ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

Federal Agency Name(s): National Ocean Service (NOS), National Oceanic And Atmospheric Administration, Department of Commerce

Funding Opportunity Title: CSCOR FY08 Regional Ecosystem Prediction Program

Announcement Type: Initial

Funding Opportunity Number: NOS-NCCOS-2008-2001064

Catalog of Federal Domestic Assistance (CFDA) Number: 11.478, Center for Sponsored Coastal Ocean Research - Coastal Ocean Program

Dates: The deadline for receipt of proposals at the NCCOS/CSCOR office is 3 p.m., Eastern Time for each of the three program elements for the Regional Ecosystem Prediction Program.

Invasive Species in the Great Lakes--A Regional Scale Approach: October 1, 2007

Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic: October 15, 2007,

Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida: October 29, 2007.

Funding Opportunity Description: The purpose of this document is to advise the public that NOAA/NOS/NCCOS/CSCOR is soliciting proposals for three separate regional ecosystem prediction projects on Invasive Species in the Great Lakes - A Regional Scale Approach,

Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic and Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida, For the Great Lakes and Mid-Atlantic programs, projects will be of up to 5 years in duration In the Great Lakes, proposals are requested for a regional-scale ecosystem research study investigating recent and future changes in water quality, habitats and populations of living resources in the context of invasive species. For the Mid-Atlantic region, proposals are requested for a regional-scale ecosystem research study investigating the cumulative impacts of multiple stressors at the land-water interface of estuaries and bays on recreationally, economically or ecologically important living resource populations and communities. Proposals for these two programs should be regional in scale, interdisciplinary, comprehensive, integrated, and multiple investigator to develop capabilities for innovative forecasts and predictions for improved management and control capabilities. For the South Florida program, proposals will be 2 - 3 years in duration. In the South Florida program, proposals are solicited to develop, undertake and conclude a consensus-building process that results in scientifically-based quantifiable goals for aquatic resources and habitats of the Florida Bay and Keys. Proposals should include a diverse and comprehensive team of managers, scientists and NGOs and be regional in scope. Proposals submitted to this solicitation should not have overlap with other active NCCOS/CSCOR programs including the Coastal Hypoxia Research Program (CHRP), Ecology and Oceanography of Harmful Algal Blooms (ECOHAB), Monitoring and Event Response for Harmful Algal Blooms (MERHAB), and the Ecological Effects of Sea Level Rise or previously awarded grants (see http://www.cop.noaa.gov for program descriptions). Funding is contingent upon the availability of Fiscal Year 2008 Federal appropriations. It is anticipated that final recommendations for funding under this announcement will be made by April 2008 and that projects funded under this announcement will have a June through August start date.

Electronic Access: Background information about the NCCOS/CSCOR efforts can be found at www.cop.noaa.gov. Proposals should be submitted through Grants.gov (http://www.grants.gov.)

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

The Center for Sponsored Coastal Ocean Research (CSCOR) develops and improves predictive capabilities for managing the Nation's use of its coastal resources through competitive research programs. NCCOS/CSCOR also supports efforts to translate the results of its research investments, and those of others, into accessible and useful information for coastal managers, planners, lawmakers, and the public to help balance the needs of economic growth with those of conserving the resources of our Nation's Great Lakes, estuaries, and coastal ocean.

NCCOS/CSCOR provides a focal point for regional ecosystem-scale competitive coastal ocean research within the National Oceanic and Atmospheric Administration?s (NOAA) National Centers for Coastal Ocean Science (NCCOS). Together with partners within NOAA and other organizations responsible for coastal resources, NCCOS/CSCOR advances the scientific understanding needed to protect coastal resources and ensure their viability for future generations. This increased understanding of the Great Lakes and coastal ocean directly benefits the management of U.S. coastal resources, and helps NOAA, other federal agencies, and state, tribal, and local governments achieve their coastal stewardship responsibilities.

A key objective of NCCOS/CSCOR research is the production of user-driven predictive tools that will enable resource managers to assess alternative management strategies to reverse degraded ecosystems and protect healthy ones. Research will be outcome-oriented towards predictions that have a demonstrable societal benefit, as well as increased scientific understanding that will provide managers and the public with sound scientific information for making decisions. Articulation of outcome-based management goals is required in proposals (see Section IV.B.), and recipients will be expected to report progress toward achieving outcome-based goals annually

NCCOS/CSCOR uses a mix of issue-based (ecosystem stressors) and place-based (regional ecosystem research) approaches. The aim of the ecosystem stressor approach is to advance understanding of high impact natural and human-induced stressors on ecosystem structure and function including hypoxia, harmful algal blooms and climate change. The aim of the regional ecosystem research approach is to develop multidisciplinary regional ecosystem forecasting capabilities with an emphasis on transition to operation and/or application. Research priorities are currently determined through a multi-tiered process which includes Congressional direction, NOAA mandates and strategic plans,

engagement of resource managers and stakeholders, and identification of strategic opportunities by the scientific community.

NCCOS/CSCOR Ecosystem Stressor-Based Research focuses on five key stressors where they are the primary causes of ecosystem changes that are of management concern:

- climate change (e.g., ecosystem effects, sea level rise),
- extreme natural events (e.g., harmful algal blooms, hypoxia),
- pollution,
- invasive species, and
- land and resources use.

NCCOS/CSCOR stressor-based programs are undertaken with the understanding that coastal issues are complex, and that these stressors often interact with one another to varying degrees. Supported research seeks to understand the impacts of these stressors in an ecosystem context, including the human dimension of social and economic impacts. For these research programs to be effective at determining underlying causes and management options, they must often reach beyond the specific coastal system of concern to address important influences from adjacent watersheds, airsheds and global climate patterns.

NCCOS/CSCOR Regional Ecosystem Research is implemented on a geographic basis, with the regions being

- Great Lakes,
- Northeast,
- Mid-Atlantic,
- Southeast and Caribbean,
- Gulf of Mexico,
- California,
- Northwest,
- Alaska, and
- Western Pacific.

Different management issues predominate in each of these areas, although it is also the case that there are many similarities in the type of problems between regions and the science needed to address them. Because management regimes differ in these regions, user groups and stakeholders may be different in the different regions as well. NCCOS/CSCOR expects proposers to include representatives of management agencies and to work closely with user groups and stakeholders to define research projects and products that will apply to regional management needs.

Past regional ecosystem programs supported by NCCOS/CSCOR, such as the Ecological Forecasting (EcoFore) and the Cumulative Effects of Multiple Stressors (MultiStress) programs, solicited proposals from any U.S. region for any combination of issues and stressors. While this allowed the greatest flexibility for proposers, it did not take full advantage of the work that managers, scientists, agencies and lawmakers have done to identify and prioritize important science needs to provide a stronger basis for ecosystem approaches to management. NCCOS/CSCOR is now merging these two programs into the Regional Ecosystem Prediction Program (REPP) that will be targeted for specific regions and issues and tied more explicitly to regional management needs to provide a stronger basis for ecosystem approaches.

