

The NOAA FISHERIES NAVIGATOR

Electronic Monitoring for Groundfish Sectors in Fishing Year 2021

Beginning May 1, 2021, Groundfish sectors may use electronic monitoring (EM) instead of human at-sea monitors to meet sector monitoring requirements. NOAA Fisheries has been working with industry and other stakeholders to develop an audit-model EM program for groundfish sectors since 2015. In December 2019, we notified the New England Fishery Management Council of our intent to expand the audit-model EM program and incorporate it into the fishing year 2021 sector operations plan approval process. There is also a maximized retention EM program operating in the region, but this program requires further development before it can be included in sector operations plans. We have developed and distributed EM program standards and guidance, as well as an agency-designed audit-model program, to facilitate sectors' adoption of an audit-model EM program, if desired. Sectors with vessels that wish to use EM were required to submit a draft EM plan to NOAA Fisheries by November 1, 2020. NOAA Fisheries will work collaboratively with these sectors to revise their EM plans as necessary in advance of the 2021 fishing year. Sector vessels may only use EM to meet monitoring requirements if their sector's EM plan is approved by NOAA Fisheries.

Choosing a Provider

Each year, we solicit applications from at-sea monitoring (ASM) provider companies that wish to be approved to provide ASM services for the new fishing year. For fishing year 2021, we also solicited applications from EM provider companies. We anticipate announcing provider approvals for the upcoming fishing year in January 2021. Once the approved providers are announced, sectors with member vessels that intend to use EM will need to contract with an approved EM provider for services. In the spring, sector members that choose to use EM will work with their EM provider to install EM equipment on their vessels, develop a unique vessel monitoring plan (VMP), and familiarize themselves with the catch handling protocols. We will request the vessel-specific VMPs prior to the start of the fishing year to allow sufficient time for review and approval of the VMPs before May 1. We will publicly announce the deadline to allow for industry planning.

Update on Amendment 23

Separately, on September 30, 2020, the New England Fishery Management Council

took final action on Amendment 23 to the Northeast Multispecies Fishery Management Plan. We will review Amendment 23 and, if approved, will target a May 1, 2022 implementation date for the monitoring

measures. The Amendment 23 monitoring measures include the use of two EM programs: The audit-model and the maximized retention

See *MONITORING '21*, page 4

HOW EM WORKS

Audit

EM validates captain's reported groundfish discards.

Measure groundfish discards within camera view.

Record all catch using eVTR.

Use sub-sampling protocols for faster processing of high volumes of groundfish.

Submit the video footage from the trip to your EM service provider.

Reviews video from randomly selected trips and provides NOAA Fisheries with a summary report documenting the groundfish discards.

Compares your eVTR report to the EM provider's summary report for quota accounting.

Provides feedback to you explaining whether the eVTR and EM summary report matched to help you improve your reporting and groundfish discard estimates.

Reviews a subset of trips to monitor the EM provider's performance.



Goal



Changes to How You Fish



What Your EM Provider Does



What NOAA Fisheries Does

Maximized Retention

EM confirms vessel retained all allocated groundfish for dockside monitor to observe.

Retain and land all allocated groundfish, regardless of size, for sampling by a dockside monitor.

Record all catch using eVTR.

Meet dockside monitor upon landing to observe offload. All landed fish may be sold.

Submit the video footage from the trip to your EM service provider.

Reviews the video from trips and provides NOAA Fisheries with a summary report verifying discard compliance.

No allocated groundfish discards are attributed to the trip, but all landed groundfish counts against the sector's quota.

Reviews EM provider's summary report to ensure compliance with retention requirements.

Uses catch data collected by the dockside monitor for science.

Reviews a subset of trips to monitor the EM provider's performance.

THIS SUPPLEMENT PROVIDED BY NOAA FISHERIES SERVICE'S GREATER ATLANTIC REGIONAL OFFICE

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EM infographic depicting audit-model and MREM programs.



