



Department of Fish and Wildlife Ocean Salmon Project

2019 California Ocean Salmon Fisheries

**Presented by
Grace Ghrist**



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



2019 California Recreational Season

Klamath Management Zone: OR/CA Border to Horse Mt. (101 days)



Fort Bragg: Horse Mt. to Pt. Arena (185 days)



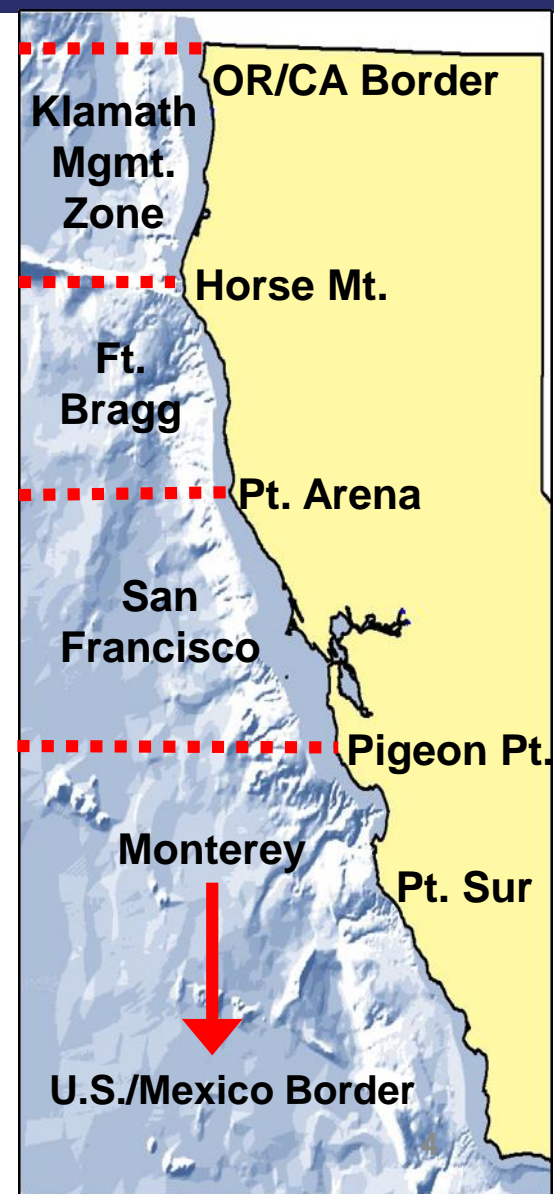
San Francisco: Pt. Arena to Pigeon Pt. (185 days)



Monterey and south: Pigeon Pt. to U.S./Mexico Border (145 days)

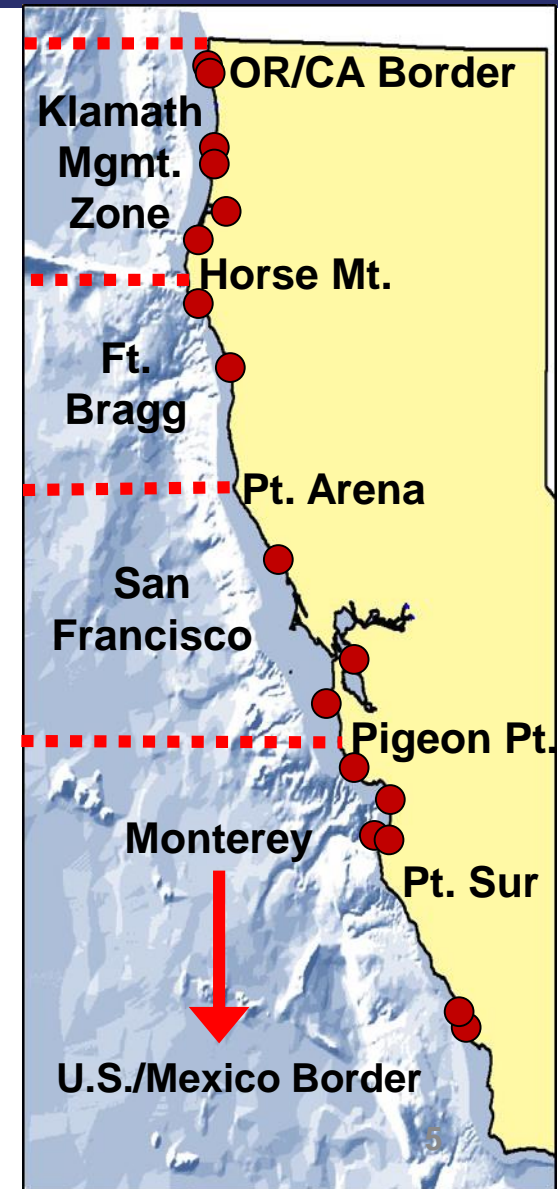


Minimum size: 20" north of Pt Arena and in SF after April 30
Minimum size: 24" south of Pigeon Pt and in SF through April 30
Bag limit: 2 fish per day



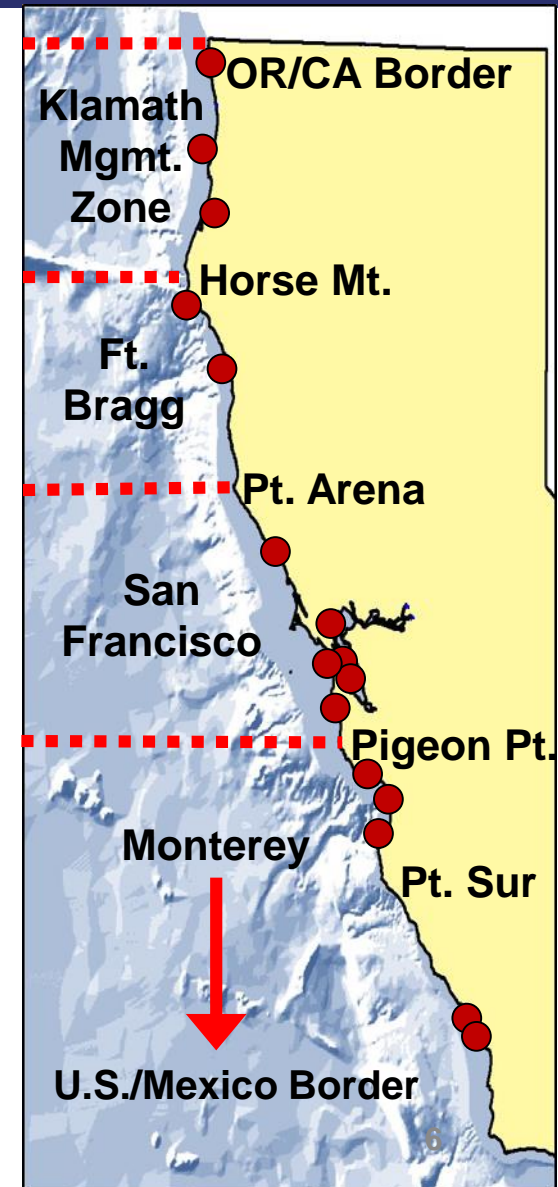
Sample Design – Private Skiff Fishery

- 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
 - All the skiff trips made at a sample site for an entire day are sampled
 - 552 skiff days were sampled during the 2019 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

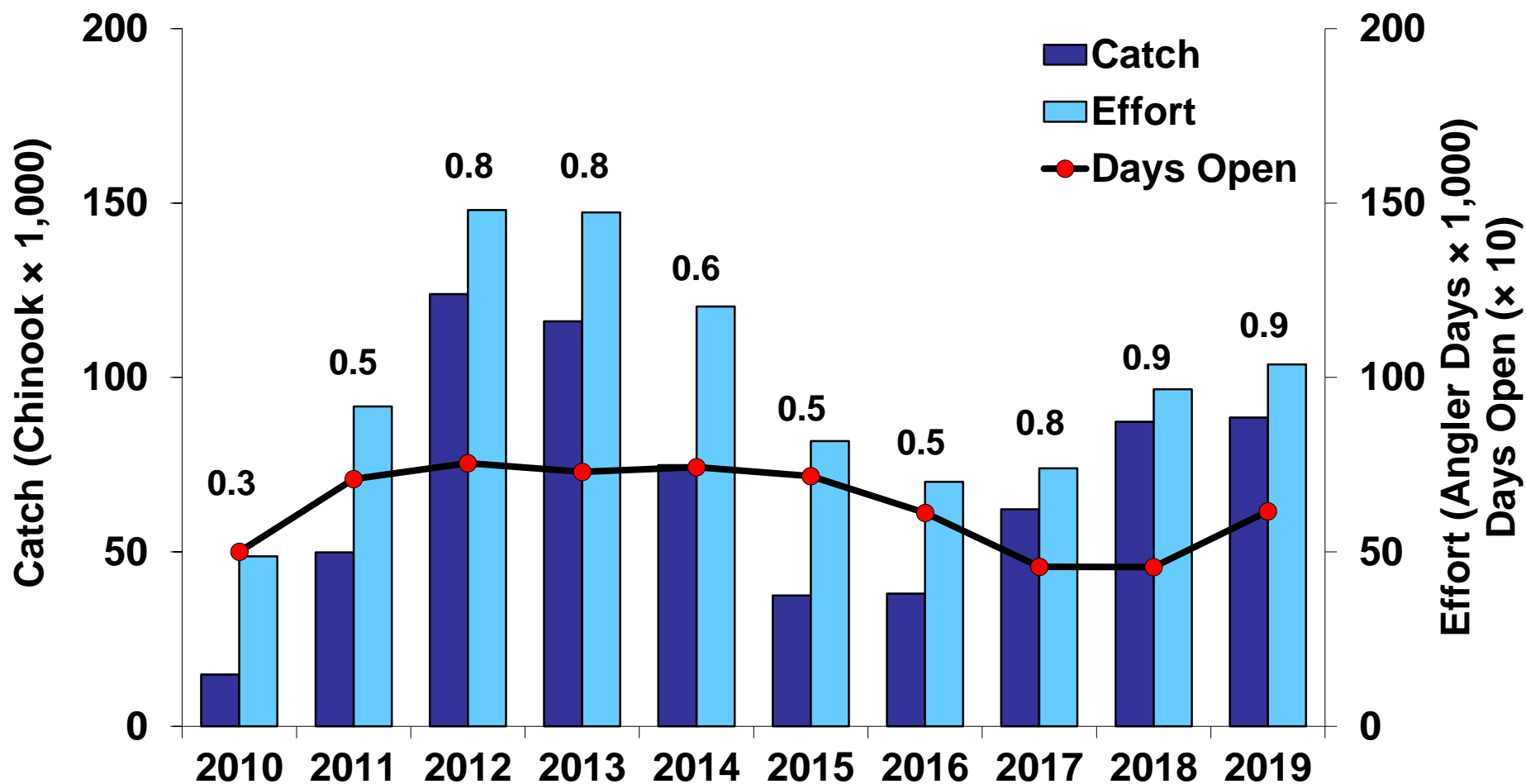


Sample Design – CPFV Fishery

- Sample $\geq 20\%$ of all salmon-targeting CPFV trips in each management area and period
 - 15 primary salmon CPFV sample sites
 - 115 CPFVs participated in the 2019 ocean salmon fishery
 - 1,434 salmon-targeting CPFV trips were sampled during the 2019 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

