



NFWF

Electronic Monitoring and Reporting 2019 Grant Slate

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FUNDING PARTNERS



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ABOUT NFWF

The National Fish and Wildlife Foundation (NFWF) protects and restores our nation's fish and wildlife and their habitats. Created by Congress in 1984, NFWF directs public conservation dollars to the most pressing environmental needs and matches those investments with private funds. Learn more at www.nfwf.org

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Jamestown, Rhode Island

OVERVIEW

The National Fish and Wildlife Foundation (NFWF), the National Oceanic and Atmospheric Administration (NOAA), the Walton Family Foundation, and the Kingfisher Foundation announced a 2019 round of funding for Electronic Monitoring and Reporting projects. Fourteen new fisheries conservation grants totaling \$3,925,179 were awarded. The 14 awards announced generated \$5,707,142 in match from the grantees, providing a total conservation impact of \$9,632,321.

The Electronic Monitoring and Reporting Grant Program seeks to catalyze the implementation of electronic technologies in U.S. fisheries in order to systematically integrate technology into fisheries data collection and modernized data management systems for improved fisheries management. This year's grant slate funded projects to implement electronic technologies strategies and modernize data management systems.

The following 14 projects address two key strategies to advance electronic technology implementation in U.S. fisheries: 1) test and deploy e-technology in fishery data collection and 2) modernize data management systems. In many cases, projects address both strategic priorities.

Implementing Electronic Monitoring for the Pollock Trawl Fishery in the Western Gulf of Alaska (AK)

Grantee: Aleutians East Borough

Grant Amount:\$531,217

Matching Funds:\$1,262,134

Total Project Amount:\$1,793,351

Increase electronic monitoring for discard compliance in the small vessel Pollock mid-water trawl fleet in the Western Gulf of Alaska. Project will install electronic monitoring systems onboard vessels, develop compliance plans for these vessels, conduct shore based counts of salmon bycatch, and develop cost-effective data management tools.

(continued)

Using Electronic Monitoring for Sustainability in the Gulf of Mexico Reef Fish Fishery (FL, LA, TX)

Grantee: Mote Marine Laboratory, Inc.
 Grant Amount: \$500,292
 Matching Funds: \$531,896
Total Project Amount: \$1,032,188

Expand electronic monitoring in the Gulf of Mexico reef fish fishery to address fisheries management objectives by monitoring for catch and bycatch, improving data management, and enhancing usability. Project will build on more than four years of electronic monitoring system improvements and comprehensive data collection to advance implementation of electronic monitoring as a Gulf-wide priority.

Testing Electronic Monitoring to Address Observer Constraints in the Swordfish Deep-Set Fishery (CA)

Grantee: Pflieger Institute of Environmental Research
 Grant Amount: \$172,863
 Matching Funds: \$209,000
Total Project Amount: \$381,863

Compare and document the efficacy and feasibility of electronic monitoring to document catch and bycatch in the California deep-set buoy fishery. Project will directly compare traditional human observers and camera-based electronic monitoring to assess costs, improve the potential for monitoring small vessels and meet regulatory requirements while maintaining full accountability in the developing fishery.

Pre-Implementation of Electronic Monitoring in New England's Groundfish Fishery (MA, ME, NH, RI)

Grantee: Cape Cod Commercial Fishermen's Alliance
 Grant Amount: \$524,586
 Matching Funds: \$528,214
Total Project Amount: \$1,052,800

Advance electronic monitoring in New England's groundfish fishery by continuing operation of a successful pilot project and working with stakeholders to clarify standards and needs related to the technology. Project will engage 35 vessels to finalize electronic monitoring standards and ensure that data is effectively stored, shared, and used by regional stock assessment scientists and other data end users.

Integrating Artificial Intelligence Algorithms to Strengthen Electronic Monitoring (MA, ME, NH, RI)

Grantee: New England Marine Monitoring
 Grant Amount: \$241,109
 Matching Funds: \$246,989
Total Project Amount: \$488,098

Integrate existing artificial intelligence algorithms into electronic monitoring review, transmission, and storage



Canvasback ducks

workflows to reduce program costs. Project will advance the artificial intelligence used in the New England Groundfish electronic monitoring fisheries to automate catch accounting and streamline data storage thus addressing management priorities.

Scaling Maximized Retention Electronic Monitoring in the Northeast Groundfish Fishery (MA, ME, NH, RI)

Grantee: Gulf of Maine Research Institute
 Grant Amount: \$405,000
 Matching Funds: \$500,000
Total Project Amount: \$905,000

Expand the Maximized Retention Electronic Monitoring program by adding three to four vessels to the electronic monitoring fleet and refining in person dockside monitoring. Project will conduct outreach to vessels, assess the economic impacts of this programs previous years for fishermen, and continue review of collected electronic monitoring data.

