

Marine Fisheries Management: What We Need to Know

A Roundtable Discussion Sponsored by The Heinz Center

On September 25, 2006, the Heinz Center convened a roundtable discussion in the House Science Committee's hearing room that brought together representatives from commercial and recreational fishing associations, management agencies, conservation groups and universities (see list on back).

Key Discussion Points

Effective fisheries management requires *integrated information systems* to anticipate the effects of fishing, land use and other activities in marine and coastal zones. Managers need to know about:

- *Fish*: stock composition, size and location – species interactions – impact of diseases, toxins and climate on recruitment and distribution
- *Fishing*: commercial and recreational fishing patterns, fleet information and markets
- *Habitat*: on-shore land use and off-shore activities – water quality, temperature, currents – bottom condition and upstream habitat

We know enough to evolve fisheries management toward an ecosystem-based approach and progress has already been made in science and governance. There will never be “perfect” data, but:

- *Fishery managers can expand the issues they consider*: such as habitat conditions and trends, use of area closings (e.g., to protect sensitive species such as cold-water corals) and interactions with other species (e.g. marine mammals).
- *Collaborative regional initiatives*: can provide a forum for integrating fragmented monitoring efforts across many sectors (e.g., fisheries, coastal zone management, pollution prevention) to produce meaningful ecosystem measures that managers in each sector can use.

Collaboration is crucial to:

- *Finding creative solutions*: like using fishing boats as research vessels (which helps provide more data and supplements owner's incomes) and bringing new technologies online (e.g., electronic vessel monitoring systems, “smart” tags on animals).
- *Maximizing use of interagency, intergovernmental, and private resources*: Federal agencies, states, NGOs and industry – when linked together – can often do more than any one party alone, both in providing useful information collection and making tough management decisions.

There are common needs for gathering information and filling knowledge gaps:

- *Monitoring*: Long-term data-gathering is essential to understand the condition of fisheries and management effects and can also serve as an early warning system.
- *Fishery and management research*: In matching problems with appropriate tools, basic fishery research provides technical guidance and enables evaluation of management strategies.
- *Regional priority setting*: is important because regions face different problems and data needs.
- *Predictive capacity*: Investments in observations, data management and ecosystem modeling are needed to predict outcomes from fishing, aquaculture and other activities.

Coordinated data gathering and delivery is imperative:

- *Interoperable data*: To achieve more efficient and sustainable harvest and track changes in marine populations and fishing patterns, data collection for specific sites or fleets should link up with regional and national data systems that incorporate water quality and land use (e.g., IOOS).

- *Accessible data*: Data should be transparent and accessible to users for a range of applications (e.g., fishery and land use regulations, fishing operations) as quickly as possible.
- *Broaden constituencies for data systems*: Sharing data with the public and involving regulated parties increases awareness of problems and solutions and builds support for data collection.

Participating Organizations

Atlantic Coastal Cooperative Statistics Program
 American Fisheries Society
 American Sportfishing Association
 Atlantic States Marine Fisheries Commission
 At-Sea Processors Association
 Bering Sea Fishermen’s Association
 Clarkson University
 Coastal Conservation Association
 Coastal Oregon Marine Experiment Station
 Environmental Defense
 Environmental Protection Agency
 IUCN USA & Caribbean Multilateral Office
 Joint Oceans Commission Initiative
 Kelley Drye Collier Shannon
 Marine Mammal Commission
 National Environment Trust
 National Marine Sanctuary Foundation
 NatureServe
 Nicholas Institute, Duke University
 National Oceanic and Atmospheric Administration
 Nora's Restaurant; Changing Seas
 North Star Group
 Ocean.US

Oceana
 O'Connor & Hannan, LLP
 South Atlantic Fishery Management Council
 The Ocean Conservancy
 Theodore Roosevelt Conservation Partnership
 U.S. Commission on Ocean Policy
 USDA Forest Service
 US Geological Survey

 House of Representatives Science Committee
 Senate Commerce Committee
 Senate Environment and Public Works Committee
 Representative Allen's Office
 Representative Biggert's Office
 Representative Blumenauer’s Office
 Representative Farr's Office
 Representative Frank's Office
 Representative Gilchrest's Office
 Representative Pallone's Office
 Representative Saxton's Office
 Representative Simmons’ Office
 Senator Cantwell's Office
 Senator Nelson's Office