

NOAA
FISHERIES

Office of Science
and Technology
Silver Spring, MD

U.S. National Observer Program and Regional Electronic Technology Implementation Plans for 2016 -2018

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Presentation Overview

- National and regional observer programs
- Budgets
- Regional Electronic Technologies Implementation Plans
 - Electronic monitoring
- Future challenges

Legend

— US Exclusive Economic Zone (EEZ)

National Observer Program (1999)

Mission

Provide a formalized mechanism for NOAA Fisheries to address observer issues of national importance and to develop policies and procedures to ensure that NOAA Fisheries observers and observer programs are fully supported. The policies must reflect the diverse needs of regional observer programs while enhancing data quality and achieving consistency in key areas of national importance.

Objectives

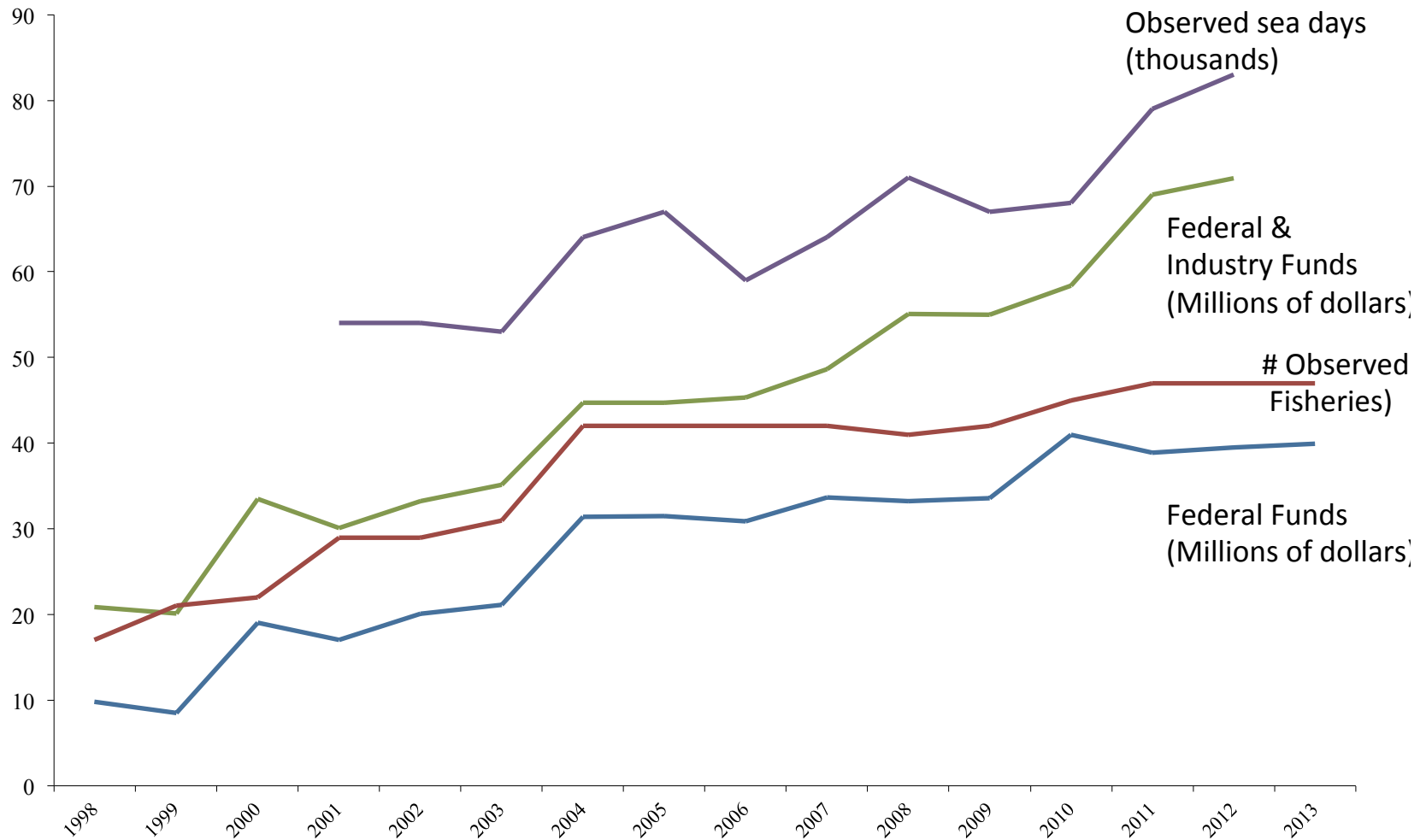
- Coordinate the National Observer Program Advisory Team.
- Communicate and advocate the mission of the National Observer Program and each regional observer program.
- Develop and support national standards and policies to create high quality, cost effective, efficient, and productive observer programs.
- Characterize and qualify the activities and resources of NOAA Fisheries observer programs and advocate for full support

