D1 OBSERVER AVAILABILITY

ANNA HENRY, OCTOBER 2024

THANK YOU

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INTRODUCTION

June 2023 Council tasked discussion paper on observer availability and opportunities for gaining experience on vessels.

- The number of observers of each endorsement level needed across fishing seasons compared with the existing number of unique qualified observers and newly qualified observers
    - Including consideration of pending management programs such as
        - Trawl EM
        - PCTC- moving BSAI cod trawl vessels into 100% coverage
        - Changes to monitoring requirements in the Bering Sea pot cod CP sector
- A description of observer provider challenges in providing observer coverage in both partial and full coverage fisheries.
- A summary of any solutions NMFS or observer providers are considering to improve observer availability.

OBSERVER COVERAGE

All vessels and processors that participate in federally managed or parallel groundfish and halibut fisheries off Alaska are in one of two observer coverage categories:

- Full coverage
  - “pay-as-you-go” – industry contracts directly with observer providers
  - Three certified provider companies
- Partial coverage
  - Randomly selected trips or offloads
  - Funded by observer fee assessed on all landings
  - One observer provider awarded contract

EXPERIENCE REQUIREMENTS

- NMFS regulations specify that qualified candidates must have:
  - Bachelor's degree with a major in a natural science
  - 30 semester hours or equivalent in applicable biological sciences
    - Extensive use of dichotomous keys
    - One undergraduate course each in math and statistics with a minimum of 5 semester hours total for both
    - Computer skills that enable the candidate to work competently with standard database software and computer hardware

Table 1 Observer training and experience requirements for the various observer deployment endorsements.

Endorsement	Requirements
Observer Certification	Minimum eligibility Initial observer training
Level 2	Observer certification 60 data collection days Met expectation on last cruise
Lead Level 2 (trawl gear)	Level 2 endorsement 2 cruises (contracts) 100 sampled hauls on a CP using trawl gear or a mothership
Lead Level 2 (non-trawl gear)	Level 2 endorsement 2 cruises (contracts)—at least 10 days each Successfully completed LL2 training or briefing as required 30 sampled sets (non-trawl gear) or 100 sampled hauls (trawl gear)

OBSERVER REQUIREMENTS

Table 2 Observer requirements

Coverage	Vessel/Gear Type	Fishery Description	Observer Endorsements Required
Full	Processing Plants	BSAI and GOA Pollock	Observer Certification (OC)
	Mothership	Groundfish CDQ – delivery of unsorted codends	OC + Lead Level 2 (LL2)
	Trawl CP/Mothership	Pollock CDQ Groundfish CDQ BSAI Pollock Amendment 80 in BSAI Rockfish Program	OC +LL2
	HAL CP	BSAI Pacific cod Groundfish CDQ	Increased observer option: OC + LL2
			Scales option: LL2 (with flow scale)
	CP/Mothership All gear types	All other fisheries (including HAL CPs that "opt out" of BSAI Pacific cod fishery)	OC
	Trawl CV	Groundfish CDQ BS Pollock Rockfish Program BSAI Pacific cod	OC
	HAL CV	46' LOA CDQ Groundfish	OC
	Pot CP	Groundfish CDQ	OC + LL2
		Groundfish (non-CDQ)	OC + Level 2 (L2)
Partial	All gear types	All fisheries (selected trips)	OC
	Fixed Gear EM	Selected trips	Camera system
Trawl EM EFP	Trawl CV	Pollock	Camera system
	Processing Plants	Pollock	OC

OBSERVER AVAILABILITY

- New observers are certified after completion of the initial training
- Certification expires 18 months after their last debriefing
- NMFS tracks observer qualifications including certifications, trainings completed, and endorsements
- Observer providers must deploy observers with the appropriate endorsement for the assignment
    - Verify observer experience with FMA Observer Program staff
    - Documentation of endorsements are not issued to providers unless requested
- An individual observer is included in the pool of qualified observers as long as their certification or endorsement is valid, regardless of their individual intent to deploy on future assignments

