Coral Reef Ecosystem Studies (CRES) 2006

SUMMARY:
The Center for Sponsored Coastal Ocean Research (CSCOR) of NOAA's National Centers for Coastal Ocean Science (NCCOS) is soliciting proposals that address causes of regional declines in coral abundance and degradation of coral ecosystems. CSCOR's interest is to provide timely and high-quality scientific results that can be used to develop alternative management strategies to restore and protect coral reef ecosystems.

CSCOR solicits proposals that seek a better understanding of the underlying processes that regulate coral reefs and associated ecosystems. Findings from this research will be used to directly support resource management decisions to protect healthy coral reef ecosystems and to reverse decline in degraded ones.

DUE DATE FOR APPLICATIONS:
The deadline for the receipt of proposals at the NCCOS/CSCOR office is 3pm, EST September 1, 2005. CSCOR will fund new CRES projects for 3 to 5 year duration that will be closely aligned with the original goals and objectives as articulated in the FY02 CRES announcement (http://www.cop.noaa.gov/opportunities/grants/oldfunding.html). Subject to the availability of funds, review of proposals will begin in September 2005. The anticipated project start date should be May 01, 2006, unless otherwise directed by the Program Officer.

PROGRAM PRIORITIES:
This solicitation will focus on several geographic regions and two depth ranges: (1) typical, shallow water (0-50m) coral reef ecosystems in the locations prioritized below, and (2) deep water (50-100m) hermatypic, light-dependent coral reef ecosystems. CSCOR's interest is to provide timely and high-quality scientific results that can be used to develop alternative management strategies to restore and protect coral reef ecosystems.

Areas of potential study will include coral reef ecosystems under U.S. jurisdiction that are eligible for federal funding and have a clear need for ecosystem-scale research. The areas targeted as high priority study regions for this funding cycle are:

(1) Pacific island groups including the Commonwealth of Northern Marinas Islands, Marshall Islands, Federated States of Micronesia, and the Republic of Palau, and American Samoa; and
(2) The West Florida Shelf (delineated by the 200 m isobath, includes Pulley Ridge and Florida Middle Grounds, not including the Dry Tortugas).

Projects focusing on the Main Hawaiian Islands, the Northwestern Hawaiian Islands, Guam, Southeast Florida, the Florida Keys, and the Dry Tortugas will not be considered.

ELIGIBILITY:
Eligible applicants are institutions of higher education, other non-profits, state, local, Indian Tribal Governments, and Federal agencies that possess the statutory authority to receive financial assistance. Minority Serving Institutions are encouraged to apply to (http://www.ofa.noaa.gov/%7Egrants/noaa-msi.html)

CSCOR will not fund any Federal -salaries, but will fund travel, equipment, supplies, and contractual personnel costs associated with the proposed work. Furthermore, no expenses of any kind will be provided for National Ocean Service researchers.

TYPICAL AWARDS:
Award amounts typically do not exceed $1,000,000 per year with project duration from 3-5 years for the CRES research projects; and $500,000 per project per year for up to three separate projects with project durations of 1-3 years for the deep hermatypic coral reef studies. It is anticipated that 3-5 total projects will be funded.

COST SHARING OR MATCH REQUIREMENTS:
None

FULL FUNDING ANNOUNCEMENT:
Find the Full Funding Announcement at http://www/Grants.gov. Search for Funding Opportunity Number NOS-NCCOS-2006-2000240.

AGENCY POINT OF CONTACT:

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NOAA/NOS/NCCOS
Center for Sponsored Coastal Ocean Research
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ADDITIONAL INFORMATION:
For additional information on the CRES fund opportunity and other CSOR grant program and application information, visit the CSCOR Coastal Ocean Programs website at:
http://www.cop.noaa.gov/opportunities/grants/welcome.html

Information includes:

- Specific Funding Announcements
- Instructions and Guidelines
- Application Forms for Initial Proposal Submission
- Application Forms for Continuation of Funding
- Special Award Conditions
- Reporting Requirements
- Reviewer Information
- Related OMB Circulars and DOC Codifications
- Unfunded (No-Cost) Extension Instructions

