

NOAA FISHERIES

**Northeast Fisheries Science Center Science and
Research Director's**

Annual Guidance Memo for Fiscal Year 2021

June 2020

Northeast Fisheries Science Center

NOAA Fisheries

Preface

The Annual Guidance Memo gives specific guidance for activities to be conducted by the Northeast Fisheries Science Center in Fiscal Year 2021 in support of the NOAA Fisheries' vision and mission. This Annual Guidance supports the [NOAA Fisheries Strategic Plan 2019-2022](#) and the [New England and Mid-Atlantic Geographic Strategic Plan 2020-2023](#).

The mission of NOAA Fisheries is to “... *provide vital services for the nation: productive and sustainable fisheries, safe sources of seafood, the recovery and conservation of protected resources, and healthy ecosystems—all backed by sound science and an ecosystem-based approach to management.*”

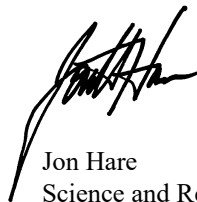
To meet this mission, NOAA Fisheries has three national Strategic Goals:

1. *Amplify the economic value of commercial and recreational fisheries, while ensuring their sustainability.*
2. *Conserve and recover protected species while supporting responsible fishing and resource development*
3. *Improve organizational excellence and regulatory efficiency*

There are four requirements that the Northeast Fisheries Science Center must be met to achieve these goals:

1. *Support the people who work at the Northeast Fisheries Science Center* - People are the heart of the Northeast Fisheries Science Center and it is imperative that we continually work to improve our workplace and ensuring it is free from discrimination and fully inclusive of all employees.
2. *Collaborate across the Northeast Fisheries Science Center and with our scientific and management stakeholders and partners* - All three national Strategic Goals represent complex - ‘wicked’¹ - problems. We must work together to address them.
3. *Conduct and improve our science in support of fisheries, aquaculture, and protected species conservation* - We conduct operational science in support of management, but we must always be seeking to improve our data collection, analyses, modeling, and assessments capabilities.
4. *Lead the development and application of ecosystem-approaches to management and climate-ready management* - We must use our understanding of the issues around fisheries, aquaculture, and protected species conservation to lead the development and application of new concepts and approaches that address the challenges created by a complex and rapidly changing Northeast U.S. Shelf Ecosystem.

Success in our mission means sustainable seafood, conservation of marine mammals, and recovery of endangered species. This Annual Guidance Memo provides guidance to the people at the Northeast Fisheries Science Center as to how to achieve these goals and how to support these requirements to be successful in our mission.



Jon Hare
Science and Research Director
Northeast Fisheries Science Center

¹ Wicked problems have a high degree of interconnectedness, many stakeholders, complex governance, and difficult definitions - [DeFries and Nagendra 2017 Science](#).

NOAA Fisheries Mission

*Stewardship of living marine resources
through science-based conservation
and management and the promotion of
healthy ecosystems*

Mission

U.S. fisheries are among the largest and most sustainable in the world. The U.S. science-based fishery management process, as mandated by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and other laws, is designed to provide optimum yield while preventing overfishing and taking into account the protection and restoration of habitat and marine ecosystems.

NOAA Fisheries also seeks to grow domestic marine aquaculture production, supplementing U.S. wild-caught fisheries while promoting business and employment opportunities. This part of our mission was the focus on the recent Executive Order on Promoting American Seafood Competitiveness and Economic Growth. NOAA Fisheries accomplishes this by working closely with federal and state partners to develop effective and streamlined aquaculture permitting systems, and by providing science and services to support the expansion and sustainability of U.S. marine aquaculture. The actions are in line with the National Aquaculture Act, which calls on NOAA to work with other federal agencies to support and promote aquaculture development.

The health of species such as marine mammals, sea turtles, corals, and salmon is important for maintaining balanced and thriving ocean ecosystems and supporting a thriving ocean and coastal recreation sector. We work to conserve marine species and their habitats, protect and restore ecosystems from detrimental human activities, and monitor activities that might affect them, as mandated by the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA).

