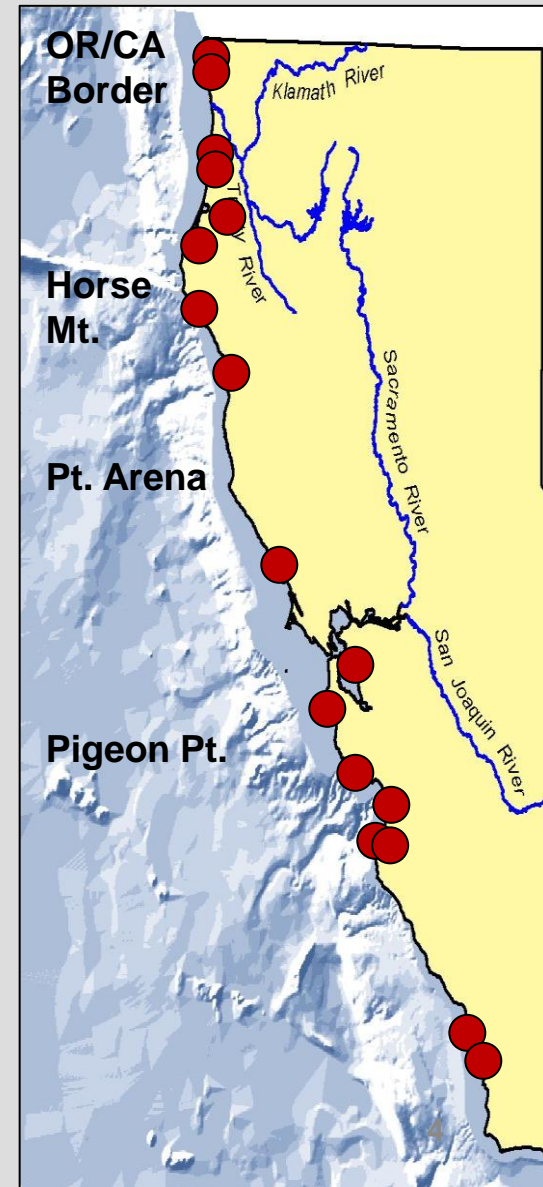
1. Estimate salmon harvest & fishing effort for each management area by half month periods for all California ocean salmon fisheries
2. Determine contribution rates of specific salmon stocks by age using coded-wire tag recoveries by fishery, time, and management area

Recreational Salmon Fishery



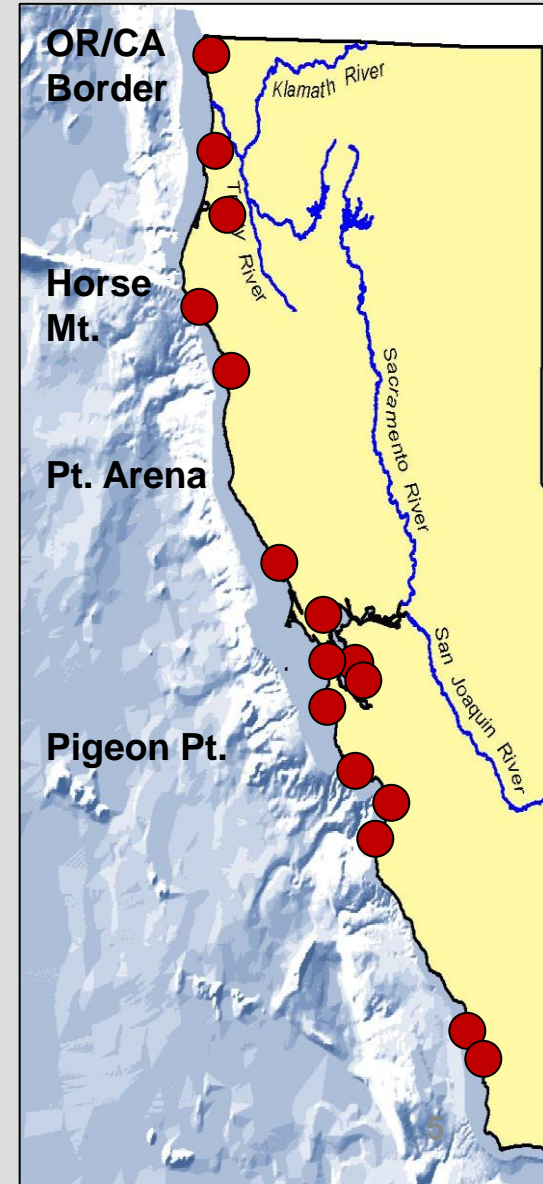
Sample Design – Private Skiff Fishery

- Random stratified sampling design using weekday and weekend/holiday strata (i.e., skiff days)
- Sampling unit: 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
 - 617 skiff days sampled during the 2015 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