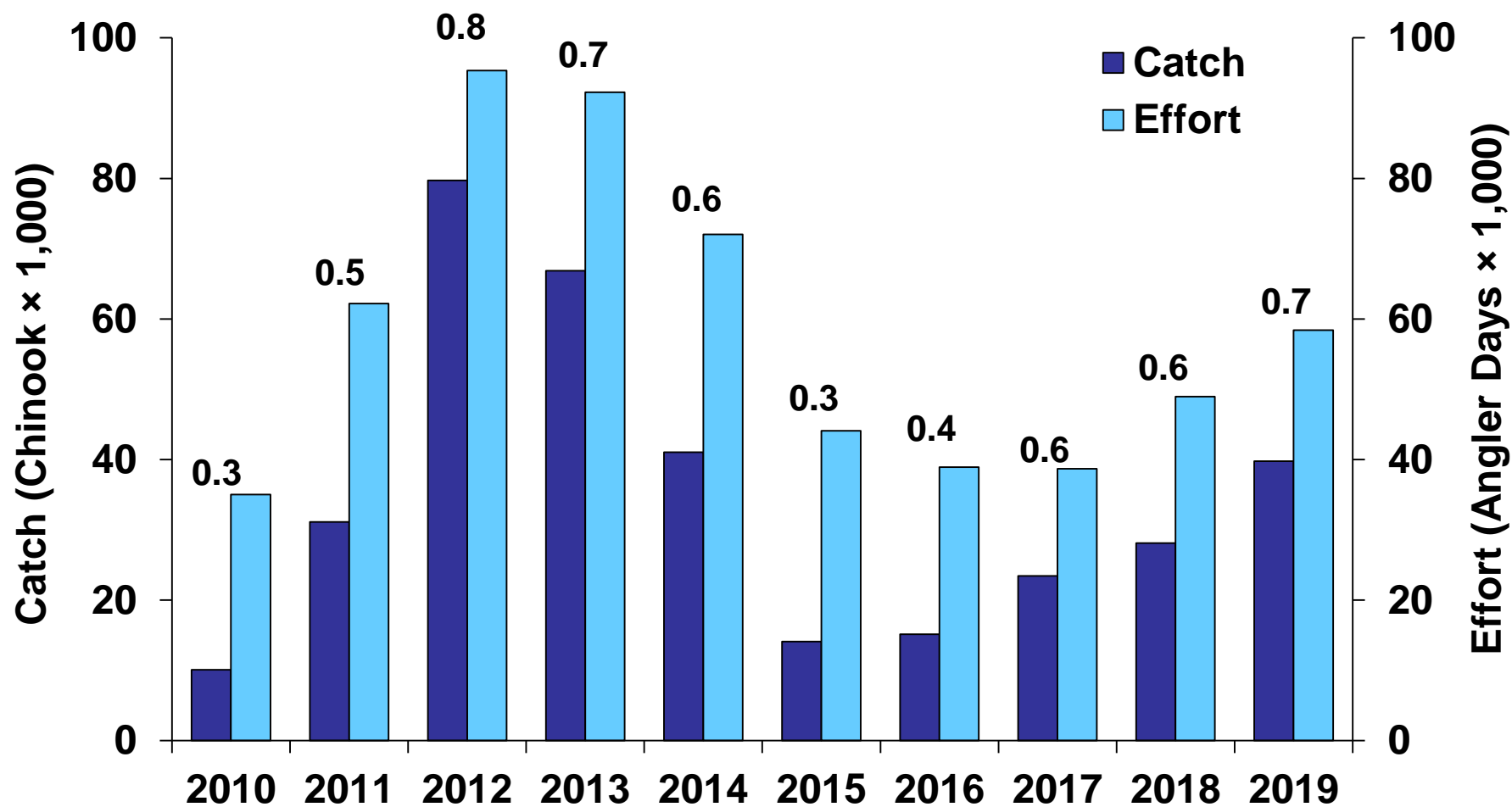


Recreational Catch and Effort, 2010-2019



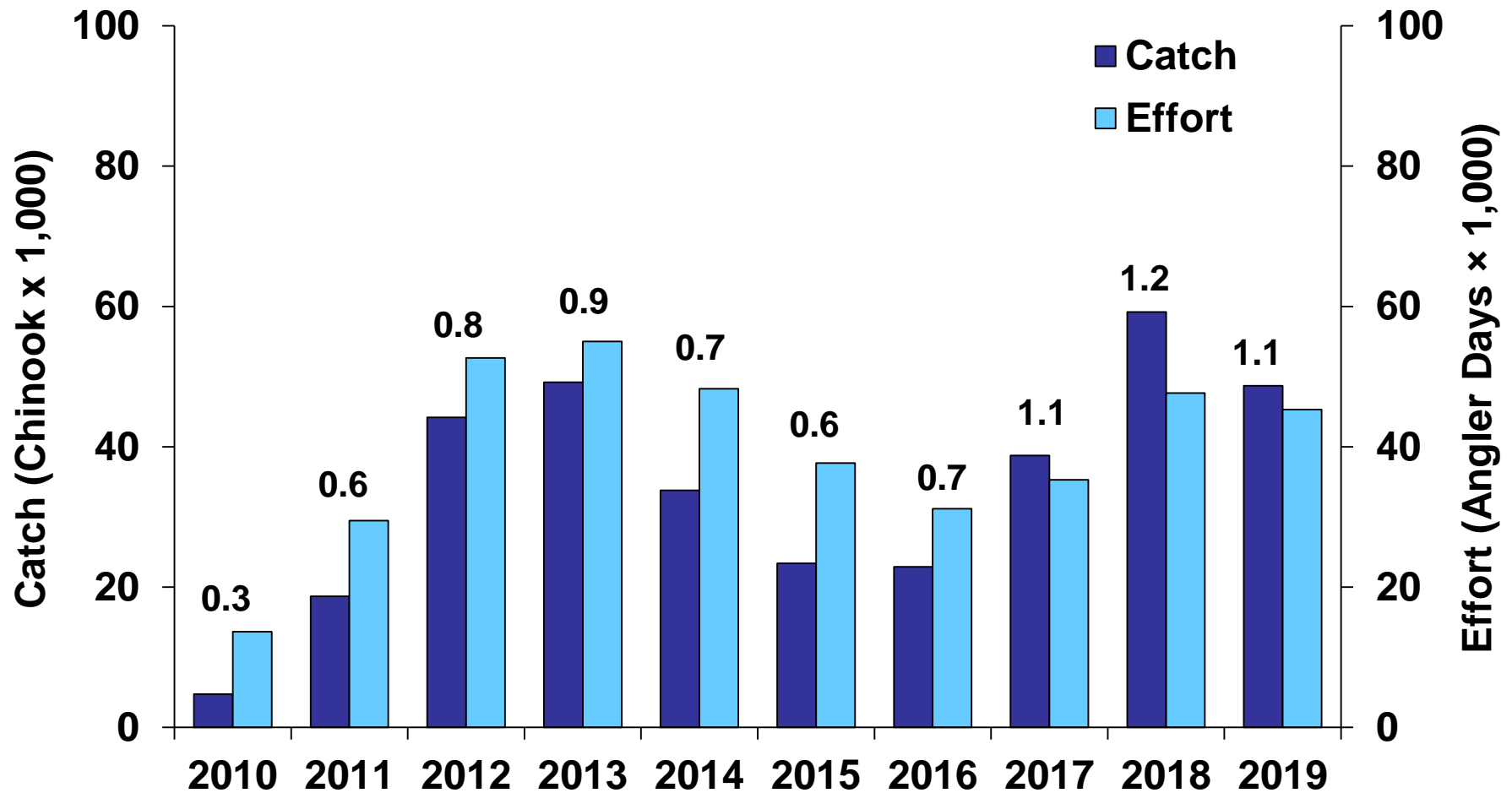
Days Open = All four management areas combined (Monterey treated as one area)