OBSERVER AVAILABILITY

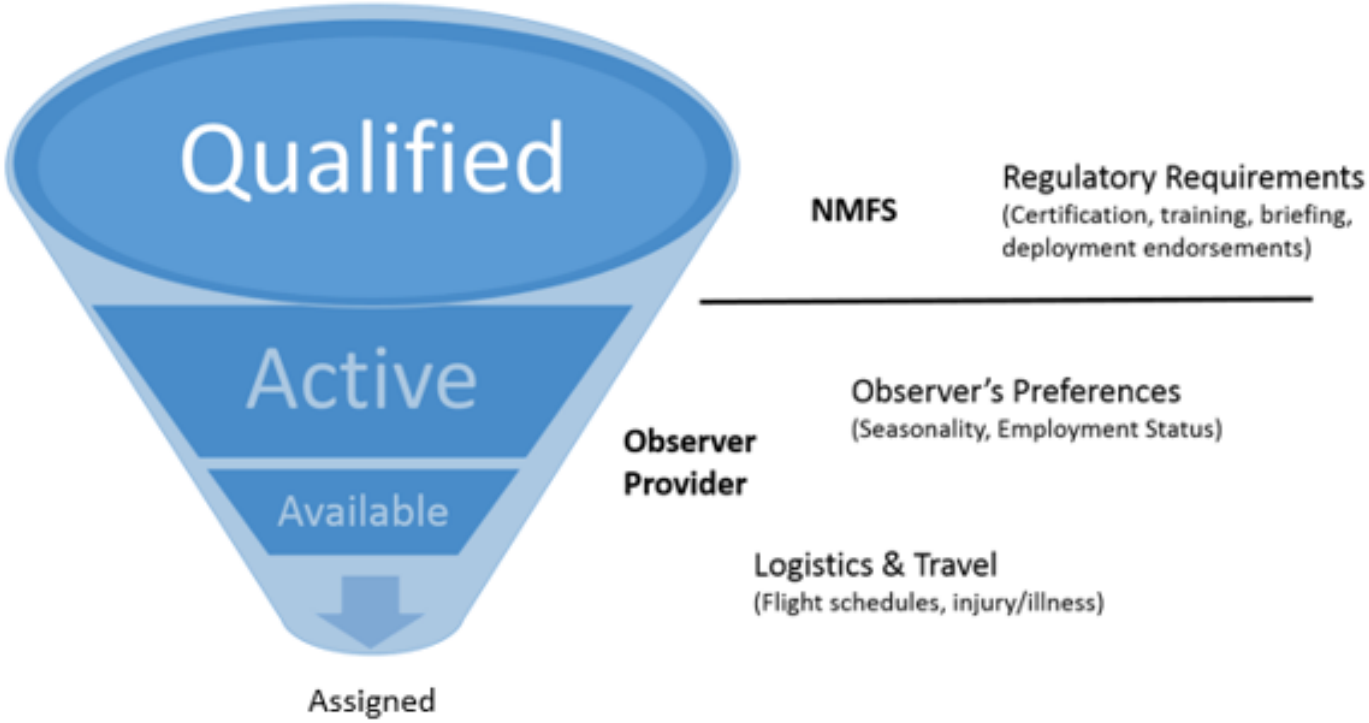

Figure 2 How observer availability is affected by regulatory requirements, observer preferences, and logistics and travel (adapted from NMFS 2017).

OBSERVER AVAILABILITY

Table 3 Number of distinct qualified and newly qualified observers at each endorsement level and observer attrition as of December 31 of each year 2014-2023.

YEAR	Qualified Observers						Newly Qualified Observers						Attrition
	All Certified	Not LL2	LL2 - either	Non-trawl LL2	Trawl LL2	LL2 - Both	All Certified	Not LL2	LL2 - either	Non-trawl LL2	Trawl LL2	LL2 - Both	
2014	532	237	295	203	233	141	164	130	34	11	27	4	149
2015	548	226	322	215	243	136	145	113	32	19	23	10	129
2016	524	178	346	215	261	130	108	81	27	13	21	7	132
2017	494	166	328	192	263	127	103	77	26	14	21	9	133
2018	486	178	308	181	260	133	128	98	30	9	30	9	136
2019	493	194	299	183	250	134	141	105	36	14	33	11	134
2020	479	209	270	171	237	138	140	121	19	6	19	6	154
2021	467	211	256	160	228	132	126	114	12	8	11	7	138
2022	431	196	235	165	208	138	126	109	17	10	15	8	162
2023	434	200	234	162	196	124	141	115	26	14	23	11	138

Source: NMFS FMA

Table 4 Number of individual observers deployed by endorsement type 2014-2023.