Sample Design – CPFV Fishery

- **Commercial Passenger Fishing Vessels (CPFV)**
 - Sampling unit: each CPFV trip
 - Sample $\geq 20\%$ of all salmon-targeting CPFV trips in each management area and period
 - Approximately 100 CPFVs target salmon at 16 primary sample sites
 - 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



2015 California Recreational Season

Klamath Management Zone: OR/CA Border to Horse Mt. (130 days)

May 1		Sep 7
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Fort Bragg: Horse Mt. to Pt. Arena (219 days)

Apr 4		Nov 8
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San Francisco: Pt. Arena to Pigeon Pt. (211 days)

Apr 4		Oct 31
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Monterey North: Pigeon Pt. to Pt. Sur (157 days)

Apr 4		Sep 7
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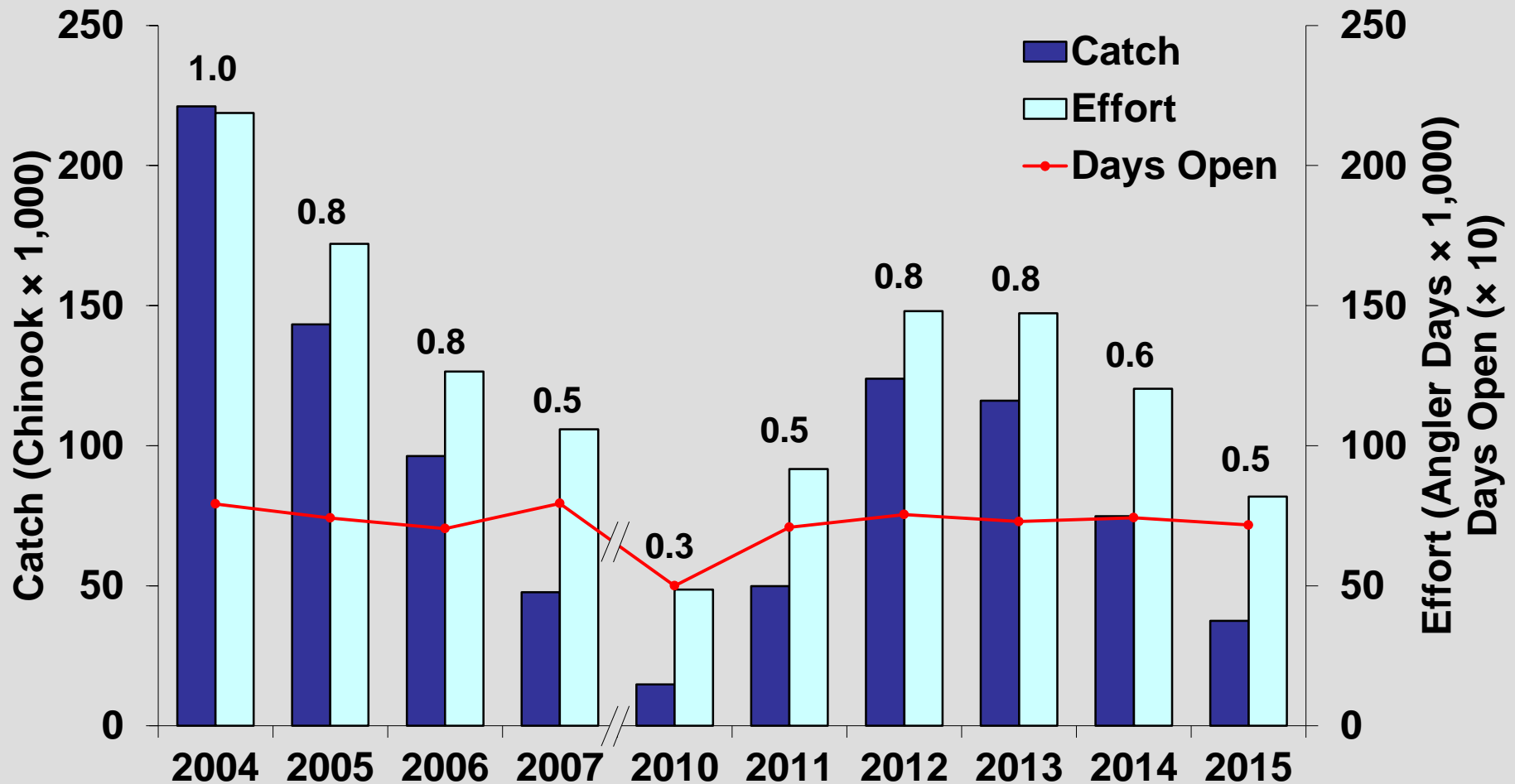
Monterey South: Pt. Sur to U.S./Mexico Border (107 days)

Apr 4		Jul 19
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Minimum size limit 20", except 24" in San Francisco through April
and in Monterey areas through May; 2 fish per day