Climate change is increasingly impacting fisheries, aquaculture, and protected species throughout the world. The NOAA Fisheries Climate Science Strategy defines a proactive approach to increase the production, delivery, and use of climate-related information needed to fulfill NOAA Fisheries mandates. The goal of this Strategy is to reduce impacts and increase the resilience of the nation's valuable living marine resources and the communities that depend on them. NOAA Fisheries must continue to lead in the development and application of climate-ready management.

The ecosystems within which fisheries, aquaculture, and protected species conservation occur are complex and include numerous human and natural processes and interactions. Broadly speaking, NOAA Fisheries has adopted an ecosystem approach toward living marine resource management recognizing the ecological, economic, social, and sectoral connections in the nation's Large Marine Ecosystems. The agency's Ecosystem-Based Fisheries Management Policy supports the need to better inform decisions regarding trade-offs among and between fisheries (commercial, recreational, and subsistence), aquaculture, protected species, biodiversity, and habitats. Recognizing the interconnectedness of these ecosystem components will help maintain resilient and productive ecosystems (including the human communities on which they depend), even as they respond to climate, habitat, ecological, and other environmental changes. Once again, NOAA Fisheries must continue to lead in the development of application of ecosystem approaches to management integrating across mission areas, disciplines, and sectors.

Fundamental to achieving this broad mission is a focus on people and collaboration. Individuals are doing the work of the Center and it is crucial to continue to develop a workplace culture that allows all individuals to participate and contribute to their full potential. It is also important to recognize that no one individual can meet the mission working alone nor can Northeast Fisheries Science Center meet this mission on its own. Collaborations and partnerships are necessary, and fostering and growing these relationships is fundamental to our success.

The Regional Landscape

Nationally, NOAA Fisheries faces significant issues, challenges, and risks including changing climate and ecosystem conditions; increasing use of ocean resources; increasing demands for data, assessments, and advice; and decreasing resources.

In the Northeast region, the most impactful issues we face are:

- Changing climate, oceanic conditions, and coastal habitat affecting distribution, productivity, and sustainability of fisheries and aquaculture and conservation of protected species
- Ocean acidification as a growing concern affecting fisheries, aquaculture, and marine ecosystems.
- Marine, estuarine, and riverine habitat loss
- Offshore wind energy development and the potential for offshore aquaculture development
- Increasing demands on marine resources and resource users and increasing need for science and management

Some of the Challenges we must address:

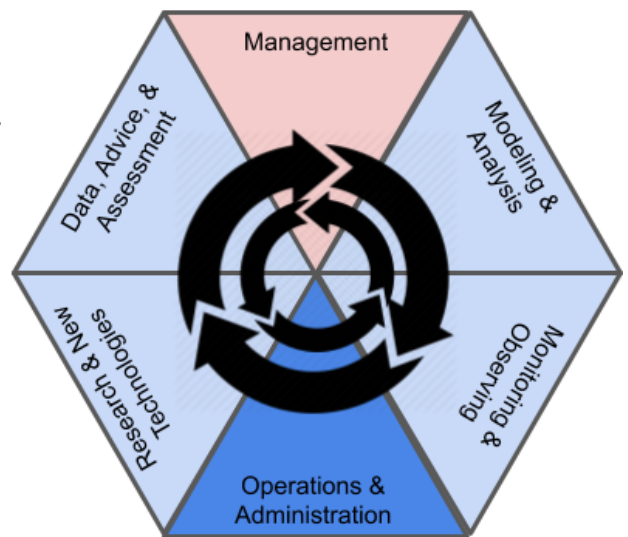
- Adapting to and recovering from the coronavirus pandemic
- Developing science to support decisions in a complex socio-ecological system
- Integrating science across disciplines and developing and supporting ecosystem approaches to management
- Communicating and collaborating with a large number of partners and stakeholders
- Maintaining an adequate level of surveys and data collection for marine resource management
- Improving modeling and analytical approaches, and working to develop and integrate understanding of the Northeast U.S. Shelf Ecosystem including physical, chemical, geological, biological, and human components
- Meeting the increased needs for data and assessments to provide managers with high quality advice
- Providing science to inform difficult management issues including recovering endangered species, rebuilding stocks, and allocating quotas, and supporting co-existence of offshore wind, protected species, and fisheries
- Developing and implementing new technologies and approaches that improve our scientific advice in a cost-effective and efficient manner