CENTER FOR SPONSORED COASTAL OCEAN RESEARCH

CORAL REEF ECOSYSTEM STUDIES – CARIBBEAN

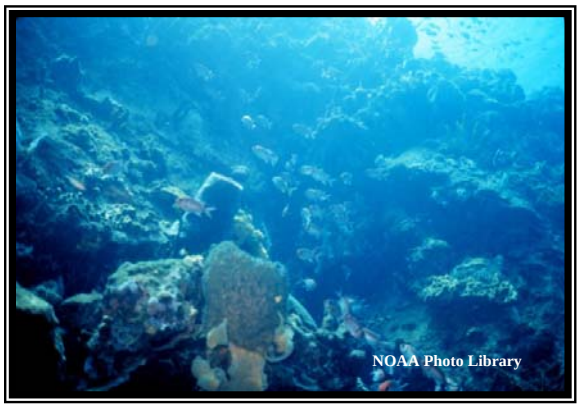
"INTEGRATING SCIENCE AND MANAGEMENT IN THE CARIBBEAN"

ISSUE

Coral reefs possess the greatest ecological complexity and biodiversity among marine ecosystems, and represent an invaluable economic and recreational resource. However, the integrity of coral reefs is threatened by numerous anthropogenic and natural stresses including sediments, nutrient enrichment, climate change (coral bleaching), over-harvesting, and storms.

Compared to other marine systems, coral reefs may be particularly vulnerable to watershed-based stresses related to coastal development, since coral reefs are usually best developed near areas with low sediment and nutrient input. Over-harvesting may also be particularly hazardous since coral reefs may be highly dependent upon complex biological interactions involving predation, herbivory, and competition.

In addition to the separate effects of various stressors, synergistic interactions among stressors can further degrade coral reef health. For instance, overharvesting of the grazers that control algae might allow increased algal cover on the reef, which may compromise the resiliency of some reefs to increased nutrient inputs.



APPROACH

The impacts of anthropogenic effects may be mitigated by implementation of marine protected areas (MPAs). However, the development of sound ecological strategies for management not only requires the analysis of various stresses and biological processes, but also must involve socioeconomic concerns and user-friendly modeling systems to evaluate the efficacy of management options.

The Coral Reef Ecosystem Studies – Caribbean project will:

- Identify and evaluate factors critical to the decline of coral reefs in the proposed study areas
- Evaluate effective management approaches
- Develop tools to assist resource managers
- Evaluate socio-economic concerns vital to management plans
- Integrate environmental studies, socioeconomic impacts, and modeling into a comprehensive ecological study

The project was initiated in FY 2003 as a science-based, integrated approach to understand coral reef dynamics and processes, and to provide tools and options for coral reef management. The program is based at three sites: La Parguera and

Culebra, Puerto Rico, and St. John, US Virgin Islands, all of which contain marine protected areas in various stages of development. Research conducted at these sites will build upon current research and historical data going back 40 years, and the comparison of processes (both ecological and social) will result in greater understanding of coral reef function and provide a scientific basis for reef conservation and restoration.

MANAGEMENT AND POLICY IMPLICATIONS

The research will quantify linkages within the complex association of species, habitats, and social systems, including:

- Land-water interactions, including linking models of terrestrial runoff and coastal zone development.
- Linkages among small-scale habitats and large-scale areas within reef developments
- Changes in trophic dynamics (from fishing pressure, etc.) and their effects on reef health and dynamics
- Linkages between human activities and natural systems

The program will evaluate alternative management strategies, particularly the effectiveness of marine protected areas, by comparing the marine reserves at each of the study sites. Each reserve has a historical and spatial basis for comparison, and the program will assess the impacts of fishery closure on the reefs themselves and on the controlling processes (changes in community and trophic structure), and will evaluate the socioeconomic processes affecting the implementation and success of each reserve.

Finally, the program will develop user-friendly Geographic Information System (GIS) based models as an ecosystem management tool. The models will have a predictive capability, and incorporate terrestrial inputs, current-flow models, trophic models of marine reserves, and integrate natural and social processes and impacts.

FOR MORE INFORMATION CONTACT:
NOAA/NOS/NCCOS/CSCOR
Mike Dowgiallo, Ph: (301) 713-3338
e-mail: coastalocean@noaa.gov

CRES programs administered by CSCOR contribute to the mission of NOAA's Coral Reef Conservation Program.

CENTER FOR SPONSORED COASTAL OCEAN RESEARCH

CORAL REEF ECOSYSTEM STUDIES – MICRONESIA

"CORAL REEF ECOSYSTEM INTEGRITY AND RESTORATION OPTIONS WITH WATERSHED-BASED ACTIVITIES AND MARINE PROTECTED AREAS (MPAS) IN THE TROPICAL PACIFIC ISLANDS"

ISSUE

Coral reefs are highly diverse, productive and complex ecosystems. They build tropical islands and land masses, protect their shores from coastal erosion and wave damage, support fisheries of cultural and economic value, are a repository for natural products of biomedical value, and are truly museums of the world's tropical marine biodiversity. While coral reefs are relatively robust and have survived millions of years of natural disturbances, anthropogenic influences are a major concern for the sustainability of these important ecosystems.

