

ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

- **Federal Agency Name(s):** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce
- **Funding Opportunity Title:** Chesapeake Bay Integrated Science Program
- **Announcement Type:** Initial Announcement
- **Catalog of Federal Domestic Assistance (CFDA) Number(s):** 11.457, Chesapeake Bay Studies
- **Dates:** *Full proposals* must be received by 5 p.m. eastern time on March 12, 2007.
Letters of Intent must be received by 5 p.m. eastern time on February 7, 2007.
- **Application Submission:** Electronic submission online: www.grants.gov
- **Contact Information:** Derek M. Orner, NOAA Chesapeake Bay Office,
410 Severn Avenue, Suite 107A, Annapolis, MD 21403
derek.ornier@noaa.gov or (410) 267-5676
(For program-specific information please contact the appropriate Federal Program Officer listed in section VII. Agency Contacts)
- **Funding Opportunity Description:** The NOAA Chesapeake Bay Office (NCBO) is in its second decade of providing science, service, and stewardship to advance NOAA's mission in the mid-Atlantic. The NCBO implements NOAA's mission—to understand and predict changes in the Earth's environment and conserve and manage the coastal and marine resources to meet our Nation's economic, social and environmental needs— at a regional scale. NCBO's Chesapeake Bay Integrated Science Program is a competitive program that supports effective ecosystem-based fisheries management and integrated habitat restoration. This program funds: (1) fisheries research, monitoring, modeling, and stock assessment; (2) submerged aquatic vegetation restoration; and (3) cooperative science activities. All projects supported through this program must address the strategic goals and objectives of NCBO (<http://noaa.chesapeakebay.net>) and provide timely information for making resource management decisions in an ecosystem context. Science Program priorities are designed to be responsive to, and compatible with the scientific and technical information needs of the Chesapeake Bay as identified on NCBO's Funding Opportunities web page (<http://noaa.chesapeakebay.net/fundingopportunities.aspx>).

FULL ANNOUNCEMENT TEXT

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I. Funding Opportunity Description

A. Program Objective

The NOAA Chesapeake Bay Office (NCBO) is in its second decade of providing science, service, and stewardship to advance NOAA’s mission in the mid-Atlantic and to support the efforts of the Chesapeake Bay Program. The Office represents all of NOAA, serving as a regional storefront for NOAA’s multiple capabilities. The NCBO implements NOAA’s mission—to understand and predict changes in the Earth’s environment and conserve and manage the coastal and marine resources to meet our Nation’s economic, social and environmental needs— at a regional scale.

The Chesapeake Bay Program (CBP) is a unique regional partnership that directs and conducts the restoration of the Chesapeake Bay. As a partnership, the CBP brings together members of various state, federal, academic and local watershed organizations to build and adopt policies that support Bay restoration. Each organization in the partnership has a unique set of strengths, and by combining resources from multiple organizations the Bay Program is able to follow a unified plan for restoration. NOAA/NCBO provides leadership in four of ten “keystone” commitments identified in the *Chesapeake 2000* Agreement, which guides restoration throughout the Bay and its watershed: Fisheries Management, Oyster Restoration, Submerged Aquatic Vegetation protection and restoration, and Education and Outreach.

An ecosystem is a geographically specified system of organisms (including humans), the environment, and the processes that control its dynamics. An ecosystem-based approach to management is geographically specified, adaptive, informed by ecosystem knowledge and uncertainties, considers multiple external influences, and strives to balance diverse societal objectives. Recognizing the complex interactions among aquatic species, water quality, and habitats in the Chesapeake Bay ecosystem, and the importance of fish from both an economic and ecological perspective, the Chesapeake Bay Program (CBP) has set a path towards implementing ecosystem-based management. The NCBO is a key partner in the effort to advance ecosystem-based approaches to management in Chesapeake Bay.

NCBO's Chesapeake Bay Integrated Science Program is a competitive program that supports vital restoration, research, monitoring, analysis, modeling and assessment activities that will assist the CBP, NOAA, and other program partners in reaching the goal of effective ecosystem-based management and integrated restoration. All projects supported through this program must address the strategic goals and objectives of NCBO (<http://noaa.chesapeakebay.net>) and provide timely information for making resource management decisions in an ecosystem context. Science Program priorities are designed to be responsive to and compatible with the scientific and technical information needs of the Chesapeake Bay as identified on NCBO's Funding Opportunities web page (<http://noaa.chesapeakebay.net/fundingopportunities.aspx>).

B. Program Priorities

Proposals should address one of four areas of interest: (1) fisheries research, monitoring, modeling, and stock assessment in support of ecosystem-based fisheries management; (2) SAV restoration; or (3) cooperative research. Each area of interest will undergo a separate review process as outlined in section V.

1) Ecosystem-based Fisheries Research, Monitoring, Modeling, and Assessment

The NCBO has successfully led a collaborative effort to develop a document, entitled *Fisheries Ecosystem Planning for Chesapeake Bay (FEP)*, which provides valuable guidance for ecosystem-based fisheries management in the Bay and coastal region. The FEP describes the current state of knowledge of the structure and function of the ecosystem in which living resource use occurs, and identifies critical gaps in our understanding of fisheries, habitats, and ecological processes that are vital to effective adaptive management of these resources. It is designed to increase awareness of how management decisions can affect the ecosystem, and to facilitate the incorporation of ecosystem principles into Chesapeake Bay fisheries management. The FEP defines a fisheries ecosystem as "the complex interactive community of organisms (including humans) and their shared environment (including habitats and ecological processes) that contributes to, influences, or determines the fishing industry." Although not a tactical plan, the FEP provides strategic advice on critical features and processes of the Chesapeake Bay ecosystems vital to effective management of its fishery resources. In setting forth these concepts, the FEP provides a framework for expanding single-species management and makes recommendations on incremental steps towards ecosystem-based fisheries management. In November 2005, the Chesapeake Executive Council of the Chesapeake Bay Program formally adopted an ecosystem-based approach to fisheries management in Chesapeake Bay, using the FEP as guidance.