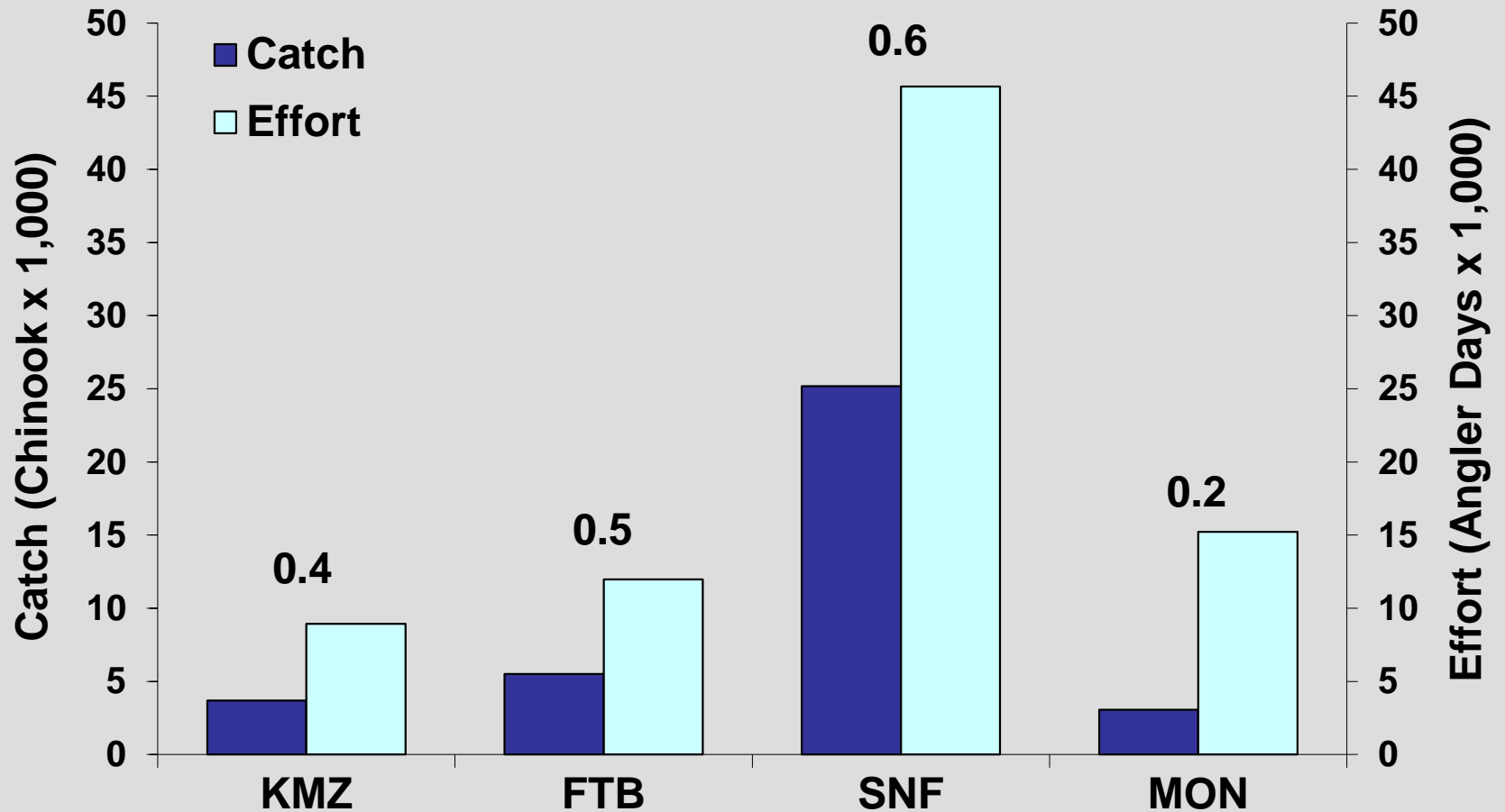


Recreational Catch and Effort, 2004-2015



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

2015 Recreational Catch and Effort by Management Area



<i>Days Open</i>	130	219	211	157	TOTAL
<i>Total Chinook</i>	3,690	5,496	25,184	3,071	37,441
<i>Angler Days</i>	8,939	11,971	45,658	15,215	81,783



Commercial Salmon Fishery

Sample Design – Commercial Fishery

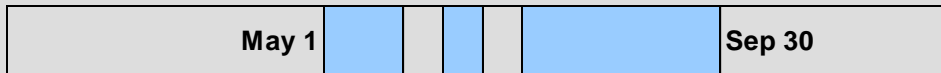
- **Sample $\geq 20\%$ of all landings by weight in each management area and period**
- **Sampling unit: each commercial landing**
- **Samplers observe, identify to species, and count all salmon being offloaded**
- **Each salmon inspected for missing adipose fin and all marked fish are set aside and the heads are taken for coded-wire tag recovery**
- **Determine average weight and days fished from sampled landings by catch area and sample period**

2015 California Commercial Season

Klamath Mgmt. Zone: OR/CA Border to Humboldt S. Jetty (18 days)



Fort Bragg: Horse Mt. to Pt. Arena (123 days)



