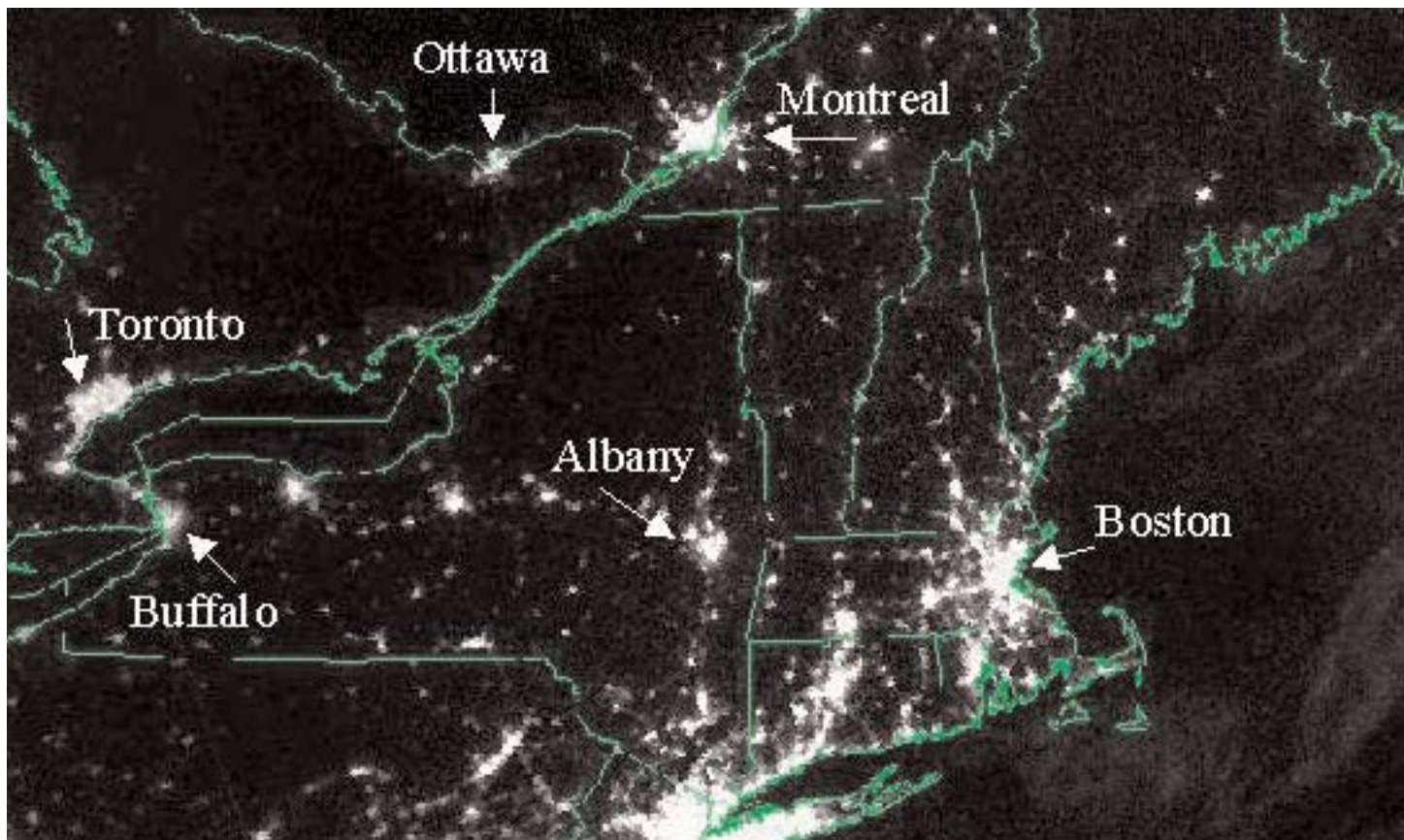


Collaborations

A report on collaborative research projects in the northwest Atlantic Ocean.



A satellite image taken at night shows the exploding development along the Northeast coast. Scientists and fisheries managers agree that future ocean management approaches must address numerous human activities that impact coastal health. (NASA Image)

The BIG Picture: Global Ecosystem-Based Management and its Challenge for Fisheries

New initiatives promise to change the way we take care of the ocean, but it is unclear how the New England Fishery Management Council will fit in.

Each year the Mississippi and Atchafalya River Basins drain nearly 40 percent of the runoff from all the United States' land area into the Gulf of Mexico. During the journey through the heart of North America the water picks up chemicals from agricultural fertilizers, animal manure, construction sites, wastewater treatment plants, septic tanks, factories, power plants, automobiles, and so on.