NCBO seeks proposals for fisheries research, monitoring, modeling, or assessment that will facilitate effective ecosystem-based management in Chesapeake Bay. This management paradigm requires knowledge of the interactions among exploited species, and their habitats and stressors, to develop viable management plans. The FEP (http://noaa.chesapeakebay.net/FISHFEP_DRAFT.pdf) is a source document identifying the science necessary to support ecosystem-based fisheries management in the Bay. It is anticipated that approximately \$1.2M will be available for projects supported through this area of interest. Approximately \$500k will be available for new projects, the remainder for continuation of previously funded multi-year projects. Proposals submitted under

this area should address one or more of the following elements:

a) Monitoring and Assessing Fisheries Stocks

- Basic information on stock size and trends in abundance.
- Spatial distributions of living resources and statistics on harvesting activities for modeling and economic valuation
- Estimates of anadromous fish abundance and recruitment dynamics
- Monitoring and assessment of forage fish populations (particularly Atlantic menhaden and bay anchovy)
- Monitoring of fish stocks for disease and determination of impacts on productivity

Proposals may include research on life history characteristics, larval dynamics, stock-recruitment relationships, schedules of vital rates, and descriptions of stock structure, demographics and spatial distribution. Development of techniques to better accommodate incomplete and variable data and to show the impacts of various management options associated with the uncertainties inherent in current models would also be appropriate.

- (1) Proposals addressing Atlantic menhaden are of particular interest for this announcement. Atlantic menhaden are primary consumers of planktonic organisms, principally phytoplankton. Thus, menhaden are an important link in the estuarine and coastal marine food web and play an integral role in the Chesapeake Bay ecosystem. The most recent Atlantic States Marine Fisheries Commission's stock assessment for Atlantic menhaden determined that the coastal stock of menhaden is healthy and is not being overfished. However, several questions have emerged recently regarding the regional abundance and the ecological role of Atlantic menhaden in Chesapeake Bay. Proposals addressing any of the following elements specific to Atlantic menhaden in Chesapeake Bay are specifically requested with a strong emphasis on any potentially new technological advancements for addressing (iii) determining exchange rates:
 - (i) Estimate Atlantic menhaden abundance in Chesapeake Bay;
 - (ii) Estimate the removal of Atlantic menhaden in Chesapeake Bay by fisheries and forage demand by striped bass and other predatory species;
 - (iii) Determine exchange rates between Chesapeake Bay and the Atlantic coastal system for Atlantic menhaden;
 - (iv) Larval studies to determine Atlantic menhaden recruitment to Chesapeake Bay.
- (2) Proposals specifically advancing the understanding of cownose rays (*Rhinoptera bonasus*) in Chesapeake Bay are specifically encouraged. Cownose rays are seemingly increasing in the Bay yet substantive evidence for this increase is lacking. Recent debates have centered around the potential for a commercial or recreational fishery for this species which may or may not be feasible. The current stock status for cownose rays is poorly understood due to limited and non-uniform stock assessment

efforts and protocols across the range of this species, particularly, but not limited to Chesapeake Bay. A proposal addressing this area could include:

- (i) Identification of effective stock assessment methods for cownose rays;
- (ii) Investigations into survival and mortality rates of different life stages;
- (iii) Development of sustainable reference points for rays to be utilized in determining if a sustainable harvest rate exists, in addition to determining whether the population is stable, decreasing, or increasing and to determine if the population is at an appropriate level;
- (iv) Assessment of durophagous feeding abilities using captive prey handling and bite force experiments to determine which life stages of various bivalve species are susceptible to predation.
- (v) Investigation of fecundity, length and weight relationships for females throughout their range; growth rates for males and females throughout their range; predator-prey relationships; behavior and movement; oceanic-behavior and movement; and information on the maturity schedule which would be extremely useful in combination with migration rates.

- (3) Identification and quantification of technical interactions (i.e. bycatch) in Chesapeake Bay commercial and recreational fisheries. Technical interactions (i.e. bycatch) arise when multiple species are caught in single gears or single-species fisheries. They occur in many Bay fisheries and remain unquantified and undocumented.

Quantification of this source or mortality is critical to holistic management of Chesapeake Bay fisheries. Proposals should evaluate the nature of the technical interactions and the levels of removal and mortality attributable to such interactions.

