

GROUNDFISH TRAWL CATCH SHARE PROGRAM FIVE YEAR REVIEW

Executive Summary
Pacific Fisheries Management Council
June 2017



NOAA
FISHERIES

FIVE-YEAR REVIEW

- Section 303A(c)(1)(G) of the MSA requires the Councils and Secretary to “include provisions for [...] a formal and detailed review 5 years after the implementation of the program
- Pacific Fishery Management Council opted for a very detailed review
- Review document is organized around the goals and objectives of the program

QUESTIONS FROM THE SSC & COUNCIL

- 1. NET BENEFITS:** How did net benefits to the nation derived from this fishery change?
- 2. FINANCIAL OUTCOMES:** How did financial outcomes for participants in the fishery change?
- 3. DISTRIBUTIONAL OUTCOMES:** Did the distribution of cost, revenues, effort, and net benefits among fishery participants (including communities and user groups) change?
- 4. UTILIZATION:** Did utilization rates for specific species change?

Primary data sources:

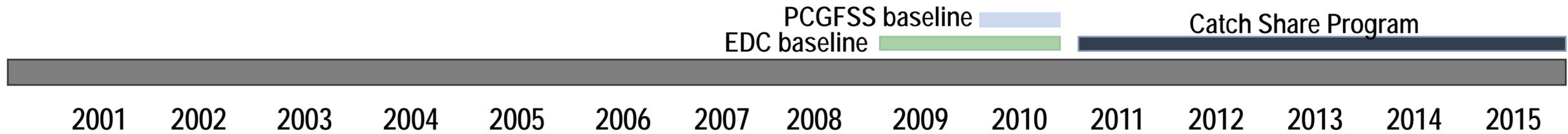
Fish Tickets

Pacific Coast Groundfish Social Survey

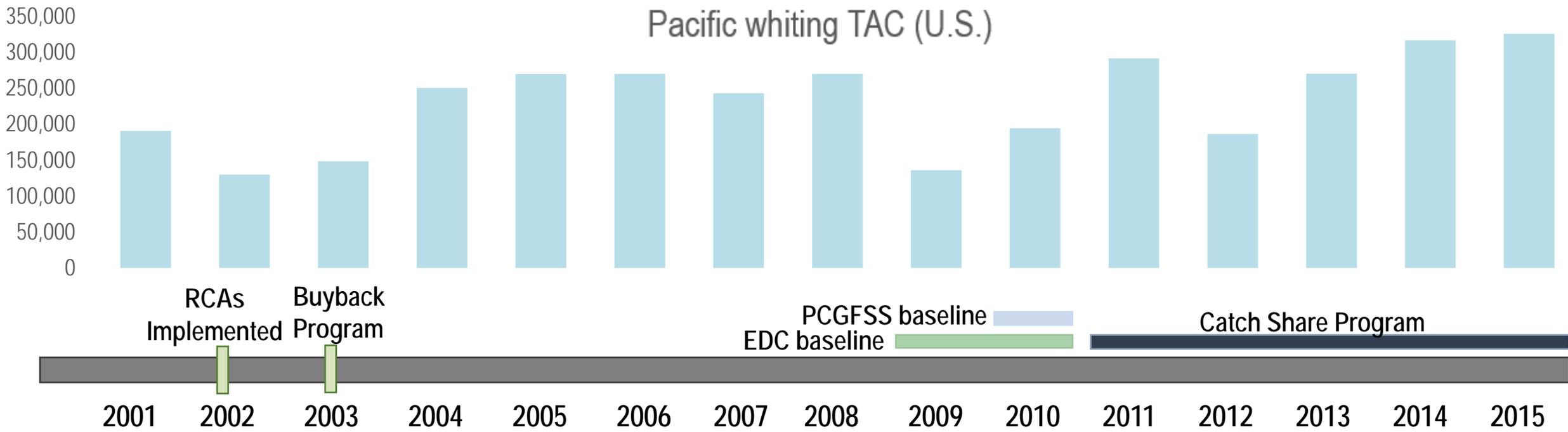
Economic Data Collection

West Coast Groundfish Observer Program

Pacific Coast Groundfish Permit System and IFQ Accounting System



Pacific whiting TAC (U.S.)



Overfished (prior to 2000): Cowcod and canary rockfish (2000); lingcod, POP, and bocaccio (1999)

Overfished: Pacific whiting and yelloweye rockfish (2002)



Rebuilt: Pacific whiting (2004)

Rebuilt: Lingcod (2005)

Overfished: Petrale sole (2010)



Rebuilt: Widow rockfish (2012)

Rebuilt: Canary rockfish and petrale sole (2015)