Deploys 900 observers / 79,000 sea days / 48 fisheries

National Observer Program Activities

Enhancements to Data Quality and Data Collection Procedures	To develop and evaluate Agency initiatives to improve the quality of observer data from regional observer programs.
	To evaluate the procedures for collection of observer data, including the review of data collection methodologies and bycatch estimation procedures.
	To develop technological and methodological enhancements to improve data collection techniques.
	To enhance the quality of data collected by observers through development of national standards for the collection, management, and distribution of observer data.
	To enhance integration of observer data with other data collection programs such as logbooks, VMS, and landing reports.
	To develop and update a national bycatch report for documentation of regional and national bycatch estimates and estimation procedures, identification of gaps in coverage, and input into strategic planning processes.
Policy Development	To identify amendments under the Magnuson-Stevens Fishery Conservation and Management Act, Marine Mammal Protection Act, Endangered Species Act, and other federal legislation necessary to support observer program activities.
	To develop national policies on issues of national concern to observer programs, such as hiring and training observers, observer safety and health, and data confidentiality.
Observer Support	To recognize and support the needs of observers so that they are able to collect high quality scientific data.
	To communicate NOP activities of interest to the observer community
Program Enhancements	To identify the agency's highest priorities for observer data collection and make recommendations on how observer programs can fulfill those needs.
	To review regional observer programs and make recommendations on how to improve program operations and administration
	To review the cost efficiency and effectiveness of observer program operations.
Outreach and Education	To communicate the goals and objectives of NOAA Fisheries observer programs at a national level.
	To support and coordinate the outreach activities of regional observer programs.
	To formalize working relationships between observer programs and other state/federal agencies and organizations.
International	To support and participate in the International Fisheries Observer Conference.
	To maintain an awareness of observer programs worldwide.
	To assist other NOAA Fisheries offices with international observer-related issues.

National Observer Program Budget



FY 2015 Observer Budget

(\$ in Thousands)	FY 2015 Available
PPA: Observers and Training:	
Atlantic Coast Observers	\$3,334
East Coast Observers	\$333
Hawaii Longline Observer Program	\$3,775
North Pacific Observer Program	\$5,566
NE Fisheries Observers	\$8,226
National Observer Program	\$12,305
S. Atlantic/Gulf Shrimp Observers	\$1,751
West Coast Observers	\$4,807
Subtotal, Observers/Training PPA	\$40,097
PPA: Reducing Bycatch - Observers Portion Only	\$651
Total Observers Funding	\$40,748

FY 2015 Enacted amount for Observers and Training is \$43.0 million. FY 2015 Available funding shown above include reductions for Hollings Rescission, Prior year De-obligations, and HQ administrative costs.

FY 2015 Observer Budget by Region

(\$ in Thousands)	FY 2015 Available	North East	South East	West Coast	North West	Alaska	Pacific Islands	Sci. & Tech.
PPA: Observers and Training:								
Atlantic Coast Observers	\$3,334	\$1,473	\$1,812	\$0	\$0	\$0	\$0	\$49
East Coast Observers	\$333	\$0	\$333	\$0	\$0	\$0	\$0	\$0
Hawaii Longline Observer Program	\$3,775	\$0	\$0	\$0	\$0	\$0	\$3,775	\$0
North Pacific Observer Program	\$5,566	\$0	\$0	\$0	\$0	\$5,566	\$0	\$0
NE Fisheries Observers	\$8,226	\$8,226	\$0	\$0	\$0	\$0	\$0	\$0
National Observer Program	\$12,305	\$5,039	\$1,036	\$1,039	\$958	\$1,556	\$2,085	\$592
<i>Electronic Monitoring/Reporting</i>	<i>[\$900]</i>	<i>[\$0]</i>	<i>[\$56]</i>	<i>[\$174]</i>	<i>[\$200]</i>	<i>[\$375]</i>	<i>[\$95]</i>	<i>[\$0]</i>
S. Atlantic/Gulf Shrimp Observers	\$1,751	\$0	\$1,751	\$0	\$0	\$0	\$0	\$0
West Coast Observers	\$4,807	\$0	\$0	\$0	\$4,807	\$0	\$0	\$0
Subtotal, Observers/Training PPA	\$40,097	\$14,738	\$4,932	\$1,039	\$5,765	\$7,122	\$5,860	\$641
PPA: Reducing Bycatch - Observers Portion	\$651	\$94	\$94	\$94	\$94	\$94	\$94	\$87
TOTAL	\$40,748	\$14,832	\$5,026	\$1,133	\$5,859	\$7,216	\$5,954	\$728

FY 2015 Enacted amount for Observers and Training is \$43.0 million. FY 2015 Available funding shown above include reductions for Hollings Rescission, PY De-obligations, and HQ administrative costs.