Proposals investigating gear alterations to reduce bycatch and protected species interactions are also acceptable.

b) Stock Assessment Graduate Fellowship Program

Proposals that develop a graduate education program focused on the assessment of Chesapeake Bay resources are encouraged. With an anticipated shortage of marine scientists in many key areas, this initiative will strive to play an important role in training future researchers / stock assessment scientists. This initiative is intended to provide for active university/NOAA cooperation in the advancement, organization, and operation of marine research, education, in-service training, and demonstration programs. Principal Investigators for this area of interest would oversee the development of Chesapeake Bay region stock assessments that are conducted through this program and submitted to the Chesapeake Bay Stock Assessment Committee for review and acceptance. Applicants in this area are strongly encouraged to partner with a NOAA scientist with a stock assessment and/or Chesapeake Bay focus; therefore preference will be given to applicants who partner with NOAA scientists. Proposals specifically focused on regional assessments for Atlantic croaker or weakfish are strongly encouraged.

c) Multispecies Research, Monitoring, and Modeling

In an ecosystem-based approach to fisheries management, it is important to understand the complex relationships between fisheries, the ecosystem, society, and the environment. Proposals submitted under this area should address any of the following elements:

- Advance knowledge of predator-prey relationships
 - Increase knowledge of interspecific interactions in food webs, especially predator/prey relationships and development of predator-prey models of key interactions.
 - Document and quantify historic multispecies interactions among economically and ecologically important finfish and shellfish within the Chesapeake Bay. Proposals should lead to the identification of ‘significant’ interactions within the Chesapeake Bay fisheries system. Work may involve analysis of commercial and recreational catch and effort data, the analysis of trophic interactions, energy flows within the fisheries system or multivariate analyses of distribution and abundance relationships within the fisheries system and their relationship to environmental and habitat characteristics.
- (1) Development of Baywide reference points related to total removals from the system to fully appreciate the impact those fishery removals have on food webs. All sources of removals to quantify the level of total removals to the Chesapeake Bay system should be identified and threshold and sustainable levels of removals should be identified;
 - (2) The development of new, and improvements of existing, single species, multispecies, and ecosystem-based fisheries stock-assessment and food web models are required. Support is required to develop and employ a suite of multispecies, living resource models to evaluate impacts of manipulating water quality, prey, and fishing pressure on living resources. Analyzing and modeling effects of climate variability or change and sea level rise on anadromous fish population dynamics and recovery potentials also are critical to understand and manage recoveries in these taxa. Blue crab, menhaden and anchovy are of particular interest. Development of food-web models for Chesapeake Bay should be continued leading to more realistic trophic network models and dynamic food-web simulation models (e.g., the ECOPATH, ECOSIM, and CASM modeling now underway, as well as other modeling approaches). Additionally, incorporation of environmental and multiple stressor effects, e.g., water quality, disease, and harvesting, into multispecies and ecosystem-based stock-assessment models is needed.
 - (3) Development of integrated indicators of ecosystem health that explicitly include information on fish stocks, their habitats, and interacting species. When possible, use existing long-term monitoring programs in Chesapeake Bay to satisfy data needs for indicator development. Development of appropriate indicators, nevertheless, is a major task. The kinds of indicators most likely to support ecosystem-based fisheries management under an FEP must be identified.
 - (4) Develop or modify biological reference points (BRPs) within a multispecies context for ecosystem-based management of Chesapeake Bay fisheries. These reference points include stock abundance (biomass), fishing mortality rate targets, and thresholds that indicate stock status. In an FEP, they should reflect interactions among species (e.g., predator-prey and competitive interactions) and essential ecosystem services provided by exploited species (e.g., the roles of filter feeders in

controlling standing stocks of plankton, increasing water clarity, and modifying nutrient cycles).

2) SAV Restoration

Proposals should address one of the areas of interest listed here. If the proposal addresses more than one area of interest, it should list first on the application the area of interest that most closely reflects the objective of the proposal. Proposals should follow and refer to the guidance in the Chesapeake Bay Program's "Strategy to Accelerate the Protection and Restoration of Submerged Aquatic Vegetation in the Chesapeake Bay" which is available at http://www.chesapeakebay.net/pubs/subcommittee/lrsc/thwg/Final_SAV_restoration.pdf or via Peter Bergstrom (peter.bergstrom@noaa.gov or (410) 267-5665).

All proposals should address the manner in which the applicant will obtain the necessary permits (if applicable) for collection of plant materials from tidal waters and bottom disturbance or putting structures in tidal waters. For collecting permit requirement in Maryland, see: <http://mddnr.chesapeakebay.net/savrrc/index.html> . For permit information for Virginia tidal waters, see: <http://www.mrc.state.va.us/hmac/hmoverview.shtm> .

It is anticipated that approximately \$250K will be available through this program in FY07. Funds will be used to support multi-year projects currently underway, as well as new projects.

These areas of interest are listed in roughly descending order of importance, based on priorities in the CBP strategy cited above, and NOAA priorities:

- a) Applied research to increase the success of planting SAV, especially methods that involve planting directly from seeds and/or vegetative propagules. Investigate factors directly related to improving the large-scale cultivation and planting of SAV from seeds in Chesapeake Bay. For some species this research could also include planting of tubers, winter buds, and other vegetative propagules. These factors may include the following: optimal conditions for production and maturation; viability and germination; harvest and storage methods; natural modes of seed transport and fates of seeds that disperse naturally; effects on planting success of any structures such as breakwaters that reduce wave exposure; distribution and viability of seed banks and tubers; and other factors. Collecting information useful to the direct planting of seeds and/or vegetative propagules of wild celery (*Vallisneria americana*), sago pondweed (*Stuckenia pectinata*), and/or redhead grass (*Potamogeton perfoliatus*) is encouraged.
- b) Integrated restoration projects that include at least two of these three elements: SAV, living shorelines, and native oysters. Projects should be designed with elements in physical proximity in ways that are designed to enhance the success of the other projects. Evaluation of project success should include an assessment of the effectiveness of placing different restoration types in proximity to each other.