San Francisco: Pt. Arena to Pigeon Pt. (149 days)



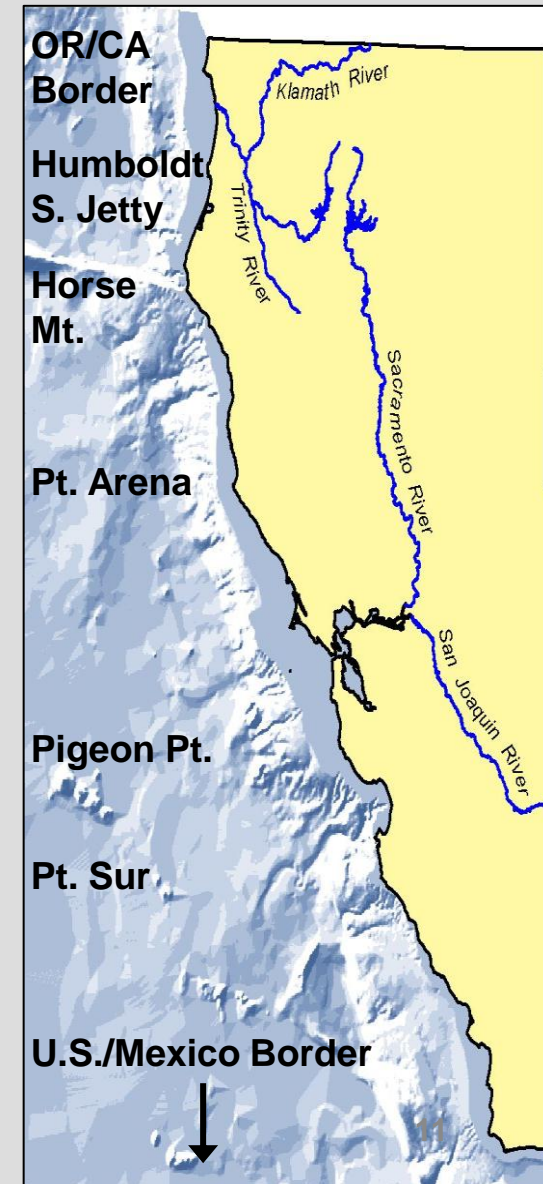
Monterey North: Pigeon Pt. to Pt. Sur (94 days)



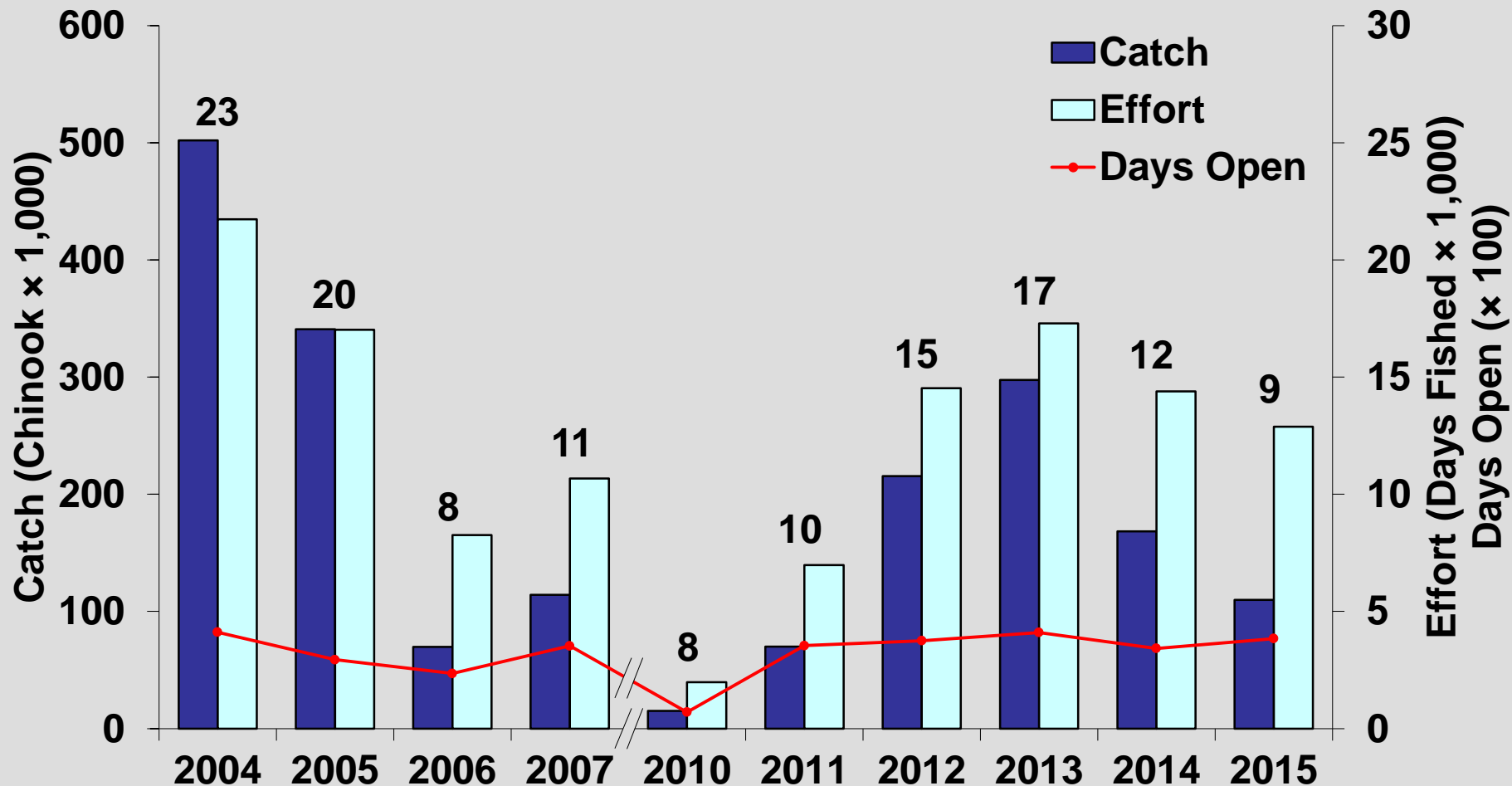
Monterey South: Pt. Sur to U.S./Mexico Border (79 days)