Skiff Catch and Effort, 2010-2019



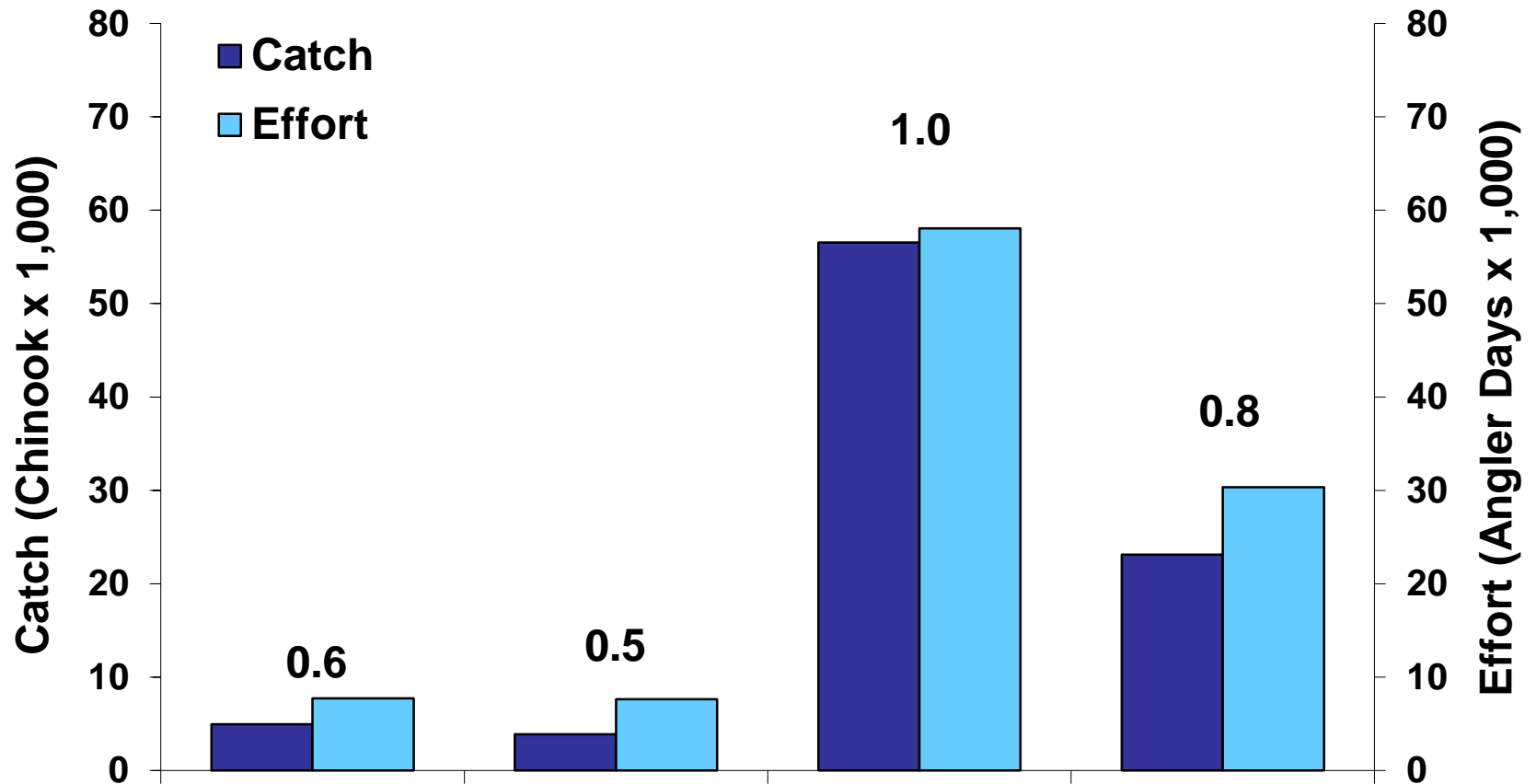
Days Open = All four management areas combined (Monterey treated as one area)

CPFV Catch and Effort, 2010-2019



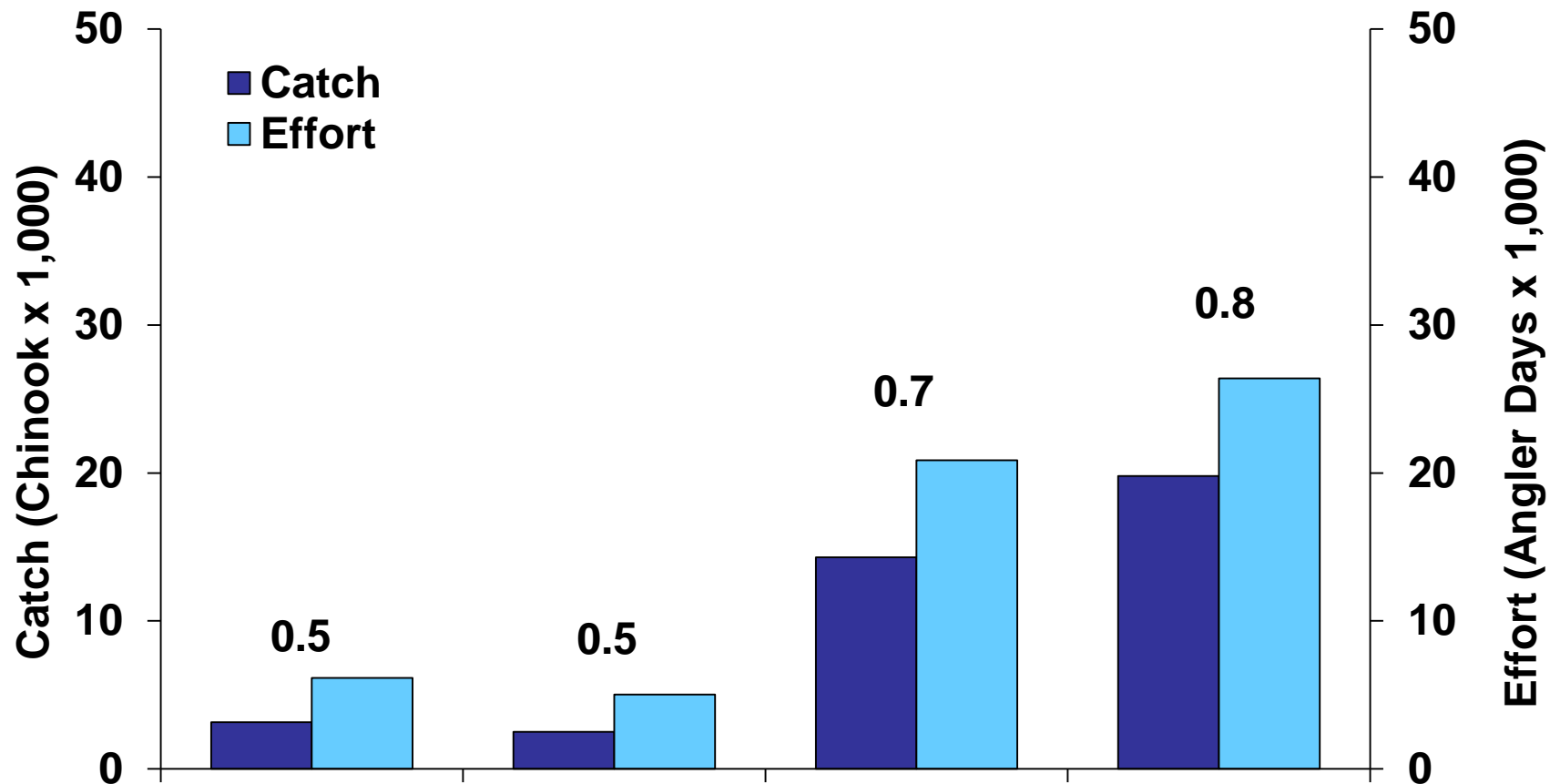
Days Open = All four management areas combined (Monterey treated as one area)

2019 Recreational Catch and Effort by Management Area



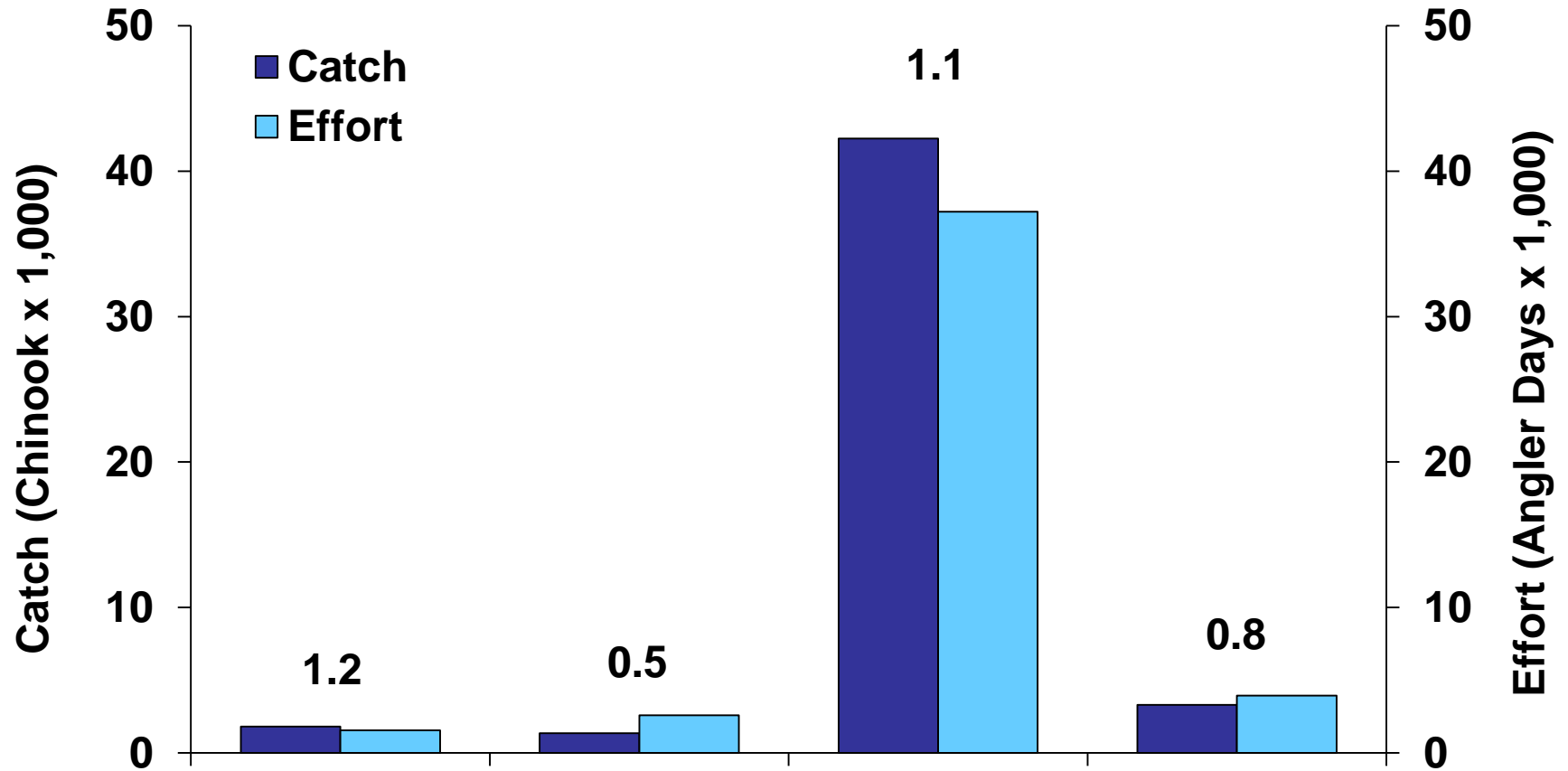
<i>Days Open</i>	101	185	185	145	TOTAL
<i>Total Chinook</i>	4,957	3,861	56,543	23,103	88,464
<i>Angler Days</i>	7,712	7,613	58,054	30,332	103,711