(3) Cooperative Research

The NCBO is developing a Cooperative Research Program in Chesapeake Bay to formalize and expand collaborative research among the Chesapeake Bay's commercial fishing industry, marine and estuarine scientists, and fishery management communities. The goal of this initiative is to enhance the data upon which fishery management decisions are made as well as to facilitate communication and collaboration among commercial fishermen, scientists, and fishery managers. Through this initiative, the NCBO will develop a collaborative and cooperative program to set research priorities that meet management and fishing industry needs.

Fishery management is by nature a multiple-year endeavor following long time series of fishery dependent and independent information. Additionally, there are specific needs for immediate short-term biological and habit-related information to help solve fishery management issues. Thus, the cooperative science initiative will operate with two avenues of potential funding.

Long-Term Monitoring Program designs: The long-term cooperative research programs focus on fisheries independent data as well as fishery-dependent data. Support for the design and pilot of potentially longer-term monitoring programs is acceptable.

Short-Term Research Projects: The program encourages short-term cooperative research projects such as habitat studies, biological information and stock structure studies, and socioeconomic research, with an initial focus on blue crab, menhaden or striped bass. Projects in this area should aim to provide more detailed information on fish stocks, marine habitat, and bycatch reduction through the use of more selective fishing gears.

This funding provides a significant opportunity for the NOAA Chesapeake Bay Office to develop collaborative relationships with the fishing industry. These Cooperative Research Programs are a mechanism to build trust and understanding among the various players in the fisheries community and management agencies. It is recommended that proposals consist of partnerships between fisherman, academia and/or NOAA staff.

C. Program Authority

The Secretary is authorized under the Fish and Wildlife Coordination Act, as amended, at 16 U.S.C. 661, to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes, and in minimizing damages from overabundant species.

II. Award Information

A. Funding Availability

This solicitation announces funds that may be available in FY 2007 in award amounts to be determined by the proposals and available funds. Annual funding is anticipated to fund projects for up to 3 years duration, but is dependent on funding made available in the federal FY07 budget. Funding for subsequent years will also depend on the performance of grantees to successfully conduct activities as determined by the Federal Program Officer through performance reports, site visits, and compliance with award conditions. Applicants are hereby given notice that funds have not yet been appropriated for these programs.

It is the intent of the NOAA Chesapeake Bay Office to renew funding for several projects currently being supported by this ongoing science program, pending successful review of a new workplan and adequate progress reports and/or site visits. It is also the intent of NCBO to award funding to new projects as available funds permit.

There is no guarantee that sufficient funds will be available to make awards for all qualified projects. The exact amount of funds that may be awarded will be determined in pre-award negotiations between the applicant and NOAA representatives. Publication of this notice does not oblige NOAA to award any specific project or to obligate any available funds. If applicants incur any costs prior to an award being made, they do so at their own risk of not being reimbursed by the government. Notwithstanding verbal or written assurance that may have been received, there is no obligation on the part of NOAA to cover pre-award costs unless approved by the Grants Officer as part of the terms when the award is made.

B. Project/ Award Period

Proposals may be submitted for up to 3 years. Proposals may be considered eligible for renewal beyond the first project period. However, if not initially awarded as a multi-year award, funds will be made available for only a 12-month award period and any continuation of the award will depend on submission of a successful proposal subject to identified review process, adequate progress on previous award(s), and available funding to renew the award. No assurance for a funding renewal exists; funding will be at the complete discretion of NOAA.

Multi-year projects should include in the first-year application a full description of the proposed work and estimated budget by line item as described in this announcement for the first and each subsequent year.

If selected for funding, the applicant will be required to submit a proposal each subsequent year upon request from the Program Officer. In addition to the requirements for new proposals, renewal applications should include the accomplishments to date on the previous year's award.

C. Type of funding instrument

Under this solicitation, NCBO will fund Chesapeake Bay Integrated Science Projects as cooperative agreements. The cooperative agreement has been determined to be the appropriate funding instrument because of the substantial involvement of NCBO in:

1. Developing program research priorities;
2. Evaluating the performance of the program for effectiveness in meeting regional goals for Chesapeake Bay management;
3. Monitoring the progress of each funded project;
4. Holding periodic workshops with investigators; and
5. Working with recipients to prepare annual reports summarizing current accomplishments of the Chesapeake Bay Integrated Research Program.

III. Eligibility Information

A. Eligible Applicants

Eligible applicants are institutions of higher education, other nonprofits, commercial organizations, foreign governments, organizations under the jurisdiction of foreign governments, international organizations, state, local and Indian tribal governments. Federal agencies or institutions are not eligible to receive Federal assistance under this notice.

The Department of Commerce/ National Oceanic and Atmospheric Administration (DOC/NOAA) is strongly committed to broadening the participation of historically black colleges and universities, Hispanic serving institutions, tribal colleges and universities, and institutions that work in underserved areas. The NCBO encourages proposals involving any of the above institutions.

B. Cost Sharing or Matching Requirement

No cost sharing is required under this program, however, the NCBO strongly encourages applicants to share as much of the project costs as possible. Funds from other Federal awards may not be considered matching funds. The nature of the contribution (cash versus in-kind) and the amount of matching funds will be taken into consideration in the review process. Priority selection will be given to proposals that propose cash rather than in-kind contributions.