Responsibilities of Regional Observer Programs

- Sampling protocols and coverage levels
- Safety training
- Observer deployment
- Observer debriefing
- Data management
- Data analysis



Location of Regional Programs



Atlantic Ocean and Gulf of Mexico 2013 coverage



Pacific Ocean and Western Pacific 2013 coverage



North Pacific (Alaska) 2013 coverage

**Bering Sea/Aleutian Islands/
Gulf of Alaska cooperatives**

Coverage: 100%



**Bering Sea/Aleutian Islands/
Gulf of Alaska Groundfish & Halibut Trawl
Longline/Pot**

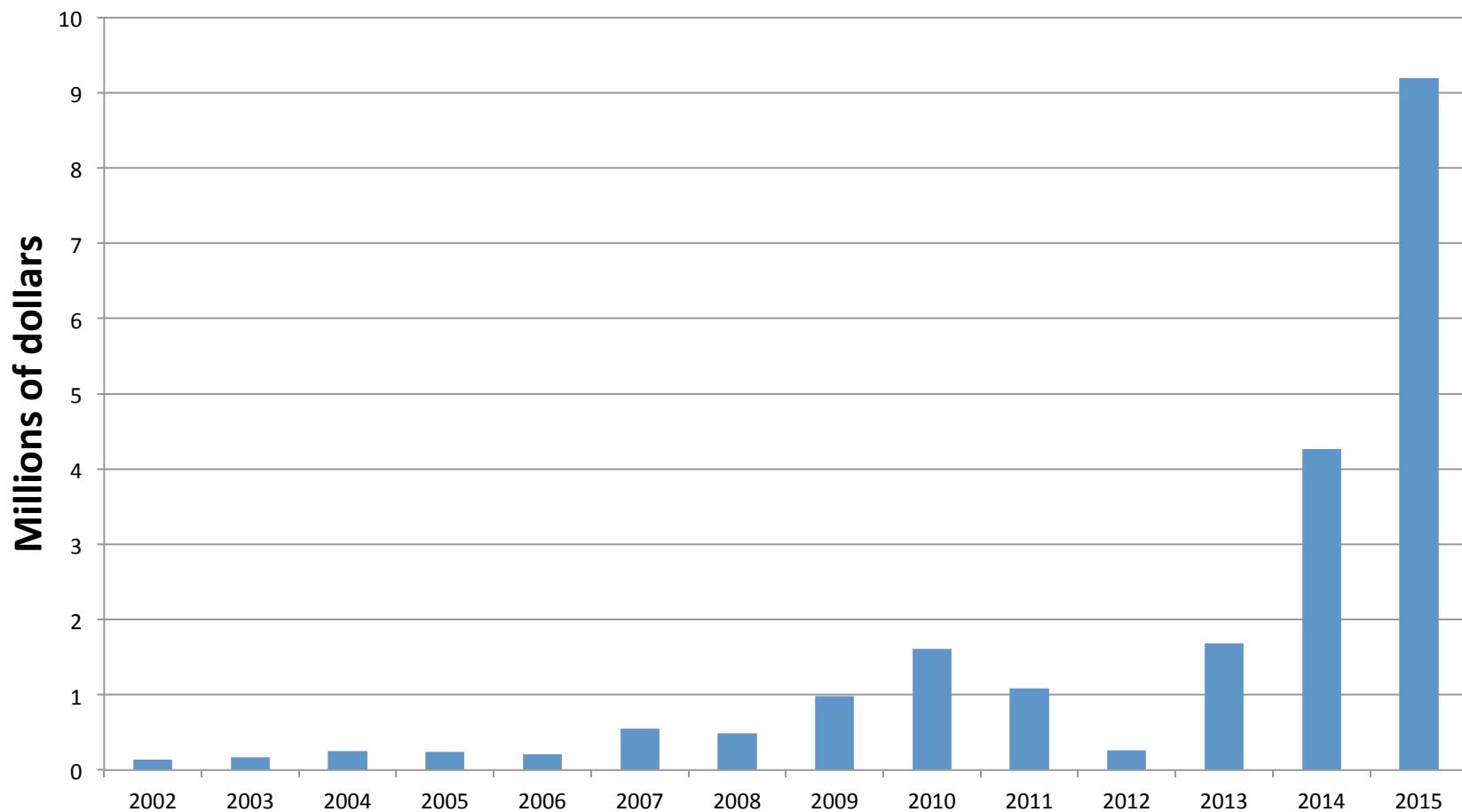
Coverage: 10-14%

Regional Electronic Technologies Implementation Plans

Electronic Reporting (ER) & Electronic Monitoring (EM)