2019 Skiff Catch and Effort by Management Area



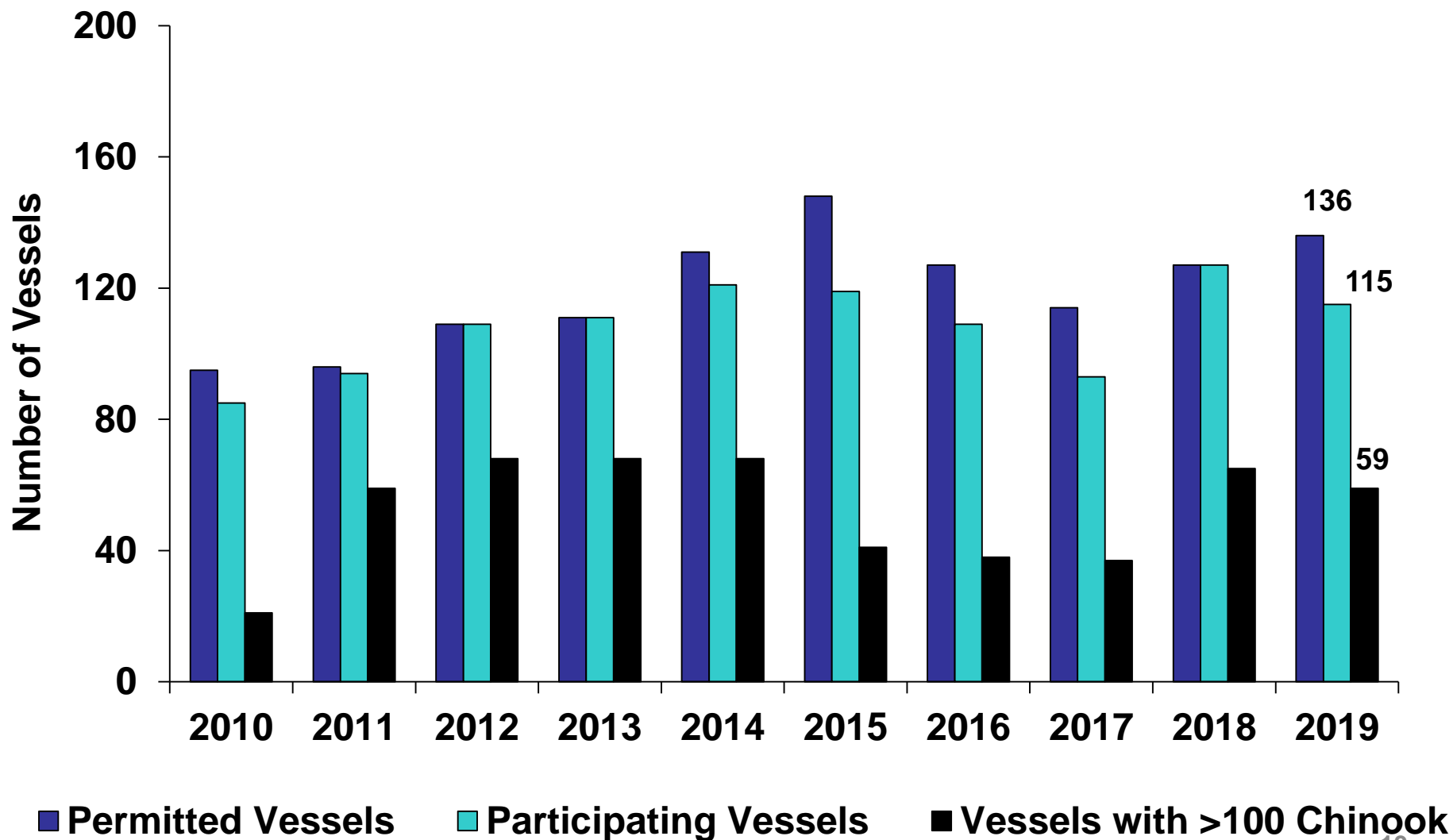
Days Open	KMZ	FTB	SNF	MON	TOTAL
	101	185	185	145	
Total Chinook	3,148	2,505	14,300	19,803	39,756
Angler Days	6,156	5,019	20,848	26,389	58,412

2019 CPFV Catch and Effort by Management Area



<i>Days Open</i>	101	185	185	145	TOTAL
<i>Total Chinook</i>	1,809	1,356	42,243	3,300	48,708
<i>Angler Days</i>	1,556	2,594	37,206	3,943	45,299

Number of CPFVs Targeting Chinook Compared to Permitted Vessels, 2010-2019





Commercial Salmon Fishery

2019 California Commercial Season

Klamath Mgmt. Zone: OR/CA Border to Humboldt S. Jetty (62 days)

Jun		Jul		Aug		
1	30	1	30	2		31
Quota = 2,500		3,997		4,293		

Fort Bragg: Horse Mt. to Pt. Arena (76 days)

Jun 4				Aug 28
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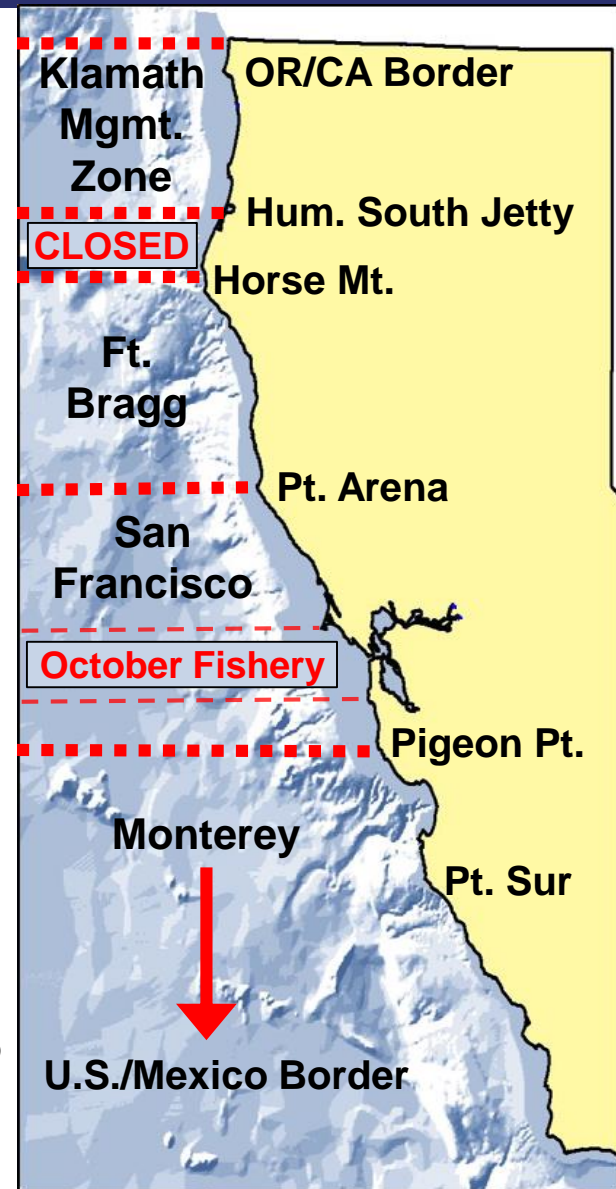
San Francisco: Pt. Arena to Pigeon Pt. (133 days)

May 16				*	Oct 15
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Monterey: Pigeon Pt. to U.S./Mexico Border (79 days)

May 1				Jul 31
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* Oct 1-15 fishery: Open Mon-Fri from Pt. Reyes to Pt. San Pedro
Minimum size 27" in all areas