Due to the small size of the islands of Micronesia, activities conducted within watersheds have almost immediate effects on coastal coral reefs. Runoff, sedimentation and non-point source pollution are among ht greatest threats to coral reefs and reef fisheries throughout the Pacific Basin. The societal costs of coral reef degradation resulting from land-based developments are great, especially when considering the importance of coral reefs to island cultures.

APPROACH

The Coral Reef Ecosystem Studies – Micronesia study, focused on Guam will:

- Apply the knowledge gained from previous studies determining the classes and concentrations of coastal pollutants associated with watershed discharge of greatest concern to coral reef health
- Collect quantitative data on physical and chemical characteristics of coastal waters affected by watershed discharge and apply these to developing integrated management schemes
- Provide an accurate assessment of the societal costs of insufficient environmental protection measures within watersheds and coastal waters as they affect reefs and related coastal marine resources
- Determine if coral reef restoration activities are practical if coupled with watershed restoration efforts, establishment of MPA's and pollution abatement, and
- Make this information readily accessible to stakeholders as a means of affecting appropriate environmental policy.

Methods include performing ecological studies on coral reefs, studying coastal water characteristics of flow, residence time and spatial extent of watershed discharge, quantifying the societal costs to island communities resulting from watershed and related reef degradation, and testing reef restoration techniques coupled with established MPA's and land-based remediation.

MANAGEMENT AND POLICY IMPLICATIONS

The research integrates ecological studies, physical oceanographic research and social science to deal with problems identified as priorities by the US Coral Reef Task Force. It will focus on the anthropogenic disturbances of greatest impact on coral reefs, and translate this information for regional educational outreach.

FOR MORE INFORMATION CONTACT:
NOAA/NOS/NCCOS/CSCOR
Mike Dowgiallo, Ph: (301) 713-3338
e-mail: coastalocean@noaa.gov

CRES programs administered by CSCOR contribute to the mission of NOAA's Coral Reef Conservation Program.

ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

- **Federal Agency Name(s):** Center for Sponsored Coastal Ocean Research (CSCOR), National Centers for Coastal Ocean Science (NCCOS), National Ocean Service (NOS), National Oceanic and Atmospheric Association (NOAA), Department of Commerce

- **Funding Opportunity Title:** Coral Reef Ecosystem Studies (CRES) 2006

- **Announcement Type:** Initial Announcement

- **Funding Opportunity Number:** NOS-NCCOS-2006-2000240

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- **Catalog of Federal Domestic Assistance Number:** 11.478, Center for Sponsored Coastal Ocean Research

- **Program Authorities:** 16 USC 6401 et seq

- **Dates:** The deadline for receipt of proposals at the NCCOS/CSCOR office is 3 p.m., September 1, 2005.

- **Funding Opportunity Description:** The purpose of this document is to advise the public that NCCOS/CSCOR is soliciting proposals that address causes of regional declines in coral abundance and degradation of coral ecosystems. NCCOS/CSCOR's interest is to provide timely and high-quality scientific results that can be used to develop alternative management strategies to restore and protect coral reef ecosystems.

- **Electronic Access:** The following web sites furnish supplementary information on long-term coral reef ecosystem research needs: http://www.coralreef.gov.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objectives:

Coral reefs and associated seagrass and mangrove communities are among the most complex and diverse ecosystems

on earth. They support important fishing and tourism industries, protect coasts from wave and storm damage, build tropical islands, contain an array of potential pharmaceuticals, and provide local communities with a source of food, materials and traditional activities. As shallow-water, near shore communities, coral reef ecosystems are ecologically closely linked to adjacent watersheds and are highly vulnerable to human activity. In addition, deep water (50-100m) hermatypic, light dependent coral reef ecosystems identified in this solicitation are typically colonized by a disproportionately high number of endemic species of fishes and invertebrates. Because of their relative inaccessibility, deep reefs can also serve as refugia for shallow water species. Deep reefs that serve as refugia may warrant special resource management attention and protection to help maintain local and/or regional biodiversity. Thus, research in this area offers potential findings of major interest for resource management.