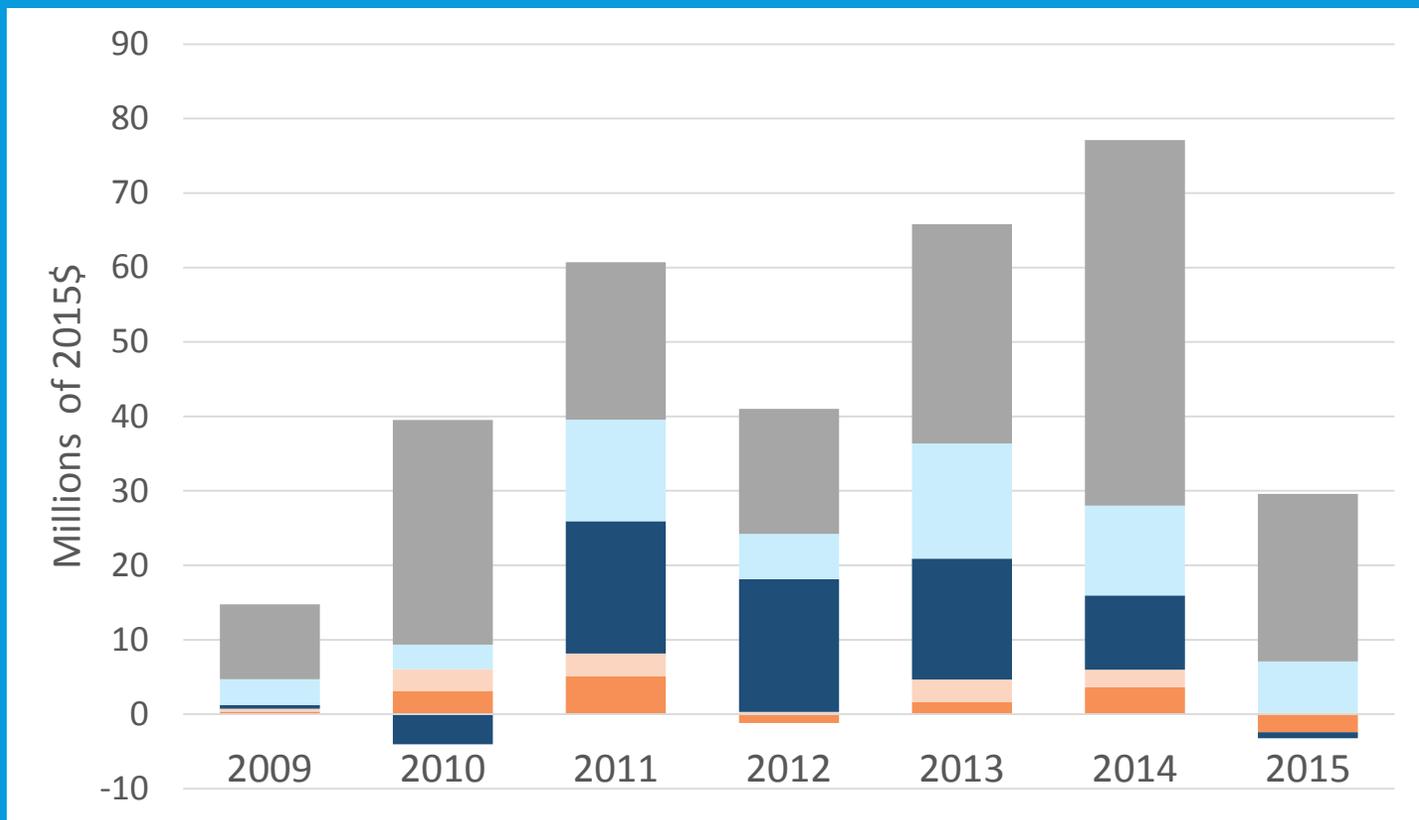
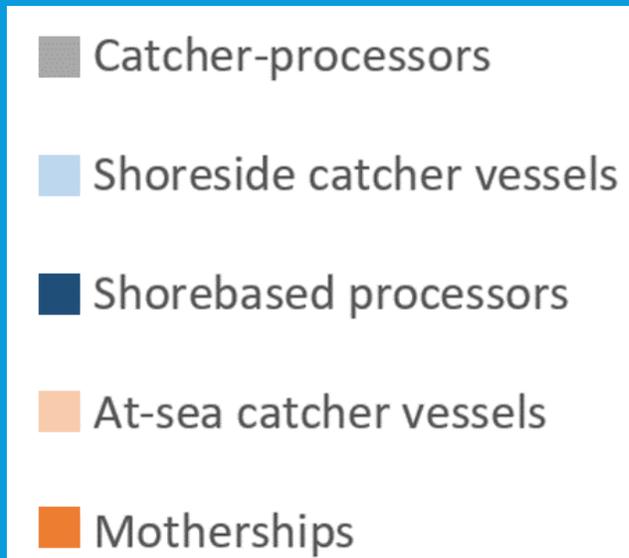
NET BENEFITS

HOW DID NET BENEFITS TO THE NATION DERIVED FROM THIS FISHERY CHANGE AFTER IMPLEMENTATION OF THE CATCH SHARE PROGRAM?

NET ECONOMIC BENEFITS TO THE NATION

Net economic benefits are calculated by subtracting monetary costs from gross revenue for fishing activities, summed over participants in each sector.

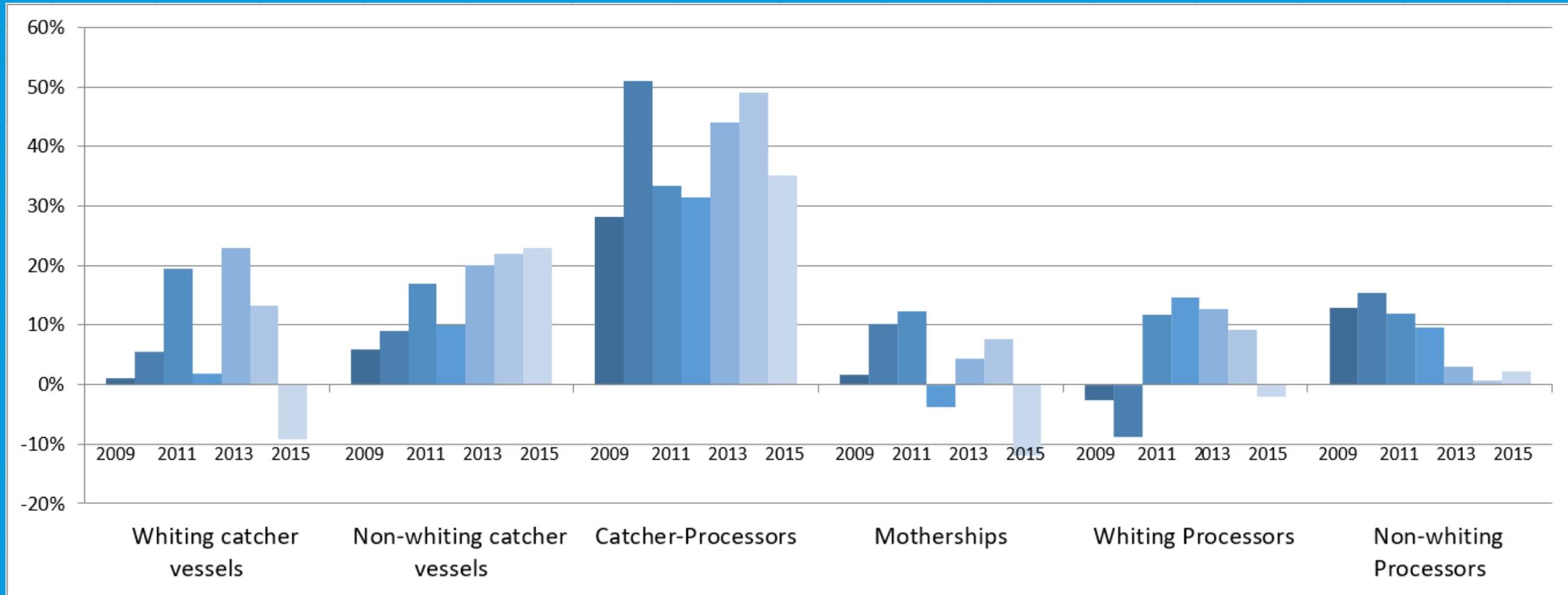
2009-2010 Average: \$25 million
2011-2015 Average : \$54 million