YEAR	Deployed Observers			
	All Deployed	As Not LL2	As Trawl LL2	As Non-trawl LL2
2014	433	407	112	78
2015	454	422	104	84
2016	443	411	113	72
2017	383	358	101	77
2018	382	366	116	61
2019	381	357	117	66
2020	352	335	98	50
2021	355	339	96	45
2022	340	315	108	56
2023	329	310	97	55

OBSERVER DEMAND

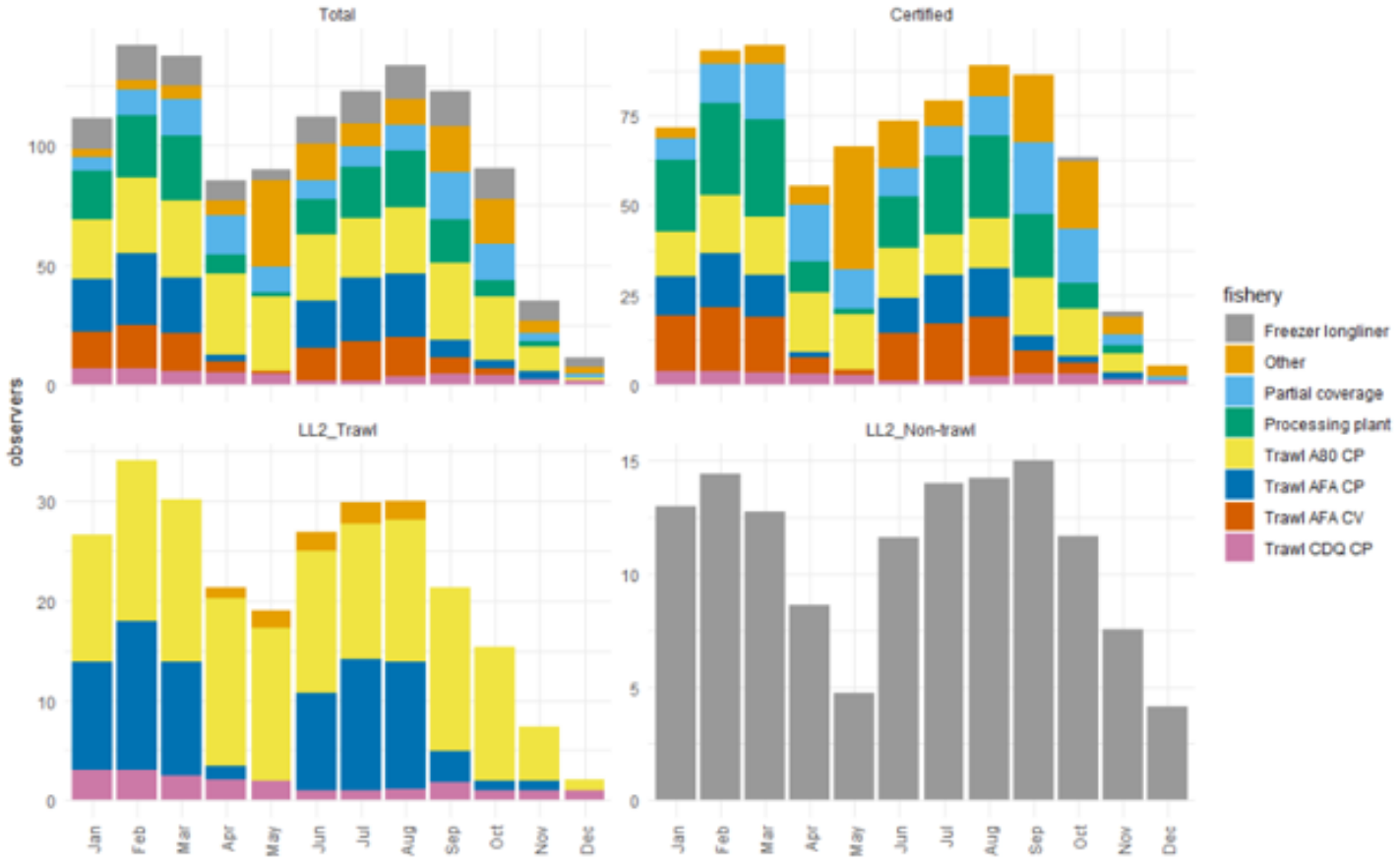

Figure 5 Average number of daily observers required by month and endorsement type in different fisheries in 2023 (note y-axis changes in each panel).