- Statewide closures during start of June and July, end of August
 - Minimum size limit 27", except 26" in SF after Aug and 28" in KMZ
- * Oct 1-15 fishery: open between Pt. Reyes and Pt. San Pedro; Mon-Fri

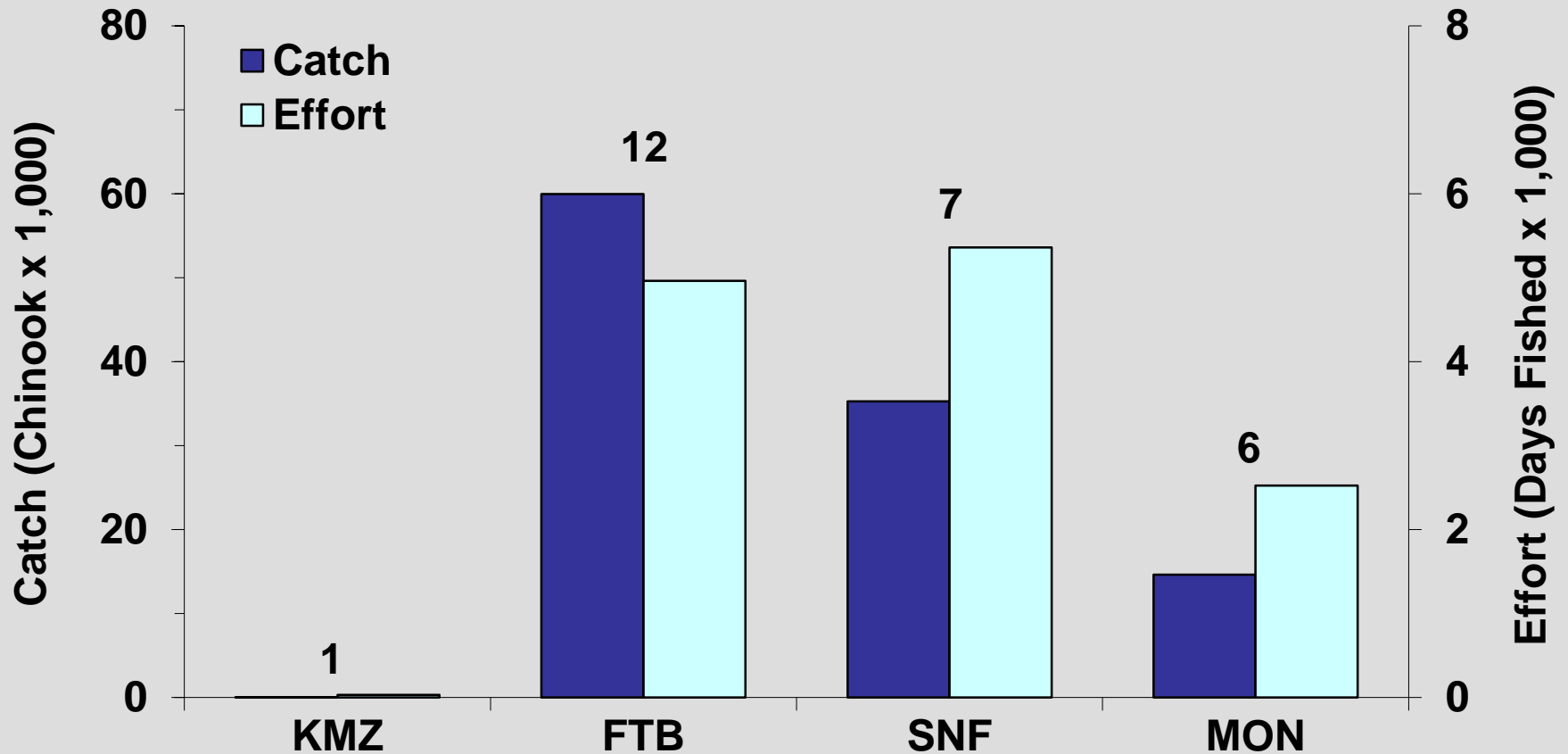


Commercial Catch and Effort, 2004-2015



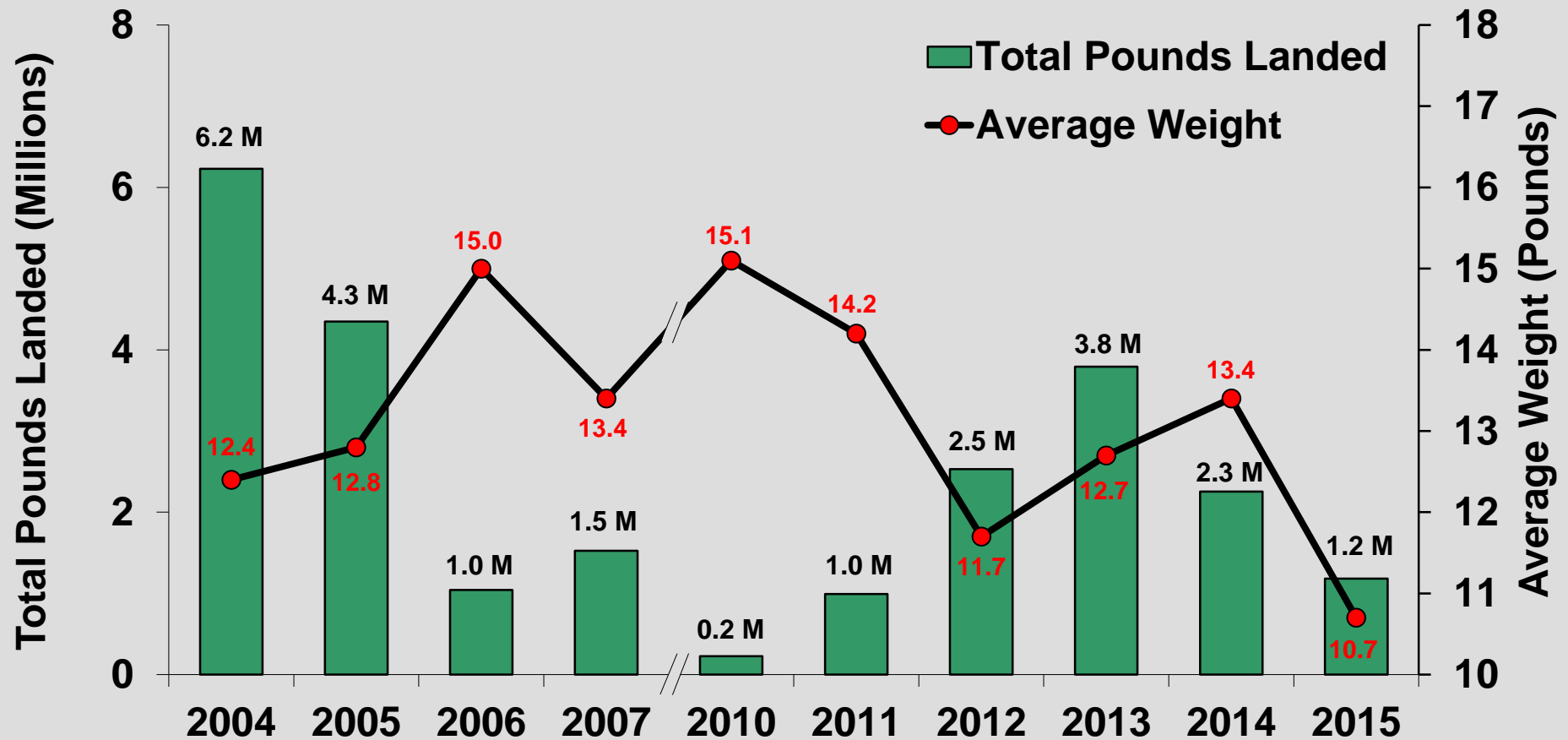
Days Open = All four management areas combined (Monterey treated as one area)