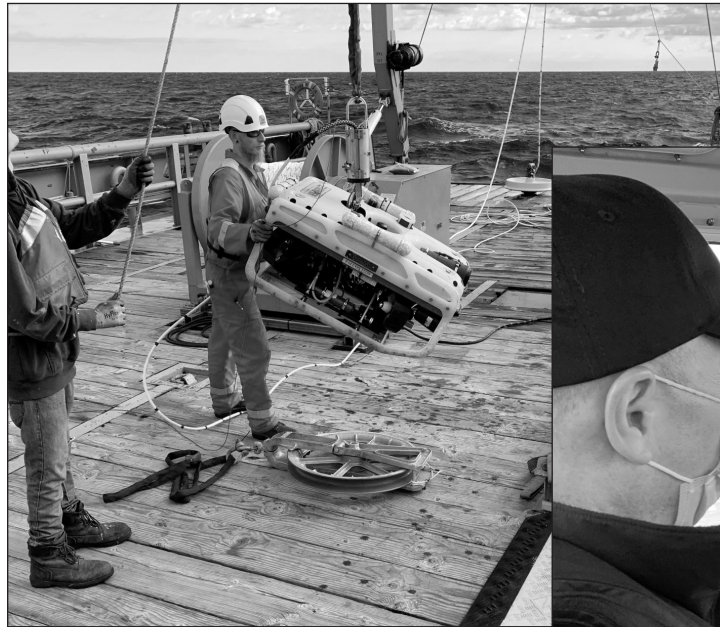
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NOAA Enforcement Deploys Remotely Operated Vehicles to Patrol the Seas

NOA's Office of Law Enforcement enhanced efforts in 2020 to help ensure compliance with gear regulations in the Northeast/Mid-Atlantic American Lobster Trap/Pot Fishery (<https://www.fisheries.noaa.gov/national/marine-mammal-protection/northeast-mid-atlantic-american-lobster-trap-pot-fishery-mmpa>). OLE deployed remotely operated vehicles this last summer and fall to inspect gear in the lobster trap fishery. Work conducted thus far shows that Remotely Operated Vehicles can be an effective tool to inspect offshore lobster gear.

Entanglement in fishing gear is one of two primary threats to the North Atlantic right whale species' survival (the other is vessel strikes). NOAA Fisheries implemented the Atlantic Large Whale Take Reduction Plan, (<https://www.fisheries.noaa.gov/alwtrp>), which reduces injuries and deaths of large whales due to incidental entanglement in fishing gear. The plan includes requirements such as the use of sinking groundlines, surface gear markings, a minimum number of traps per trawl, and weak links. The take reduction team is in the process of updating these requirements to further reduce the risk of entanglement.

The lines connecting traps to each other (groundlines) or to the surface buoy (vertical lines) can entangle marine mammals. Large whales, including critically endangered North Atlantic right whales, are particularly susceptible to entanglement because their habitat and feeding areas overlap with fisheries. The gear can cut into a whale's body, cause serious injuries, and result in infections and



At left, deploying the ROV.

Below, operating the ROV.
NOAA photos



death. In addition, non-compliance with gear requirements listed under 50 CFR §697.21 (e.g., gear marking and identification, escape vents, ghost panels, and minimum trap requirements) negatively impacts law abiding fishermen and the lobster fishery in general.

It is OLE's responsibility to enforce these rules in order to protect species like the right whale. The use of remotely operated vehicles has made it possible for OLE to inspect gear without having to physically retrieve the gear. The ROVs are

equipped with a video camera, lighting, sonar, and a manipulator arm. When deployed, the ROV can detect and record most gear or tag violations from the ocean surface down to the ocean floor. The ROV can also detect improper trap configurations.

Atlantic Highly Migratory Species December Advisory Panel Meeting

NOAA Fisheries consults with, and considers comments from the Atlantic Highly Migratory Species (HMS) Advisory Panel when preparing and implementing fishery management plans or amendments for Atlantic tunas, swordfish, billfish, and sharks. The members of the Atlantic HMS Advisory Panel represent commercial and recreational fishing interests, the scientific community, and the environmental community who are knowledgeable about Atlantic HMS and/or Atlantic HMS fisheries. On December 7, 2020, the Atlantic HMS Management Division staff, Atlantic HMS Advisory Panel members, and members from the general public met for a 1-day meeting to discuss draft Amendment 14 to the Consolidated HMS Fishery Management Plan (Amendment 14), management of the Atlantic billfish fishery in 2021, and the draft Atlantic HMS Electronic Technology Plan.