OBSERVER DEMAND

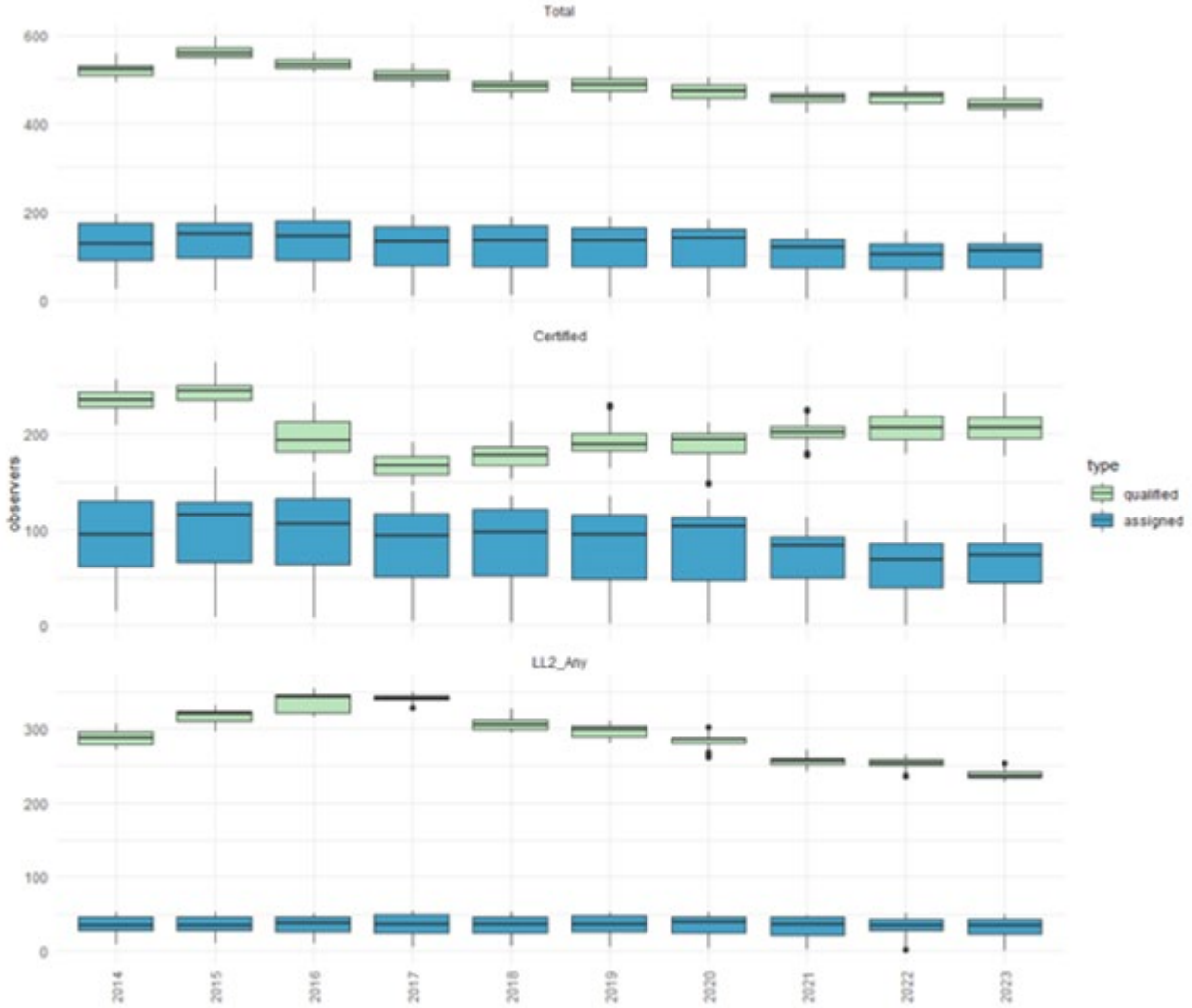

Figure 4 Daily number of available and assigned observers by endorsement level 2014-2023

RECENT MANAGEMENT CHANGES

Action	Effective date	Monitoring change
Pacific Cod Trawl Cooperative	9/7/2023	BSAI Pacific cod trawl CV fishery moved from the partial observer coverage category to full coverage category
Pot CPs in BSAI groundfish	12/11/2023	CPs previously required to have observers with the observer certification (OC) now required to carry at least one Level 2 observer at all times.
Pelagic Trawl Electronic Monitoring	expected 1/1/2025, EFP since 2020	Pollock CVs using pelagic trawl gear in the BSAI and GOA can opt to use electronic monitoring systems in place of observers onboard vessels; shoreside observers with OC monitor offloads.