Some of the Risks we foresee:

- Decrease scientific information and activities resulting from the coronavirus pandemic
- Aging infrastructure and availability/dependability of vessels will impact data collection critical for resource management.
- Increasing demand for our science and research capabilities to ensure the coexistence of sustainable fisheries and mixed-ocean uses.
- Increasing costs and increasing demands requires a priority-based approach, which results in reducing effort in some areas to maintain or grow effort in others

Science Enterprise

Our primary goal at the Northeast Fisheries Science Center is science excellence to achieve the NOAA Fisheries mission - science that is accurate, precise, accountable, objective, efficient, timely, useful, transparent, and trusted. Our science is conducted to support the management of living marine resources in the Northeast U.S. Shelf Ecosystem, which extends from North Carolina to Maine, and includes watersheds, estuaries, the continental shelf, and open ocean. The Northeast Fisheries Science Center's science enterprise has six components. The first four: i) research and new technologies, ii) monitoring and observation, iii) modeling and analysis, and iv) data, advice, and assessments are supported by the fifth: v) operations and administration. Those five components contribute to the sixth vi)



management - the purpose of this scientific enterprise is to provide the best scientific information possible to living marine resource managers in the Northeast U.S..

Each component of this enterprise is critical to the overall success. Similarly all components must work together to be successful. Thus, the Northeast Fisheries Science Center must work in and invest in each of the components, as well as ensure integration and communication among all the components. This enterprise, each component and the whole, requires collaboration, coordination, and communication with our scientific and management partners and our stakeholders. Finally, this enterprise and the people working within it must adapt and learn together.

Research & New Technology includes the development of new understanding in support of the NOAA Fisheries mission. Research can occur as laboratory experiments, field-based experiments and process studies, retrospective analyses, as well as modeling studies designed to understand and predict changes to living marine resources, the ecosystems they depend upon, and the human communities within which they interact. New technologies are also developed, evaluated and applied to improve the efficiency and effectiveness of the science enterprise with a goal of advancing scientific understanding and better supporting management.

Monitoring & Observing is the systematic collection of data that provide information on changes in biological, physical, chemical, and human conditions. Northeast Fisheries Science Center data collection systems are designed to provide data for innovative research, support the development of models and analyses, and inform advice, assessments, and ultimately management.

Modeling & Analysis includes activities that synthesize understanding and provide the basis for prediction, forecasting, and projection. Model outputs can be tested with additional research, monitoring and application of new technologies. Modeling and analysis can also serve to support the provision of data, assessments, and advice in support of management. Modeling and analysis includes a range of activities from conceptual, to numerical, to visual.

Data, Assessments, and Advice broadly support management programs and decision-making. These activities develop a wide variety of products that support the NOAA Fisheries mission and the decisions of managers in the region. In some cases these products are a dataset; in other cases these products are formal assessments; while in other cases these products are more general advice provided by the Northeast Fisheries Science Center. Advice can also involve participation of Northeast Fisheries Science Center scientists on Plan Development Teams, Fishery Management Action Teams, Technical Committees, and Working Groups that advise management partners. The goal is to develop science-based decision tools to support the sustainability of living marine resources, to enhance coastal community resilience and society's capability to respond to changing ecosystem conditions, and to manage risk to different components of the ecosystem. These data, assessments, and advice include natural and human dimensions of the Northeast U.S. Shelf Ecosystem.

Operations and Administration are fundamental to the science enterprise and represent the internal functions and services necessary for the Northeast Fisheries Science Center to operate. These functions and services include secure and safe facilities and IT infrastructure, highly functioning workforce management support, effective personnel management, active communication techniques and strategies; effective and compliant budget execution, budget planning, procurement, grants, and contracts; and enabling IT support at the facility and programmatic levels.