The chemicals, which include high levels of the nutrients nitrogen and phosphorus, eventually make their way to the ocean and feed a massive bloom of algae off the Louisiana coast.

When the algae die they sink to the bottom and are eaten by bacteria. The phenomenon is so large that the surrounding water

is stripped of oxygen as the organisms convert food into energy by the billions.

Typically, in mid-July, the oxygen-starved mass has grown to about the size of New Jersey: Fish, shrimp and marine life of all varieties must flee the area or perish.

The lifeless water is known simply as the "dead zone."

Fortunately for New England, current patterns in the Gulf of Maine help protect against a catastrophe on the same scale.

But the millions of people living in the region's watershed still impact marine resources, after countless fish in the early stages of life are lost to pollution and damaged wetlands.

"A lot of folks believe this is not a problem, but to me it is the number one external threat to our ability to manage and conserve fisheries," said Paul Howard, executive director of the New England Fishery Management Council, the body charged with safeguarding the region's commercial and

Message from the editor

This is the section of the publication reserved for my editorial views--that is, my opinion--on how collaborative research ties into what are often highly charged and controversial fisheries management issues, and sometimes what the research says about our society as a whole.

To give it style I usually try to find a theme that threads through both of the stories in the issue.

The job was easy this time because, with the help of Paul Howard, executive director of the New England Fisheries Management Council, a concept that is relevant to all collaborative research and, in fact, to all topics that have any relationship to government policy was revealed to me: political will.

Paul refers to the need for greater political will if we as a region or nation are to do something meaningful about the impact pollution and coastal development have on fisheries health.

By political will I think he means the energy and motivation behind citizens and interest groups who represent them for affecting policy change.

In a democracy, where politicians are expected to reflect the views of the people who elect them, political will is a powerful force.

This is because politicians know that tackling problems as large as industrial run-off or wetland destruction comes with a significant cost, typically exacted by well-funded and organized interest groups dedicated to maintaining the status quo.

Thus politicians understandably would like to know that they have enough public support to balance such costs, which brings me to the aforementioned theme for you to consider as you read on.

If we really hope to address the enormous threats facing our ocean and move policymakers to devote the substantial energy, resources, and political capital necessary to bring about such change, then they need to know that we the people who elected them not only support their decisions, but will be so disappointed if they act otherwise that we won't elect them again.

The same is true for funding needed to conduct the research we need for effective ocean management, including collaborative research and for the fishery management council to be able to manage stocks and participate in emerging ocean zoning discussions.

We are fortunate in New England to have a unified Congressional delegation that consistently puts coastal management issues at the top of its priorities. But the threats to our ocean, and to consistent funding of the activities needed to protect it are so large they still need our help.

Put simply, you can do your part by engaging in political life: contact your representatives and tell them that the ocean is your priority, contact the NMFS public relations office to do the same, and always vote like the oceans depend on it--because they do.



Handwritten signature of Michael Crocker in black ink.

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Collaborations:

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the northwest Atlantic
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When managers talk about taking an ecosystem approach, specific to fisheries, they usually mean setting harvest limits based on information about how interactions between species and other ecological factors contribute to the abundance (or scarcity) of fish.

recreational fisheries.

“In reality it is an issue that dwarfs commercial fishing issues, but I'm not sure there's the political will to address activities such as coastal development and pollution nor do I believe the council will ever have the leverage to do something about it.”

In light of such problems, the U.S. Commission on Ocean Policy called for a radical shift in fisheries management in its 2004 report to the president:

“U.S. ocean and coastal resources should be managed to reflect the relationships among all ecosystem components, including human and nonhuman species and the environments in which they live. Applying this principle will require defining relevant geographic management areas based on ecosystem, rather than political, boundaries.”

The strategy is typically known as ecosystem-based management (EBM) or, sometimes, ocean zoning.

In response to the commission's findings, new partnerships between private and public interests in coastal regions have surfaced in recent years to design decision-making frameworks capable of addressing the multi-jurisdictional issues raised by a shift to EBM.

The Massachusetts Ocean Partnership Fund and Northeast Regional Ocean Council are currently working on a similar plan for this part of the country.

But Howard said the strategy described above is quite different from the ecosystem-based management tools available to fishery councils.

“There are several different aspects of EBM, and it's critical to understand which is being discussed. I'm referring to the "global" EBM, dealing with multiple, sometimes competing, uses of offshore resources and the multi-jurisdictional issues that arise among regulatory agencies, and then there's the fisheries specific aspect of ecosystem-based fisheries management,” he said.