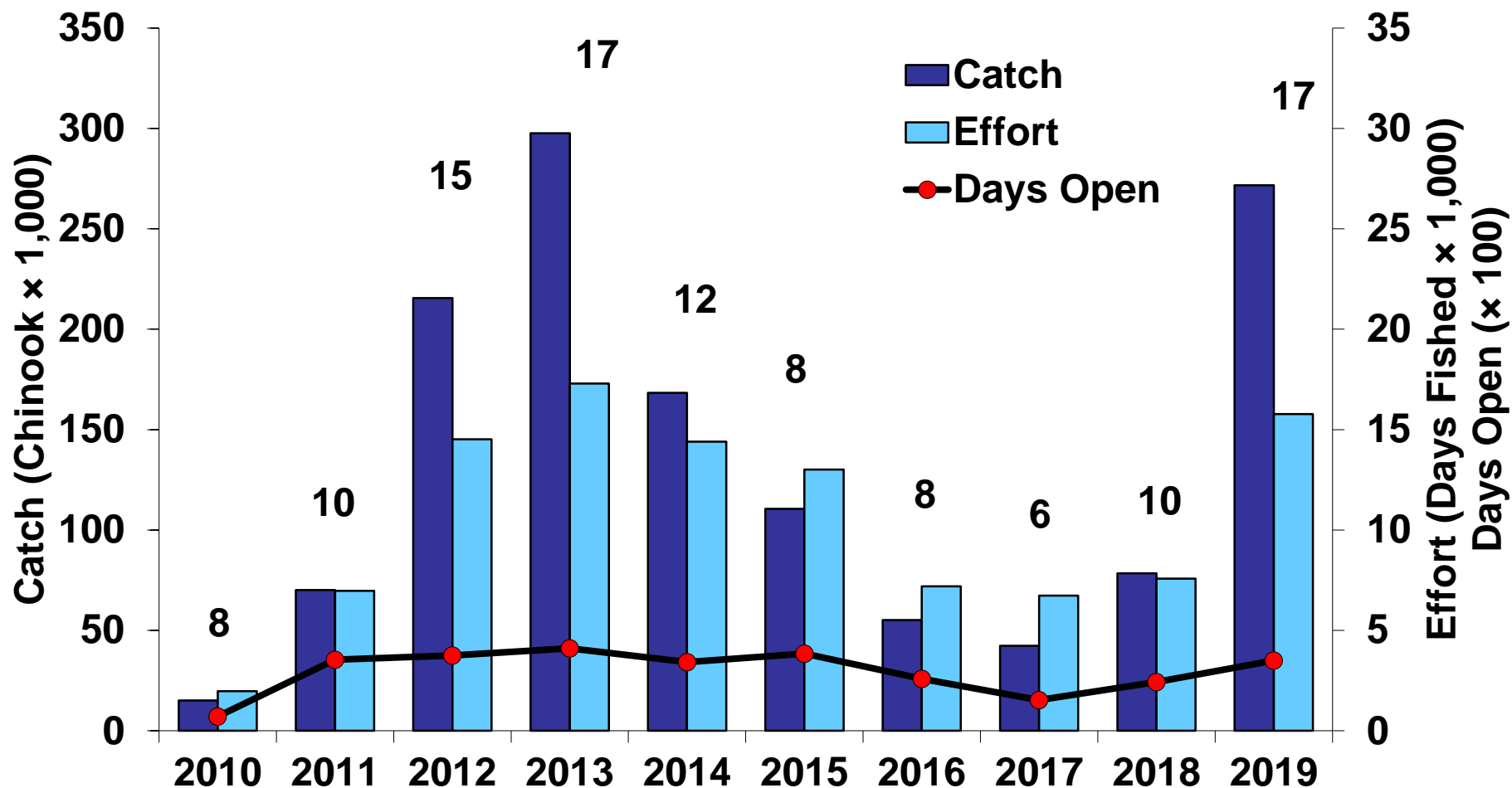


Sample Design – Commercial Fishery

- 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

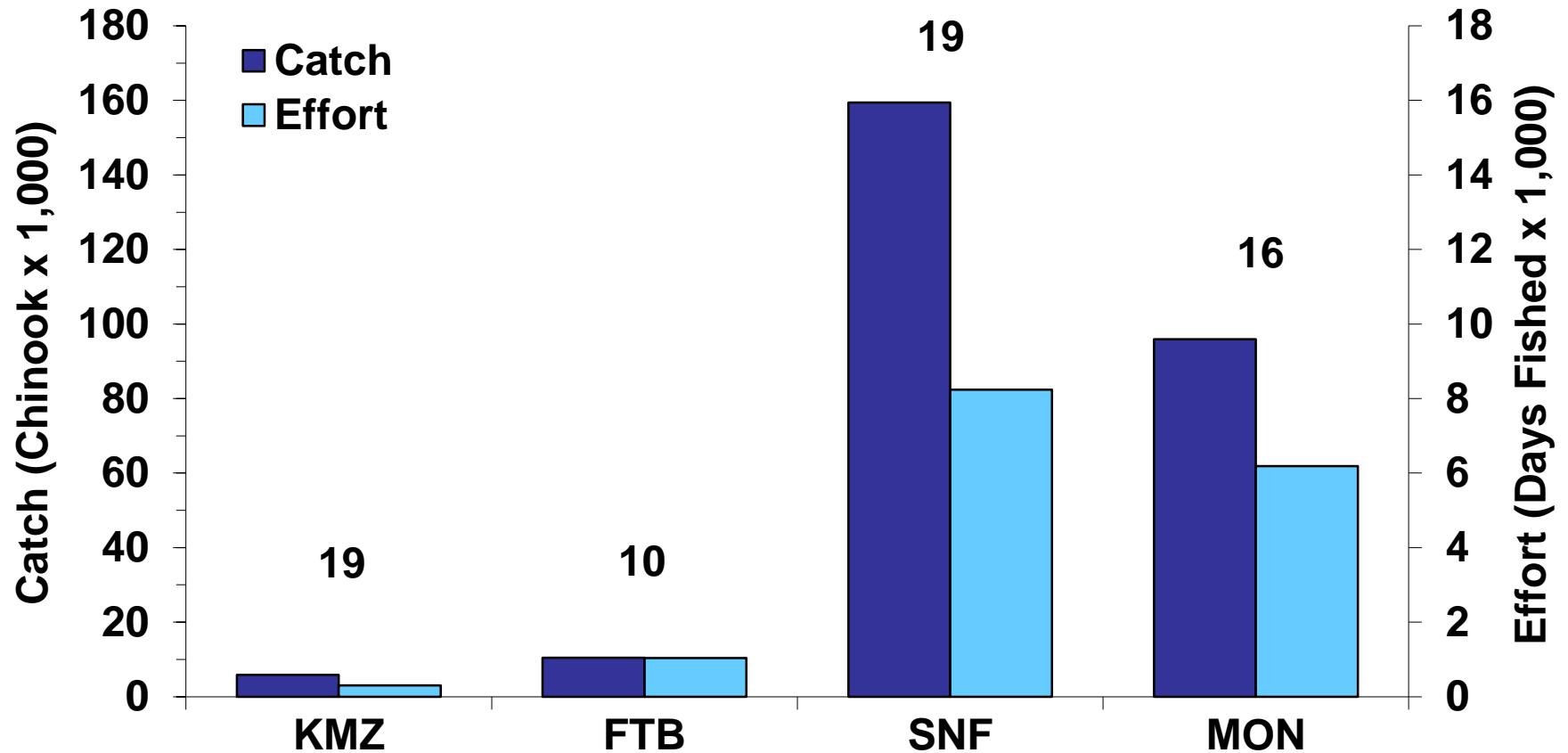


Commercial Catch and Effort, 2010-2019



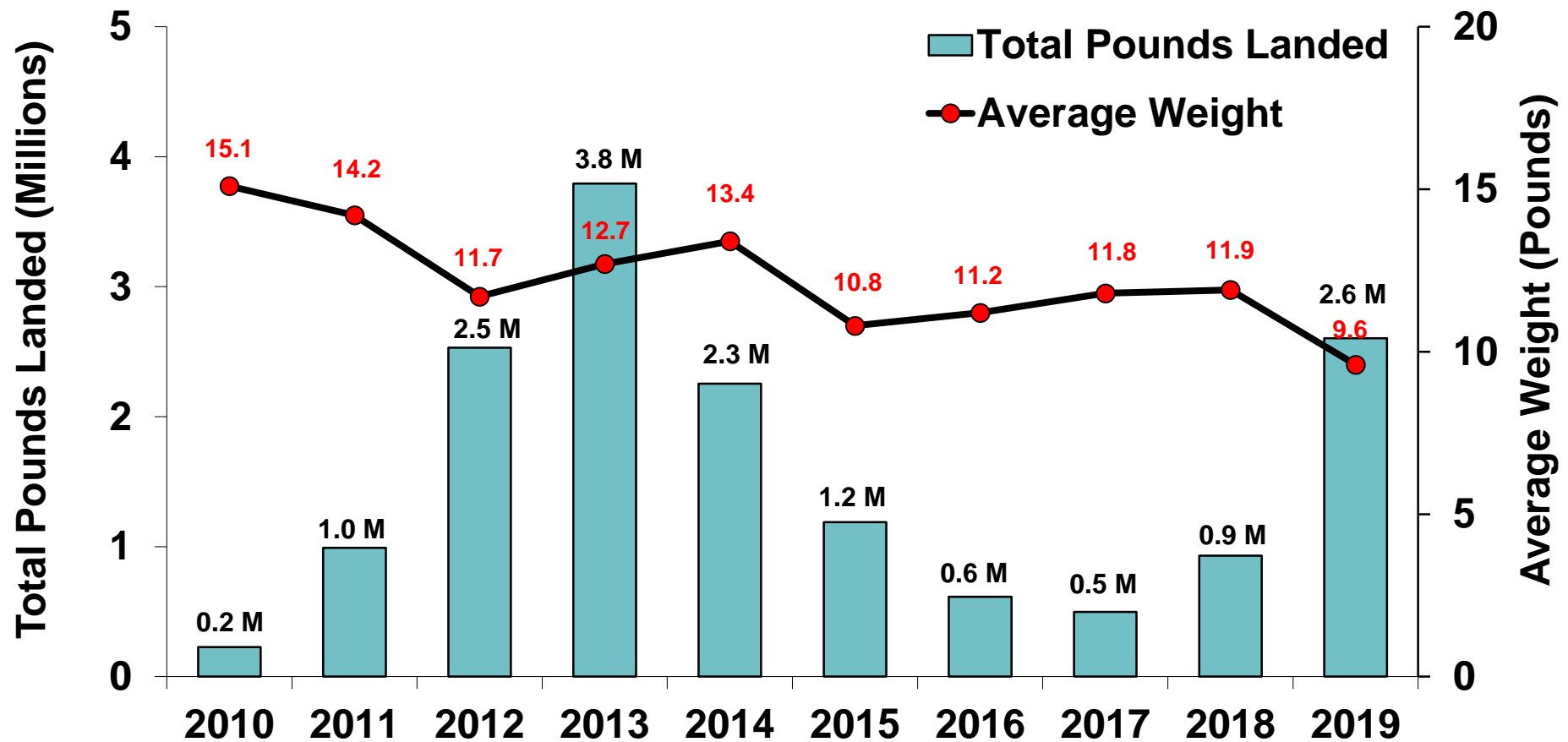
Days Open = All four management areas combined (Monterey treated as one area)

