FY2011 Fisheries Science Program Competitive Solicitation Process

The Chesapeake Bay Fisheries Science Program, coordinated through the NOAA Chesapeake Bay Office (NCBO), has been funding competitively-based projects in fisheries research, monitoring, and modeling since 1985. Projects supported have ranged from short-duration gear efficiency and/or biological studies to development of long-term monitoring programs (winter dredge survey) to full benchmark stock assessments.

Funding in FY 2011 is expected to support Executive Order 13508 on Chesapeake Bay Restoration and Protection. NCBO believes that the focal areas for available funds should be identified by the scientific community and prioritized by the fishery managers in the region.

Objective:

Use the Bay scientific community and partners to develop a comprehensive list of science and research needs to support Chesapeake Bay management of fisheries and Ecosystem-Based Fisheries Management. These science and research needs will inform development of an NCBO Federal Funding Opportunity (FFO) announcement, coordination with other partners, and funding sources in the Bay region. NCBO will utilize and prioritize science and research needs based on input from the fisheries management community using the Sustainable Fisheries Goal Implementation Team (GIT).

Process: Below is a summary of the process.

- Brief Fisheries GIT Executive Committee on process for identifying FY2011 research/science needs and priorities for initial feedback – *completed* 8/23/2010.
- Task team solicits fisheries research/science needs through the Fisheries Ecosystem Workgroup and Fisheries GIT membership. Task team representatives are:
 - o Fisheries Ecosystem Workgroup (Shannon Green)
 - NCBO (Derek Orner)
 - Fisheries GIT (Adam Davis)
- NCBO convenes task team to discuss expectations, roles, and responsibilities.
 Task team members will use their network of colleagues and constituent groups (technical committees, professional organizations, co-workgroup members, etc.) to solicit science and research needs to support fishery management.

- NCBO to compile and share the list of research/science needs with ASMFC (Pat Campfield), STAC (Denise Wardrop), CRC (Kevin Sellner), NEFSC (Joe Idoine), and SEFSC (Doug Vaughan) for review, comments, and additions.
- Fisheries GIT Executive Committee reviews and identifies priorities for upcoming announcement of availability of funds.

Timeline:

- Solicitation of research/science needs September and early October.
- Fisheries GIT Executive Committee to prioritize research priorities October.
- Development of FFO for legal review within NOAA October.
- Publication of FFO soliciting proposals for FY2011 research printed December 2010 / January 2011.
- Proposals due February/March 2011. Proposals submitted under the NOAA competitive program will undergo a rigorous technical review followed by panel review and ranking.
 - External technical review utilizing reviewers from outside the Chesapeake Bay region – through April 2011.
 - o Panel meeting late April to early May 2011.
- Award submission to NOAA Grants Management Division by June, 2011. Projects would be expected to begin late summer to fall 2011.

Context for the Solicitation:

The NOAA Chesapeake Bay Office (NCBO) believes that soliciting a broad range of input on fisheries science needs in the Bay will help to guide our fisheries science program funding priorities in a way that promotes coordinated, Bay-wide fishery management decision making based on sound science. NCBO views the newly formed Sustainable Fisheries Goal Implementation Team (Fisheries GIT) as an important mechanism for soliciting and vetting fishery science needs across the Bay region. As such we are forming the aforementioned task team to initiate this process.

The Fisheries GIT is a product of recent Chesapeake Bay Program restructuring and is focused on facilitating fisheries management that encourages sustainable Chesapeake Bay fish populations, supports viable recreational and commercial fisheries, and promotes natural ecosystem function. The Fisheries GIT provides the forum to discuss fishery management issues that cross state and other jurisdictional boundaries, and also works to better connect science to management decisions and create a framework/mechanism for implementing ecosystem-based approaches to fisheries management. The Fisheries GIT will foster the use of and rely upon multiple tools, including cooperative research, monitoring, modeling, assessments and management actions to restore, enhance, and protect the finfish, shellfish, and other living resources in the Bay.

The Fisheries GIT Executive Committee, comprised of senior managers from across the Bay, includes.

- Peyton Robertson (NOAA Chesapeake Bay Office)
- Tom O'Connell (Maryland)
- Jack Travelstead (Virginia)
- Bob Beal (Atlantic States Marine Fisheries Commission)
- Bryan King (District of Columbia)
- A.C. Carpenter (Potomac River Fisheries Commission)

Membership of the full Fisheries GIT includes a broad set of stakeholders including industry, NGOs, and other federal and state agencies.