Management includes all organizations involved in managing living marine resources in the Northeast U.S. Shelf ecosystem. First and foremost is the NOAA Fisheries Greater Atlantic Regional Fishery Office (GARFO), which is responsible for management of living marine resources in the Northeast region. The Atlantic States Marine Fisheries Commission, the New England Fishery Management Council, and the Mid-Atlantic Fishery Management Council are the main external fishery partners. The Northeast Fisheries Science Center also provides science and advice to NOAA Fisheries Highly Migratory Species Management Division. Other federal agencies are also supported, including the Bureau of Ocean Energy Management, the Army Corps of Engineers, and the U.S. Fish and Wildlife Service. Where resources overlap, management organizations in the southeast U.S. are also supported. These include the Southeast Regional Office and South Atlantic Fishery Management Council. There are also a number of advisory groups that review and use Northeast Fisheries Science Center science including those concerned with

protected species, including whales: the Atlantic Scientific Review Group, Status Review Teams, and Take Reduction Teams. Northeast Fisheries Science Center science also supports internationally managed resources through engagement in bilateral discussions of transboundary resources with Canada, and contributions to the advisory processes in the Northwest Atlantic Fisheries Organization, the International Council for the Exploration of the Sea, the International Commission for the Conservation of Atlantic Tunas, and the North Atlantic Salmon Conservation Organization. At the state level, we support management by participating on state planning bodies such as the Long Island Sound Management Committee and groups focused on oyster restoration in the Chesapeake Bay. This is not meant to be an exhaustive list, but provides examples of the wide array of managers and decision-makers who use Northeast Fisheries Science Center science.

FY21 Priorities and Anticipated Results

The priorities and anticipated results outlined here are consistent with overarching national priorities and the shared regional strategies to meet these priorities. The [NOAA Fisheries Strategic Plan 2019-2022](#) identified three strategic goals:

- Amplify the economic value of commercial and recreational fisheries while ensuring their sustainability.
- Conserve and recover protected species while supporting responsible fishing and resource development.
- Improve organizational excellence and regulatory efficiency

To complement the NOAA Fisheries Strategic Plan, the Northeast Fisheries Science Center and Greater Atlantic Regional Fishery Office developed a [New England and Mid-Atlantic Geographic Strategic Plan 2020-2023](#), which defines regional strategies to meet the national goals.

All activities at the NEFSC have been impacted by the coronavirus pandemic. Thus all of the priority actions defined below will be impacted to some degree. Our job will be to mitigate and adapt to these impacts. This will require increased communication and collaboration both within the Science Center, with the Greater Atlantic Regional Office and with our partners and stakeholders.

Regional Strategies

1. Amplify the economic value of commercial and recreational fisheries while ensuring their sustainability.

We expect to amplify the economic value of regional seafood production by optimizing commercial harvest, ensuring recreational opportunities, promoting marine aquaculture, and restoring habitat. Effective science-based management is essential to reaching optimum yield while preventing overfishing. Annual commercial landings revenues total nearly \$2 billion, and recreational fisheries result in over \$5.8 billion in trip expenditures, while a number of notable species are under-harvested. We intend to continue our close collaboration with the New England and Mid-Atlantic Fishery Management Councils, Atlantic States Marine Fisheries Commission, state and fishing industry partners, the Northwest Atlantic Fisheries Organization, and local organizations and stakeholders. We also intend to continue to develop, support, and implement ecosystem approaches to marine resource management. These approaches recognize the Northeast U.S. ecosystem as a complex socio-ecological system that requires integrative and participatory science and management.

2. Conserve and recover protected species while supporting responsible fishing and resource development

We are responsible for recovering threatened or endangered marine species and for conserving and protecting marine mammals. Many of these species are key components of their ecosystems and have particular social and cultural importance. The focus is on recovery while using our understanding of limiting factors and threats to minimize conflict with infrastructure projects or other forms of economic growth. We will continue to improve the timeliness of our regulatory decisions and conservation outcomes when fishing and resource development projects interact with protected resources. Recovery of protected species would relieve restraints on development or other economically important projects. Priority species include North Atlantic Right Whale and Atlantic Salmon. Priority actions involve recovery science and management that recognizes the ecosystem interactions with the species.