PACIFIC COD TRAWL COOPERATIVE (PCTC)

BSAI Pacific cod trawl CV fishery moved from the partial observer coverage category to full coverage category

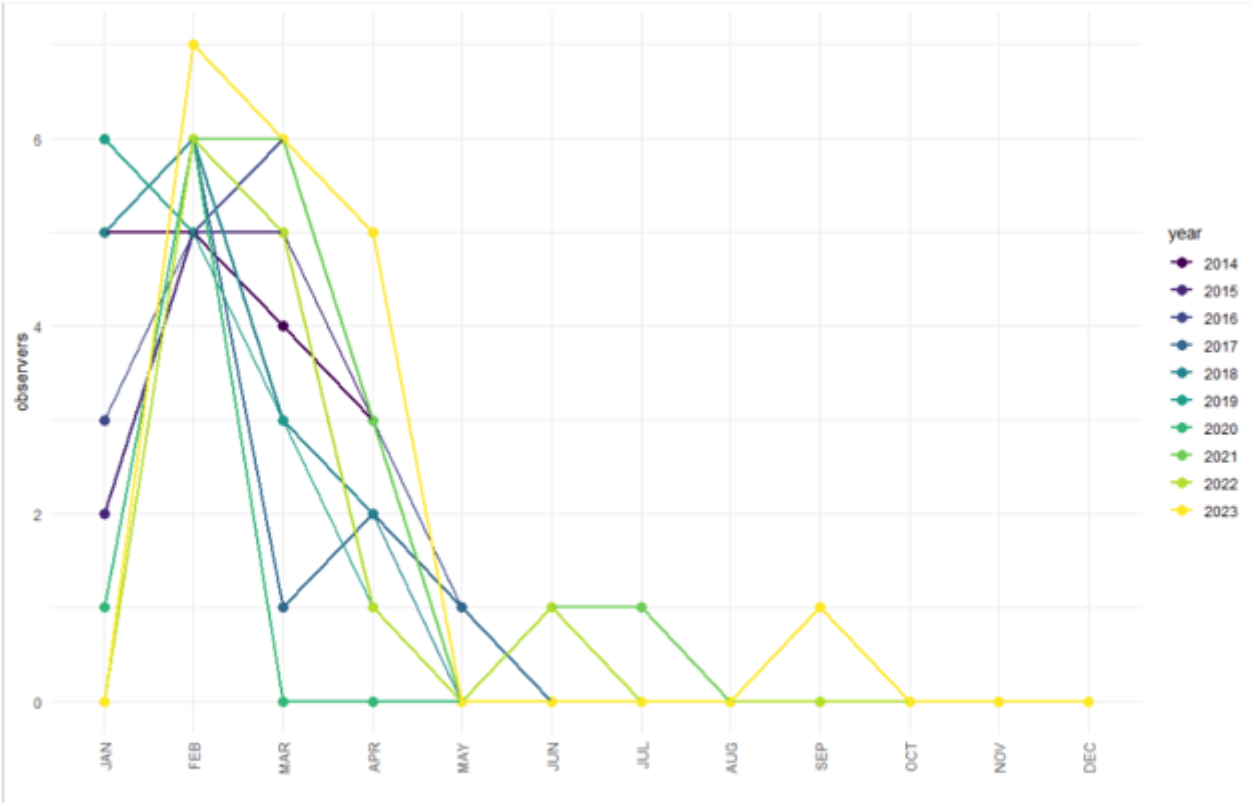

Figure 6 Maximum additional number of certified observers required in a single day, by month if the PCTC program had been in place 2014-2023.

POT CATCHER PROCESSORS (POT CP)

CPs previously required to have observers with the observer certification (OC) now required to carry at least one Level 2 observer at all times.