When managers talk about taking an ecosystem

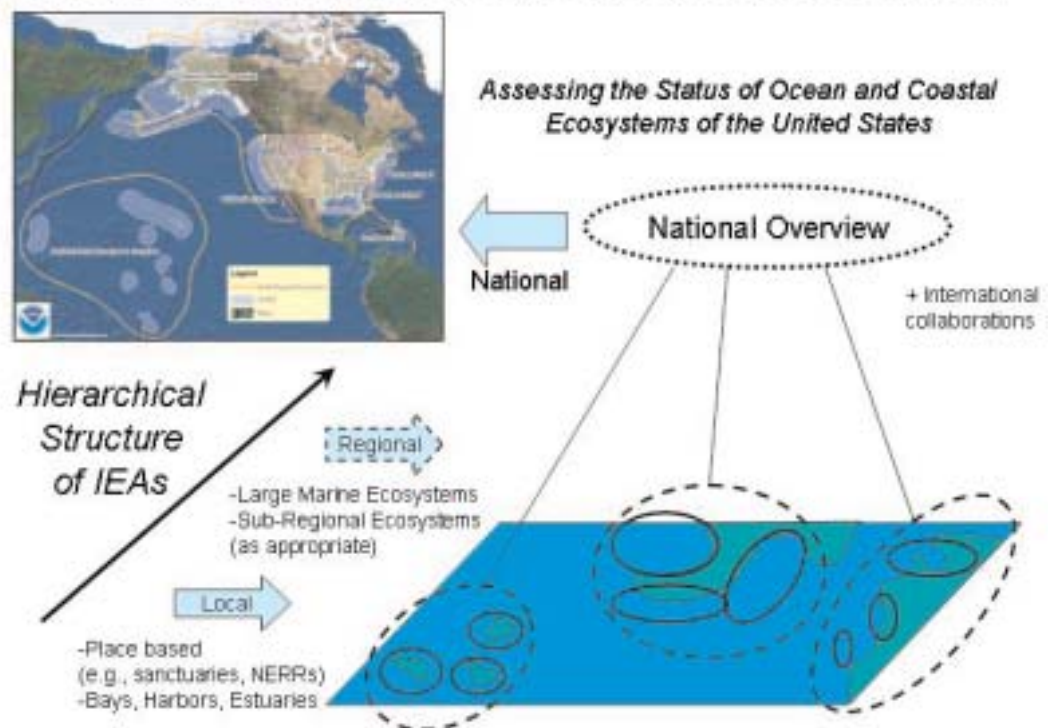
approach, specific to fisheries, they usually mean setting harvest limits based on information about how interactions between species and other ecological factors contribute to the abundance (or scarcity) of fish.

“If incorporating better estimates of natural mortality and/or environmental factors leads to better scientific advice then you can call it anything you want (ecosystem-based management or whatever), but at the end of the day it's just better advice. As a fisheries management council, we'd be happy to have it and we should push for it,” said Howard.

In fact, the newly revised Magnuson-Stevens Act—the country's guiding legislation for fisheries management—directs the councils to undertake a review of the science available to include ecological considerations in their fishery management plans.

Already the New England council's science and statistical committee has recommended that a stock's optimum yield—the most fish that can be extracted from a resource without damaging future productivity—should be determined based on population assessments combined with enhanced knowledge about ecosystem functioning.

What are the appropriate geographical scales for IEAs?



A slide from a presentation given by John Boreman, NMFS director of science and technology, shows the complicated geographic, political, and logistical issues involved with Integrated Ecosystem Assessments (IEAs), the precursors to global ecosystem-based management.

Meanwhile, planning for what will likely result in the biggest change to the region's ocean policy since the Magnuson Act took effect in 1977, continues without the participation of fisheries management's central decision-making body.

The full council is expected to begin work on a fishery ecosystem plan in early 2009.

"I believe it needs to have an objective that goes beyond a mere scientific review document. It needs to provide recommendations to the council on some aspect of management that would have real consequences," said Howard.

But before the council can determine the new science it needs for EBM it must first meet a number of priority deadlines.

"We have an enormous workload to keep management moving forward, especially considering the newly reauthorized Magnuson-Stevens Act provisions, which include annual catch limits, acceptable mortality levels, sectors, and limited access programs. That said, perhaps we're best-placed for understanding the shortcomings of the current advice we're receiving and respond by setting catch levels more precautionously," said Howard.

And with no real increase to the council's budget since 2002, Howard said he is hard-pressed to divert resources away from the currently required management provisions.