IV. Application and Submission Information

A. Address to Request Application Package

Electronic application packages are strongly encouraged and are available at: <http://www.grants.gov/>. If the applicant has difficulty accessing Grants.gov or downloading the required forms from the NCBO website, they should contact Derek Orner, NOAA Chesapeake Bay Office; 410 Severn Avenue, Suite 107A, Annapolis, MD 21403, or by phone at 410-267-5676, or fax to 410-267-5666, or via internet at derek.ornier@noaa.gov.

Paper applications are available on the NCBO website: <http://noaa.chesapeakebay.net/> or can be obtained by contacting Derek Orner, NOAA Chesapeake Bay Office; 410 Severn Avenue, Suite 107A, Annapolis, MD 21403, or by phone at 410-267-5676, or fax to 410-267-5666, or via internet at derek.ornier@noaa.gov.

If the applicant has difficulty accessing Grants.gov or downloading the required forms from the NCBO website, they should contact Derek Orner, NOAA Chesapeake Bay Office; 410 Severn Avenue, Suite 107A, Annapolis, MD 21403, or by phone at 410-267-5676, or fax to 410-267-5666, or via internet at derek.ornier@noaa.gov.

Potential applicants are invited to contact the appropriate NCBO Federal Program Officer before submitting an application to discuss project ideas in the context of NCBO program goals and objectives.

NCBO Federal Program Officers:

Fisheries Research, and Cooperative Research – Derek Orner 410-267-5676
derek.ornier@noaa.gov

SAV Restoration – Peter Bergstrom 410-267-5665 peter.bergstrom@noaa.gov

B. Content Application Submission

1. Letter of Intent (LOI) - A Letter of Intent (LOI) describing the proposed work and its relevance to the priority areas listed above is requested and strongly encouraged although not required. . The purpose of the LOI process is to (1) provide information to potential applicants on the relevance of their proposed project to the Chesapeake Bay Integrated Research Program and the likelihood of it being funded in advance of preparing a full proposal; (2) to assist the NOAA Chesapeake Bay Office in setting up technical reviewers; and, (3) to allow the NCBO to assist applicants with the electronic submission of proposals through www.grants.gov. The LOI must include a tentative project title; name and institution of all principal investigator(s), and must specify which individual is the Lead principal investigator; must be no more than two pages in length and must include a statement of the problem, brief summary of the work to be completed, methodology to be used and approximate cost of the project. The LOI should be sent to the appropriate Federal Program Officer listed above, and must be received by 5 p.m. eastern time on February 7, 2007. Short, constructive responses from NCBO will be returned to lead PIs within 2 weeks.

2. Full Application Submission - Applicants are strongly encouraged to submit applications electronically through <http://www.grants.gov>.

Proposals must adhere to the following provisions and requirements and must be received by 5 p.m. eastern time on March 12, 2007. Failure to follow these requirements will result in proposals being returned without review.

Applications must follow the format described in this document and must be complete. Applicants must identify the specific research priority or priorities to which they are responding. If the proposal addresses more than one priority, it should list first on the application the priority that most closely reflects the objective of the proposals. For applications containing more than one project, each project must be identified individually using the format specified in this section. If an application is not in response to any of the priorities listed in this Announcement, it should so state. Applicants should not assume prior knowledge on the part of NCBO as to the relative merits of the project described in the application.

Hard copy or paper applications must be one-sided and unbound. Applicants are required to submit 1 signed original and 2 copies of the full proposal. All incomplete applications will be returned to the applicant. Please note that applicants are strongly encouraged to submit applications electronically through <http://www.grants.gov>.

3. Application Format

Applicants must submit the following forms during initial submission of the application:

- Application for Federal Assistance (SF-424),
- Budget Information, Non-construction Programs (SF-424A),
- Assurances, Non-construction Programs (SF424B).

Applicants may submit the information typically included on these documents through the <http://www.grants.gov> website. The Department of Commerce Form(s) CD-511, Certifications Regarding Debarment, Suspension and Other responsibility Matters; Drug Free Workplace Requirements and Lobbying, and if applicable Department of Commerce Form CD-346 Applicant for Funding Assistance (Non-Profits, For-Profits, and Individuals) will be required during the final review process if not initially submitted with the application.

Proposal format must be in at least a 10-point font and double-spaced. Brevity will assist reviewers and program staff in dealing effectively with proposals. Therefore, the Project Description may not exceed 15 pages. Data management plans and/or access agreements as well as tables and visual materials, including charts, graphs, maps, photographs, and other pictorial presentations are not included in the 15-page limitation. Appendices may be included but must not exceed a total of 20-pages in length. Appendices may include information such as curriculum, resumes, and/or letters of endorsement. Additional informational material will be disregarded.

In addition to the Federal Forms listed above, proposals must include the following information in the format outlined below.

a. Project summary (1-page limit):

- (1) Organization title.
- (2) Principal Investigator(s) (PI).
- (3) Address, telephone number, and email address of Principal Investigator(s).
- (4) Area of interest for which you are applying (see section I. B.).
- (5) Project title.
- (6) Project duration (1, 2 or 3 year project periods - starting on the first of the month and ending on the last day of the month). Specify whether the project is being submitted with the intention of continuation beyond the first year.
- (7) Project objectives for each 12-month project period as well as for the entire anticipated project period.
- (8) Summary of work to be performed this fiscal year.
- (9) Budget Information
 - Total Federal funds requested this fiscal year.
 - Cost-sharing to be provided from non-Federal sources, if any. Specify whether contributions are cash or in-kind.
 - Total project cost this fiscal year.