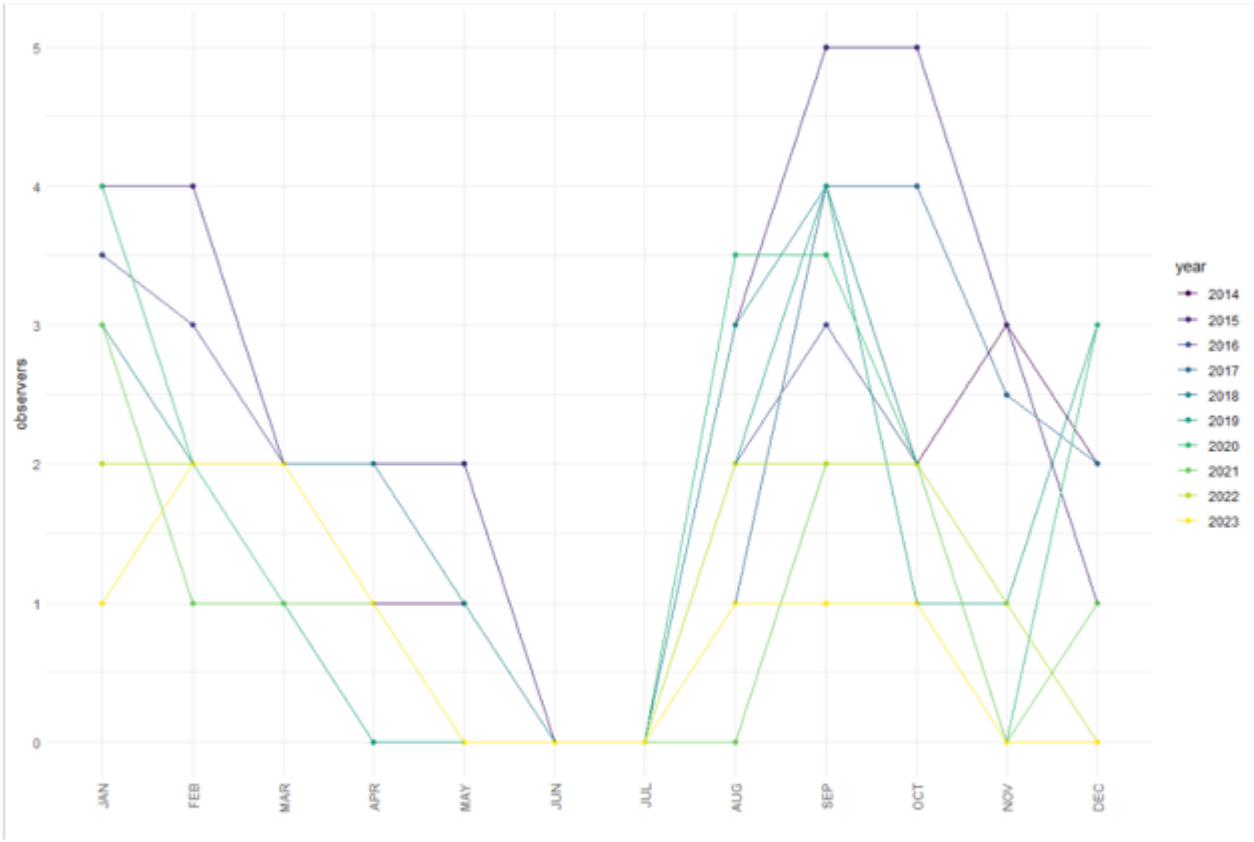

Figure 7 Maximum number of L2 observers required in a single day, by month if the pot CP Level 2 observer requirements had been in place 2014-2023. Note these are not additional observers but rather L2 endorsed observers that would have previously only required observer certification.

PELAGIC TRAWL EM

Pollock CVs using pelagic trawl gear in the BSAI and GOA can opt to use electronic monitoring systems in place of observers onboard vessels; shoreside observers with OC monitor offloads.