Also closely related to the work of the Fisheries GIT is the Maryland Sea Grant Ecosystem-Based Fisheries Management (EBFM) Project. This project implements a new technical and scientific foundation for EBFM and moves beyond traditional single species management to consider the interconnections between species, their physical and living environments, and human influences. To date over 85 scientists, managers, and NGOs from within and beyond the Chesapeake Bay region have volunteered to contribute their expertise to this effort. The final products of this effort will be a set of background and critical ecosystem issue briefs for each of the key species and a management tool linking ecosystem based reference points for each of the critical ecosystem stressors as identified by the Fisheries Ecosystem Workgroup (FEW). Three species briefs are already completed.

- <u>Striped Bass</u>: http://www.mdsg.umd.edu/images/uploads/siteimages/Striped Bass Species Team Briefs.pdf
- <u>Menhaden:</u> http://www.mdsg.umd.edu/images/uploads/siteimages/Menhaden Species Team Briefs.pdf
- <u>Blue Crab</u>: http://www.mdsg.umd.edu/images/uploads/siteimages/MDSG-EBFM-Blue Crab Briefs.pdf

In addition to consultation among these coordination mechanisms and projects, NCBO will use the Chesapeake Bay Executive Order (EO) 13508 on Chesapeake Bay Restoration and Protection Strategy and Action Plan (http://executiveorder.chesapeakebay.net/) as guidance in establishing science needs and priorities that help fill the information gaps and develop technical guidance and approaches needed to implement EO actions. Of particular interest are the following actions:

- Launch a Bay-wide oyster strategy using scientific support for decision making.
- Restore priority tributaries and support enforcement.

- Support continued interjurisdictional blue crab management.
- Revise the blue crab population rebuilding target
- Facilitate interjurisdictional, ecosystem based fisheries management
- Consider alternative fisheries management approaches
- Improve indicators of environmental conditions.
- Improve scientific information to support Bay-wide restoration and management efforts.

More specifically NCBO has identified the following scientific and technical advances as needed to address the EO actions and advance fisheries management in the Bay.

- Supporting research to fully develop the ecological connections between living resources and habitat.
- Providing support for ecosystem-based fishery management through an evaluation of health, size, trends, and distribution of key commercially and ecologically important fishery populations of species in the Chesapeake Bay.
- Identifying inconsistencies and areas of overlap in State fishery monitoring surveys; proposing methods to standardize fisheries data across jurisdictions; and conducting surveys to fill gaps in information.
- Conducting science to support the development of ecosystem-based fisheries management models and plans for priority Bay species, including blue crab, oysters, menhaden, striped bass, and alosines (e.g., shad and herring).
- Enhancing ecosystem-based decision support tools such as multispecies trophic and habitat models to strengthen living resource and fisheries management in the Bay.
- Conducting tributary-specific, targeted restoration efforts in priority locations to advance native oyster populations and habitat for key living resources.
- Establishing pre- and post-restoration monitoring programs to evaluate the success, including ecological benefits of large-scale restoration projects.
- Ensuring data integration and modeling efforts are focused on supporting management decision making.

Each of these drivers and ongoing efforts should be taken into consideration as you develop your list of science needs.

Species/Them e	Short-term Analytical Need (<18 mo.)*	Manageme nt application	Medium -term Researc h and/or Analysis topic or project (18 - 24 mo)**	Manageme nt application	Long- term Researc h Project (24+ mo.)***	Manageme nt application
Oysters Striped Bass	An integrated, Baywide striped bass diet study that quantifies both striped bass diet and bio-energetic needs.	There is a need to quantify catch and effort in the winter, Virginia recreational striper fishery.				
Blue crab	 A comprehen sive, bay- wide recreationa l crab survey. An integrated Bay-wide fishery- dependent survey of the crab fishery. 	Needed to feed the assessment and finetune annual estimates of exploitation.				
Menhaden	Developme nt of biological reference points for menhaden	This will provide managers with a tangible tool to assess impacts of				

	based on abundance and the ecosystem role of menhaden (charge to menhaden TC). Refinement of the 'Manageme nt Strategy Evaluation Tool' being assembled by Howard Townsend and Tom Idhe.	an array of management strategies – including land use.		
Alosines				
Emerging issues (Blue Catfish, clams, etc)				
Building blocks for Ecosystem based fisheries management				

^{*} Short-term, analytical products delivered by NLT fall 2012 [8-12 mo. Project period; 2-3 mo. report prep.]

^{**} Mid-term research/analysis product delivered NLT winter 2013/14 [18-24 mo. Project period; 2-3 mo. report prep.]

*** Long-term research product delivered NLT spring 2015 [24-36 mo. Project period; 2-3 mo. report prep.]