b. Project description (15-page limit): Each project must be completely and accurately described. The main body of the proposal should be a clear statement of the work to be undertaken and should include: specific objectives and performance measures for the period of the proposed work and the expected significance; relation to longer-term goals of the PI's project; and relation to other work planned, anticipated, or underway through Federal assistance. Each project must be described as follows:

- (1) Identification of problem(s): Describe the specific problem(s) or area(s) of interest to be addressed (see section I.B. above).
- (2) Project objectives: Objectives should be simple and understandable; as specific and quantitative as possible; clear as to the "what and when," but should avoid the "how and why", and; attainable within the time, money and human resources available. Projects should be accomplishment oriented and identify specific performance measures.
- (3) Project narrative: The project narrative is the scientific or technical action plan of activities that are to be accomplished during each budget period of the project. This description must include the specific methodologies, by project job activity, proposed for accomplishing the proposal's objective(s).

Investigators submitting proposals in response to this announcement are strongly encouraged to develop inter-institutional, inter-disciplinary research teams in the form of single, integrated proposals or as individual proposals that are clearly linked together. The project narrative must include a milestone table that summarizes the procedures/objectives that are to be attained in each project month covered. Table format should follow sequential month rather than calendar month (i.e. Project period Month 1, Month 2... versus October, November...).

(4) Data management: (not included in the 15-page limitation – can be submitted as an appendix.) The proposal must include a plan to make available to the public all data generated from observations, analyses, or model development (primary data) and any secondary (or existing) data used under a cooperative agreement awarded from this solicitation. The data must be available in a format and with documentation such that they may be used by others in the scientific community. Proposals must address plans for sharing data and research products with the community in a timely manner and should lead to development and or support of models for management purposes.

(5) Benefits or results expected: Identify and document the results or benefits to be derived from the proposed activities.

(6) Need for Government financial assistance: Demonstrate the need for assistance. Explain why other funding sources cannot fund all the proposed work. List all other sources of funding that are or have been sought for the project.

(7) Federal, state and local government activities: List any programs (Federal, state, or local government or activities, including Sea Grant, state Coastal Zone Management Programs, NOAA Oyster Disease Research Program, the state/Federal Chesapeake Bay Program, etc.) this project would affect and describe the relationship between the project and those plans or activities.

(8) Project management: Describe how the project will be organized and managed. Include resumes of principal investigators. List all persons directly employed by the applicant who will be involved with the project. If a consultant and/or subcontractor is selected prior to application submission, include the name and qualifications of the consultant and/or subcontractor and the process used for selection.

(9) Results from prior NOAA Chesapeake Bay Office support: If any PI or co-PI identified on the project has received support from the NCBO in the past 7 years, information on the prior award(s) is required. The following information should be provided:

- (a) The NOAA award number, amount and period of support;
- (b) The title of the project;
- (c) Summary of the results of the completed work, including, for a research project, any contribution to the development of human resources in science/biology;
- (d) Publications resulting from the award (Reprints may be submitted, and are requested, for documentation if applicable);
- (e) Brief description of available data, samples, physical collections and other related research products not described elsewhere; and
- (f) If the proposal is for renewed support, a description of the relation of the completed work to the proposed work.

(10) Monitoring of project performance: Identify who will participate in monitoring the project.

(11) Project impacts: Describe how these products or services will be made available to the fisheries and management communities.

(12) Education and outreach: How will this project provide a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources? This includes the degree to which the potential users of the results, i.e., industry or state resource managers, have been involved in the planning of the activity, will be involved in the execution of the activity and/or are providing funds, and whether there is a plan to disseminate the results to user groups and the public.

(13) Evaluation of project: The applicant is required to provide an evaluation of project accomplishments and progress towards the project objectives and performance measures at the end of each funding period and in the final report. The application must describe the methodology or procedures to be followed to quantify the results of the project.

c. Total project costs and budget narrative: Total project costs are the amount of funds required to accomplish what is proposed in the Project Description, including cost-share contributions and donations.

Provide a detailed table with narrative to support the requested items or activities (personnel/salaries, fringe benefits, travel, equipment, supplies, contract costs, and indirect costs.) Supplies (<\$5,000/item) and equipment (>= \$5,000/item) should be broken out in as much detail as possible. The budget table and narrative submitted with the application should match the dollar amounts on the SF-424 and SF-424A forms. Additional cost detail may be required prior to a final analysis of overall cost allowability, allocability, and reasonableness.

For multi-year projects, the budget table and narrative must include all years.

Please note the following restrictions for salaries and fringe benefits:

Funds for salaries and fringe benefits may be requested only for those personnel who are directly involved in implementing the proposed project and whose salaries and fringe benefits are directly related to specific products or outcomes of the proposed project. Hourly rates and projected hours worked on the project and/or percentage of time and yearly salary should be included for all salary requests. Applicants are strongly encouraged to request reasonable amounts of funding for salaries and fringe benefits to ensure the proposal is competitive.

d. Supporting documentation: Provide any required documents and any additional information necessary or useful to the description of the project. The amount of information given in this section will depend on the type of project proposed, but should be no more than 20 pages. The applicant should present any information that would emphasize the value of the project in terms of the significance of the problems addressed. Without such information, the merits of the project may not be fully understood, or the value of the project may be underestimated. The absence of adequate supporting documentation may cause reviewers to question assertions made in describing the project and may result in lower ranking of the project. Information presented in this section should be clearly referenced in the project description.