NET BENEFITS

PRODUCTIVITY AND EFFICIENCY

Efficiency (net revenue as a percentage of revenue)



NET BENEFITS

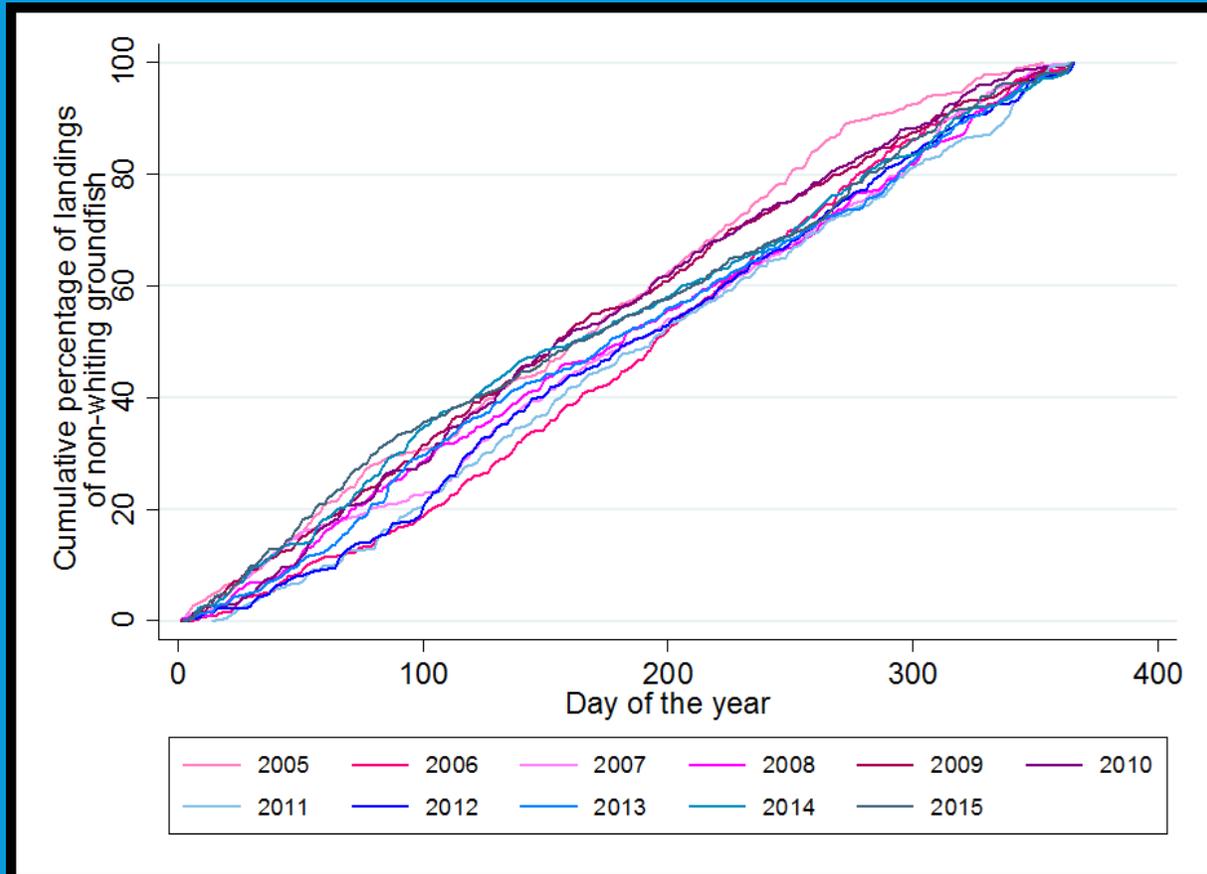
FLEXIBILITY

- Participation in non catch-share fisheries
- Participation in cooperatives and risk pools
- Days at sea
- Timing of landings
- Number and size of fishing trips
- Location of landings
- Carrying over, leasing, and selling quota