To identify critical science and management needs, NCCOS/CSCOR recently undertook a first iteration regional ecosystem research prioritization process to identify key regional research needs that are limiting the ability of managers to address one or more major coastal problems from a regional ecosystem perspective. The goal was to identify the integrative research most needed to support ecosystem approaches to managing regional issues of highest priority to coastal managers. The NCCOS/CSCOR research prioritization strategy is based on input from documented research needs assessments from management groups; the greater science community; the NOAA, NOS, and NCCOS strategic plans; government-wide guidance documents such as the report of the U.S. Commission on Ocean Policy and the Ocean Research Priorities Plan; legislative drivers; comments from other interested parties through workshops and public meetings; and partners interested in helping to support future research endeavors. NCCOS/CSCOR collated findings from these various sources, and analyzed them to determine which of the stated needs were most productively addressed by the NCCOS/CSCOR approach of ecosystem-scale research with a predictive endpoint.

In order to choose which geographic areas to focus on for FY2008, NCCOS/CSCOR considered the type and amount of research already supported in the region, the degree to which science issues and management needs were sufficiently articulated at this time, the maturity and composition of management efforts at a regional scale, and whether or not other funding agencies or regional entities were taking a lead in the region. NCCOS/CSCOR, as it has done with many programs in the past, actively seeks partners to help support critical regional ecosystem science needs given that these efforts

often require substantial support over many years. It is recognized that all regions are important, and have unique issues. NCCOS/CSCOR and NCCOS have invested in many of these regional issues in the recent past (see www.cop.noaa.gov for examples of research supported by NCCOS/CSCOR projects are searchable by region). The intent of the Regional Ecosystem Prediction Program is to consider a limited number of regions and issues each year but, through annual announcements and multi-year awards, maintain a portfolio of regional research with a high degree of diversity, both geographically and of issues addressed. In some cases there may also be announcements for issues that span multiple regions. This announcement solicits regional ecosystem proposals from the Great Lakes, Mid-Atlantic and South Florida, as articulated in greater detail below.

B. Program Priorities

Invasive Species in the Great Lakes - A Regional Scale Approach

In the Great Lakes, NCCOS/CSCOR has a strong history of research focused on strengthening Great Lakes management capabilities. These activities include ecological forecasting of hypoxia, harmful algal bloom and zebra mussel interactions, monitoring and event response for harmful algal blooms, episodic event impacts, and initial funding to develop the Great Lakes CoastWatch and the Great Lakes Forecast System. Descriptions of these activities, both recent and historical, can be found on the NCCOS/CSCOR website http://www.cop.noaa.gov.

The Great Lakes ecosystem is the most clearly definable coastal region under NOAA?s purview and mission responsibilities given the unambiguous geographic boundaries of the lake shorelines. The region has a suite of environmental stresses common to all coastal systems, and a long history of bi-national and interagency partnerships and collaborations. Thus, the Great Lakes have particularly high potential for successful development and application of innovative regional ecosystem management tools.

A number of recent scientific reports have indicated the need for a new concerted research effort to examine the impacts of recent ecological changes in the Great Lakes on water quality (see Great Lakes Issue Identification Workshop report http://www.glerl.noaa.gov/eegle/products/COP_workshop_2003/COPWorkshopReport.doc , Great Lakes Regional Collaboration http://www.glrc.us/ and Lake Erie Research Planning Workshop http://www.glerl.noaa.gov/ifyle/workshops/workshop_final2004.pdf). Recently, the Great Lakes Commission (GLC) Great Lakes Panel on Aquatic Nuisance Species Research Committee compiled priorities for aquatic invasive species research, management and control (http://www.glc.org/ans/pdf/researchpriorities2005.pdf).

The Great Lakes has led the nation in nutrient control management, contaminant cleanup, international and ecosystem-based approaches to management and invasive species control strategies. Many of these efforts have shown success as phosphorus targets were largely achieved by the early 1980s and contaminant levels are decreasing or leveling off. However, based on data collected over the past few years, water quality issues have returned and over the past 15 years the rate of species invasion into the Great Lakes has accelerated with substantial impacts on food webs and cycling of nutrients. The most obvious example of these changes resulted from the introduction of zebra and quagga mussels in the early 1990s. These bivalves have fundamentally altered energy transfer and nutrient cycling in the lakes and have been identified as a contributing cause for the appearance of hazardous algal blooms of Microcystis, increased depletion of oxygen, and increased water clarity with resultant blooms of benthic macrophytes, such as Cladophora. The invasive mussels are joined by a growing number of other invasive species that are starting to have impacts, many poorly understood, as they establish populations and their influences reverberate through the ecosystem. Consequently, invasions of non-native species are a prime concern for Great Lakes management.

Other agencies and initiatives have been involved in various aspects of research into aquatic invasive species. Notably, the NOAA Sea Grant program has a National Strategic Investment focus on aquatic invasive species research and outreach (http://www.seagrant.noaa.gov/roe/research.html). Individual state Sea Grant programs have invested in research into local species of concern, and methods of invasion prevention, especially issues dealing with ballast water. The NOAA Great Lakes Environmental Research Laboratory maintains a National Center for Research on Aquatic Invasive Species (http://www.glerl.noaa.gov/res/Programs/ncrais/).

The U.S. Geological Survey Great Lakes Science Center has an active program in invasive species, but notes "More research into ecosystem processes and linkages is needed" (http://www.glsc.usgs.gov/main.php?content=research_invasive&title=Invasive%20Species 0&menu=research). The Northeast-Midwest Institute focuses primarily on ballast water strategies (http://www.nemw.org/biopollute.htm). The U.S. Environmental Protection Agency Great Lakes National Program Office has a focus on invasive species research in the region (http://www.epa.gov/glnpo/invasive/index.html) Recently, the Environmental Protection Agency and the U.S. Department of Agriculture supported a national call for proposals for the interactive effects of climate change, land use, and invasive species (http://es.epa.gov/ncer/rfa/2007/2007_star_ecoimpacts.html).

In contrast to the more targeted studies mentioned above, focused on individual species and specific management and mitigation tools, this solicitation requests proposals that will develop scientific capabilities and tools (models or forecasts) that address the interactions between invasive species and regional ecosystem-based management. This could include items from the ?Ecosystem Response and Impacts,? ?Prevention,? ?Control

and Management? and ?Economics? recommendations of the GLC (http://www.glc.org/ans/pdf/researchpriorities2005.pdf).

Within an ecosystem framework impacted by invasive species, proposals are solicited for projects up to 5 years in duration for a regional-scale ecosystem research study to develop environmental forecasting tools for assessing and predicting changes in water quality, habitat, living resources and consequences to the food web of the Great Lakes. Proposals must address this issue in a regional context (all or most of the Great Lakes) and be of obvious utility to managing natural resources in the face of current invasive populations. Specific topics appropriate to address with a regional ecosystem research framework could include but are not limited to:

" Developing regional forecasting (short to long-term) capabilities for current and potential invasive species that could provide managers with the ability to adjust management strategies for key natural resource issues pro-actively in the face of unavoidable invasions;

" Developing new capabilities to understand whether recent ecosystem changes due to invasive species have compromised eutrophication controls and, if so, predict what quantitative changes in nutrient load reduction goals might be warranted;

" Quantifying the impact that invasive species are having on benthic community structure and the resultant impact on higher trophic levels, including fish populations of recreational, ecological or commercial importance, and their management;

" Quantifying the impact of current, or predicted future, populations of alien species on benthic-pelagic coupling and related processes and how these changes could require different strategies for management of water quality, habitat, harmful algal bloom and living resources;

" Quantifying and forecasting the role of physical processes and external forcings (e.g., episodic events, interannual variability, climate change, non-steady state conditions) in the presence of invasive species on regional-scale ecological processes and how an improved understanding of these large-scale processes and forcings could be incorporated into more effective management strategies;

" Improving the basis for setting quantifiable goals or objectives for the management of invasive species by linking scientific, economic and human dimension factors.