Anthropogenic stresses in the coral reef environment include poor water quality from runoff and inadequate sewage treatment, over-harvesting and destructive fishing practices of reef resources, sedimentation, shoreline development, and damage from tourists and divers. Larger-scale changes in global climate also potentially affect coral reef ecosystems through changes in sea temperature, sea level, irradiance, wind and precipitation patterns, and frequency and severity of tropical storms. Natural and human-induced forces act separately and in combination, to degrade coral reef ecosystems. Symptoms of stress include mass bleaching (loss of symbiotic algae) of corals, regional reductions of certain reef framework corals, and disease outbreaks leading to mass mortalities of reef-building corals and associated organisms. According to the 2004 report by the Global Coral Reef Monitoring Network (http://www.gcrmn.org/), the world has lost an estimated 20 percent of coral reefs and predicts that 24 percent of the world’s reefs are under immanent risk of collapse though human pressures, and a further 26 percent are under a longer term threat of collapse. Significant further reductions in coral reef health, accompanied by major losses in biological diversity, are expected to continue for the next few decades unless coordinated action to manage and conserve these ecosystems is undertaken soon.

The 1998 Executive Order on Coral Reef Protection (E.O. 13089) directs Federal agencies to map, research, monitor, manage, and restore coral reef ecosystems. In response to the Executive Order, a U.S. Coral Reef Task Force established interagency working groups to address six areas: (1) Coastal Uses, (2) Ecosystem Science and Conservation, (3) Mapping and Information Synthesis, (4) Water and Air Quality, (5) International Dimensions, and (6) Education and Outreach. One

of the key components of the Task Force Action Plan is long-term regional ecosystem research, which this announcement addresses. This program is a collaborative effort within NOAA's Coral Reef Conservation Program (CRCP). The CRCP, authorized under the Coral Reef Conservation Act of 2000, works across NOAA to support effective management and sound science to preserve, sustain and restore valuable coral reef ecosystems.

This notice solicits proposals that seek a better understanding of the underlying processes that regulate coral reefs and associated ecosystems. Findings from this research will be used to directly support resource management decisions to protect healthy coral reef ecosystems and to reverse decline in degraded ones. This solicitation will focus on several geographic regions and two depth ranges: (1) typical, shallow water (0-50m) coral reef ecosystems in the locations prioritized below, and (2) deep water (50-100m) hermatypic, light-dependent coral reef ecosystems. NCCOS/CSCOR's interest is to provide timely and high-quality scientific results that can be used to develop alternative management strategies to restore and protect coral reef ecosystems. To meet this goal, highest consideration will be given to multi-disciplinary team proposals incorporating hypothesis-driven research involving both the natural and social sciences, which includes participation by the territory, state, or Federal resource management community. Because of the complex relationships among land-based activities, watershed/reef interactions, and local economies and values, the overall research proposal should include a component study that addresses social and economic aspects of the study area, and integrate this research into the study as a whole.

Results from such research must be applicable to the development of alternative management strategies, and the prediction of changes in the ecosystem in response to such management strategies. The development of predictive models (e.g., bio-physical models to investigate larval transport of reef organisms and their recruitment to reef systems in the context of variable oceanographic conditions; water quality models to investigate the relationship between watershed-based pollutant inputs and effects on reef ecosystems; economic models to investigate the relationship between coral reef health and local economies) as a component of these studies is required. Scientific information, syntheses, models, and ecosystem forecasting capabilities from this multi-disciplinary, long-term effort will enable resource managers to make more informed decisions on managing US coral reef ecosystems.

B. Program Priorities:

1. Coral Reef Ecosystems Studies (CRES)

Two long-term CRES studies were initiated in FY02 and focused on reefs of Puerto Rico, U.S. Virgin Islands (USVI), and Guam. The CRES research program was developed in response to the continued decline of U.S. coral reef ecosystems, and the need to define and understand causes and effects of reef degradation on a regional scale. The first two CRES projects were prioritized by geographic area and selected through a competitive process. Additional high-priority geographic areas not covered by the first announcement are described below.

NCCOS/CSCOR will fund new CRES projects for 3 to 5 year duration that will be closely aligned with the original goals and objectives as articulated in the FY02 CRES announcement (http://www.cop.noaa.gov/opportunities/grants/oldfunding.html). Areas of potential study will include coral reef ecosystems under U.S. jurisdiction that are eligible for federal funding and have a clear need for ecosystem-scale research. The West Florida Shelf and several Pacific Island groups will be targeted as high priority study regions.