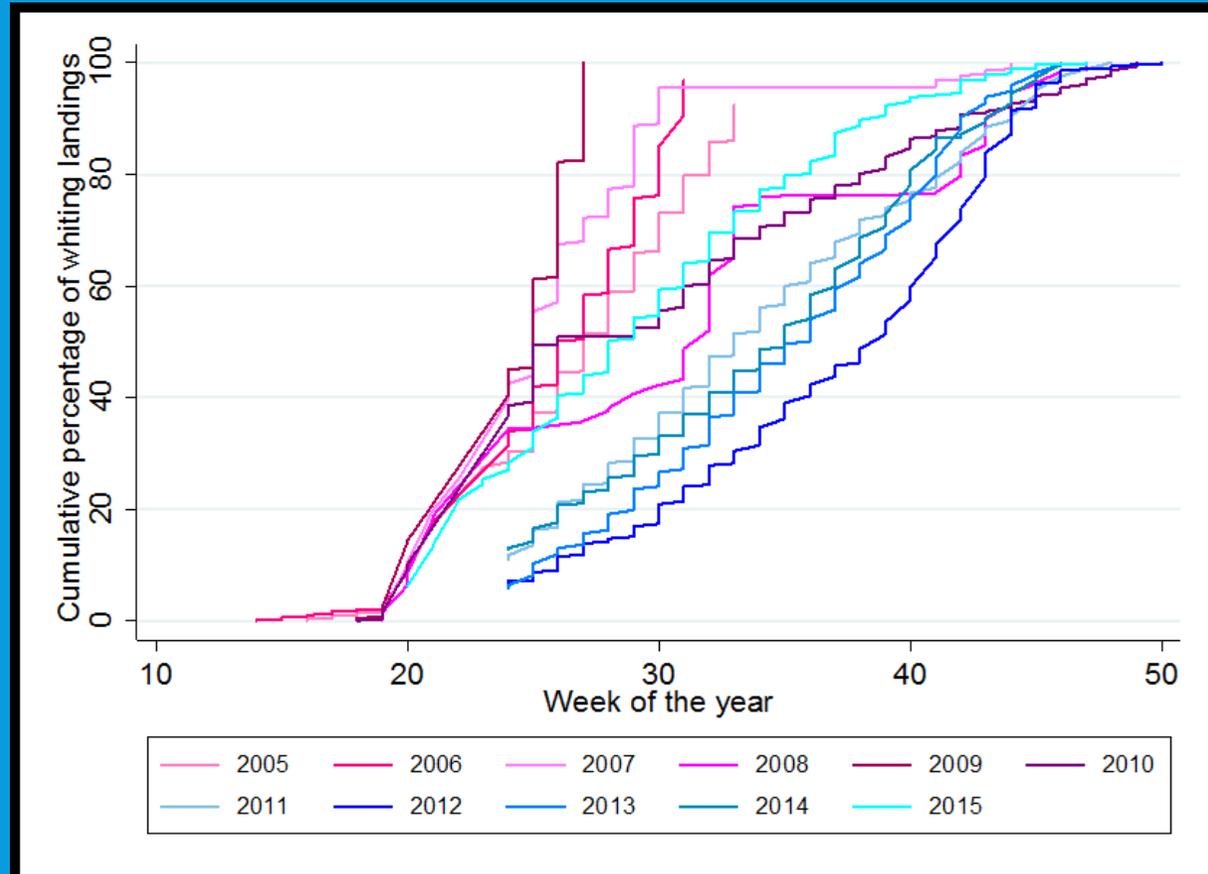
FLEXIBILITY

TIMING OF LANDINGS

Shoreside non-whiting



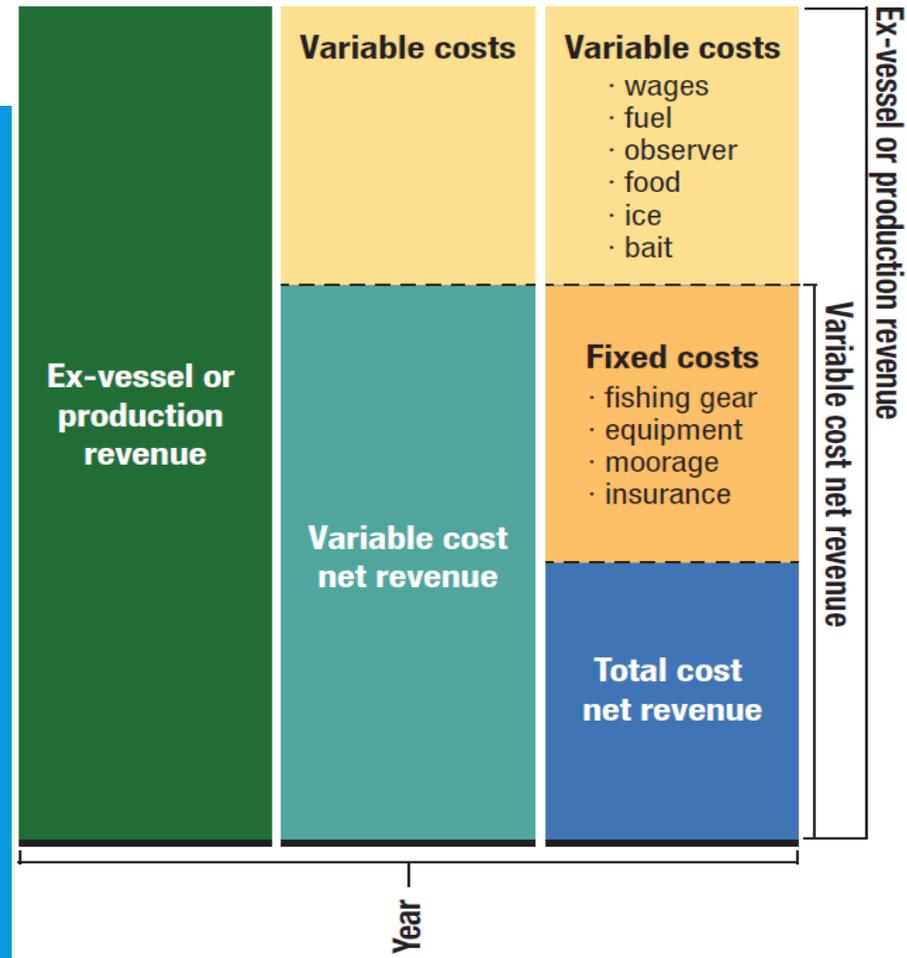
Shoreside whiting



FINANCIAL OUTCOMES

HOW DID FINANCIAL OUTCOMES FOR PARTICIPANTS IN THE FISHERY CHANGE FOLLOWING IMPLEMENTATION OF THE CATCH SHARE PROGRAM?