Proposals must include justification for the questions addressed, in terms of environmental management importance, linkage to invasive species and need for a regional ecosystem construct. Proposals must provide detailed descriptions of the improved quantitative understanding to be achieved and predictive capability to be developed, identify management issue(s) that are being addressed and specify how results could change current

management practices. The user community for the tools and information developed must be clearly identified along with the path by which these improved capabilities will be provided to users and applied. Explicit identification of the end user group(s) is required and must include participation of co-investigators from both scientific and management entities. All proposed activities must have a clear application to one or more identified coastal resource management issues that are of regional scale and relevance, and be tractable within the time and budget proposed. For further information, researchers should contact the Program Manager Felix Martinez (felix.martinez@noaa.gov, 301-713-3338 x 153).

Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic

For the purposes of this announcement, the Mid-Atlantic is defined as the region from Delaware Bay to Virginia. The region is dominated by Chesapeake Bay and Delaware Bay and includes numerous coastal bays separated from the Atlantic Ocean by barrier islands.

The Mid-Atlantic is a complex temperate zone ecosystem subject to extreme seasonal variability including pulsed river inputs, strong winter storms, occasional hurricanes and a large range of temperatures. The estuarine and coastal ecosystems support a rich and diverse assemblage of habitats and living resources, many of which are migratory and constitute regional populations within, and sometimes beyond, the geographic boundaries of the Mid-Atlantic.

The Mid-Atlantic is one of the most populated coastal regions in the U.S. with particularly dense development along the extensive sheltered estuarine shorelines. Human populations are expected to continue to grow at a rapid pace, increasing the already considerable impacts on habitats and living resources. In a report entitled ?Improving Links Between Science and Coastal Management? prepared for The Coastal States Organization (http://www.coastalstates.org/documents/misc%20docs/ConvertedFiles/surveyReport/surveyReport.htm), concerns related to development pressures were consistently ranked among the highest priorities. For the Mid-Atlantic Region, the two top-ranked management issues were land use and habitat and the top-ranked research needs associated with them were ?identify cumulative effects of development? and ?cumulative impact assessment?, respectively.

These population and development pressures in the Mid-Atlantic region have resulted in significant impacts to the ecosystem (e.g., multiple types and sources of pollution, commercial and recreational fishing, land-use changes, extensive modification of shorelines). Many of the estuarine systems in this region are particularly vulnerable to pollution sources because of the large area of watersheds relative to water surface and poor flushing. Erosion and runoff from agricultural and urban lands have loaded large amounts of

fine-grained silts and clays into the upper bays and tributaries reducing light penetration critical to submerged aquatic vegetation and smothering benthic habitats. Nutrients enter estuarine and coastal waters from point and nonpoint sources including the atmosphere, triggering algal blooms and causing hypoxic conditions which can be seasonally persistent in deeper stratified waters or ephemeral in shallow water habitats where these conditions can be devastating to living resources. Toxic contaminants enter the bays via atmospheric deposition, dissolved and particulate runoff from the watershed or direct discharge from point sources. Sediments and biota can accumulate these toxic contaminants which are typically concentrated in ?hot spots? across the region in contrast to the more widespread nutrient pollution. Overfishing and habitat destruction have severely impacted once abundant populations of finfish, blue crabs, oysters and horseshoe crabs. Extensive shoreline modification has occurred through hardening to protect land from erosion, placement of docks and other construction activities. These modifications, along with perturbations from invasive species, pollution, disease and sea level rise, have cumulatively destroyed much of the fringing marshes and beaches that serve as critical habitat for numerous water and land-based living resources.

The threat to habitats and living resources that depend upon the land-water interface is recognized as a national issue where populations are concentrated along sheltered coasts. A recent National Academies report (http://www.nationalacademies.org/morenews/20061012.html) highlights the impacts to habitats and living resources from structural modifications (e.g., bulkheads, revetments, riprap). The effects of hardened shorelines can be magnified by processes such as modifications to waves, currents and depositional patterns of sediment that spread impacts to adjacent areas. The Academies report repeatedly highlights the potential ecosystem impacts that these shore erosion control measures can have and the lack of understanding of the cumulative impacts where these modifications are extensive ? ?From an ecological standpoint, the cumulative impact of the loss of many small parcels will at some point alter the properties, composition, and values of the ecosystem.? ?These cumulative effects are rarely assessed and hence are generally unknown, but an understanding of them is necessary to prevent an underestimation of the impacts of individual projects.? The report also highlights the need for managers to move away from a ?parcel by parcel? approach and toward a regional approach for managing these structures ? ?Creating a more proactive ?regional approach? to shoreline management could address some of the unintended consequences of reactive permit decisions.? In the Mid-Atlantic, data has already been compiled showing the scale of shoreline hardening. A NOAA/Coastal Zone Management (CZM) - funded project conducted by the Virginia Institute of Marine Science (http://coastalscience.noaa.gov/publications/das25.pdf) reveals, for example, that already over 26% of the assessed Maryland Chesapeake Bay shoreline is artificially hardened and several counties exceed 40%. As sea levels rise, further threatening the erosion of shorelines, it is likely that these percentages will continue to increase.

Important fringe habitats at the land-water interface are also being impacted by other physical alterations - high concentrations of docks and piers - in areas of high population density, the same areas affected by the previously-discussed shoreline hardening. A recent NOAA workshop on the Environmental and Aesthetic Impacts of Small Docks and Piers (http://coastalscience.noaa.gov/publications/das25.pdf) highlighted the issues associated with high concentrations of these structures including, as for installation of structures to harden shorelines, the typical case-by-case approach to permitting each of these structures. As for hardened shorelines, the cumulative environmental impacts of these structures were repeatedly raised in this workshop by managers as a concern. The report?'s list of research priorities, developed by the managers in attendance, included ?The cumulative impacts from docks and their associated uses and how they can be avoided, minimized or mitigated.?

In addition to the physical alterations described above, habitats and organisms at the land water interface are also particularly susceptible to pollution threats and their secondary impacts. Much of the nutrient, contaminant and sediment pollution entering Mid-Atlantic estuaries and bays are derived from land runoff, which often directly enters these fringe habitats at high concentrations. This pollution can have multiple impacts including stimulation of planktonic algal and benthic macroalgal blooms, formation of transient hypoxic conditions during diel cycles, reduction in water clarity and toxicity to a variety of organisms.

Sea level rise is also threatening fringing habitat at the land-water interface where natural processes cannot keep pace with these relatively rapid changes or where man-made structures have stopped the natural landward migration of wetland and littoral communities. In some areas of the Mid-Atlantic, invasive species and diseases are also threatening habitats and natural populations and communities at the land-water interface.