2019 Commercial Catch and Effort by Management Area

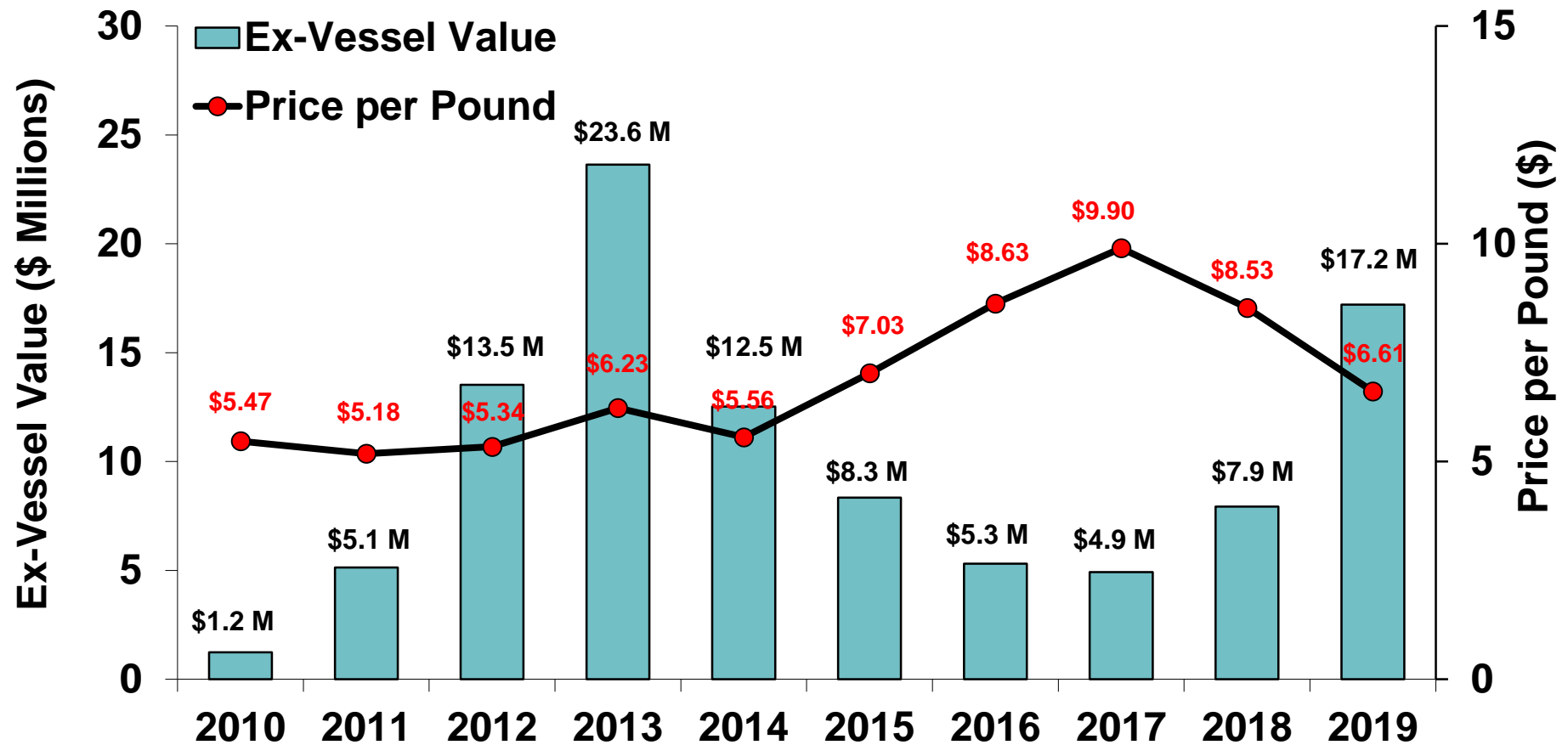


<i>Days Open</i>	62	76	133	79	TOTAL	
<i>Total Chinook</i>	5,857	10,467	159,431	95,942	271,697	
<i>Days Fished</i>	304	1,041	8,241	6,188	15,774	18

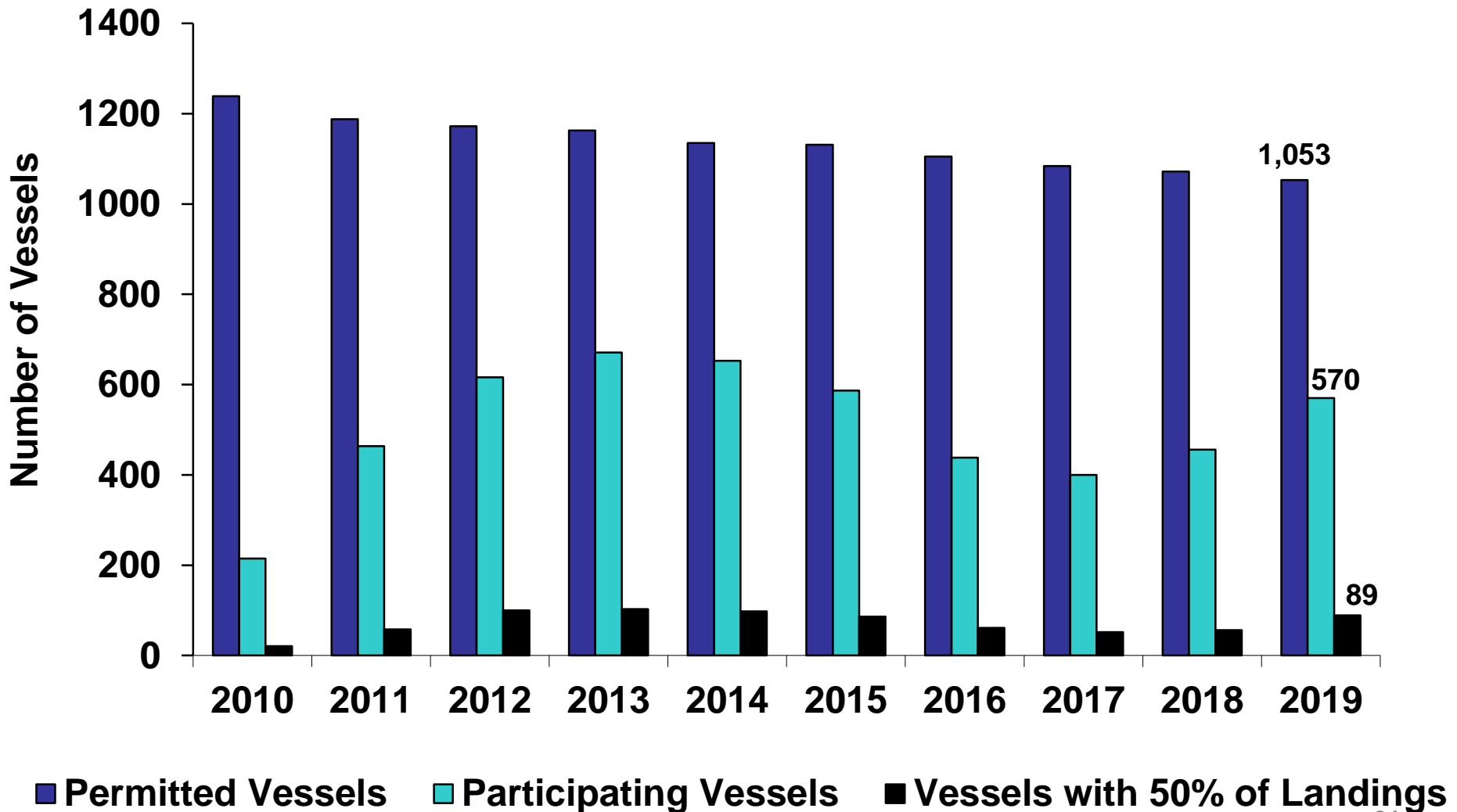
Total Commercial Pounds Landed and Average Weight, 2010-2019



Commercial Ex-Vessel Value and Price per Pound, 2010-2019

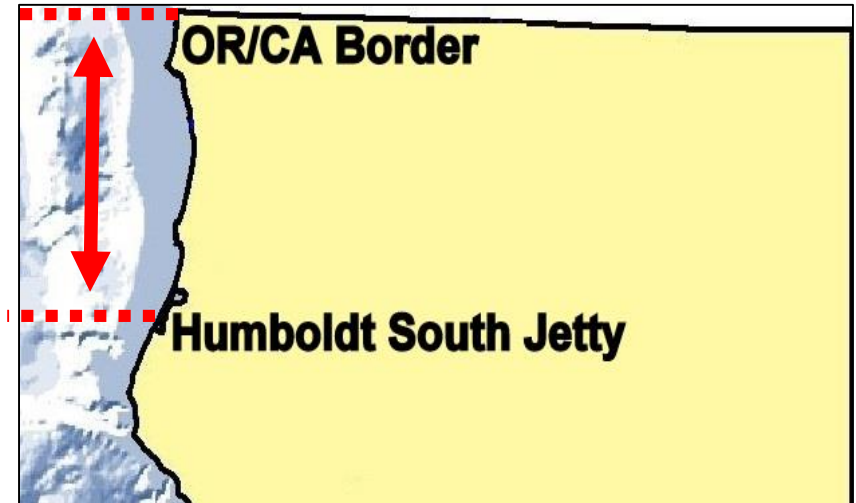


Number of Vessels with Landings Compared to Permitted Vessels, 2010-2019



2019 KMZ Quota Fisheries

- Open 5 days/week (Fri.-Tue.)
- Total boats participating: **61**
- Average weight: **9.0 lbs** (state avg. = 9.6)
- Ex-vessel value: **\$313,390**
- Average price/lb: **\$5.95** (state avg. = \$6.61)