Financial outcomes



SSC: “Upper bound” individual-level measures of net revenue

Catcher vessels

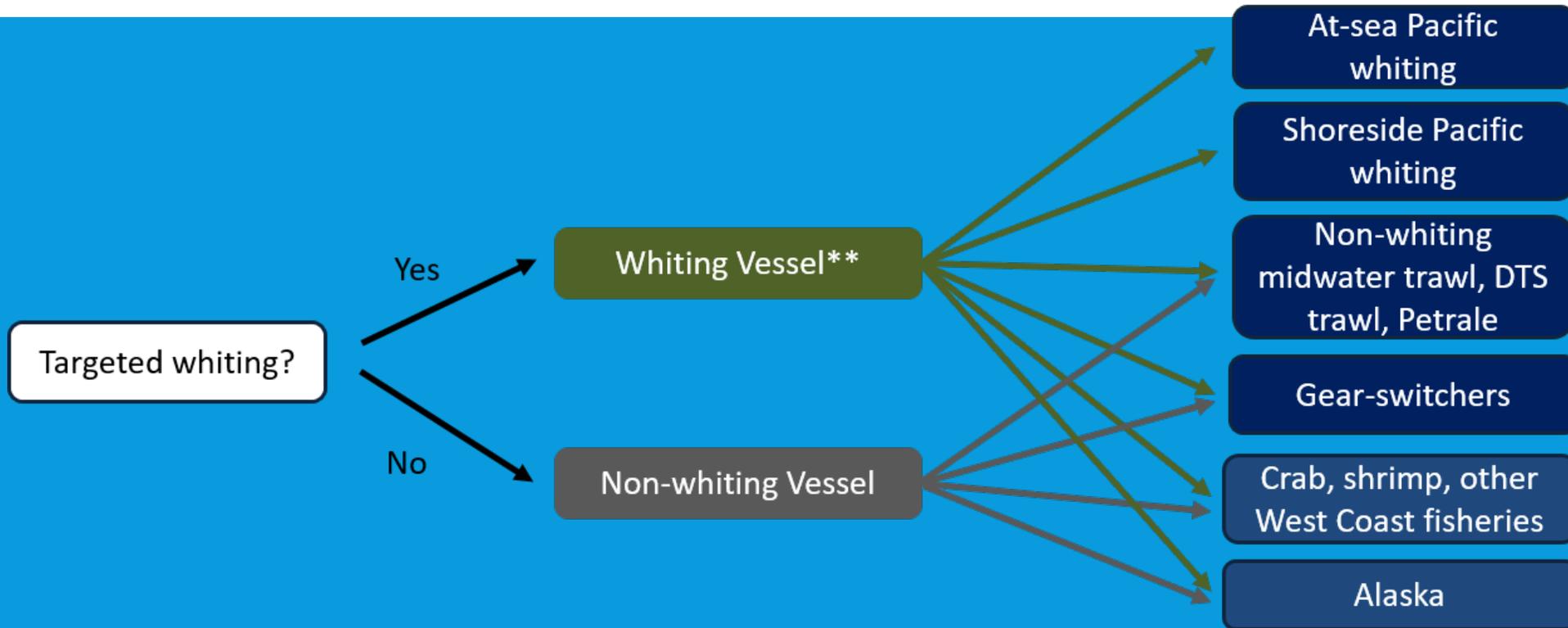


Figure 3-1. Economic performance section classification of catch share catcher vessels.
**Does not include vessels that only caught whiting as bycatch.

Shore-based processors and first receivers

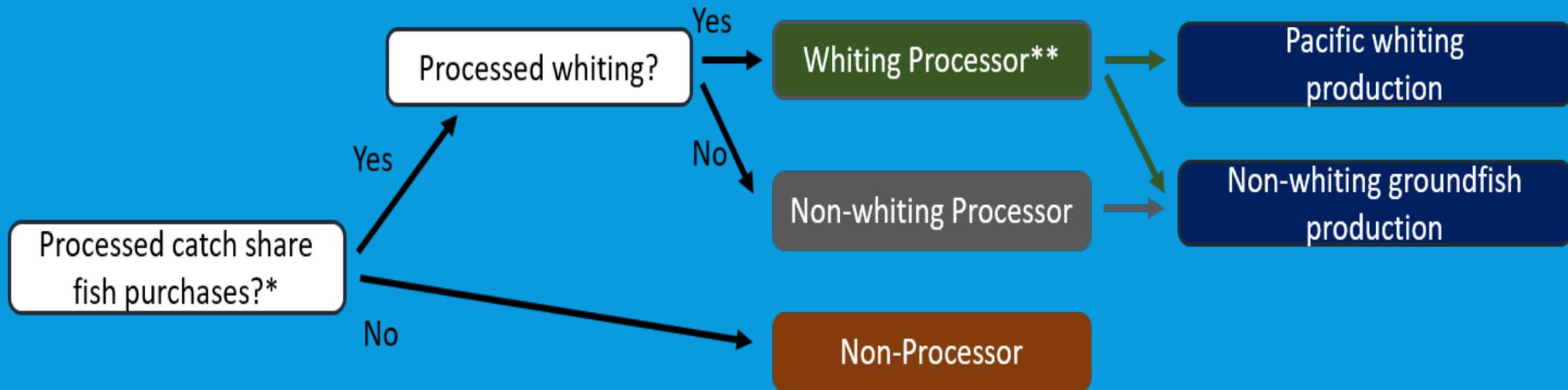


Figure 3-2. Economic performance section classification of CS first receivers and shorebased processors. **Does not include processors that only receive whiting as bycatch.

<https://dataexplorer.northwestscience.fisheries.noaa.gov/fisheye/PerformanceMetrics/>

Table 3-25. Fleet-wide revenue, average revenue, and expenses as a percentage of revenue (2015 \$) for **shoreside whiting operations** of catcher vessels, 2009-2015. Source: EDC data.

Shoreside whiting	2009	2010	Pre-catch shares	2011	2012	2013	2014	2015	Catch shares
Fleet-wide Fishing Revenue	5,969,108	10,884,420	8,426,764	24,291,580	21,918,060	27,610,230	24,575,220	9,983,392	21,675,696
Average revenue	175,562	310,983	243,273	934,292	913,253	1,150,426	983,009	453,791	886,954
Expenses (% of revenue)									
Crew and captain	32%	31%	31%	31%	35%	34%	36%	34%	34%
Equipment and fishing gear	52%	47%	49%	28%	36%	22%	21%	51%	32%
Fuel and lubrication	18%	21%	20%	11%	15%	10%	13%	18%	14%
Buyback fees	5%	5%	5%	5%	5%	5%	5%	5%	5%
Observers	0%	1%	1%	0%	1%	1%	1%	2%	1%
Cost recovery fees				0%	0%	0%	3%	3%	1%
Ice, food, bait, supplies	4%	3%	3%	1%	1%	1%	1%	2%	1%
Other	10%	8%	9%	4%	5%	5%	6%	11%	6%
Total Expenses	121%	115%	118%	81%	96%	77%	86%	127%	93%
Number of vessels	34	35		26	24	24	25	22	