Proposals are solicited for projects of up to 5 years in duration for a regional-scale ecosystem research study in the Mid-Atlantic investigating the cumulative impacts of multiple stressors (as described above) at the land-water interface of estuaries and bays on recreationally, economically or ecologically important living resource populations and communities. This research is needed to support management efforts to protect and restore submerged and wetland plant communities at the land-water interface of Mid-Atlantic estuaries and bays and species that depend upon these critical habitats including finfish, shellfish, amphibians, reptiles and birds. The influence of human activity on Mid-Atlantic waterways is more intense and apparent at the land-water interface than anywhere else and includes shoreline hardening, filling of wetlands, nutrient, sediment and contaminant pollution, docks and piers, harvesting of living resources and invasive species. Natural threats that may also be influenced by human activity include diseases, sea level rise and other climatic influences. While some of these threats are starting to be examined in a more holistic regional ecosystem context (e.g., nutrient pollution), many are still being managed from limited space and time perspectives even though numerous species that depend upon

these habitats are migratory and thus constitute regional populations and communities. Thus, a more regional and multidisciplinary approach to research is needed if the consequences of these multiple threats to fringing habitats is to be understood and predicted in a way that managers can use to protect and restore species and habitats of concern.

Proposals must, therefore address this issue on a regional scale that includes a significant portion of the range of target populations and communities within mid-Atlantic estuaries and/or coastal bays, and be interdisciplinary, comprehensive, integrated, and multiple-investigator to develop capabilities for innovative forecasts and predictions that will support a regional ecosystem approach to management of critical stressors. Target populations and communities of interest can be chosen by the proposer but should be of significant concern to management agencies and the public.

Proposals should describe multidisciplinary research and synthesis that creates new modeling and forecasting tools to better understand and forecast the complex interactions and impacts of multiple stressors on target populations and communities at the regional scale. Outcomes of the research must include diagnostic or forecasting tools that address the needs expressed by managers for information that could allow them to manage the problem of protecting and/or restoring these fringing ecosystems, and the living resources that depend upon their integrity, in a regional framework.

Specific topics appropriate to address within a regional ecosystem framework could include but are not limited to:

" Determining the ?tipping point? of available habitat for nesting/breeding for target populations that are threatened by hardening of shorelines and simultaneously impacted by a suite of other stressors;

" Quantifying and predicting the impacts to recreationally, commercially and economically important fish and shellfish populations of varying levels of fragmentation of wetland and submerged plant communities by man made structures, pollutant sources and other stressors;

" Quantifying and predicting the regional benefits of utilizing alternative shoreline stabilization techniques such as ?living shorelines? to protect sensitive species of interest to managers and the public;

" Determining, quantifying and predicting the synergistic impacts of multiple stressors on living resources at the land-water interface in a manner that would allow managers to strategically choose the most cost-effective and practical mitigation measures to reduce these impacts by affecting stressors that can be controlled;

" Geographically identify critical fringing habitats and their characteristics (e.g., patch size, connectedness) that must be protected from specific stressors to sustain regional populations of target species that are of importance to managers and the public;

" Identify, as a component of the proposal, the key human dimension factors that influence both the degradation and restoration of impacted shoreline habitat so that these factors can be meshed with strong predictive science to strategically identify the most successful management strategies, including the establishment of quantifiable restoration goals.

Proposals must include justification for the populations/communities targeted and stressors addressed, in terms of environmental management importance and magnitude of the current impacts or future threats, and the need to address these issues in a regional ecosystem construct. Proposals must provide detailed descriptions of the improved quantitative understanding to be achieved and predictive capability to be developed, identify management issue(s) that are being addressed and specify how results could change current management practices. The user community for the tools and information developed must be clearly identified along with the path by which these improved capabilities will be provided to users and applied. Explicit identification of the end user group(s) is required and must include participation of co-investigators from both scientific and management entities. All proposed activities must have a clear application to one or more identified coastal resource management issues that are the subject of this announcement address the issues at a regional scale and be tractable within the time and budget proposed. For further information, researchers should contact the Program Manager Elizabeth Turner (elizabeth.turner@noaa.gov., 603-862-4680)

Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida

The south Florida coastal marine environment has been altered extensively by population trends, agriculture, and industry and the impact to the living marine resources within this system have been significant. This area includes Florida and Biscayne Bays and the Florida Keys, much of which lies within the Everglades and Biscayne Bay National Parks and Florida Keys National Marine Sanctuary (FKNMS). It historically contains some of the most rich and diverse marine resources communities in the country, which have been a magnet for tourism and commercial fishery interests, and is extremely important to the economy of the region. The implications of these trends continuing unabated and in combination with expected changes caused by sea level rise, climate change and continuing sources of pollution from development put these valuable resources at continuing and likely greater risk.

This entire south Florida marine ecosystem is downstream and thus intimately linked to the Florida Everglades. Modifications made to the Everglades as a result of the Comprehensive Everglades Restoration Plan (CERP) could have a significant impact on habitats and living resources within Florida Bay and the surrounding marine system as well as aesthetic, resource management, or economic impacts. For example, concern has been raised over the amount, timing, and distribution of fresh and ground water into Florida Bay and its associated nutrient loadings and the effects on seagrass beds, fishery nursery areas, and coral reefs.

NOAA is responsible for management of coastal marine resources in south Florida, a responsibility that is shared with Florida state agencies. This management responsibility covers the resources within Florida and Biscayne Bays and FKNMS. Thus NOAA has a critical interest in the implications of CERP-directed changes to the Everglades and their potential impact on coastal water quality, important seagrass beds, coral reef communities, and possibly harmful algal blooms.

An interagency research program has been underway for more than a decade to characterize present conditions and ecosystem processes towards a goal of gauging or predicting future impacts of CERP decisions on valuable marine resources. This large investment of human resources and finances has resulted in a reasonable scientific understanding of the marine system and an evolving, but clearer indication of potential changes in water quantity and quality in and into Florida Bay, the Florida Keys, Biscayne Bay and the SW Florida shelf resulting from proposed CERP scenarios. These efforts, guided in the past by agency missions and mandates and the CERP process, is steadily moving from a focus on basic ecosystem research towards data synthesis and system modeling and is being directed at the broader goals of the region-wide CERP restoration. One of these efforts, largely directed and supported by the South Florida Water Management District (SFWMD), is working to develop, calibrate, and verify hydrologic and water quality models of important physical and water quality parameters of the system. There may also be other ecosystem models that require development to support ecosystem approaches to management of the important resources in this region.

NOAA/NOS/NCCOS/CSCOR has been a major contributor to the development of scientific capabilities in the region with a primary mission to support multidisciplinary management-relevant research at the regional ecosystem scale with predictive endpoints. This mission is particularly well suited to the management challenges associated with addressing the downstream influences of Everglades restoration. The stage has been set, with prior research on various ecosystem components, to move to a more comprehensive regional ecosystem modeling framework to support effective management of this system and some steps have already been taken in this regard. Supporting the development of a comprehensive regional ecosystem modeling effort to underpin an ecosystem-based management is NCCOS/CSCOR?s ultimate goal in this region as articulated in the overall

intent of the REPP. Maturing this effort to the point that it can unambiguously inform management decisions will, however, be complex and technically challenging because of the precision and accuracy needed to support anticipated management decisions. This level of specificity in setting comprehensive environmental goals for restoration and protection of Florida Bay and Keys ecosystems, and consensus among management agencies at the local, state and federal level, in addition to the public, does not yet exist.

Given the current lack of a consensus for specific, quantifiable goals that define the desired condition for protection and restoration of valuable resources in the Florida Bay ? Florida Keys region, it is an opportune time to use the scientific knowledge accumulated to date, along with the intent of management agencies responsible for aspects of this system and the interests of the public, to reach consensus, to the extent possible, on what these specific, quantifiable and comprehensive ecosystem goals should be. This will then clarify the path forward for NCCOS/CSCOR and others to support and build the synthesis and forecasting tools that can provide scientific guidance to justify the management decisions that will allow attainment of these goals.