4. Electronic Submission

You may access the electronic grant application for the Chesapeake Bay Integrated Research Program at <http://www.grants.gov>. Please note that applicants must locate the downloadable application package for this program by the FFO number (to be provided on the NCBO website, <http://noaa.chesapeakebay.net>) or the CFDA number (11.457). Users of Grants.gov will be able to download a copy of the application package, complete it off line, and then upload and submit the application via the Grants.gov site. When you enter the Grants.gov site, you will find information about submitting an application electronically through the site as well as the hours of operation. We strongly recommend that you do not wait until the application deadline date to begin the application process through Grants.gov.

- To use Grants.gov, applicants must have a DUNS number and register in the Central Contractor Registry (CCR). You should allow a minimum of 5 days to complete the CCR registration.
- Applications must comply with any page limit requirements described in this notice.
- After electronic submission of the application, applicants will receive an automatic acknowledgment from Grants.gov that contains a Grants.gov tracking number.
- NOAA may request that you provide original signatures on forms at a later date.

5. Submission Dates and Times

Letters of Intent must be received by 5 p.m. eastern time on February 7, 2007. Full proposals must be received by 5 p.m. eastern time on March 12, 2007. Proposals received after that time will not be considered for funding.

C. Funding Restrictions

1. Indirect Cost Rates

Regardless of any approved indirect cost rate applicable to the award, the maximum dollar amount of allocable indirect costs for which the Department of Commerce will reimburse the recipient shall be the lesser of the line item amount for the Federal share of indirect costs contained in the approved budget of the award, or the Federal share of the total allocable indirect costs of the award based on the indirect cost rate approved by an oversight or cognizant Federal agency and current at the time the cost was incurred, provided the rate is approved on or before the award end date. If the applicant does not have a current negotiated rate and plans to seek reimbursement for indirect costs, documentation necessary to establish a rate must be submitted within 90 days of receiving an award.

2. Allowable Costs

Funds awarded cannot necessarily pay for all the costs that the recipient might incur in the course of carrying out the project. Allowable costs are determined by reference to the Office of Management and Budget Circulars A-122, "Cost Principles for Nonprofit Organizations"; A-21, "Cost Principles for Education Institutions"; and A-87, "Cost Principles for State, Local and Indian Tribal Governments." Generally, costs that are allowable include salaries, equipment, supplies, and training, as long as these are "necessary and reasonable."

D. Other Submission Requirements

All applicants are strongly encouraged to submit applications electronically (through <http://www.grants.gov/>). Facsimile transmissions of proposals will not be accepted. For additional information on application requirements or submission procedures, contact Derek Orner, NOAA Chesapeake Bay Office; 410 Severn Avenue, Suite 107A, Annapolis, MD 21403. (410) 267-5676 or derek.ornier@noaa.gov.

V. Application Review Information

A. Evaluation Criteria

1. Importance/relevance and applicability of proposal to the program goals (30 points)

This ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, or local activities. For the Chesapeake Bay Integrated Research Program this includes the following questions: Does the applicant demonstrate a knowledge and comprehension of the problem? Is the applicant familiar with related work that is completed or on-going?

2. Technical merit (30 points)

This assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether there are clear project goals and objectives. For the Chesapeake Bay Integrated Research Program this includes the following questions: Are the objectives defined in the proposal focused? Does the applicant demonstrate that the objectives are realistic and can be reached within the proposed project period? What is the likelihood of the proposed activities to improving the general understanding of the Bay's ecosystem? Does the project design include a project evaluation that ensures that the goals and objectives of the project will be met?

3. Overall qualifications of applicants (10 points)

This ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project. For the Chesapeake Bay Integrated Research Program this includes the following question: Does the applicant show the capability and experience in successfully completing similar projects?

4. Project costs (20 points)

This budget is evaluated to determine if it is realistic and commensurate with the project needs and time-frame. For the Chesapeake Bay Integrated Research Program this includes the following questions: Does the applicant demonstrate the ability to leverage other resources? Is the nature of the cost share cash or in-kind? Is the budget request reasonable and does the applicant justify the proposed budget request? Are requested funds for salaries and fringe benefits only for those personnel who are directly involved in implementing the proposed project and/or are directly related to specific products or outcomes of the proposed project?

5. Outreach and education (10 points)

This assesses whether the project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources. For the Chesapeake Bay Integrated Research Program this includes the following questions: Does the project involve external sharing and communication through peer-reviewed publication and presentation at scientific symposium and conferences? This includes the degree to which the potential users of the results, i.e., industry or state resource managers, have been involved in the planning of the activity, will be involved in the execution of the activity and/or are providing funds, and whether there is a plan to disseminate the results to user groups and the public.

B. Review and Selection Process

Each specific area of interest, as outlined in Section I.B., will undergo a separate review process. Applications submitted within only the same area of interest will compete against one another.

1. Initial Evaluation of Applications

Once a full application has been received by NCBO, an initial administrative review is conducted to determine compliance with requirements and completeness of the application.

2. Technical Review

Applications meeting the requirements of this solicitation will undergo an external technical review. Technical review is conducted by a minimum of three independent reviewers. Each reviewer will individually evaluate and score proposals (1-100 points) using the criteria provided in Section V.A. This review normally will involve experts from both NOAA and non-NOAA organizations. The technical reviewers' ratings will be used to produce a rank order of the proposals. No consensus advice will be given by the technical reviewers.