FINANCIAL OUTCOMES

CREW AND PRODUCTION WORKERS

Daily and Annual Wages for Crew

- **Whiting vessels:** Increased 83% and 118% (excl. 2015)
- **Non-whiting vessels:** Increased by 63% and 24%
- **Motherships:** Only annual wages increased for processing and non-processing crew
- **Catcher-Processors:** Processing crew decreased 23 and 20%
- PCGFSS results on compensation satisfaction corroborates these results; In 2010, 64% of crew interviewed rated compensation as “excellent” or “good”, in 2015 this increased to 76%

Shorebased processor employees

- **Non-production employees:** hourly wages have increased
- **Production employees:** hourly wages have stayed the same
- Mean number of processing employees per facility has increased in most³⁸ months

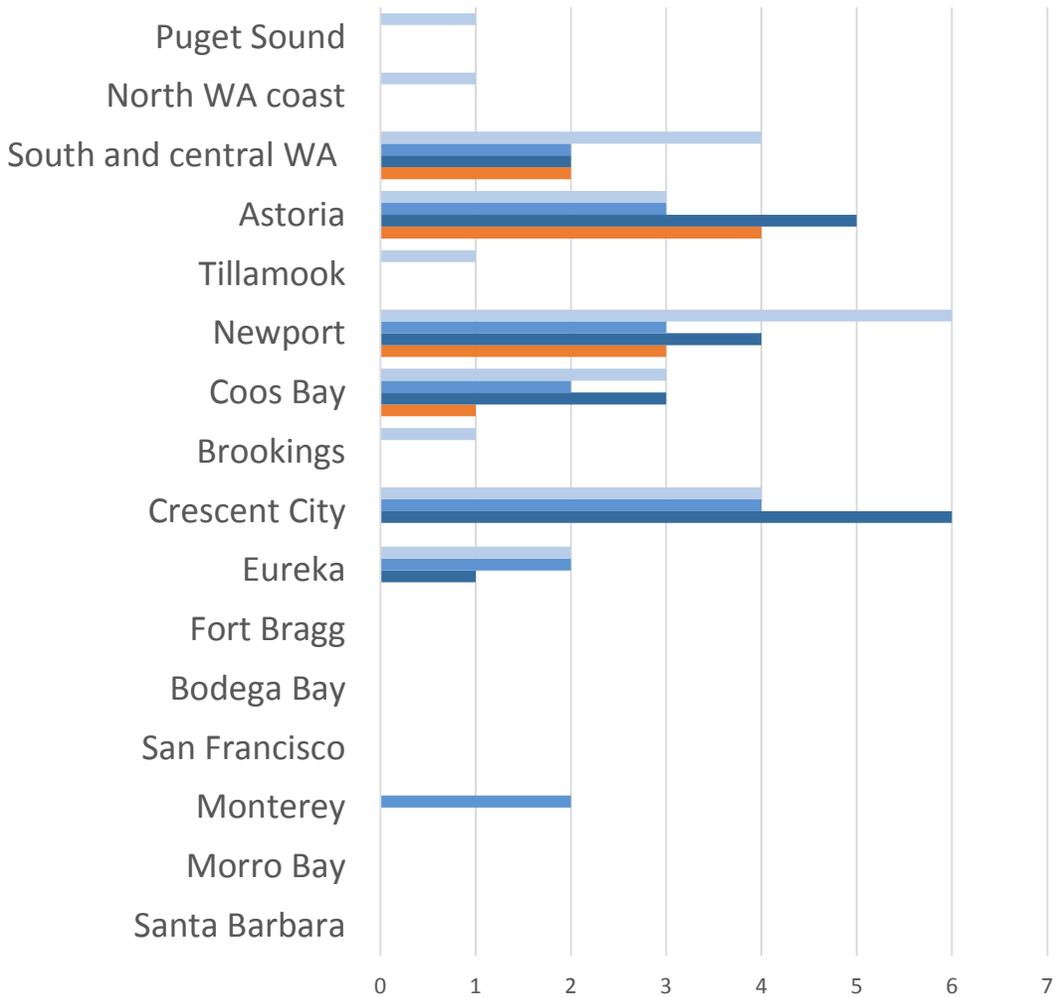
DISTRIBUTIONAL OUTCOMES

DID THE DISTRIBUTION OF COST, REVENUES, EFFORT, AND NET BENEFITS AMONG FISHERY PARTICIPANTS (INCLUDING COMMUNITIES AND USER GROUPS) CHANGE?