Proposals are solicited to develop, undertake and conclude a consensus-building process that results in scientifically-based quantifiable goals for aquatic resources and habitats of the Florida Bay and Keys that are of concern to or fall within the legal mandates of management agencies at the federal, state and local level. To the extent possible, these environmental goals should:

" reflect important ecosystem connections as determined by recent research studies and the deliberations of scientific panels that have reviewed the state of the science and management concerns in this region;

" reflect what is feasible given physical, chemical, biological and social conditions but should not be constrained by current practices;

" be expressed as quantifiable metrics that can be routinely measured and monitored as well as having the potential to be modeled in a hindcasting and forecasting mode to determine and quantify key controlling factors that may be under management control;

" represent, to the extent possible, a consensus of the management, scientific and stakeholder communities in this region;

" be conducted in a manner that is compatible with existing legal mandates and constructs for the protection of environmental resources at the federal, state, regional and local levels and with the expectation that the results of this effort will, at least in part, be adopted by those government entities with the ability to implement actions to achieve the goals.

It is expected that a successful proposal will include a broad-based team of resource managers with responsibilities for the area of interest, scientific experts with demonstrated knowledge of this system, including ecosystem modeling expertise, and stakeholders that represent the major public interests in this region. This multidisciplinary team is expected to propose an approach that demonstrates a high probability of success in producing a set of quantifiable, scientifically-based environmental goals that has the support of both management agencies and the public. The proposal should also include some effort toward the end of the project to articulate the regional ecosystem modeling and predictive capabilities that would assist managers in reaching these goals. Furthermore, the proposal must articulate how scientifically-based quantifiable goals, criteria or standards would be adopted into existing legal frameworks for managing the valuable habitats and living resources in this region. For further information, researchers should contact the Program Manager Larry Pugh (larry.pugh@noaa.gov, 301-713-3338 x 160)

C. Program Authority

For Invasive Species in the Great Lakes - A Regional Scale Approach and the Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic, the program authority is 16 U.S.C. 1456c. For Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida, the program authority is 33 U.S.C. 1442.

II. Award Information

A. Funding Availability

Funding is contingent upon availability of Federal appropriations. NOAA is committed to continual improvement of the grants process and accelerating the award of financial assistance to qualified recipients in accordance with the recommendations of the Business Process Reengineering Team. In order to fulfill these responsibilities, this solicitation announces that award amounts will be determined by the proposals and available funds. Funds for the Invasive Species in the Great lakes - A Regional Scale Approach and for the Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic programs typically will not exceed $500,000 - $1,000,000 per project per year, exclusive of ship costs. It is anticipated that 1-3 projects will be awarded for each of these two programs with project durations of 3 to 5 years. The Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida program is expected to have a project duration of 2 to 3 years with funds not to

exceed $500,000 per project per year. It is anticipated that 1 project will be awarded for this program. Support in out years after FY 2008 is contingent upon the availability of funds.

Applicants are hereby given notice that funds have not yet been appropriated for this program. In no event will NOAA or the Department of Commerce be responsible for proposal preparation costs if this program fails to receive funding or is cancelled because of other agency priorities. There is no guarantee that sufficient funds will be available to make awards for all qualified projects. Publication of this notice does not oblige NOAA to award any specific project or to obligate any available funds. If one incurs any costs prior to receiving an award agreement signed by an authorized NOAA official, one would do so solely at one?s own risk of these costs not being included under the award.

Publication of this notice does not obligate any agency to any specific award or to obligate any part of the entire amount of funds available. Recipients and subrecipients are subject to all Federal laws and agency policies, regulations and procedures applicable to Federal financial assistance awards.

B. Project/Award Period

Full proposals may cover a project/award period of up to 5 years, but shorter-term project proposals will also be welcomed. Multi-year awards may be funded incrementally on an annual basis, but once awarded those awards will not compete for funding in subsequent years. Each award requires a project description that can be easily divided into annual increments of meaningful work representing solid accomplishments.

The following is a description of multi-year awards for those applicants subsequently recommended for award. Multi-year awards are awards which have an award/project period of more than 12 months of activity. Multi-year awards are partially funded when the awards are approved, and are subsequently funded in increments. One of the purposes of multi-year awards is to reduce the administrative burden on both the applicant and the operating unit. For example, with proper planning, one application can suffice for the entire multi-year award period. Funding for each year?s activity is contingent upon the availability of funds from Congress, satisfactory performance, and is at the sole discretion of the agency. Multi-year funding is appropriate for projects to be funded for 2 to 5 years. Once approved, full applications are not required for the continuation out years.

C. Type of Funding Instrument

Funding instruments available are project grants and cooperative agreements.

(1) Research Project Grants: A research project grant is one in which substantial

programmatic involvement by the Federal government is not anticipated by the recipient during the project period. Applicants for grants must demonstrate an ability to conduct the proposed research with minimal assistance, other than financial support, from the Federal government.

(2) Cooperative Agreements: A cooperative agreement implies that the Federal government will assist recipients in conducting the proposed research. The application should be presented in a manner that demonstrates the applicant's ability to address the research problem in a collaborative manner with the Federal government. A cooperative agreement is appropriate when substantial Federal government involvement is anticipated. This means that the recipient can expect substantial agency collaboration, participation, or intervention in project performance. Substantial involvement exists when: responsibility for the management, control, direction, or performance of the project is shared by the assisting agency and the recipient; or the assisting agency has the right to intervene (including interruption or modification) in the conduct or performance of project activities.

NOAA will review the applications in accordance with the evaluation criteria. Before issuing awards, NOAA will determine whether a grant or cooperative agreement is the appropriate instrument based upon the need for substantial NOAA involvement in the project. In an effort to maximize the use of limited resources, applications from non-Federal, non-NOAA Federal and NOAA Federal applicants will be competed against each other.

Research proposals selected for funding from non-Federal researchers will be funded through a project grant or cooperative agreement. Research proposals selected for funding from non-NOAA Federal applicants will be funded through an interagency transfer, provided legal authority exists for the Federal applicant to receive funds from another agency. PLEASE NOTE: Before non-NOAA Federal applicants may be funded, they must demonstrate that they have legal authority to receive funds from another Federal agency in excess of their appropriation. Because this announcement is not proposing to procure goods or services from the applicants, the Economy Act (31 U.S.C. section 1535) is not an appropriate basis. Support may be solely through NCCOS/CSCOR or partnered with other Federal offices and agencies.

III. Eligibility Information

A. Eligible Applicants

Eligible applicants are institutions of higher education, other non-profits, state, local, Indian Tribal Governments, commercial organizations and Federal agencies that possess the statutory authority to receive financial assistance. Please note that:

(1) NCCOS/CSCOR will not fund any Federal Full Time Employee (FTE) salaries, but will fund travel, equipment, supplies, and contractual personnel costs associated with the proposed work.

(2) Researchers must be employees of an eligible entity listed above; and proposals must be submitted through that entity. Non-Federal researchers should comply with their institutional requirements for proposal submission.

(3) Non-NOAA Federal applicants will be required to submit certifications or documentation showing that they have specific legal authority to receive funds from the Department of Commerce (DOC) for this research.

(4) NCCOS/CSCOR will accept proposals that include foreign researchers as collaborators with a researcher who has met the above stated eligibility requirements.