2015 Commercial Catch and Effort by Management Area

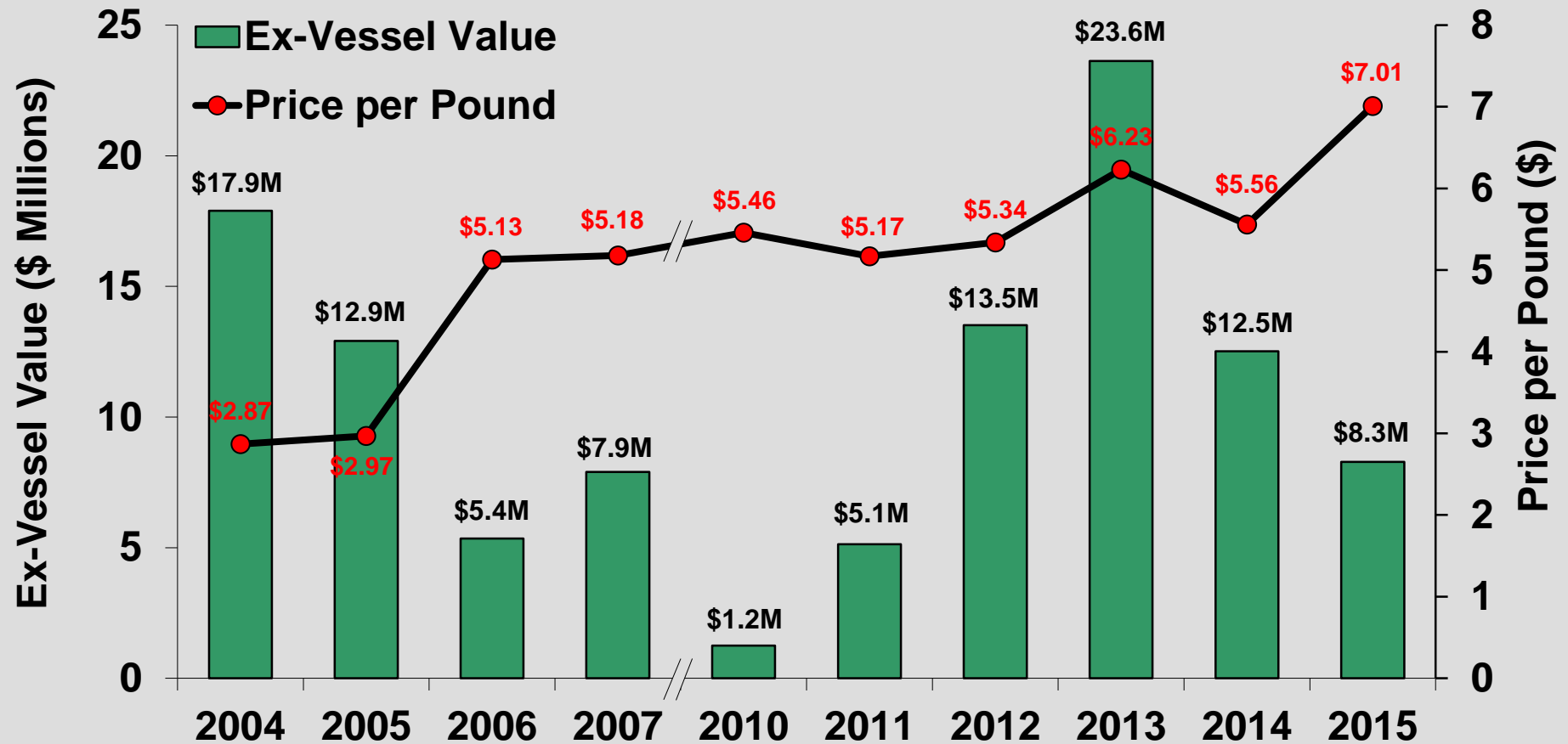


<i>Days Open</i>	18	123	149	94	TOTAL
<i>Total Chinook</i>	46	59,957	35,261	14,638	109,902
<i>Days Fished</i>	32	4,961	5,361	2,524	12,878