All projects should be highly leveraged and build upon ongoing and prior regional research funded by NCCOS/CSCOR and other Federal, state, university, and agency partners. Because recent and current resources have been devoted to the east coast of Florida, Florida reef tract, Puerto Rico, USVI, Hawaiian Islands, Northwest Hawaiian Islands (NWHI), and Guam, these areas are not included as potential study areas in this announcement. However, this will not preclude collaborative activities or funding to individual researchers from these areas as part of a multi-institutional team.

Proposed research should focus on coral reef ecosystems in the Atlantic or Pacific subject to the jurisdiction or control of the United States. NCCOS/CSCOR will select the strongest and most balanced proposal(s) that focuses on one of the following geographic areas of special interest: (1) Pacific island groups including the Commonwealth of Northern Marinas Islands, Marshall Islands, Federated States of Micronesia, and the Republic of Palau, and American Samoa; and (2) the West Florida Shelf (delineated by the 200 m isobath, includes Pulley Ridge and Florida Middle Grounds, not including the Dry Tortugas). The specific area of study within these regions will be defined by the selected proposal. Within a study region, more than one specific area may be included for comparative purposes. Where remote sites are included, ship requirements (ship type, time, and cost) should be identified.

Because the NCCOS Center for Coastal Monitoring and Assessment (CCMA) will be concurrently conducting biogeographic studies in the above regions, all proposals should include a statement that if selected for funding, they will coordinate their activities as appropriate with CCMA. Contact information

for CCMA will be provided at the time of funding. For more information on CCMA's Biogeography Program please see http://biogeo.nos.noaa.gov/.

Each proposal must:

i. Conduct ecosystem-scale studies to evaluate and assess the dynamics of the coral reef ecosystem, identify the key stressors that are impacting, or could potentially impact the health of the ecosystem, and evaluate management approaches to prevent or reverse ecosystem degradation.

ii. Develop tools, such as ecological forecasting models and/or data syntheses for decision making, to assist resource managers in predicting ecosystem health as a result of certain ecological impacts (e.g. climate change, coastal land-use, invasive species, extreme events, contaminants, etc.). Such tools should have the capacity to predict ecosystem health following alternative management actions, in order to assess and prioritize management strategies.

iii. Explore the social, cultural, and economic context in developing tools and evaluating factors critical to the success of reef management strategies.

To accomplish the above three objectives, proposals must address the following four research focus areas:

(1) Relationship(s) between watershed-based activities and changes in coral reef ecosystems, for example: the mechanisms by which watershed-based pollutants are transported to and distributed within coral reef ecosystems.

(2) Primary causes of ecological stresses in reef ecosystems of the study region (such as, over fishing, destructive fishing practices, reef destruction and pollution, climate change, disease, invasive species, sedimentation, etc.) and prioritization of these stresses.

(3) The effect of changes in faunal components on the integrity of the reef ecosystem (such as, oceanic and ecological processes that regulate species recruitment, species interactions, population dynamics, and identification of keystone species).

(4) Evaluation of Marine Protected Areas (MPAs) as management tools for improving coral reef structure and function, and identification of important linkages among coral reef ecosystems in the study region. Proposers are strongly encouraged to include MPAs, or potential MPAs in the study design if possible, especially where collaborative research within MPAs would enhance the understanding of regional coral reef ecosystems and human use of these ecosystems. This is a particular priority in the Pacific islands region, where research into the establishment of MPA networks in an ecosystem-based fashion (i.e. identification of sources/sinks of larvae, connectivity patterns, and enhancement of coral reef

resiliency to stress) is needed. Research into the effectiveness of established local and regional MPAs is also a priority.

For the Pacific islands, priority will be given to funding a single comprehensive proposal that includes a set of subprojects led by individual Principal Investigators. This collaborative team of multi-institutional, multi-disciplinary researchers should be led by a single Principal Investigator. Pacific islands studies should be integrated though a "consortium-like" approach to leverage ongoing monitoring and research efforts in the region and to link approaches and findings to address regional problems; at least three of the Pacific island groups should be included in the proposal.

In addition, a focus on capacity building for the local scientific and resource management community is strongly encouraged for the Pacific islands region. Priority will be given to proposals that incorporate and enhance the capacity of local research and resource management communities in the region.

Typically, NCCOS/CSCOR programs of a size and design similar to CRES include five to eight lead researchers along with a management team, and a management team chair that serves as a main point of contact with the CRES program manager. Management teams typically include three to four individuals from different institutions that, as a group, provide strong leadership and solid partnerships that enable the program to be effectively implemented and produce meaningful results. Management teams can include representatives from Federal laboratories, universities, local governments, and non-governmental organizations.