	Pacific Islands	Alaska	West Coast	Southeast	Greater Atlantic	Atlantic Highly Migratory
ER in place						
new ER in next 2 years			all fisheries			
future ER for observers						
EM in place		4 fisheries				
New EM in next 1-2 years			Groundfish 2015		Groundfish 2016	
New EM in 3-5 years		Small boat / fixed gear 2018	Groundfish 2016, Drift Gillnet Fishery 2018	Shrimp to monitor for sawfish 2018	Herring & Makcerel 2017	
VMS in place						
Future VMS plans						
Private angler recreational fishing			2018-2020			
For-hire fishery			2018-2020			
Cost estimates						
Costs addressed generally						
Cost share components			groundfish FMP	shrimp ER		
Fishery dependent data modernization				future plan	2017	
ER for biological data						

Electronic Technologies Budget (all sources)



Overview of Electronic Monitoring

EM (video monitoring) purposes include:

- **Compliance monitoring** – are regulations being followed (fishery and protected species)
- **Management** – data to support real-time management (individual vessel quotas, catch limits)
- **Scientific data collection** – assessments, socioeconomic, ecological and ecosystem research, bycatch reporting

NOAA Fisheries has funded > 30 EM pilot projects.

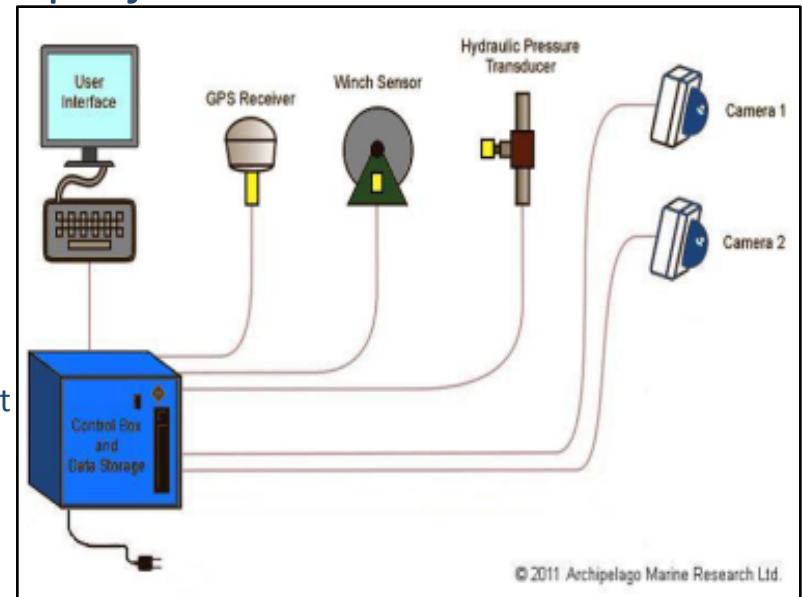
5 EM programs ~ implemented:

Atlantic HMS and 4 Alaska groundfish fisheries

3 EM programs ~ pre-implementation:

Northeast, West Coast, and Alaska

More info: talks in this session & Symposium: Implementing Electronic Monitoring and Reporting in U.S. Fisheries Management
Thursday, August 20th
8:00 AM - 5:20 PM
Room B-112



Implemented EM Programs

3 examples

1. Amendment 80 to Bering Sea/Aleutian Islands (BSAI) non-pollock trawl fishery (2007)

- requires video recording of sorting activity in bins (or an alternative measure) to prevent pre-sorting of the catch before the observer has an opportunity to sample the catch.

2. Amendment 91 to BSAI pollock trawl fishery (2010)

- requires video monitoring of all locations where salmon bycatch is sorted by the crew and the location where the salmon are stored until sampling by an observer.

3. Amendment 7 to the Consolidated Atlantic HMS FMP (2015)

- requires EM systems on vessels with Atlantic tuna longline permits and is designed to monitor bluefin tuna catch and discards.



EM Lessons Learned (So Far . . .)

- Potential Benefits

- Suitability across a wide range of vessel sizes
- Compliance tool for monitoring requirements or prohibitions
- Fully integrated data collection tools that can create a profile of fishing activity at sea
- Potentially lower costs (*yet to be determined*)
- 24/7 operation on many vessels

- Challenges

- Species identification
- Estimating weights of discarded species
- Archiving and storing huge amounts of data
- Costs and time delays associated with analysis of EM data
- Regulatory and operational constraints, including enforcement

Future Challenges

- Flat federal budget does not allow for increased observer coverage.
- Pressure to implement electronic monitoring programs.
- Lack of consistency in industry funding of observer programs (and possibly electronic monitoring) around the United States.



Thank You! Questions?



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