	Jun 1-30	July 1-30	Aug 2-5, 12-31
Quota	2,500	3,997* Preseason = 2,500	4,293* Preseason = 2,000
Catch (% of quota)	737 (29%)	1,475 (37%)	3,645 (85%)
Landing Limit	20	20,50**	50**, 15
Total Participants	29	29	42

*Includes rollover from previous month

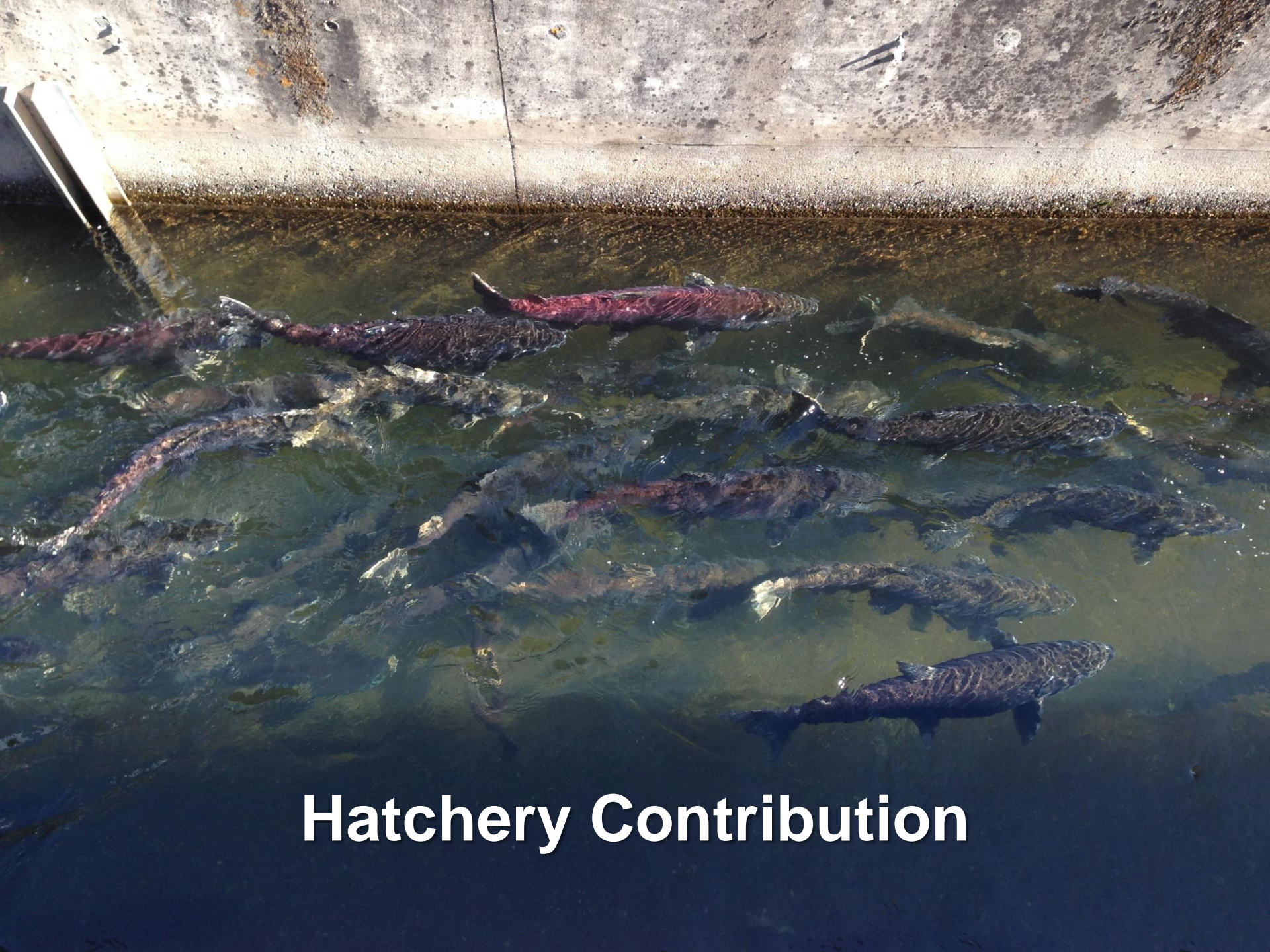
**Effective July 19- Aug 5

2019 Fall Ocean Fisheries Impacts on Age-4 Klamath River Fall Chinook

Area	Recreational	Commercial
Northern Oregon	0	26
Coos Bay	0	0
KMZ - Oregon	0	0
KMZ - California	0	0
Fort Bragg	0	0
San Francisco	0	0
Monterey	0	0
Total	0	26

**0.07% age-4 ocean harvest rate in fall fisheries,
which will be deducted from the 16% allowable
ocean harvest rate when determining the 2020
season structure**

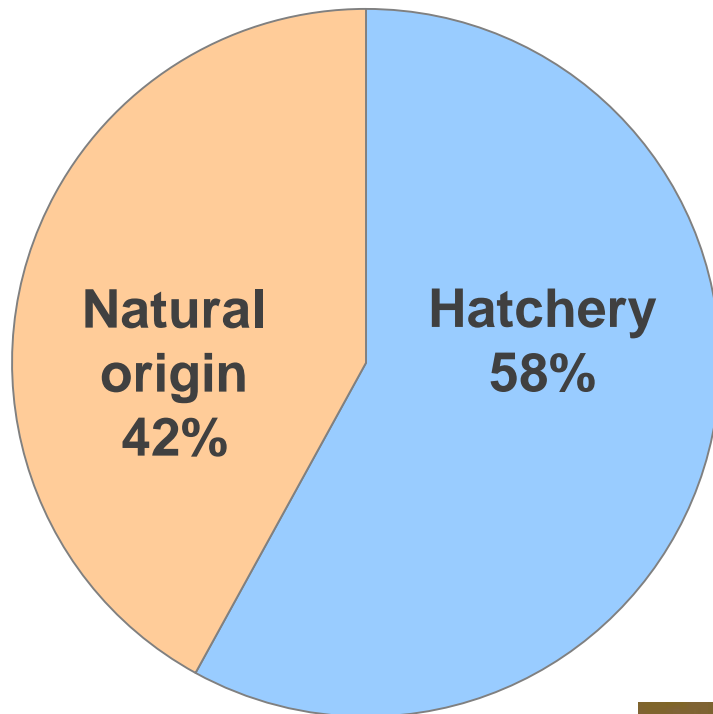




Hatchery Contribution

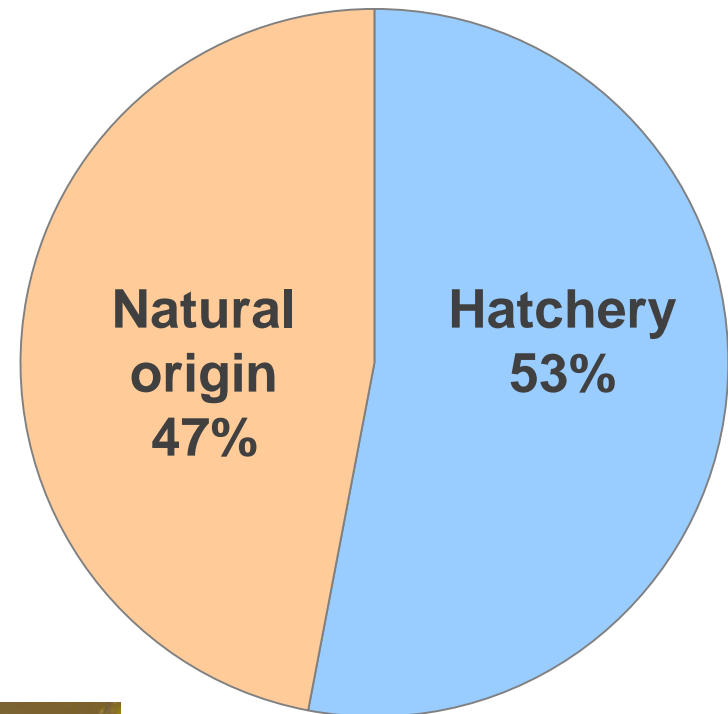
Hatchery Contribution to 2019 CA Ocean Fisheries