Expected Products and Outcomes

Long-term multi-disciplinary research will provide a better understanding of the nature, extent, and consequences of anthropogenic and natural stress on coral reef ecosystems. Research results may be used to distinguish anthropogenic factors from natural variability in determining coral reef ecosystem health and potential impacts that may result from climate variability. Project proposals should clearly address a timetable and major program elements that will lead to specific interim and final management deliverables. In order for the study results to be useful to resource managers and decision makers, the study design and implementation should include a clear means to incorporate the information needs of the targeted region. Approaches for accomplishing this type of input could include annual workshops and Management and Technical Advisory Committees that include a broad spectrum of regional interests. Proposers are strongly encouraged to

develop an approach in the proposal to ensure regional stakeholder input and participation. A final comprehensive synthesis report will be required that concisely summarizes the project results and their potential application to improving the condition of degraded reefs, protecting healthy reefs in the study region, and other critical information relevant to reef management. Guidelines for producing this report will be made available to the project management team during the project cycle.

CRES Products Will Include:

(1) Research data (to be archived in an appropriate data center such as the NODC), assessments, publications, summary reports, and any other useful activity or product that will provide resource managers and the public with timely information that is readily understandable;

(2) Syntheses of the research, including specific recommendations for management action, that lead to improved coral reef ecosystem health through novel and/or traditional approaches, particularly with respect to integrated watershed management and MPAs, and;

(3) Predictive tools such as simulation models (including ecological forecasts) that will help managers make informed decisions, and assess alternative management strategies (e.g., watershed and coastal water quality models to assess changes in land inputs and impacts on reefs and related habitats; larval transport and recruitment of reef organisms in the context of variable oceanographic conditions, and information for optimizing site selection for MPAs).

2. Deep-water (Hermatypic) Coral Reef Ecosystems Studies (Deep-CRES)

Research focusing on ecosystem processes in deep water (50-100 m), hermatypic, light-dependent coral reefs is also a priority in this announcement. Regions of focus include the U. S. Southeast Atlantic and Gulf of Mexico, the U. S. Caribbean, and the Hawai'ian Islands. The deep reef at Pulley Ridge as described above could be studied as part of the West Florida Shelf study or fall into this research priority because of its uniqueness. Much attention has been devoted to the diversity and ecology of deep sea environments in abyssal depths, and hundreds of studies have been conducted on shallow water coastal communities, although relatively little attention has been paid to coastal environments in the 50-100 m depth range. Most of the work on coral reefs has focused on relatively shallow (< 30 m) environments, and those studies that are below 50 m which are typically on slopes, are difficult to sample with conventional techniques and are far less common.

The deep water coral reef ecosystems described here are distinct from “true” deep water corals that occur at greater depths and are not light-dependent. The depth range where deep water hermatypic coral reefs occur is referred to in the scientific literature as the “twilight zone” and these reefs are typically colonized by a disproportionately high number of endemic species of fishes and invertebrates. Key objectives of this research would be to understand the processes that regulate deep hermatypic reef ecosystems and assess their vulnerability to exploitation and human disturbance. Deep reefs that serve as refugia may warrant special resource management attention and protection to help maintain local and/or regional biodiversity. Protection may also offer a hedge against extinction to endemic species, which are more vulnerable to disturbance due to their limited geographic ranges. Thus, these studies offer potential findings of major interest for resource management.

Proposals should address research to:

a. Understand the processes that regulate deep hermatypic reef ecosystem

b. Examine the potential for deep reefs to serve as refugia for shallow water species

c. Assess the deep reef coral ecosystem’s vulnerability to exploitation and human disturbance. Deep reefs that serve as refugia may warrant special resource management attention and protection to help maintain local and/or regional biodiversity.

Examine the potential for management strategies, such as Marine Protected Areas to serve as a hedge against extinction to endemic species, which are more vulnerable to disturbance due to their limited geographic ranges.

Conducting research on deep water (50-100 m) hermatypic, light dependent coral reef ecosystems will require specialized technology beyond standard SCUBA diving, such as advanced diving technologies (e.g., mixed gas SCUBA diving, closed-circuit rebreathers, etc.); remotely operated vehicles; and/or shallow diving submersibles. Applicants should include all operating costs for these specialized technologies and the necessary ship costs in their proposals.

