Science, Service, Stewardship

Northeast Fisheries Science Center
Science Strategic Planning

NOAA FISHERIES SERVICE

August 2012

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NOAA Fisheries Science Strategic Planning

- **Exercise by all five science centers and the Office of Science & Technology**

- **Position the center and the agency to document and prioritize science programs, to evaluate key synergies and to address budget challenges**

- **Importance of input from NERIO, Councils, ASMFC and other key partners**

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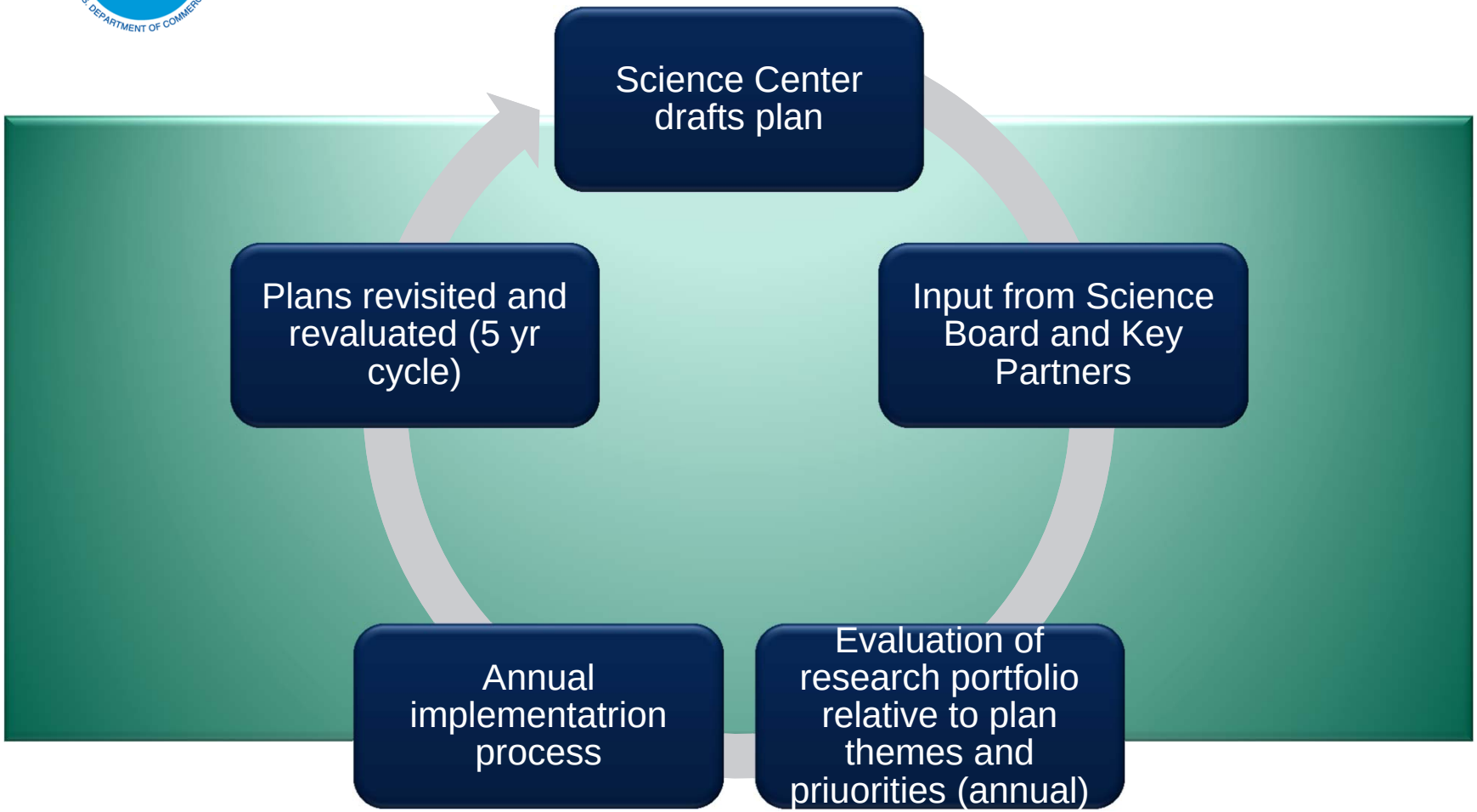
Our Planning Process