3. Review Panel

The NCBO will convene a review panel consisting of at least three regional experts in the scientific and management aspects of fisheries research from NOAA and non-NOAA organizations. Each member of the panel will review the technical review scores and comments, and will individually make recommendations and provide a numerical ranking to the Federal Program Officer. No consensus advice will be given by the reviewer panel members.

Proposals submitted under I.B.(2) - SAV Restoration, will not undergo a review panel.

C. Selection Factors

The Federal Program Officer will, in consultation with NCBO staff as appropriate, review the ranking of the proposals and recommendations of the review panel and make recommendations to the NCBO Director. The average numerical ranking from the review panel (or technical review for the SAV program) will be the primary consideration by the NCBO Director in deciding which of the proposals will be recommended for funding to the NOAA Grants Officer. However, the Director of the NCBO will select proposals after considering the technical reviews, recommendations of the review panel, and recommendations of the Federal Program Officer. The NCBO Director shall award in rank order unless it is justified that a proposal be selected out of rank order based upon any of the following factors:

1. Availability of funding
2. Balance/distribution of funds
 - a. Geographically
 - b. By type of institutions
 - c. By type of partners
 - d. By research areas
 - e. By project types
3. Duplication of other projects funded or considered for funding by NOAA/federal agencies
4. Program priorities and policy factors as set out in Section I.B. and III.B.
5. Applicant's prior award performance
6. Partnerships with/Participation of targeted group
7. Adequacy of information necessary for NOAA staff to make a NEPA determination and draft necessary documentation before recommendations for funding are made to GMD.

Projects considered for renewal will be evaluated by the Director of the NCBO, in consultation with the Federal Program Officer and other NCBO staff, to determine whether the project will be renewed for funding based upon the advice of the review panel. If there has been satisfactory prior award performance, projects considered for renewal may take priority over new proposals.

D. Anticipated Announcement and Award Dates

Subject to the availability of funds, review of proposals will occur during the 90-days following the date given in this announcement that the proposals are due to the NCBO. Funding should begin during summer 2007 for most approved projects. Projects should not be expected to begin prior to July 1, 2007, unless otherwise directed by the Federal Program Officer.

VI. Award Administration Information

A. Award Notices

Successful applicants will receive notification from the Federal Program Officer that the application has been recommended for funding to the NOAA Grants Management Division. This notification is not an authorization to begin performance of the project. Official notification of funding, signed by a NOAA Grants Officer, is the authorizing document that allows the project to begin. Notifications will be issued to the Authorizing Official and the Principle Investigator of the project. Unsuccessful applicants will be notified that their proposal was not selected for recommendation. Unsuccessful applications will be kept on file in the Program Office for a period of at least 12 months, and then destroyed.

B. Administrative and National Policy Requirements

The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the Federal Register notice of December 30, 2004 (69 FR 78389) are applicable to this solicitation.

Intergovernmental Review

Applications under this program (CFDA 11.457, Chesapeake Bay Studies) are subject to Executive Order 12372, Intergovernmental Review of Federal Programs

Limitation of Liability

In no event will NOAA or the Department of Commerce be responsible for proposal preparation costs if these programs fail to receive funding or are cancelled because of other agency priorities. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

National Environmental Policy Act (NEPA): NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), for applicant projects or proposals which are seeking NOAA federal funding opportunities. Detailed information on NOAA compliance with NEPA can be found at the following NOAA NEPA website: <http://www.nepa.noaa.gov/>, including our NOAA Administrative Order 216-6 for NEPA, http://www.nepa.noaa.gov/NAO216_6_TOC.pdf, and the Council on Environmental Quality implementation regulations, http://ceq.eh.doe.gov/nepa/regs/ceq/toc_ceq.htm.

Consequently, as part of an applicant's package, and under their description of their program activities, applicants are required to provide detailed information on the activities to be conducted, locations, sites, species and habitat to be affected, possible construction activities, and any

environmental concerns that may exist (e.g., the use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems.)

In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting of an environmental assessment, if NOAA determines an assessment is required. Applicants will also be required to cooperate with NOAA in identifying and implementing feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. The failure to do so shall be grounds for the denial of an application.

C. Reporting

Award recipients will be required to submit financial and performance (technical) reports. All financial reports shall be submitted in triplicate (one original and two copies) to the NOAA Grants Officer. Performance reports should be submitted to the Federal Program Officer. Electronic submission of performance reports is strongly encouraged. Reports will be submitted on a semi-annual schedule and must be submitted no later than 30 days following the end of each 6-month period from the start date of the award. The comprehensive final report is due 90 days after the award expiration. A Data Management Plan must be submitted as part of the proposal application package and submission dates/deadlines agreed to in this plan must be adhered to.

VII. Agency Contact(s)

For further information about the Chesapeake Bay Integrated Science Program, please visit the NOAA Chesapeake Bay Office website at: <http://noaa.chesapeakebay.net/>.

For assistance with forms, application requirements, or submission procedures please contact Derek Orner, NOAA Chesapeake Bay Office; 410 Severn Avenue, Suite 107A, Annapolis, MD 21403, or by phone at 410-267-5676, or fax to 410-267-5666, or via internet at derek.ornier@noaa.gov.

For program-specific information, please contact the appropriate Federal Program Officer.
NCBO Federal Program Officers:

Fisheries Research – Derek Orner 410-267-5676 derek.ornier@noaa.gov

SAV Restoration – Peter Bergstrom 410-267-5665 peter.bergstrom@noaa.gov

Cooperative Research – Derek Orner, 410-267-5676 derek.ornier@noaa.gov