DISTRIBUTIONAL OUTCOMES

COMMUNITIES- Port Areas

Number of Buyers- Shoreside whiting



Number of Buyers- Non-whiting Trawl

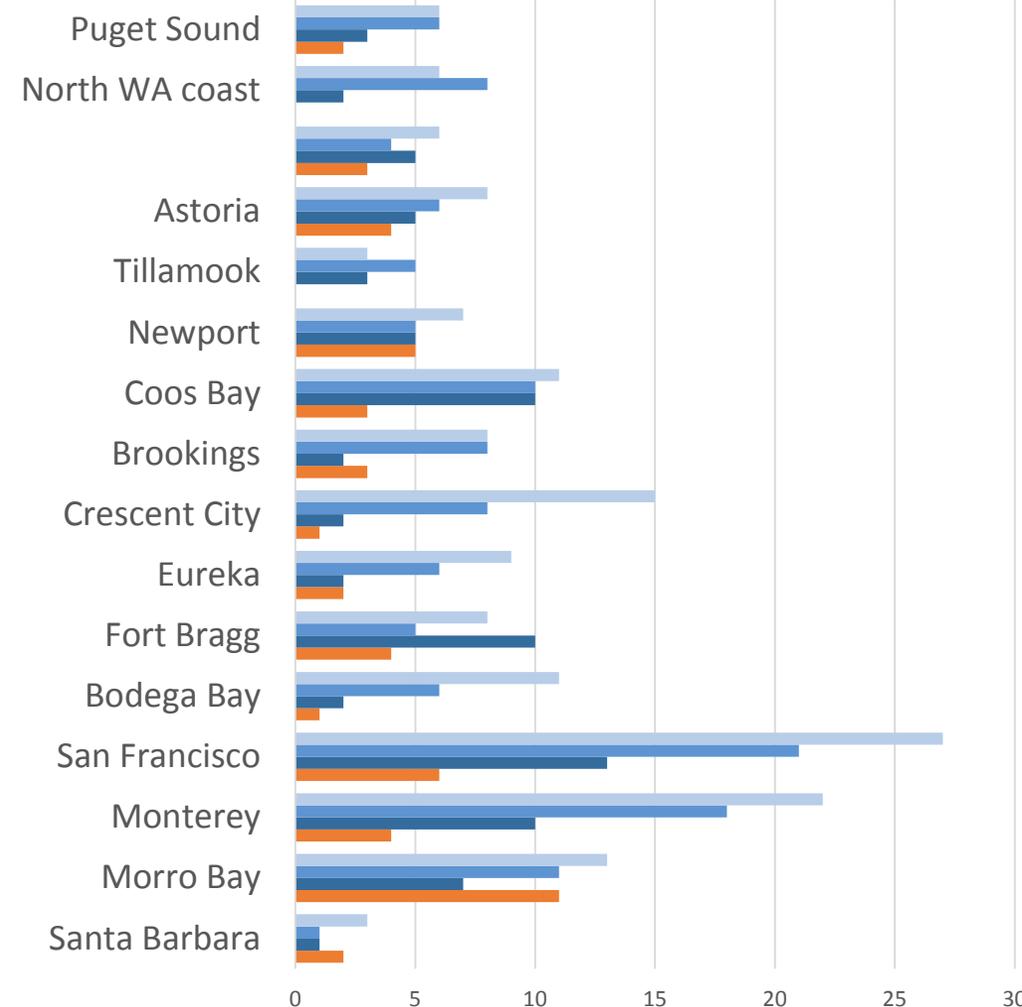
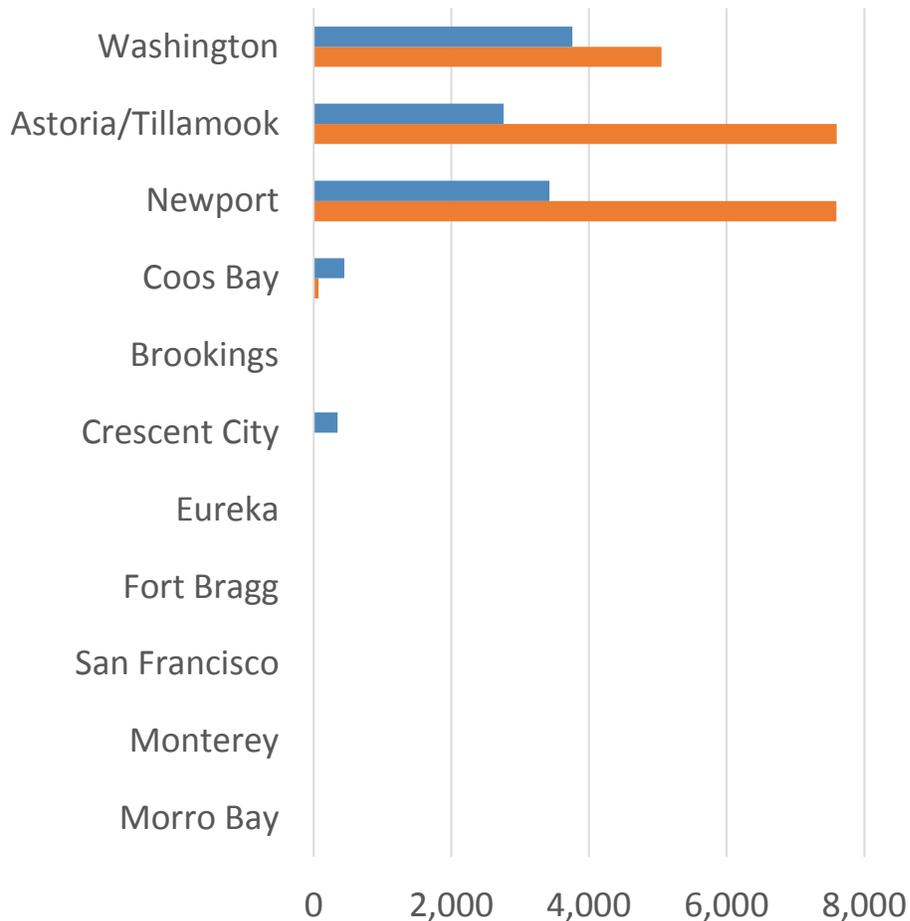