Amendment 14 would revise the framework used for the establishment of acceptable

biological catch (ABCs) and annual catch limits (ACLs) for Atlantic shark fisheries consistent with the National Standard 1 guidelines. The Atlantic HMS Management Division's presentation regarding Atlantic billfish management summarized 2020 recreational billfish fishery landings to date and reviewed available management options if needed. The Atlantic HMS Management Division will be closely monitoring 2020 landings and will take follow-up action if the 250-marlin landings limit is exceeded for 2020. The draft Atlantic HMS Electronic Technology Plan includes several options for Atlantic HMS fisheries that would reduce or eliminate redundancies in reporting, ensure Atlantic HMS data elements are included in all Electronic Technology application development, and consider ways to adjust to changing needs. For more information about the Atlantic HMS Advisory Panel and topics discussed and the most recent and past meetings please visit the Atlantic HMS Advisory Panel webpage.

Ensuring a Successful ROV Deployment

To start, a location is selected based on fishing trends, observed activity, or reports of noncompliance. Once a site has been chosen one or two enforcement officers work with the vessel captain to locate lobster gear for inspection. After the gear has been located, gear technicians launch the ROV while an officer inspects the gear via a live video feed. The video is recorded during ROV deployment and may be saved as evidence. If a violation is documented, an enforcement officer follows up with further investigation and enforcement action as needed. In addition, all information collected during the operation may be considered for future gear inspection operations. Lastly, following ROV deployment, management staff who work on protected resources and relevant fishery management plans at the Greater Atlantic Regional Fisheries Office are notified about relevant information gathered in the operation.

While calm weather is preferred for ROV operations, testing has shown that the negative impact of inclement weather on ROV deployment and use at sea can be mitigated to a degree. One technique is to deploy and haul the ROV in the lee of the wind and seas. The addition of a heavy clump weight attached to the tether aids in reducing drag from the tether

The Answer Is Blowin' In the Wind

Currently, there are 17 offshore wind energy projects in various stages of planning and development from Maine through North Carolina. These projects may install over 2,100 turbines from 2021-2029 and will have direct and indirect impacts on commercial and recreational fisheries throughout the Atlantic coast. To help the public better understand fishing impacts associated with offshore wind energy development along the Atlantic coast, NOAA Fisheries developed new tools and analyses and posted them on our website.

To understand the potential impacts from wind energy development, we first needed a realistic representation of where fishing occurs, and how the fishing areas relate to the proposed wind energy development areas. We used the fishing footprint method to compare each vessel logbook fishing location from 2008-2018 to fishing activities recorded by fishery observers to model fishing activity on each trip. This method gives us an accurate representation of the areas fished by commercial vessels. Once the fishing footprints generated by the model are compared to current offshore wind energy project areas, we can estimate the landings and fishing revenue derived from each project area. This information allows us to clearly estimate the

ROV patrol

Continued from previous page

in the water. Enhanced camera lighting can also counter poor visibility that can occur due to increased turbidity in the water column or low light conditions produced by overcast skies. In addition, sonar aids operators in gear location when underwater visibility is reduced.

Moving Forward

To date, ROVs and the vessels used for their deployment have primarily been contracted through the private sector. OLE has also field tested different ROV systems at sea in hopes of purchasing a new ROV in 2021. The addition of a portable ROV along with trained operators will be a valuable asset for enforcement. A portable ROV unit along with a control console and tether can be easily deployed from NOAA, Coast Guard, and state marine patrol vessels to conduct underwater inspections at a reduced cost.

"We are excited to use ROVs in our ongoing efforts to promote gear compliance in offshore lobster fisheries," said James Landon, Director of NOAA's Office of Law Enforcement. "The successful deployment of this technology improves our ability to effectively and safely do our jobs and should help to boost NOAA efforts to protect endangered species like the North Atlantic right whale."

Efforts are currently underway to expand the underwater inspection operations that were conducted in the 2020 fishing year into the 2021 season. While underwater inspection operations to date have only been used to inspect fixed gear in the lobster fishery, the hope is to expand ROV operations in the near future to other fixed gear fisheries (e.g., gillnet fisheries and offshore aquaculture). For more information about OLE's evolving ROV project please contact Caleb Gilbert, compliance liaison, at (978) 281-9338 or caleb.gilbert@noaa.gov.