3. Improve organizational excellence and regulatory efficiency

To realize our first two strategic goals, we must have effective and efficient organizations with the agility to adapt and evolve to meet emerging challenges. Promoting organizational excellence is a continuous process to improve our ability to fulfill our mission, support our people, and support the organization. The key factors that determine organizational excellence include our people, our business and management processes, and our technology and infrastructure. Improving business processes and implementing best practices conducted in a priority-based environment, along with continuous regulatory reform, will ensure our operations best support our customers and partners. It is important to recognize that improving organizational excellence and regulatory efficiency is a continual process that helps us be more responsive, to deliver better services, and to fulfill our mission.

Regional Science Priorities

In developing the FY21 Priority Actions, a number of reviews and science priorities were considered. Scientific program reviews have identified numerous opportunities for improving our science and our organization. Some of these reviews have been part of a formal NOAA Fisheries Program review process² or part of a HQ or Northeast Fisheries Science Center-specific review.

In addition to these reviews, there are agency and regional plans for improving Northeast Fisheries Science Center science that guide our work: [Habitat Assessment Improvement Plan](#), [Stock Assessment Improvement Plan](#), [Northeast Regional Action Plan](#), [Ecosystem Based Fisheries Management Roadmap](#), and [NOAA Marine Aquaculture Strategic Plan](#)

There are also fishery management council-led reviews of programs in which the Northeast Fisheries Science Center is involved: Three-year review of the standardized bycatch reporting methodology, and [Research Set-Aside Program Review](#).

The Fishery Management Councils and Atlantic States Marine Fisheries Commission also identify research priorities and data needs: [New England Fisheries Management Council](#), [Mid-Atlantic Fisheries Management Council](#), [Atlantic States Marine Fisheries Commission](#) (research priorities are provided on species-specific webpages).

All of these recommendations and priorities were considered in developing the list of FY21 Priority Actions.

² <http://www.st.nmfs.noaa.gov/science-program-review/>

Regional Strategies	FY21 Priority Actions	Lead Division(s)
1.1 Manage stocks for optimum yield		
1.1.1 Rebuild overfished stocks, prevent overfishing with improved quota monitoring and fisheries enforcement, and find ways to increase the use of legally caught fish.	Provide scientific support to management actions developed by GARFO, NEFMC, MAFMC, and ASMFC	READ
1.1.2 Support the New England and Mid-Atlantic Fishery Management Councils in addressing regulatory amendments to achieve optimum yield.	Monitor and analyze social and economic data to support pending reconsideration of recreational and commercial fishery allocations for summer flounder, black sea bass, scup, Atlantic cod, and haddock. Support Fishery Management Council's EFH related activities and evaluate the cumulative impacts of natural and anthropogenic habitat disturbances.	READ
1.1.3 Explore opportunities for alternative management strategies for recreational fisheries.		EAD / SRD-WT
1.1.4 Protect essential fish habitat and restore damaged habitats for managed species and their prey to help maintain productive fisheries.	Support regional Recreational Fisheries programs Complete data collection programs for socio-economics in the region	READ READ
1.2 Increase U.S. marine aquaculture production		
1.2.1 Lead the Federal Government in coordinating authorizations for growth of marine aquaculture.	Research compatibility of aquaculture gear and practices with fisheries, protected species, habitat, and socio-economic goals.	EAD / READ
1.2.2 Provide advanced marine aquaculture science and technology for ready adoption in the U.S. aquaculture industry, and provide industry incentives.	Develop and transfer industry-ready methodologies and technologies to improve efficiencies in aquaculture operations. Generate scientific products that support social and economic incentives for investment in aquaculture.	EAD EAD / READ
1.3 Promote ecosystem-based fisheries management		
1.3.1 Develop approaches to support ecosystem-based fisheries management and stock assessments and incorporate ecosystem considerations into management advice.	Support GARFO, ASMFC, MAFMC, and NEFMC efforts to incorporate EBFM and EAFM in resource management decisions	READ
1.3.2 Encourage and collaborate with the councils to develop ecosystem-based approaches to fisheries management and address changing climate conditions.	Conduct field, laboratory and modeling research on the impacts of climate change, ocean acidification, and offshore wind-energy activities on living marine resources. Investigate impacts of wind energy areas on fisheries, protected species, habitats, human communities, and scientific data collection, provide support to GARFO, and support the BOEM-RODA MOU Work with regional partners to implement the NMFS Climate Science Strategy and the NOAA Climate and Fisheries Initiative Conduct research related to the EBFM RM, the NERAP, the SAIP, the ASTWG, and New England Groundfish	EAD SRD-WT READ / SRD SRD
1.4 Adequately assess all prioritized stocks and maintain information for currently assessed stocks		
1.4.1 Establish target stock assessment levels and strive to meet targets for priority stocks without compromising sustainable management of other stocks.	Implement NRCC stock assessment process and schedule to provide scientific information to support fisheries management.	READ
1.4.2 Develop incentives for industry-based (commercial and recreational) data collection and reporting.	Operate Observer Programs including NEFOP, ASM, and IFS Complete core fishery independent surveys (BT, SS, AS/OQ, NS, EcoMon, GOM BLL, CSLL) Complete data collection programs including age and growth, shark tagging, maturity studies, food habits, and oceanography Partner with GARFO and NEFMC on implementation of Research Set Aside Program and response to Research Set Aside Program Review Prioritize cooperative research through stakeholder engagement and work with regional partners to develop new uses of fishery-dependent data in advice and assessment products	FMRD PEMAD / EAD / FMRD PEMAD / EAD FMRD / READ / PEMAD FMRD
1.5 Modernize fishery information collection, management, and dissemination systems, and enhance cooperative data collection and sharing		