(5) Non-Federal researchers affiliated with NOAA-University Cooperative/Joint Institutes should comply with joint institutional requirements; they will be funded through grants either to their institutions or to joint institutes.

B. Cost Sharing or Matching Requirement

None

C. Other Criteria that Affect Eligibility

Each proposal must also include the twelve elements listed under Proposal Submission/Required Elements, (a)-(l) or it will be returned to sender without further consideration.

Permits and Approvals

It is the applicant?s responsibility to obtain all necessary Federal, state and local government permits and approvals where necessary for the proposed work to be conducted. Applicants are expected to design their proposals so that they minimize the potential adverse impact on the environment. If applicable, documentation of requests or approvals of environmental permits must be received by the Program Officer prior to funding. Applications will be reviewed to ensure that they have sufficient environmental documentation to allow program staff to determine whether the proposal is categorically excluded from further National Environmental Policy Act (NEPA) analysis, or whether an Environmental Assessment is necessary in conformance with requirements of the NEPA. For those applications needing an Environmental Assessment, affected applicants will be informed after the peer review stage; and will be requested to assist in the preparation of a draft of the assessment (prior to award). Failure to apply for and/or obtain Federal, state, and local permits, approvals, letters of agreement, or failure to provide environmental analysis where necessary (e.g. NEPA environmental assessment) will also delay the award of funds if a project is otherwise selected for funding

IV. Application and Submission Information

A. Address to Request Application Package

Applications submitted in response to this announcement are strongly encouraged to be submitted through the Grants.gov web site. The full funding announcement for this program is available via the Grants.gov web site: http://www.grants.gov. This announcement will also be available by contacting the program official identified below. You will be able to access, download and submit electronic grant applications for NOAA Programs in this announcement at http://www.grants.gov. The closing dates will be the same as for the paper submissions noted in this announcement. NOAA strongly recommends that you do not wait until the application deadline date to begin the application process through Grants.gov.

Applicants should contact the Program Manager for non-electronic submission instructions.

Facsimile transmissions and electronic mail submission of full proposals will not be accepted.

B. Content and Form of Application

This document requests full proposals only. The provisions for proposal preparation provided here are mandatory. Proposals received after the published deadline (refer to

DATES) or proposals that deviate from the prescribed format will be returned to the sender without further consideration. Information regarding this announcement and additional background information are available on the NCCOS/CSCOR home page.

1. Proposals

Refer to IV. Application and Submission Information for further application submission details.

2. Required Elements

For clarity in the submission of proposals, the following definitions are provided for applicant use: Funding and/or Budget Period - The period of time when Federal funding is available for obligation by the recipient. The funding period must always be specified in multi-year awards, using fixed year funds. This term may also be used to mean ?budget period?. A budget period is typically 12 months. Award and/or Project Period - The period established in the award document during which Federal sponsorship begins and ends. The term ?award period? is also referred to as project period in 15 CFR 14.2(cc).

Each proposal must include the following twelve elements or it will be returned to sender without further consideration. The Summary, Title page, Abstract, Project Description, References, Biographical Sketch, Current and Pending Support, and Collaborators List must be in 12-point font with 1-inch margins. The twelve elements are as follows:

(a) Standard Form 424. At the time of proposal submission, all applicants requesting direct funding must submit the Standard Form, SF-424, ?Application for Federal Assistance,? to indicate the total amount of funding proposed for their institution for the whole project period. This form is to be the cover page for the original proposal. Multi-institutional proposals must include signed SF-424 forms from all institutions requesting direct funding. Original signatures are required on SF-424 forms provided to a lead institution by a collaborating institution?s for

grants.gov submission.

(b) Summary title page. The Summary title page identifies the project's title, starting with the acronym: GL08 for the Invasive Species in the Great Lakes - A Regional Scale Approach , MA08 for the Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic or SFL08 for the South Florida Program, and the Principal Investigator?s (PI) name and affiliation, complete address, phone, FAX and E-mail information. The requested budget for each fiscal year should be included on the Summary title page. Multi-institution proposals must also identify the lead investigator for each institution and the requested funding for each fiscal year for each institution on the title page. Lead investigator and separate budget information is not requested on the title page for institutions that are proposed to receive funds through a subcontract to the lead institution; however, an accompanying budget justification must be submitted for each subcontractor. For further details on budget information, please see Section (g) Standard Form SF-424A of this part.

(c) One-page abstract/project summary. A project summary (abstract) is to be submitted at time of application, shall include an introduction of the problem, rationale, scientific objectives and/or hypotheses to be tested, and a brief summary of work to be completed.

The summary should appear on a separate page, headed with the proposal title, institution(s), investigator(s), total proposed cost, and budget period. It should be written in the third person. The summary is used to help compare proposals quickly and allows the respondents to summarize these key points in their own words. Project summaries of applications that receive funding may be posted on program related websites.

(d) Project description. The description of the proposed project must include narratives of the proposed research and of the project management structure.

The research narrative must be thorough and explicitly indicate its relevance to the program goals and scientific priorities by:

(1) Identifying the topic that is being addressed by the proposal;

(2) Describing the proposed scientific objectives and research activities in relation to the present state of knowledge in the field and in relation to previous and current work by the proposing principal investigator(s);

(3) A discussion of how the proposed project lends value to the program goals; and

(4)) If specified in the Funding Opportunity Description (refer to Section I above), establishing the connection to relevant resource management needs by explicitly identifying the end user group(s) including evidence of the linkage between the scientific questions and management needs. The linkage should reflect coordination with one or more management entities.

The research narrative should provide a full scientific justification for the research, rather than simply reiterating justifications presented in this document. Specific research activities must be divided into annual increments of work that include specific objectives, methodology, and expected significance.

The Project Management Narrative must identify the function of each PI. One of the PIs must be designated as the Lead PI, who will be responsible for communicating with the Federal Program Manager on all pertinent verbal or written information. If applicable, the format and role of management and technical advisory committees should be included in this section. All proposals should specifically identify direct participation of resource manager(s) as co-Principal Investigators and if required, as members of management and technical advisory committees. The Project Management Narrative should articulate the plan for improving capabilities in resource management, specifying management targets and proposed outputs and outcomes. Outputs are defined as products (e.g. publications, models) or activities that lead to outcomes (changes in management knowledge or action). Definitions and examples of outputs and outcomes can be accessed at www.cop.noaa.gov. The timeline for achieving outcomes should be included in the Milestone Chart (below).

The project description must not exceed 25 pages in 12-point, easily legible font with 1 to 2 pages for the Project Management Narrative and the balance used for the research narrative inclusive of figures and other visual materials, but exclusive of references, a milestone chart, letters of intent from unfunded collaborators, and letters of endorsement.

(e) References cited. Reference information is required. Each reference must include the names of all authors in the same sequence they appear in the publications, the article title, volume number, page numbers, and year of publications. While there is no established page limitation, this section should include bibliographic citations only and should not be used to provide parenthetical information outside of the 25-page proposal descriptions.

(f) Milestone chart. Provide time lines of major tasks covering the duration of the proposed project.