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Northeast Fisheries Science Center

Employment

About 500 people (FTEs+Contractors)

Locations

5 states and the District of Columbia

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The Big Picture

Framework for NEFSC Strategic Plan

Continue core activities & deliver core products

Document range of work, capabilities, and collections

Transition science program toward integrated ecosystem assessment

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Core Activities

Maintain data and sample collection and processing, and analytical capabilities to support single-species, multispecies, and ecosystem assessments for fish, invertebrates, marine mammals, sea turtles and human activities

Provide data, analyses, assessments, information, and scientific support to NMFS, its partner federal agencies, fishery management councils and commissions, and international treaty organizations

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Four Research Themes

Monitor, value, and assess fish, invertebrate, and marine mammal populations, fisheries, marine ecosystems, and the natural and human communities associated with them

Understand, forecast, and mitigate effects of environmental change (including climate change) on marine ecosystems, coastal communities, and economies

Describe and assess the role of habitats in ensuring healthy marine ecosystems; healthy populations of fish, invertebrates, marine mammals, and sea turtles; and resilient coastal communities and economies

Understand the anthropogenic, ecological, and biological factors affecting development of sustainable marine aquaculture on the Northeast continental shelf

Monitor, value, and assess fish, invertebrate, and marine mammal populations, fisheries, marine ecosystems, and the natural and human communities associated with them

Maintain data and sample collection, processing, and analytical capabilities for fish, invertebrates, marine mammals, sea turtles, and human activities to support single-species, multispecies, and ecosystem assessments (Core Activity)

Provide data, analyses, information, and scientific support to information needs of NMFS, its partner federal agencies, fishery management councils and commissions, and international treaty organizations (Core Activity)

Improve, enhance, or expand fish, invertebrate, sea turtle, and marine mammal stock assessments and/or impact analyses, and biological and socioeconomic data collections to meet regulatory requirements; implement integrated ecosystem monitoring program

Conduct single species, multispecies, and integrated ecosystem assessments, and support ecosystem –based management within the Northeast LME to meet emerging management needs and mandates

Understand, forecast, and mitigate effects of environmental change (including climate change) on marine ecosystems, coastal communities, and economies

Monitor and understand the effects of multiple and cumulative anthropogenic and natural changes on marine ecosystems and develop mitigation measures or tools where appropriate

Forecast effects of environmental change on fish, invertebrate, marine mammal, sea turtle species, and human communities

Conduct research on the culture of filter feeding organisms as a means of removing excess nutrients from eutrophied waters.

Describe and assess the role of habitats in ensuring healthy marine ecosystems; healthy populations of fish, invertebrates, marine mammals, and sea turtles; and resilient coastal communities and economies

Assess and evaluate the importance of specific habitat types for populations of fish, invertebrate, turtle, marine mammal, and seabirds

Evaluate and forecast impacts of human activities including fishing on habitats of fish, invertebrates, marine mammals, and sea turtles.

Provide information and analyses to support coastal planning

Understand the anthropogenic, ecological, and biological factors affecting development of sustainable marine aquaculture on the Northeast continental shelf

Apply the contemporary tools of biotechnology and the biomedical field to applied research on the health of aquacultured organisms and their interactions with the environments in which they are cultured

Conduct research on developing aquacultural methods for marine mollusks and finfish

Conduct research on the culture and grow-out potential of integrated multitrophic mariculture in relation to optimizing carrying capacity at multiple spatial scales.

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How do you provide input?

Councils / Commissions	• Formal engagement in the process
Stakeholders/ Public	• Draft Science Strategic Plan is available on our website • Comment period extended until October 31st