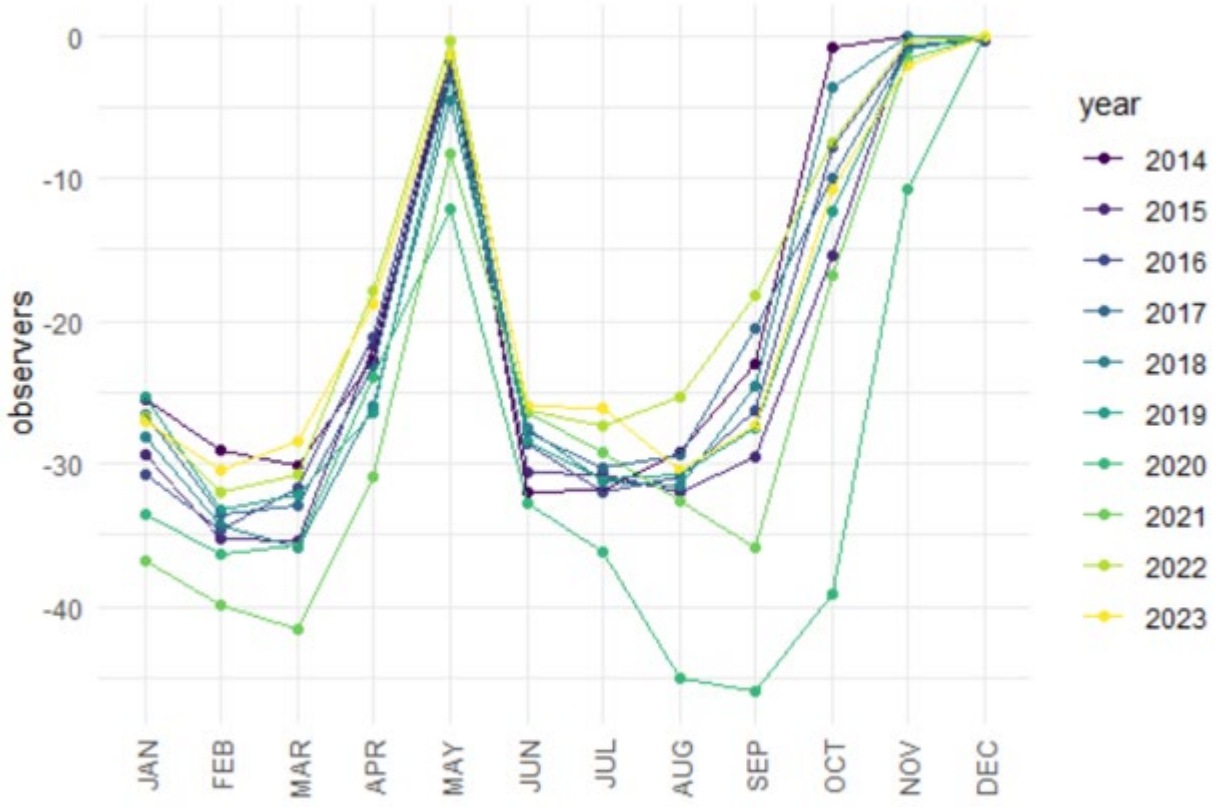

Figure 8 Greatest daily change in number of observers required if trawl EM had been a regulated program 2014-2023.