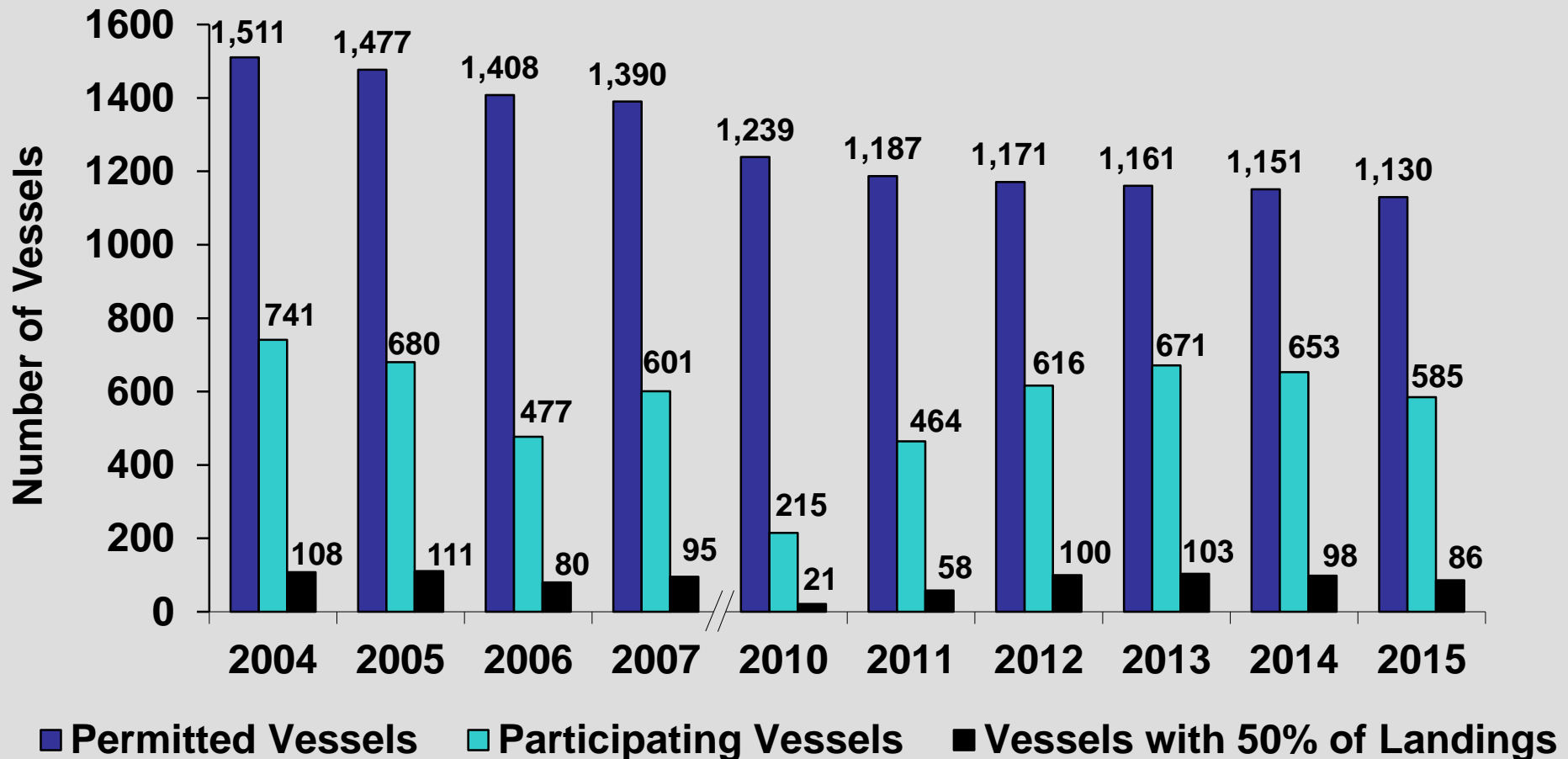
Total Commercial Pounds Landed and Average Weight, 2004-2015



Commercial Ex-Vessel Value and Price per Pound, 2004-2015



Number of Vessels with Landings Compared to Permitted Vessels, 2004-2015



2015 Klamath Management Zone September Quota Fishery

Season	Chinook Quota	Total Chinook Landed	Average Chinook Landed Per Day
Sep 11-15, 18-30 (18 Days)	3,000	46	3



Average Boats Participating Per Day	Average Daily Catch Per Boat
2	1.4

2015 Fall Ocean Fisheries Impacts on Age-4 Klamath River Fall Chinook

Area	Recreational	Commercial
Northern Oregon	0	0
Coos Bay	0	24
KMZ - Oregon	0	0
KMZ - California	0	0
Fort Bragg	0	0
San Francisco	0	0
Monterey	0	-
Total	0	24

- 24 age-4 Klamath River fall Chinook were harvested during 2015 fall ocean fisheries (September – November)
- Equates to a 0.1% age-4 harvest rate, which will be deducted from the 16.0% allowable harvest rate when determining the 2016 season structure

Hatchery Contribution to 2015 CA Ocean Fisheries

Hatchery Chinook Stock	Recreational (69%) N = 3,099 CWTs	Commercial (55%) N = 7,401 CWTs
Sacramento River Fall	76%	73%
San Joaquin River Fall	18%	16%
Klamath River Fall	1%	4%
Central Valley Spring	4%	3%
Pacific Northwest Stocks	1%	2%
Central Valley Late-Fall	0.3%	1%
Other Northern California Stocks	0.3%	1%
Sacramento River Winter	0.01%	0.005%

Sacramento River Hatchery Fall Chinook, Contribution by Hatchery – CA Ocean Fisheries

Sacramento River Hatchery	Recreational	Commercial
Feather River Hatchery <i>~7 million fall Chinook released annually</i>	63%	76%
Coleman National Fish Hatchery <i>~12 million fall Chinook released annually</i>	23%	14%
Nimbus Fish Hatchery <i>~4 million fall Chinook released annually</i>	14%	10%



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A sepia-toned historical photograph showing a large industrial facility, likely a salmon cannery. The floor is covered with a massive quantity of salmon. Several workers in aprons are visible, standing at long wooden tables or conveyor belts, processing the fish. The scene is brightly lit, possibly from large windows in the background.

Thank You

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