(g) Standard Form 424A. At time of proposal submission, all applicants are required to submit a SF-424A Budget Form for each fiscal year increment. Multi-institution proposals must include a SF-424A for each institution, and multi-investigator proposals using a lead investigator with a contractor/subgrantee approach must submit a SF-424A for each contractor/subgrantee. Each contractor or subgrantee should be listed as a separate item. Describe products/services to be obtained and indicate the applicability or necessity of each to the project. Provide separate budgets for each subgrantee or contractor regardless of the

dollar value and indicate the basis for the cost estimates. List all subgrantee or contractor costs under line item 6.f. contractual on the SF-424A.

In order to allow reviewers to fully evaluate the appropriateness of costs, all applications must include a detailed budget narrative and a justification to support all proposed budget categories for each fiscal year. Personnel costs should be broken out by named PI and number of months requested per year per PI. Support for each PI should be commensurate with their stated involvement each year in the milestones chart (see Required Elements (f) Milestone chart).

Any unnamed personnel (graduate students, post-doctoral researchers, technicians) should be identified by their job title, and their personnel costs explained similar to PI personnel costs above. The contribution of any personnel to the project goals should be explained. Travel costs should be broken out by number of people traveling, destination and purpose of travel, and projected costs per person. Equipment costs should describe the equipment to be purchased, and its contribution to the achievement of the project goals. For additional information concerning each of the required categories and appropriate level of disclosure please see http://www.cop.noaa.gov/opportunities/grants/other_instructions.html.

Any ship time needs must be clearly identified in the proposed budget. The applicant is responsible for requesting ship time through appropriate channels and for meeting all requirements to ensure the availability of requested ship time. Copies of relevant ship time request forms (e.g. UNOLS ship request forms at http://www.gso.uri.edu./unols/ship/mainmenu.html. should be included with the proposal.

(h) Biographical sketch. All principal and co-investigators must provide summaries of up to 2 pages that include the following:

(1) A listing of professional and academic credentials and mailing address;

(2) A list of up to five publications most closely related to the proposed project and five other significant publications. Additional lists of publications, lectures,

and the rest should not be included;

(i) Current and pending support. Describe all current and pending federal financial/funding support for all principal and co-investigators, including subsequent funding in the case of continuing grants. The capability of the investigator and collaborators to complete the proposed work in light of present commitments to other projects should be addressed. Therefore, please discuss the percentage of time investigators and collaborators have devoted to other Federal or non-Federal projects, as compared to the time that will be devoted to the project solicited under this notice.

(j) A list of all applicable permits that will be required to perform the proposed work.

(k) Provide one list that includes all collaborators, advisors, and advisees for each investigator (principal and co-principal investigators, post-docs, and subawardees), complete with corresponding institutions. Submit only one, combined and alphabetized list per proposal. Collaborators are individuals who have participated in a project or publication within the last 48 months with any investigator, including co-authors on publications in the resumes. Collaborators also include those persons with which the investigators may have ongoing collaboration negotiations. Advisees are persons with whom the individual investigator has had an association as thesis advisor or postdoctoral sponsor. Advisors include an individual?s own graduate and postgraduate advisors. Unfunded participants in the proposed study should also be listed (but not their collaborators). This information is critical for identifying potential conflicts on interests and avoiding bias in the selection of reviewers.

(l) Proposal format and assembly. Proposals submitted via Grants.gov APPLY should follow the format guidelines below:

Attachments must be submitted in Adobe Acrobat PDF format to maintain format integrity. Please submit the required documents as described below.

Follow the instructions found on the Grants.gov web site for application submission into the Grants.gov system. All required forms that do not have specific placeholders in the ?Mandatory Document? box must be submitted in the ?Optional Form? box as ?Other Attachments? and labeled with the document name i.e., budget narrative, project description, milestone chart etc.

For multi institutional proposal: The SF424?s of the additional institutions should be uploaded separately and labeled using the name of the institution/SF424 and then submitted in the ?Optional Form? box as ?Other Attachments?. Combine all of the remaining required documents for the individual institution into one PDF file and submit the file labeled with the name of the institution. Repeat this procedure for each collaborating institution.

Save your completed application package with two different names before submission to avoid having to re-create the package should you experience submission problems. If you experience submission problems that may result in your application being late, send an e-mail to support@grants.gov and call the Grants.gov help desk. Their phone number is posted on the

Grants.gov web site. The program manager associated with the RFA will use programmatic discretion in accepting late arriving proposals due to documented electronic submission problems. Please note: If more than one submission of an application is performed, the last application submitted before the due date and time will be the ?official? version.

In addition to the twelve required elements, it is requested the SF-424B, CD-511 and the indirect rate agreement be provided upon application submission. These forms can be uploaded in to the ?Optional Form? box under ?Other Attachments? in Grants.gov.

C. Submission Dates and Times

The deadline for receipt of proposals at the NCCOS/CSCOR office is 3 p.m., Eastern Time for each of the three program elements for the Regional Ecosystem Prediction Program.

Invasive Species in the Great Lakes--A Regional Scale Approach: October 1, 2007

Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic: October 15, 2007

Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida: October 29, 2007.

(Note that late-arriving hard copy applications provided to a delivery service on or before the applicable above due date with delivery guaranteed before 3 p.m., Eastern Time on the applicable above due date will be accepted for review if the applicant can document that the application was provided to the delivery service with delivery to the National Oceanic & Atmospheric Administration, 1305 East-West Highway, SSMC4, Mail Station 8240 8th Floor, Silver Spring, Maryland 20910-3281 guaranteed by the specified closing date and time; and, in any event, the proposals are received in the NCCOS/CSCOR office by 3 p.m., Eastern Time no later than 2 business days following the closing date.)

D. Intergovernmental Review

Applications under this program are not subject to Executive Order 12372, ?Intergovernmental Review of Federal Programs.? It has been determined that this notice is not significant for purposes of Executive Order 12866. Pursuant to 5 U.S.C. 553(a) (2), an opportunity for public notice and comment is not required for this notice relating to grants, benefits and contracts. Because this notice is exempt from the notice and comment provisions of the Administrative Procedure Act, a Regulatory Flexibility Analysis is not required, and none has been prepared. It has been determined that this notice does not contain policies with Federalism implications as that term is defined in Executive Order 13132.

E. Funding Restrictions

Indirect Costs: Regardless of any approved indirect cost rate applicable to the award, the maximum dollar amount of allocable indirect costs for which DOC will reimburse the recipient shall be the lesser of (a) the line item amount for the Federal share of indirect costs contained in the approved budget of the award or (b) the Federal share of the total allocable indirect costs of the award based on the indirect cost rate approved by a cognizant or oversight Federal agency and current at the time the cost was incurred, provided the rate is approved on or before the award end date. NCCOS/CSCOR will not fund start up or operational costs for private business ventures and neither fees nor profits will be considered as allowable costs.

F. Other Submission Requirements

Proposals must include evidence of linkages between the scientific questions and management needs, such as the participation of co-investigators from both scientific and management entities. Proposals previously submitted to NCCOS/CSCOR FFOs and not recommended for funding must be revised and reviewer or panel concerns addressed before resubmission. Resubmitted proposals that have not been revised will be returned without review.

V. Application Review Information

A. Evaluation Criteria

1. Importance and/or relevance and applicability of proposed project to the program goals: This ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, Federal, regional, state, or local activities (30 percent). For the ?Invasive Species in the Great Lakes ? competition, proposals will be evaluated on the likelihood that the

proposed work will result in products that will be of obvious utility to managing natural resources in the face of current invasive species problems. For the ?Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic? competition, proposals will be evaluated on the likelihood that the proposed work will result in outcomes that include diagnostic or forecasting tools that address the needs expressed by managers for information that could allow them to manage the problem of protecting and/or restoring fringing ecosystems of the Mid-Atlantic, and the living resources that depend upon their integrity, in a regional framework. For the ?Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida? competition, proposals will be evaluated on the likelihood that the proposed work will develop resource-related ecosystem goals that are complimentary and useful to the South Florida Ecosystem Restoration effort and the comprehensive Everglades Restoration Plan.