Horns Reef offshore wind farm.

socioeconomic impact to fisheries and communities from each project.

Based on this process, we developed a summary report of potential socioeconomic impacts from each offshore wind project area. These summaries include annual information on the amount of individual species landed, landings revenue, gear types used, number of vessels fishing, trips taken, and communities affected by each offshore wind development project area. This information is very similar to the type of analyses the New England and Mid-Atlantic Fishery Management Councils use to evaluate the impacts of fishery management actions. The Bureau of Ocean Energy Management (BOEM), the federal agency responsible for reviewing and permitting offshore energy projects, has used this information in the analysis of the wind projects under development.

The public can download the data used to generate these summary reports using a web-based query tool developed by NOAA Fisheries. Users can create a customized query by filtering the data for several fields, including year, wind energy area, species,

or fishery management plan. All data included in summary reports or available through the new web-based query tool have been aggregated, as necessary, to protect data confidentiality.

Both the summary reports and underlying data will be continuously updated as we further develop these tools based on public input and ongoing efforts to integrate other data sources. We are currently working on integrating party/charter vessel logbook data and exploring ways to integrate data from vessels that fish for highly migratory species and for species managed in the South Atlantic. Check out our [offshore wind development page \(https://www.fisheries.noaa.gov/nema/science-data/offshore-wind-energy-development-new-england-mid-atlantic-waters\)](https://www.fisheries.noaa.gov/nema/science-data/offshore-wind-energy-development-new-england-mid-atlantic-waters) for more information about the work we're doing to monitor and analyze the potential fishery impacts from offshore wind energy development.

Questions? Fisheries Data: Benjamin Galuardi, Benjamin.Galuardi@noaa.gov, 978-281-9187
Offshore Wind and Fisheries: Doug Christel, Douglas.Christel@noaa.gov, 978-281-9141.

Cooperative Research: Facing the Challenges of COVID-19 Webinar

The novel coronavirus has presented many challenges to researchers and fishermen, who often work in close quarters at sea and shore-side. However, some of our cooperative research partners have developed strategies to navigate the COVID-19 pandemic and continue their work safely.

To share what has been learned, the Northeast Fisheries Science Center's Cooperative Research Branch is hosting two, 90 minute WebEx virtual workshops on February 25 and March 4, 2021. The first webinar will focus on how cooperative research fieldwork was adapted to ensure safe operations during the COVID-19 pandemic. The second webinar will focus on how fishermen worked with researchers to independently collect scientific data during the COVID-19 pandemic, and how

it may be used to bridge data gaps

These virtual workshops are designed to foster a dialogue about how cooperative research has adapted and continued during the COVID-19 pandemic, including exchanging experiences from the field during a global health crisis.

Each workshop will include brief presentations by organizations and industry partners involved in cooperative research across the region, and discussions moderated by the Center's Cooperative Research Branch Chief, Dr. Anna Mercer.

To learn more visit:

<https://www.fisheries.noaa.gov/event/cooperative-research-facing-challenges-covid-19>

If you have questions about these webinars, contact Giovanni Ganesin at Giovanni.Ganesin@noaa.gov.



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New For-Hire Electronic Reporting for Southeast Fisheries May Affect You

Beginning January 4, 2021, if you have a for-hire federal permit for South Atlantic snapper-grouper, Atlantic coastal migratory pelagics (King and Spanish mackerel) and Atlantic dolphin/wahoo, you will now be required to report these catches electronically. Fishermen holding for-hire permits for fisheries managed by the Greater Atlantic Region are already required to report electronically.



If you hold for-hire permits in both the Southeast and Greater Atlantic regions, we recommend using the SAFIS/eTRIPS mobile app since it meets all reporting requirements for both regions.

Please note that if you hold a permit from the Southeast Region, you will have to complete three additional fields (trip fees, fuel used and price of the fuel) as well as 'did-not-fish' reports. Vessels also holding a Greater Atlantic Region permit are already required to submit reports within 48 hours of the end of a trip.

For More Information

Search online for "Southeast For-Hire Electronic

Reporting Program," where you will find a permit holder tool kit.