Table 3-103,
Page 3-217

DISTRIBUTIONAL OUTCOMES

COMMUNITIES- Port Areas

Average annual ex-vessel value:
Whiting



Average annual ex-vessel value:
Non-whiting

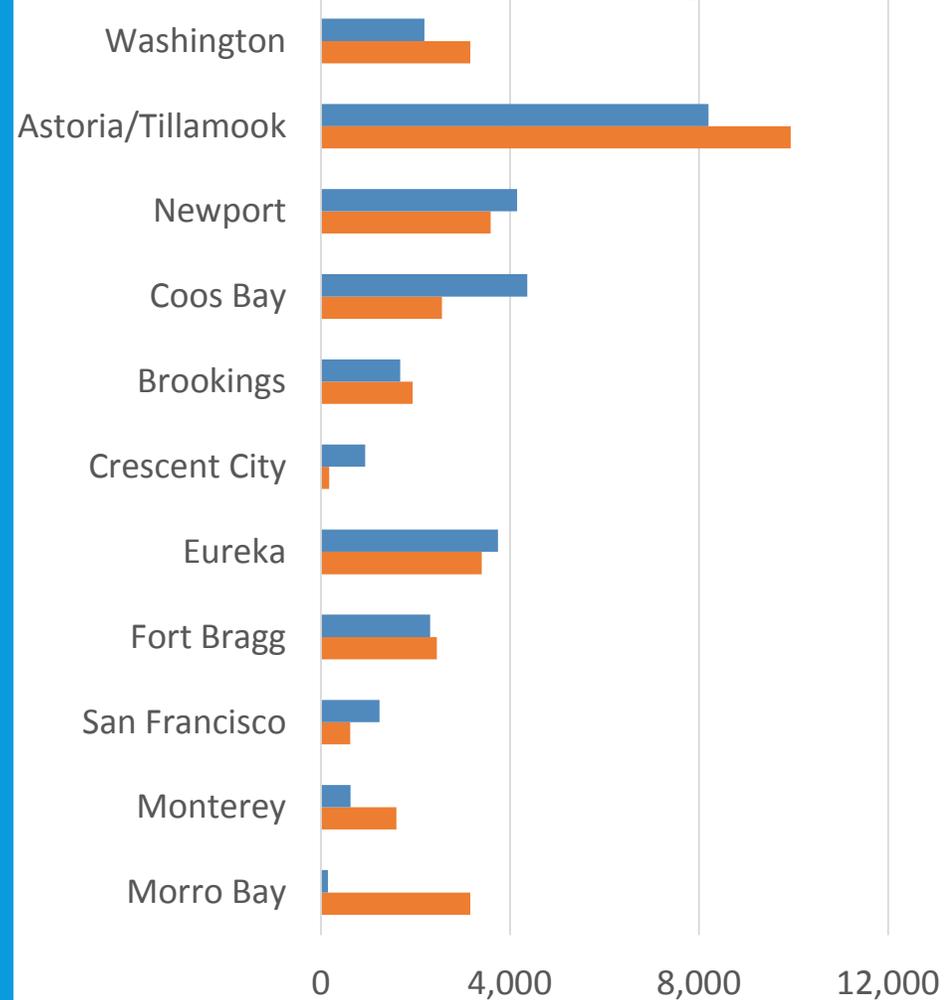


Table 3-97-98, page 3-212

DISTRIBUTIONAL OUTCOMES

COMMUNITIES

Fishing Engagement:

- Decrease in Coos Bay and Crescent City
- Increase in Ilwaco

Fishing Infrastructure:

- 46% of interviews contained some discussion of infrastructure
- Percentage discussing infrastructure losses:
 - Washington: 15%
 - Oregon: 20%
 - California: 27%
- 21% of Newport respondents spoke about increases or no change in infrastructure.

Engagement: Table 3-118, Page 3-242-4

Infrastructure: Page 3-257-8

DISTRIBUTIONAL OUTCOMES

MANAGEMENT COSTS AND CONCERNS

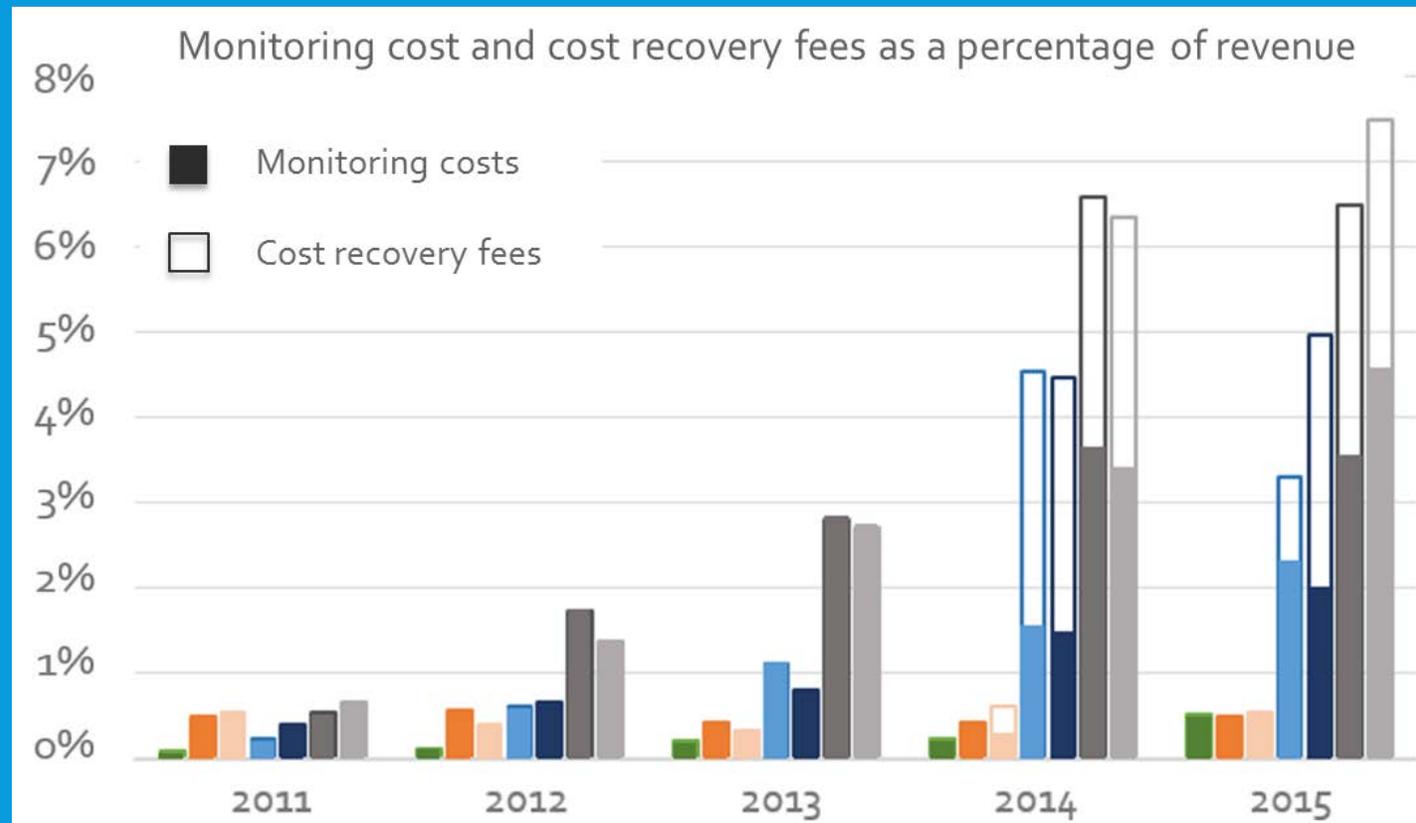
Monitoring costs:

Federal subsidy for observers and catch monitors in 2011-2015 (\$328-\$108 per day) ended in 2016.



Cost recovery:

Varies by fleet and began being collected in 2014.



QUESTIONS?



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