NOAA’s Undersea Research Program (NURP) will administer the operations for applicants that do not have access to deep water technologies and the necessary safety oversight through their home institutions. Operational costs for conducting the research must be included in the proposal. To develop operational cost estimates, applicants should contact the appropriate NURP Center for the geographical region in which the work will be conducted, i.e., for work in the Caribbean

contact the Caribbean Marine Research Center, for work in Southeast U.S. or Gulf of Mexico contact the Southeastern U.S. and Gulf of Mexico NURP Center, and for work in Hawaii and the Western Pacific contact the Hawaii Undersea Research Laboratory.

The duration of the study is anticipated to be up to three years. Typically, NCCOS/CSCOR programs of a size and design similar to CRES include five to eight lead researchers along with a management team, and with a management team chair that serves as a main point of contact with the CRES program manager. Management teams typically include three to four individuals from different institutions that, as a group, provide strong leadership and solid partnerships that enable the program to be effectively implemented and produce meaningful results. Management teams can include representatives from Federal laboratories, universities, local governments, and non-governmental organizations.

Expected Products and Outcomes

This research will provide a better understanding of the nature, extent, and consequences of anthropogenic and natural stress on deep coral reef ecosystems. Research results may be used to determine the primary factors that regulate ecosystem processes in deep coral reef environments (between 50-100m). Project proposals should clearly address a timetable and major program elements that will lead to specific interim and final management deliverables. In order for the study results to be useful to resource managers and decision makers, the study design and implementation should include a clear means to incorporate the information needs of targeted study areas. Approaches for accomplishing this type of input could include annual workshops and Management and Technical Advisory Committees that include a broad spectrum of regional interests. A final comprehensive synthesis report will be required that concisely summarizes the project results and their potential application to improving the condition of degraded reefs, protecting healthy reefs in the study region, and other critical information relevant to reef management. Guidelines for producing this report will be made available to the project management team during the project cycle.

Deep-CRES Products Will Include:

(1) Research data (to be archived in an appropriate data center such as the NODC), assessments, publications, summary reports, and any other useful activity or product that will provide resource managers and the public with timely information that is readily understandable;

(2) Syntheses of the research that increases awareness of deep coral reef ecosystems, and provides natural resource management agencies with the information necessary to better manage this unique environment, and;

(3) Predictive tools such as simulation models (including ecological forecasts) that will help managers determine the effect of biotic processes and abiotic factors (i.e. physical disturbance such as sediment and salinity plumes; larval transport and recruitment of reef organisms) on the deep water coral reef ecosystem, and provide information on the value of considering deep water coral reefs as potential MPAs.

Contact Information:

For overall information regarding the Deep-CRES program contact: Michael Dowgiallo, NCCOS/CSCOR, 301-713-3338, extension 161 or e-mail at Michael.Dowgiallo@noaa.gov.

For information on operations regarding the NURP Center for the Caribbean, the Caribbean Marine Research Center, contact: Albrey Arrington, 561-741-0192, extension 117 or e-mail at Arrington@perryinstitute.org.

For information on operations regarding the NURP Center for the Southeastern U.S. and the Gulf of Mexico contact: Otto Rutten, 305-451-0233 or e-mail at rutteno@juno.com.

For information on operations regarding the NURP Center for Hawaii and the Western Pacific, the Hawaii Undersea Research Laboratory, contact: John R. Smith, 808-956-9669 or e-mail at jrsmith@hawaii.edu.

C. Program Authorities: 16 USC 6401 et seq

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 Program Review Team (Information available at www.noaa.gov). In order to fulfill these responsibilities, this solicitation announces that award amounts to be determined by the proposals and available funds typically not to exceed $1,000,000 per year with project duration from 3-5 years for the West Florida Shelf; one comprehensive project not to exceed $1,000,000 per year with

project duration from 3-5 years for the Pacific islands; and $500,000 per project per year for up to three separate projects with project durations of 1-3 years for the deep hermatypic coral reef studies. It is anticipated that 3-5 total projects will be funded. Support in out years after FY 2006 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 (see guidance on award periods in prior section). 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 shall require a project description that can be easily divided into annual increments of meaningful work representing solid accomplishments (if prospective funding is not made available, or is discontinued). 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 continuations into the out years.

C. Type of funding instrument

They are project grants and cooperative agreements.

(1) Research Project Grants: A research project grant is one in which substantial programmatic involvement by NOAA 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 NOAA.

(2) Cooperative Agreements: A cooperative agreement implies that NOAA 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 NOAA. A cooperative agreement is appropriate when substantial NOAA 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.

(3) Determination of which instrument to use: Applicants must specify the type of award for which they are applying, either a grant or a cooperative agreement. The funding agency 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.