Call the Southeast Region customer service hotline, which is available from 8:00-4:30 EST at 833-707-1632. You can also email them at ser.electronicreporting@noaa.gov.

For help with the eTrips reporting app, search online for the ACCSP website or contact their Help Desk at 800-984-0810 or support@harborlightsoftware.com

Search online for "GARFO Vessel Trip Reporting" Contact your local Port Agent by searching online for "GARFO Port Agent".

Contact the Greater Atlantic Region Help Desk at 978-281-9188 or nmfs.gar.helpdesk@noaa.gov.

Coming Soon: Required Electronic Vessel Trip Reporting for Commercial and For-Hire Vessels

Recently, we approved a recommendation from both the Mid-Atlantic and New England Fishery Management Councils to require federally permitted commercial fishing vessels to submit vessel trip reports electronically within 48 hours of the end of a trip. In addition, the New England Council asked us to extend this requirement to vessels issued for-hire (charter/party) permits for New England Council-managed fisheries (i.e., Northeast multispecies). The purpose of this action is to increase reporting efficiency and improve data quality and timeliness of vessel trip report submissions.

This rule goes into effect on November 10, 2021, and applies to all vessels issued Greater Atlantic Region permits except for those with only lobster permits. Vessels with Mid-Atlantic Council for-hire and private boat tilefish permits are already reporting electronically.

Important Messages

You do not have to wait until November to start reporting electronically. Many vessels already are doing so. We strongly encourage you to start as soon as possible so that you are set up correctly and feel comfortable with electronic reporting when the rule goes into effect.

You can choose from several free approved reporting apps. These are listed on our Vessel Trip Reporting web page.

To report electronically, you will need a smart phone, tablet, or laptop and internet access.

There is no fee for electronic reporting.

You can get free technical support from

the developers of each app.

To use our Fish Online app, you must first have a Fish Online account. Fish Online accounts are free and easy to set up.

With a Fish Online account, you can view and update your reports submitted from any app.

The electronic reporting form is the same as the paper form. We will not be collecting any additional data.

The report submission deadline will be changed to within 48 hours of the end of a trip.

Our Fish Online app does not track location.

The SAFIS/eTRIPS app can track location, but you can turn that function off.

We will not accept paper logbook submissions after November 9, 2021, and you will need to have the electronic device to report onboard to comply with reporting requirements.

This rule makes other minor changes to our reporting requirements which you can read on our Vessel Trip Reporting web page.

How We Can Help

Our Port Agents can assist you with creating a Fish Online account and walk you through the electronic reporting process. To set up an appointment, contact your local Port Agent. For technical support with Fish Online, contact our helpdesk at 978-281-9188 or nmfs.gar.helpdesk@noaa.gov.

Links to all the available reporting applications are available on our website. As we get closer to the November transition date, we will be posting more information and guidance on our website, and will also be providing updates in the *NOAA Navigator*.

For More Information

Search online for our "GARFO Vessel Trip Reporting" web page.

Contact your local Port Agent by searching online for "GARFO Port Agent."

Sign up for emails focusing on the fisheries you participate in on our regional home page (fisheries.noaa.gov/NEMA).

Monitoring '21

Continued from page 1

model. These would be voluntary tools that could be used in place of, or in addition to, human at-sea monitors to meet sector monitoring requirements. We will continue developing a maximized retention EM program during fishing year 2021, in collaboration with industry and other stakeholders. The information sheet (below) describes the differences between these two EM programs. We plan to host workshops over the next year to assist industry with the process of transitioning to the new measures.

For more information contact: Mark Grant, Mark.Grant@noaa.gov.

Fishery Bulletin Emails and Texts

You can sign up to receive all of our official fishery bulletins via email. Head to our home page (www.fisheries.noaa.gov/nema) and choose the link "Sign Up for Email Updates." Enter your email address and on the next page, you will be able to choose from several subscription topics. Scroll down to New England/Mid-Atlantic Updates and choose the fisheries or topics you would like to receive email about.

You can also get text alerts when we send out fishery bulletins. Choose "SMS/Text Message" in the subscription type box, enter your phone number on the next page, and then choose "regional updates" under subscription topics. Scroll down and choose the fisheries or topics that interest you.