Regional Strategies

- Support and coordinate with states to advance user-centered fishery information networks and data platforms, with greater efficiency and lower cost, to improve the ability to effectively manage stocks for optimum yield and recreational opportunities.
- 1.5.1 Collaborate with industry through the Fishery Dependent Data Initiative to integrate and modernize fishery-dependent data systems to simplify fisheries reporting, improve data quality, and enhance monitoring and analysis to better support management decisions, advance scientific understanding, and facilitate the elimination of redundant reporting burdens.
- 1.5.2

2.1 Stabilize highest priority protected species

- Focus science and recovery actions, and recruit partners to collaborate on actions to stabilize declining populations such as North Atlantic right whales and Atlantic salmon.
- 2.1.1
- 2.1.2 Protect and restore habitat where it limits species recovery.
- 2.1.3 Understand effect of changing climate on protected species and their habitats.

2.2 Review and streamline permitting and authorization processes for energy development and national defense, while maximizing fishing opportunities and conservation outcomes

- Promote energy independence and economic growth by creating efficiencies in our environmental review processes, including implementing guidance and policies that support conservation and effectively address major infrastructure and energy projects important to our nation's energy independence, economy, and defense.
- 2.2.1
- Develop collaborative regional science and incorporate fisheries considerations in offshore development processes to ensure coexistence of fisheries, aquaculture, energy development and national defense.
- 2.2.2

2.3 Minimize bycatch and entanglement of protected species while supporting fisheries

- Support continued fishing opportunities and aquaculture by understanding and minimizing protected species interactions and mortality.
- 2.3.1

FY21 Priority Actions

Operate Study Fleet and develop and implement improvements to Electronic Reporting

FMRD

Develop and implement the Catch Accounting and Monitoring System that will provide one common data source for science and management, including incorporation of electronic monitoring and state data.