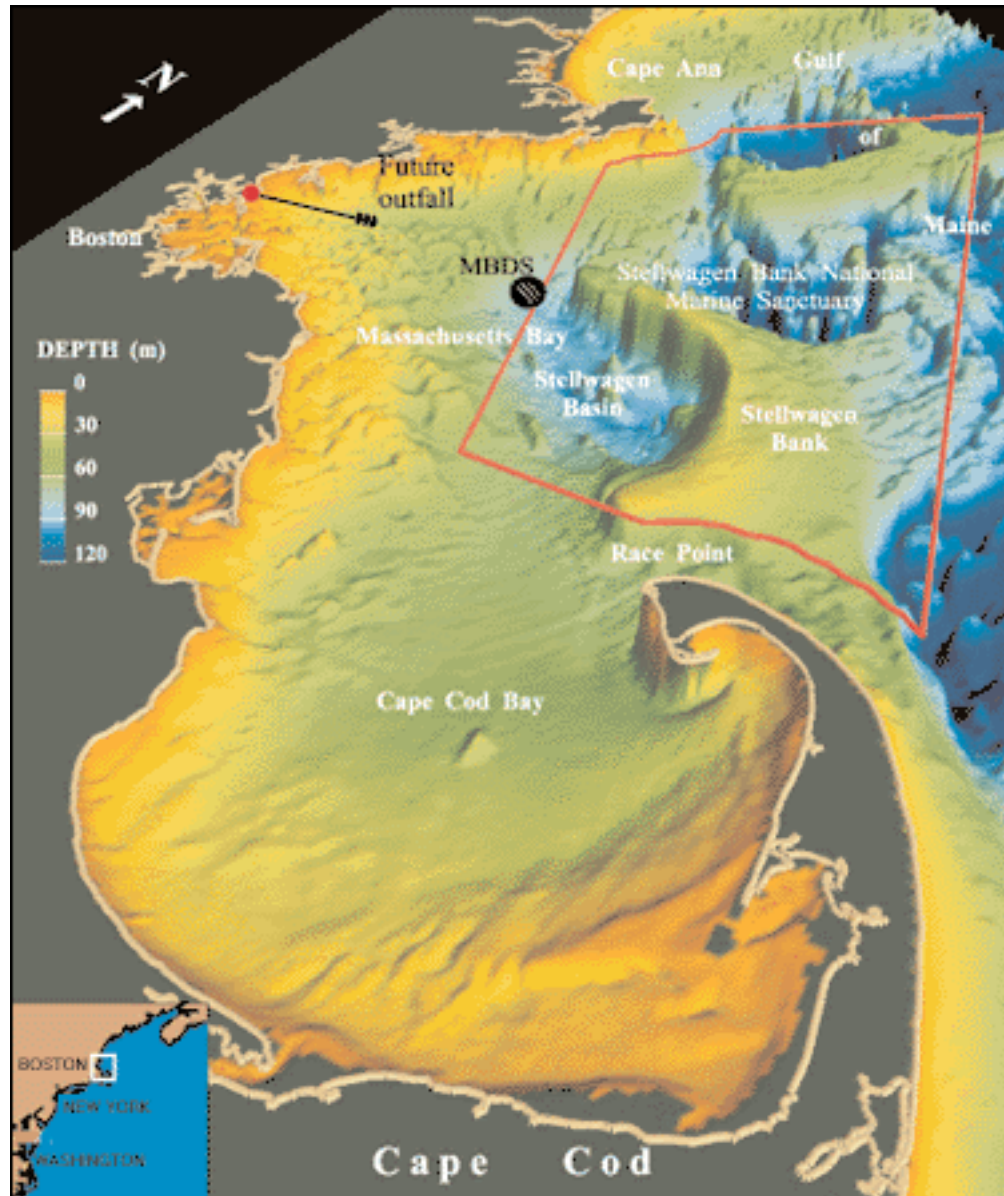
"We can't afford to slow the steady rebuilding progress we are experiencing. New England stocks are showing significant improvements. Scallops, monkfish, herring, redfish and haddock are rebuilt or nearly rebuilt. Groundfish stocks, including cod, Georges Bank haddock and Georges Bank yellowtail flounder, have experienced an average 249 percent increase in adult fish able to reproduce and replenish the stock since 1994."

"The council should play a role in the emerging discussions about ocean zoning—fisheries have much to lose from under-representation. However, the current lack of infrastructure, and the ad hoc groups forming to fill the void, makes it difficult to determine where the council's limited resources can be best used," he added.

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participation of fisheries management's central decision-making body.

"If we had more money and more people we could attend all the meetings and be a part of all the discussions (or even lead some), but given the uncertain benefits, and the real costs to competing with our other work, the best path forward is not clear."