RECENT MANAGEMENT CHANGES

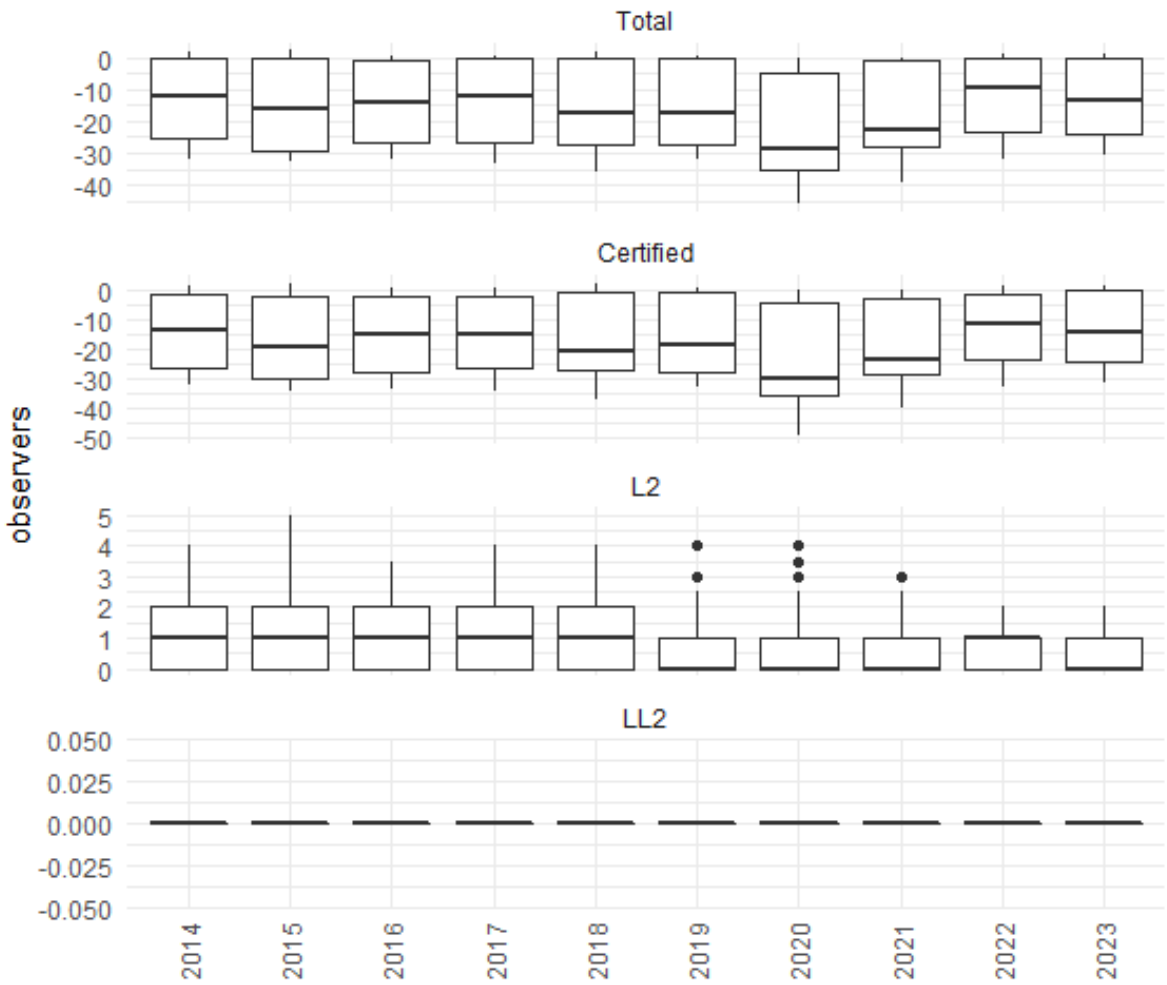

Figure 9 Overall daily change in observers assigned due to PCTC, Pot CP and Trawl EM regulatory changes.

CHALLENGES AND SOLUTIONS FOR OBSERVER AVAILABILITY

- Analysts spoke with representatives from each permitted observer provider company, current and past observers, and FMA employees to better understand the current challenges and potential solutions related to observer availability.
- There was no consensus in describing the scope or the magnitude of the problem.
- One provider mentioned that they have not seen changes in recent trends in recruiting or retention of observers
- Other providers stated that the problem is dynamic; a few years ago it was harder to recruit the necessary overall number of people to fill observer positions, but the current challenge is more related to retaining observers and subsequent reduction in experienced observers.
- The following topics and themes were mentioned as contributing factors:

CHALLENGES

- COVID-19
- Current dynamics of the fishery
- Specific demands of the position
- Regulatory requirements
- Structure of the observer system
- Changing demographics of the labor pool
- Management changes
- Additional sources

POTENTIAL SOLUTIONS

- More professional approach
- Increased communication and support
- New recruitment strategies
- Compensation

AGENCY STRATEGIES

The National Observer Program (NOP) has focused recent efforts on observer recruitment and retention, including developing the following strategies and programs:

- Observer Survey
- Mentorship program
- Progression stories
- Communication with Universities
- Flyers
- Webinars
- Veteran to Observer Program (Vet2Obs)
- Creation of the fisheries.observer@noaa.gov email address to facilitate recruitment and retention efforts.
- Creating a permanent listing on popular job boards that links the fisheries observer NOAA web page and links to current permitted contractors.
- Developing an art contest for observer artwork.
- Updating the NOP website to provide additional information for those interested in becoming an observer.

AGENCY STRATEGIES

The FMA division has implemented numerous strategies to assist observer providers to support their recruitment efforts. Some examples are as follows:

- Upon request, registration deadlines can be extended
- Increase capacity for 3-week training from 25 to 30 attendees.
- Dichotomous keys: If unable to receive official documentation from a professor or university outlining extensive use of dichotomous keys per the regulations, observer applicants may provide supplemental documentation that illustrates their usage and experience.
- Degree confirmations: consider and conditionally approve qualified applicants who have completed all degree requirements, but have not received their official degree confirmation. The otherwise qualified applicant can be conditionally approved and all official paperwork must be submitted prior to the last day of training.

CONCLUSION

- There is a surplus of qualified observers for assignments under current management requirements (including recent regulatory changes).
- This includes any qualified observer whose current certification meets the endorsement requirements and likely includes numerous observers who are not actively interested in observing and are not available for deployment.
- Given currently available data it is difficult to estimate an accurate number of observers willing and able to accept an assignment at any given time.
- Many of the challenges are either inherent to fisheries observing or general factors that affect the overall labor pool
- A number of strategies towards improving observer availability largely outside the scope of Council influence
- Consider impacts of management changes on monitoring requirements including potential cumulative and indirect effects

FMAC REPORT- RELATED TO OBSERVER AVAILABILITY

- Discussion focused on many themes in the paper
- Maintaining the current high standards and requirements for observers is of primary importance
    - The principal objective is to maintain data quality, which requires observers with proper knowledge and understanding of sampling methods and design.
- Concern regarding the loss of diversity of deployment opportunities on vessels
    - Important to maintain a variety of deployments to keep the job interesting and less routine and to sustain a vibrant observer program
- Support efforts currently being undertaken or envisioned by the agency
    - Encourage continued exploration of programs to increase observer recruitment opportunities and retention
- Observer availability remains a difficult issue to address comprehensively.