READ

Continue to foster collaboration within the Center and with industry through the Northeast Trawl Advisor Panel, including field and analytic work of joint interest and linking work to management track and research track assessments

PEMAD / FMRD / READ

Work with GARFO to implement the Fishery Dependent Data Initiative Roadmap

FMRD

Research and develop Electronic Monitoring technologies and protocols and prepare a plan for Electronic Monitoring in New England Groundfish fishery

FMRD

Develop mitigation strategies for the effect of wind energy development on NEFSC surveys including Bottom Trawl Survey, Sea Scallop Survey, and North Atlantic Right Whale Surveys

SRD-WT / PEMAD / FMRD / READ

Monitor status and trends of all protected species, particularly North Atlantic Right Whale and Atlantic salmon

READ

Research recovery and mitigation approaches for protected species and investigate protected species human interactions

READ

Provide scientific support for rulemaking associated with the Atlantic Large Whale Take Reduction Team.

READ

Research effect of changing climate and oceanographic conditions on protected species

READ / EAD

Continue developing ropeless gear to reduce entanglements with large whales

READ

Complete core protected species surveys (aerial, acoustic, AUV, and AMAPPS)

READ

Review management actions related to wind energy development and fisheries, protected species, habitat, and ecosystems.

SRD-WT / READ / EAD

Complete a wind energy impact tool, in coordination with GARFO, to estimate economic impacts of proposed wind energy development on commercial and recreational fishing activity.

READ / SRD-WT

Conduct research related to wind energy development and fisheries, protected species, habitat, and ecosystems, as well as initiating and supporting collaborative research on potential effects of wind development.

SRD-WT / All

Continue efforts to study and characterize potential impacts of aquaculture on protected species, and initiate or support collaborative research on mitigation approaches.

READ / EAD

Regional Strategies	FY21 Priority Actions	Lead Division(s)
2.3.2 Work with fishing industry, scientists, environmental organizations, academia, law enforcement agencies, and other stakeholders to develop and enforce bycatch and entanglement prevention measures domestically and internationally.	Continue to monitor protected species bycatch and support and implement mitigation research, with particular focus on buoyless technologies for fixed gear fisheries to support mitigation of entanglement risk for NARW and leatherback turtles.	READ / FMRD
2.4 Improve international cooperation and coordination	Work with observer program to document interactions between fisheries and protected species	READ / FMRD
2.4.1 Continue to develop and improve cooperation and collaboration with other countries and international organizations as it pertains to the recovery of endangered species, such as Atlantic salmon and the North Atlantic right whale, and other protected resources.	Continue to engage in bilateral efforts with Canada regarding NARW and Atlantic salmon, both through direct scientist-to-scientist collaborations and broadly bilateral and international efforts.	READ
3.1 Match a diverse workforce to mission needs	Implement Year 1 Diveristy and Inclusion Strategic Implementation Plan to ensure a workplace that is free from discrimination and fully inclusive of all employees	SRD
3.1.1 Plan and deploy workforce strategically to ensure flexibility and agility in support of evolving mission functions and continuity of operations.	Implement the NEFSC Learning plan and prioritize efforts to enhance staff morale and development, including through training opportunities and promoting a culture of continued learning.	SRD
3.1.2 Emphasize prioritized workforce composition and succession planning (i.e., the right people in the right place), diversity, competency-based management, and cross-collaborative approaches to promoting an inclusive and safe workplace.	Implement Administrative Services Organizational Health Assessment and Change Roadmap	OMI
	Complete transition to ProTech Contract Mechansism	OMI
	Develop and implement onboarding, offboarding, and welcoming processes for NEFSC staff.	OMI / SRD
	Complete implementation of the Data Management Services Implementation Plan	ITD
	Support the Staff Advisory Committe Activities to advance the Year 1 Learning Plan and the Diversity and Inclusion Plan and Regional Science Symposium	SRD
	Complete NEFSC organizational restructuring activities including FMRD and ITD	OMI / FMRD / ITD
	Maintain observer safety as defined by national and regional standards	FMRD
3.2 Recapitalize infrastructure and facilities	Long-term Facilities Footprint Study and Execution including ownership transfer in Sandy Hook and facilities planning in Barnstable County	OMI
3.2.1 Conduct facility condition assessments to evaluate properties, and prioritize and address critical maintenance needs.	Complete NWAWE upgrade, including campus wide wifi, at all sites	ITD
3.2.2 Evaluate the infrastructure needs for workspace in light of an evolving workforce, and propose strategies for recapitalization to NOAA and the Department of Commerce.	Maintain timely access to NEFSC data and information	ITD
	Maintain safe and effective facility operations in response to the coronavirus pandemic	SRD / OMI
3.3 Institutionalize prioritization and performance management practices	Implement FY22 Priority Based Resourcing process and contribute to Base Resource Review and Annual Resource Review processes	OMI / SRD
3.3.1 Use priority-based methods to optimize investments for maximum economic return while meeting food security and conservation mandates.	Prioritize and plan FY22 ship and aircraft requests and implement FY21 Fleet Allocation Plan	OMI / SRD
3.3.2 Evaluate organizational performance, assess programmatic and operational risks, and assess opportunities to ensure the best value for the American public.	Continue Adminstrative and Operational Services including Budget, Contracting, Purchasing, Human Resources	OMI
3.4 Review agency regulations and remove or modify rules that unnecessarily burden businesses and economic growth	Support GARFO, NEFMC, MAFMC, ASMFC, and NOAA Fisheries HQ in the review of regulations.	SRD
3.4.1 Implement Executive Order 13771 by reviewing regulations to identify and modify or repeal rules that add burden and costs without adding value.		
3.4.2 Work with other NOAA partners, as well as the councils, to remove outdated, unnecessary, and ineffective fishing regulations.		