A vertical topography image from the USGS illustrates how closely linked coastal erosion, pollution, and effluent run-off is tied to the prime fisheries habitat in Massachusetts Bay, Stellwagen Bank, and Jefferys Ledge. Any long-term plan to conserve fisheries must take into account the impact numerous human activities have on the ocean.



Image: Dr. Pingguo He

Northeast Consortium Request for Proposals Due Dec. 11, 2007!

A temporary Congressional spending freeze has delayed the NEC's RFP announcement, but projects still have time to hit the water by summer.

Early in November, the Northeast Consortium announced a Request for Proposals with a due date of December 11, 2007.

Things are quite different this year than in past. The Northeast Consortium received a grant from the National Oceanographic and Atmospheric Administration (NOAA) versus an appropriation from Congress, but for significantly less. Also, the program is accepting proposals for both cooperative research and project development awards at this time.

Processing the two types of proposals together, and not requiring planning letters for the full awards, make proposal review more streamlined this year.

"The normal proposal schedule started several months later this year, but there should still be time for projects to get on the water by next summer, depending on what kind of permits are needed to do the research," said Rachel Feeney, a fisheries specialist with the Consortium.

Since 1999, the Consortium has received funding from NOAA via an annual earmark supported by most of New England's Congressional delegation.

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Earmarks allow representatives to designate funds for a particular project or entity within an appropriations bill.

Earlier this year however, Congress temporarily suspended earmarks across the board for FY2007 so that the earmarking process could receive more scrutiny and oversight.

Relatively young agencies, like NOAA, which lack what is



NEC funding in years past has supported innovative projects such as those by Capt. Bill Lee to design underwater cameras used to monitor bycatch and escapement gear. The technology promises to reduce the mortality caused to fish in research (Bill Lee photo).

known as “organic” funding streams, have always been supported by earmarks. In fact, some 40 percent of NOAA's annual budget depends on the earmark process.

With the Congressional suspension in earmarking, NOAA set up its own competitive funding process for FY2007, in order to support key projects in the interim.

From this, the Consortium was awarded \$1.8 million to fund cooperative research in the Gulf of Maine and Georges Bank ecosystems.

“Because of the lower level of funding, we won’t be able to say “yes” to as many projects this year, and as a result, the process is likely to be very competitive,” said Feeney.

As in years past, awards will be administered by the University of New Hampshire on behalf of the Northeast Consortium.

Funding decisions are made by the Northeast Consortium Representatives, based on review and recommendations of a 30+ member panel consisting of Advisory Committee members, commercial fishermen, scientists, and representatives of governmental and non-governmental organizations.

In terms of funding for FY2008, NOAA has not announced if it will make another call for proposals as it did this year, leaving

the future of the Consortium and many other marine research programs uncertain.

The Northeast Consortium has not yet secured funds for FY2008 or beyond.

Those who see the benefits that cooperative research has brought to our region are encouraged to speak with representatives at NOAA and Congress to urge the continuation of such opportunities.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

November 28, 2007

Dear Federal Limited Access Permit Holder:

This letter is to remind you of vessel replacement regulations that were published in August 2007 and that will come into effect beginning January 1, 2008. This regulation **does not** impact vessels whose only Federal limited access permit is for American lobster.

Beginning January 1, 2008, vessel owners will only be allowed one transfer, via a vessel replacement, of Federal limited access permits per permit year, unless the vessel being replaced has been rendered inoperable and not repairable. Thus, between January 1, 2008, and the first day of the 2008 permit year (March 1, or May 1, depending on your permits) you will be allowed only one replacement. After the start of the 2008 permit year, you will be allowed one more replacement.

The one-time per year vessel replacement provision applies to the suite, or group, of limited access permits that authorize the vessel to participate in the fishery. Thus, a valid suite of limited access permits can only be transferred to a replacement vessel one time per permit year.

The permit year for all Northeast limited access permits, except for Atlantic sea scallop and deep-sea red crab, is May 1 – April 30. The permit year for Atlantic sea scallop and deep-sea red crab is March 1 – February 28. The previous vessel replacement measures were implemented in order to give flexibility to vessel owners to purchase and replace a vessel in a timely manner. This action maintains this flexibility while ensuring that the vessel replacement program is not utilized to circumvent the intent of Federal regulations.

In order to show that your vessel has been rendered inoperable and not repairable, you must provide documentation from an objective third party (e.g., a vessel surveyor, insurance company, United States Coast Guard, or law enforcement agency) that the vessel is no longer operable and is non-repairable.

If you have any questions regarding this regulation please call the Sustainable Fisheries Division at 978-281-9315.

Sincerely,

Patricia A. Kurkul
Regional Administrator





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