Examining Electronic Monitoring Data Quality, Integration, and Cost in Alaska's Fixed Gear Fleet (AK)

Project State: Alaska
 Grantee: Chordata LLC
 Grant Amount: \$119,100
 Matching Funds: \$126,610
Total Project Amount: \$245,710

Analyze the cost associated with, and data quality provided by, current electronic monitoring review in Alaska for the benefit of the National Marine Fisheries Service, the North Pacific Fisheries Management Council, and industry. Project will examine how electronic monitoring and observer data streams can be integrated to reduce costs, improve consistency, quality and usability of information collected.

Piloting Electronic Monitoring in the Northern Gulf of Maine Scallop Fleet (ME)

Project State: Massachusetts, Maine, New Hampshire
 Grantee: Maine Coast Fishermen’s Association
 Grant Amount: \$95,811
 Matching Funds: \$95,850
Total Project Amount:\$191,661

Develop an electronic monitoring program for the northern Gulf of Maine scallop fleet to test the feasibility of electronic monitoring on small scallop vessels. Project will test the use of video recognition software for review, expand existing data collection to the Maine state water’s fishery, and refine protocols for electronic monitoring in scallop fisheries.

Artificial-Intelligence Assisted Data Management and Review Platform for Hawaii Longline Fisheries (CA, HI)

Grantee: Ai.Fish
 Grant Amount: \$300,617
 Matching Funds: \$436,402
Total Project Amount:\$737,019

Develop a web-based application using machine learning and computer vision algorithms to preprocess electronic monitoring data from the Hawaii pelagic longline fisheries. Project will reduce costs and improve timeliness of the review process, lowering the barrier to entry for implementation of electronic monitoring and review technologies in the Hawaii-permitted longline fisheries.

Using Mobile Applications to Turn Recreational Anglers into Community Scientists (MD, VA)

Grantee: College of William and Mary, Virginia Institute of Marine Science
 Grant Amount: \$43,374
 Matching Funds: \$48,653
Total Project Amount: \$92,027

Understand the success of the ‘eBird’ application and explore how that approach could be adapted to engaging recreational anglers in community science. Project will determine the priorities and concerns recreational fishermen, fisheries managers, and fisheries scientists have regarding mobile applications, and use this input to begin developing an ‘eFish’ application for community science based on this stakeholder input.

Nationwide Communication on Fisheries Electronic Technologies and Fisheries Information Systems (WA)

Grantee: Fieldwork Communications LLC
 Grant Amount: \$152,982
 Matching Funds: \$497,400
Total Project Amount:\$650,382

Develop and execute nation-wide communication strategy for electronic monitoring and reporting technologies and modernization of the U.S. fisheries data systems. Project will develop communication materials and engage a network



Dutch Harbor, Alaska

of stakeholders using digital platforms and social media to advance electronic monitoring and reporting technologies.

Implementing Wireless Electronic Monitoring and Reporting Tools in New England (MA, ME, NH, RI)

Grantee: Integrated Monitoring Inc.
 Grant Amount: \$229,915
 Matching Funds: \$421,029
Total Project Amount:\$650,944

Expand broadband, wireless electronic reporting to high volume fishing vessels in New England, including ground fish vessels, limited access scallop vessels, and charter vessels. Project will demonstrate the scalability and transferability of wireless electronic monitoring technology and electronic reporting using broadband Vessel Monitoring System.

Expanding and Improving the Use of Electronic Monitoring in the Gulf of Mexico Shrimp Trawl Fishery(AK, FL, LA,TX)

Grantee: Saltwater Inc.
 Grant Amount: \$173,145
 Matching Funds: \$175,000
Total Project Amount:\$348,145

Expand and improve the use of electronic monitoring in the Gulf of Mexico shrimp trawl fishery by installing electronic monitoring systems and collecting data on protected species interactions and red snapper bycatch volume and locations. Project will maximize the utility of the collected data for both fishery management and dealer verification of catch origin and sustainable fishing practices.

Implementing Electronic Monitoring for Compliance in the Mid-water Trawl Pollock Fisheries (AK)

Grantee: United Catcher Boats
 Grant Amount: \$435,168
 Matching Funds: \$627,965
Total Project Amount:\$1,063,133

Implement operational testing to evaluate the feasibility and cost efficiency of using electronic monitoring systems in the Bering Sea and Gulf of Alaska Pollock mid-water trawl catcher vessels. Project will expand previous efforts to improve data quality, timeliness, and cost-efficiency for salmon bycatch monitoring compliance with retention regulations.