Recreational



N = 4,938 CWTs

Commercial

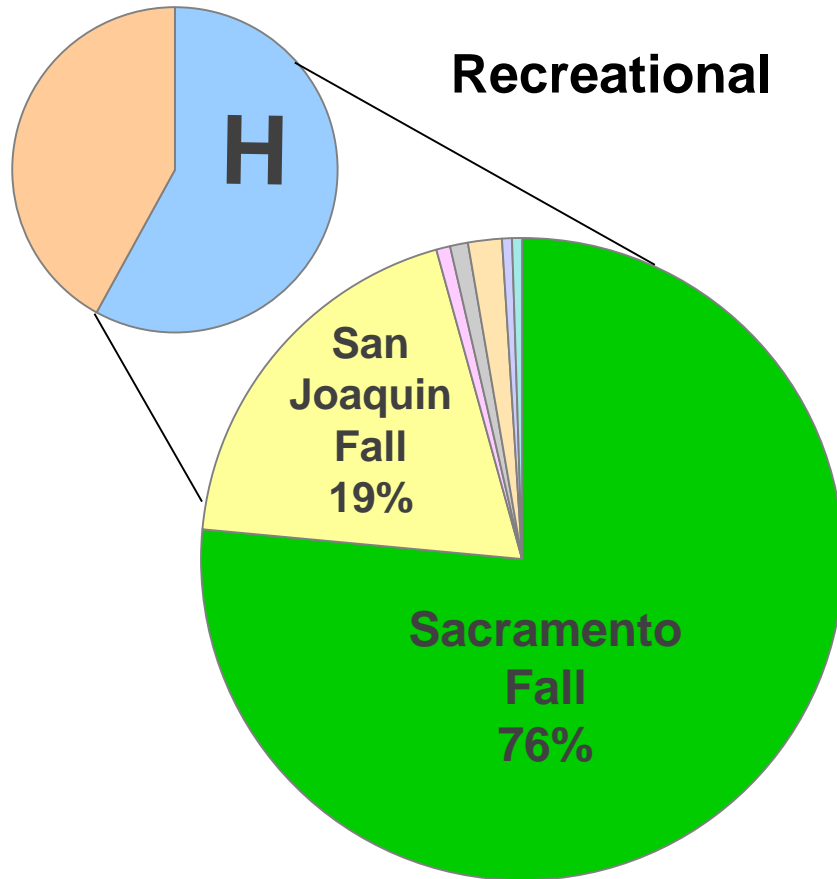


N = 15,031 CWTs



Hatchery Contribution to 2019 CA Ocean Fisheries

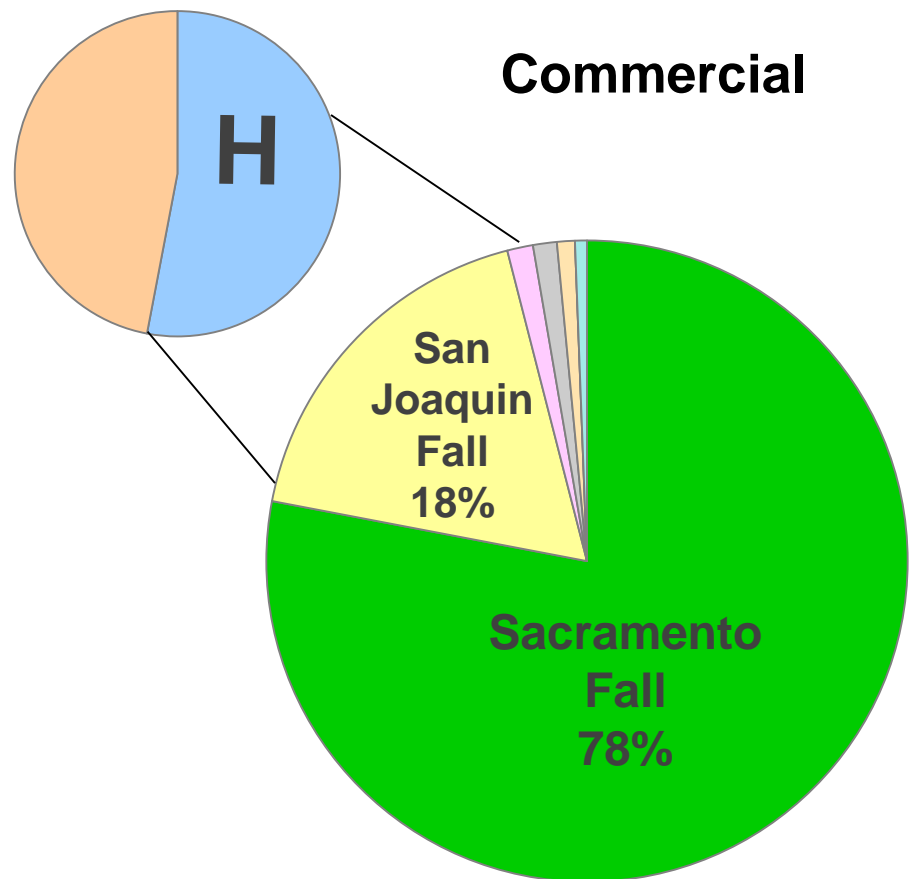
Recreational



≈5% Other Stocks:

CV Late-Fall (1%), CV Spring (2%), Klamath River Fall (1%), Sacramento Winter (0.5%), Other (<.5%)

Commercial

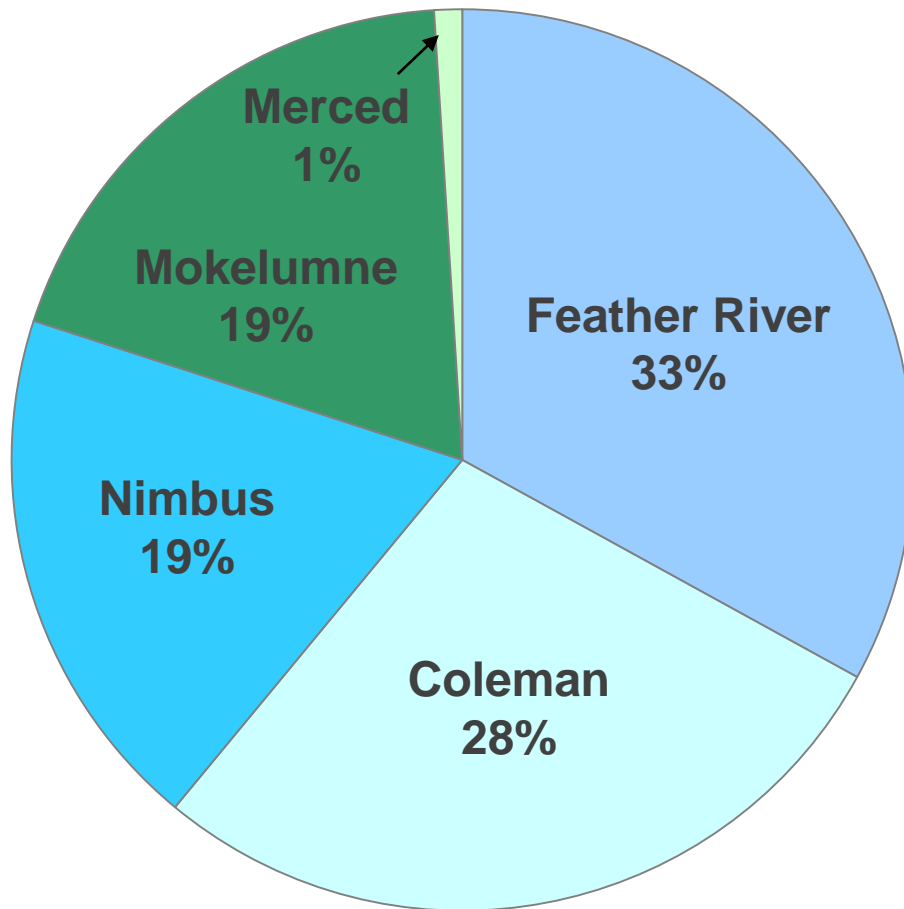


≈4% Other Stocks:

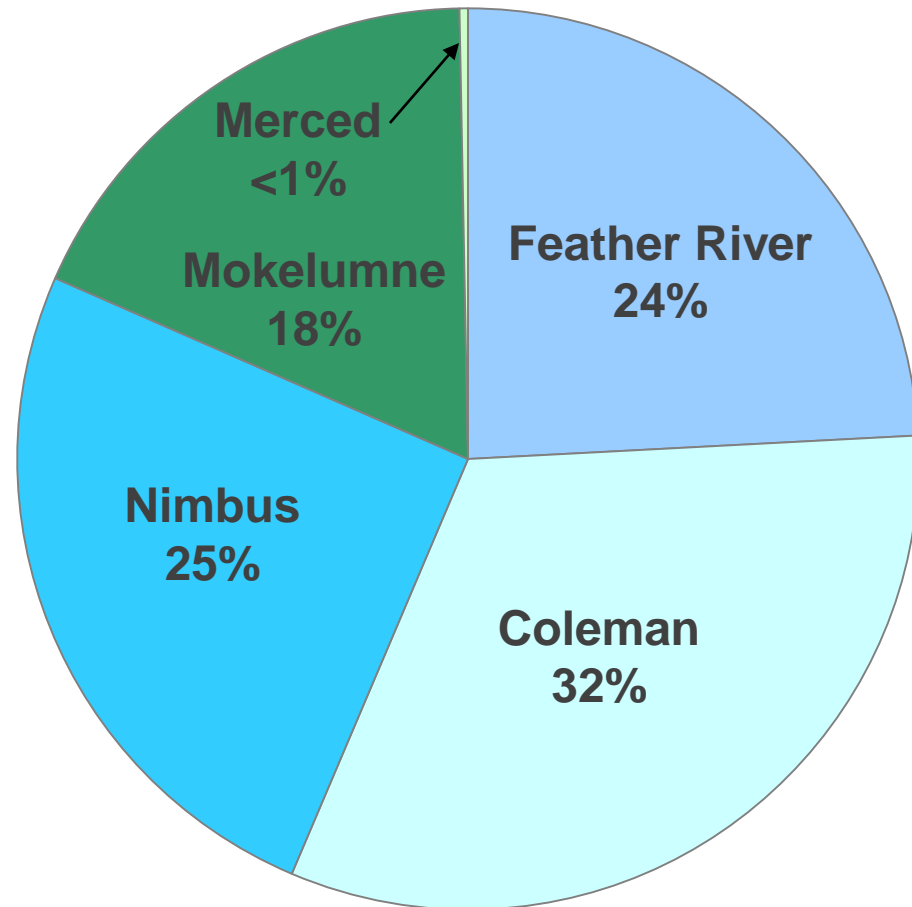
CV Late-Fall (1.2%), Klamath River Fall (1.3%), CV Spring (.9%), Sacramento Winter (0%), Other (0.6%)

Hatchery Contribution to 2019 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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