2. Technical/scientific merit: 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 (30 percent). For this competition, For the ?Invasive Species in the Great Lakes? competition, proposals will be evaluated on the likelihood that the proposed work will develop scientific capabilities and tools (i.e., models or forecasts) that address the interactions between invasive species and regional ecosystem-based management. For the ?Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic? competition, proposals will be evaluated on the likelihood that the proposed work will result in new modeling and forecasting tools to better understand and forecast the complex interactions and impacts of multiple stressors on target populations and communities at the regional scale. For the ?Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida?competition, proposals will be evaluated on the likelihood that the proposed work will result in the scientifically-based quantifiable resource-related ecosystem goals that will be useful to and used by coastal resource managers and agencies in the region.

3. Overall qualifications of applicants: This ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project (20 percent).

4. Project costs: The Budget is evaluated to determine if it is realistic and commensurate with the project needs and time-frame (10 percent)

5. Outreach and education: NOAA assesses whether this project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources (10 percent). For the purpose of this competition, the applicant must demonstrate clear connections to management entities that will use the results of the proposed work and define the specific products, outcomes and timing of the proposed work that will be used in achieving this goal.

B. Review and Selection Process

Once a full application has been received by NOAA, an initial administrative review is conducted to determine compliance with requirements and completeness of the application. All proposals will be evaluated and scored individually in accordance with the assigned weights of the above evaluation criteria by independent peer mail review and/or by independent peer panel review. Both Federal and non-Federal experts may be used in this process. The peer mail reviewers will be several individuals with expertise in the subjects addressed by particular proposals. Each mail reviewer will see only certain individual proposals within his or her area of expertise, and score them individually on a scale of one to five, where scores represent respectively: Excellent (5), Very Good (4), Good (3), Fair (2), Poor (1).

The peer panel will comprise 5 to 10 individuals, with each individual having expertise in a separate area, so that the panel, as a whole, covers a range of scientific expertise. The panel will have access to all mail reviews of proposals, and will use the mail reviews in discussion and evaluation of the entire slate of proposals. All proposals will be evaluated and scored individually. The peer panel shall rate the proposals using the evaluation criteria and scores provided above and used by the mail reviewers. The individual peer panelist scores shall be averaged for each application and presented to the program officer. No consensus advice will be given by the independent peer mail review or the review panel.

The program officer will neither vote or score proposals as part of the independent peer panel nor participate in discussion of the merits of the proposal. Those proposals receiving an average panel score of ``Fair'' or ``Poor'' will not be given further consideration, and applicants will be notified of non-selection.

For the proposals scored by the panel as either ``Excellent,'' ``Very Good,'' or ``Good'', the program officer will (a) create a ranking of the proposals to be recommended for funding using the average panel scores (b) determine the total duration of funding for each proposal; and (c) determine the amount of funds available for each proposal subject to the availability of fiscal year funds. Awards may not necessarily be made in rank order. In addition, proposals rated by the panel as either ``Excellent,'' ``Very Good,'' or ``Good'' that are not

funded in the current fiscal period, may be considered for funding in another fiscal period without having to repeat the competitive review process.

Recommendations for funding are then forwarded to the selecting official, the Director of NCCOS, for the final funding decision. In making the final selections, the Director will award in rank order unless the proposal is justified to be selected out of rank order based on the selection factors listed below in C.

Investigators may be asked to modify objectives, work plans or budgets, and provide supplemental information required by the agency prior to the award. When a decision has been made (whether an award or declination), verbatim anonymous copies of reviews and summaries of review panel deliberations, if any, will be made available to the applicant. Declined applications will be held in the NCCOS/CSCOR for the required 3 years in accordance with the current retention requirements, and then destroyed.

C. Selection Factors

Based on the panel review scores, the program officer will provide a listing of proposals in rank order to the Selecting Official for final funding recommendations. A program officer may first make recommendations to the Selecting Official applying the selection factors below. The Selecting Official shall award in the rank order unless the proposal is justified to be selected out of rank order based upon one or more 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. Whether this project duplicates other projects funded or considered for funding by NOAA or other federal agencies.

4. Program priorities and policy factors.

5. Applicant's prior award performance.

6. Partnerships and/or participation of targeted groups.

7. Adequacy of information necessary for NOAA to make a NEPA determination and draft necessary documentation before recommendations for funding are made to the grants officer.

D. Anticipated Announcement and Award Dates

Subject to the availability of funds, review of proposals will begin in October and November 2007. A June 1, 2007 start date should be used for the Invasive Species in the Great Lakes - A Regional Scale Approach, July 1, 2007 start date should be used for the Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic, and August 1, 2007 start date should be used for the Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida program unless otherwise directed by the Program Officer.

VI. Award Administration Information

A. Award Notices

The notice of award is signed by the NOAA Grants Officer and is the authorizing document. It is provided by postal mail or electronically through the Grants Online system to the appropriate business office of the recipient organization.

B. Administrative and National Policy Requirements

The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements

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.

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, ttp://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.

In conformance with the Uniform Administrative Requirements for Grants and Cooperative Agreements section 15 CFR 14.36, any data collected in projects supported by NCCOS/CSCOR should be delivered to a National Data Center (NDC), such as the National Oceanographic Data Center (NODC), in a format to be determined by the institution, the NDC, and the Program Officer. Information on NOAA NDC?s can be found at http://www.nesdis.noaa.gov/datainfo.html. It is the responsibility of the institution for the delivery of these data; the DOC will not provide additional support for delivery beyond the award. Additionally, all biological cultures established, molecular probes developed, genetic sequences identified, mathematical models constructed, or other resulting information products established through support provided by NCCOS/CSCOR are encouraged to be made available to the general research community at no or modest handling charge (to be determined by the institution, Program Officer, and DOC).

C. Reporting

All performance (i.e. technical progress) reports shall be submitted electronically through the Grants Online system unless the recipient does not have internet access. In that case, performance (technical) reports are to be submitted to the NOAA program officer. All financial reports shall be submitted to federal.financialreport@noaa.gov or hard copy financial reports are to be submitted to the US Department of Commerce/NOAA, Grants Management Division, 1325 East West Highway, OFA62-SSMC2, 9th Floor, Silver Spring, MD 20910, Attn: Jennifer Villianueva. Financial reports are semi-annual and performance reports are annual.

VII. Agency Contacts

Technical Information: Program Managers contact information can be found under each program element listed in B. Program Priorities.

Business Management Information: Laurie Golden, NCCOS/CSCOR Grants Administrator, 301-713-3338/ext 151, Internet: Laurie.Golden@noaa.gov.

VIII. Other Information

Collection of information requirements

Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection displays a currently valid OMB control number.

This notification involves collection-of-information requirements subject to the Paperwork Reduction Act. The use of Standard Forms 424, 424A, 424B, and SF-LLL has been approved by the Office of Management and Budget (OMB) under control numbers 0348-0043, 0348-0044, 0348-0040 and 0348-0046.