Regional Strategies

FY21 Priority Actions

Lead Division(s)

3.5 Institutionalize the use of innovative technologies

Support the development, leveraging, and use of powerful technologies (e.g., AUV/UAS platforms, advanced sensors, fishing industry platforms, molecular genetics, digital platforms, electronic reporting/monitoring, mobile applications, and cloud computing) for conducting surveys, enhancing and improving the accuracy of observing systems, and collecting and sharing data using cost-effective, transparent, and real-time approaches.

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| 3.5.1 | Implement Migration to the Cloud with at least one application fully functional | ITD |
| | Conduct field and laboratory investigations into genomic approaches for meeting NOAA Fisheries mission. Continue to align work NOAA Fisheries Strategic Initiative | PEMAD / EAD / READ |
| | Continue participation in NOAA Fisheries Strategic Initiative on Rapid Estimation of Fish Age Using Fourier Transform Near-Infrared Spectroscopy (FT-NIRS) | PEMAD |
| | Develop efficient storage and access processes and protocols for internal and external users of NEFSC data and products | ITD |
| | Continue development of internal capacity to operate HabCam, manage HabCam data, and use HabCam data broadly in fisheries and habitat research | PEMAD / ITD |

3.6 Expand regional collaborations

Collaborate with the councils, commission, Canadian Department of Fisheries and Oceans, industry, academia, international management organizations, and other partners to progress our science and management priorities and promote innovation and sustainability.

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| 3.6.1 | Participate in the North Atlantic Regional Team to strengthen regional partnerships related to watersheds, climate adaptation, wind energy development, and other ocean / coastal uses, to support region-wide diversity, equity, and inclusion efforts, and to support regional engagement and outreach efforts. | SRD |
| 3.6.2 | Continue participation in NE Watershed program with partners, complete synthesis of Maine Watershed ecosystems, and develop plan for regional matrixed watershed program | READ |
| | Maintain interactions with DFO and IES through annual meetings with DFO, ICES, and participation on joint DFO-NOAA Working Groups and ICES Working Groups including WGNAM, WGNEO, WGOWDF, WGOH | SRD |
| | Continue to engage in international activities that are directly relevant to the NOAA Fisheries Mission including bilaterals with Norway, Japan, Korea, France, and Poland | SRD |
| | Work with Cooperative Institute for the North Atlantic Region to implement Regional Strategies and Priority Actions | SRD |

3.7 Enhance stakeholder communications

Improve communications with stakeholders by evaluating existing tools and methods and developing flexible approaches to communicate more effectively and efficiently.

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|-------|---|-----|
| 3.7.1 | Develop and execute communication priorities in relation to regional strategies and priority actions | OMI |
| | Promote collaborative relationships with partners and stakeholders through working groups, teams, committees, | All |