(4) 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.

D. 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 included in the proposal package. 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 NEPA analysis, or whether an Environmental Assessment is necessary in conformance with requirements of the National Environmental Policy Act. 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 (i.e. NEPA environmental assessment) will also delay the award of funds if a project is otherwise selected for funding.

III. Eligibility Information

A. Eligible Applicants

Eligible applicants are institutions of higher education, other non-profits, state, local, Indian Tribal Governments, and Federal agencies that possess the statutory authority to receive financial assistance. Minority Serving Institutions are encouraged to apply to (http://www.ofa.noaa.gov/%7Egrants/noaa-msi.html)

NCCOS/CSCOR will not fund any Federal FTE salaries, but will fund travel, equipment, supplies, and contractual personnel costs associated with the proposed work. Furthermore, no expenses of any kind will be provided for NOS researchers.

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

(2) 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.

(3) NCCOS/CSCOR will accept proposals that include foreign

researchers as collaborators with a researcher, who has met the above stated eligibility requirements; and who also is an employee of an eligible institution listed above.

(4) Non-Federal researchers affiliated with NOAA-University 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 Requirements

None

C. Other Requirements

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

IV. Application and Submission Information

A. Address to Submit Application Package

Applications submitted in response to this announcement are strongly encouraged to be submitted through the Grants.gov Web site. Electronic Access The full funding announcement for each program is available via the Grants.gov Web site: http://www.grants.gov. These announcements will also be available at the NOAA Web site http://www.ofa.noaa.gov/%7Eamd/SOLINDEX.HTML or by contacting the program official identified below. After October 1, 2004, 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.

Getting started with Grants.gov is easy! Go to http://www.Grants.gov. There are two key features on the site: Find Grant Opportunities and Apply for Grants. Everything else on the site is designed to support these two features and your use of them. While you can begin searching for grant opportunities for which you would like to apply immediately, it is recommended that you complete the remaining Get Started steps sooner rather than later, so that when you find an opportunity for which you would like to apply, you are ready to go.

Get Started Step 1B Find Grant Opportunity for Which You Would Like To Apply. Start your search for Federal government-wide grant opportunities and register to receive automatic e-mail notifications of new grant opportunities or any

modifications to grant opportunities as they are posted to the site by clicking the Find Grant Opportunities tab at the top of the page.

Get Started Step 2B Register With Central Contractor Registry (CCR). Your organization will also need to be registered with Central Contractor Registry. You can register with them online. This will take about 30 minutes. You should receive your CCR registration within 3 business days. Important: You must have a DUNS number from Dun & Bradstreet before you register with CCR. Many organizations already have a DUNS number. To determine if your organization already has a DUNS number or to obtain a DUNS number, contact Dun & Bradstreet at 1- 866-705-5711. This will take about 10 minutes and is free of charge. Be sure to complete the Marketing Partner ID (MPIN) and Electronic Business Primary Point of Contact fields during the CCR registration process. These are mandatory fields that are required when submitting grant applications through Grants.gov.

Get Started Step 3B Register With the Credential Provider. You must register with a Credential Provider to receive a username and password. This will be required to securely submit your grant application.

Get Started Step 4B Register with Grants.gov. The final step in the Get Started process is to register with Grants.gov. This will be required to submit grant applications on behalf of your organization. After you have completed the registration process, you will receive e-mail notification confirming that you are able to submit applications through Grants.gov.

Get Started Step 5B Log on to Grants.gov. After you have registered with Grants.gov, you can log on to Grants.gov to verify if you have registered successfully, to check application status, and to update information in your applicant profile, such as your name, telephone number, e-mail address, and title. In the future, you will have the ability to determine if you are authorized to submit applications through Grants.gov on behalf of your organization.

Hard copies of proposals (single-sided) will also be accepted and require an original proposal and 2 proposal copies at time of submission. This includes color or high-resolution graphics, submitted as part of the proposal. For color graphics, submit either color originals or color copies. Facsimile transmissions and electronic mail submission of full proposals will not be accepted. Submit the hard copy original and 2 copies of your proposal to Attn. CRES 2006, Center for Sponsored Coastal Ocean Research (N/SCI2), National Oceanic and Atmospheric Administration, 1305 East-West Highway, SSMC4, 8th Floor Station 8243, Silver Spring, MD 20910.

FOR FURTHER INFORMATION CONTACT:

Technical Information. Dr. Michael Dowgiallo, CRES 2006, 301-713-3338/ext 161, Internet: Michael.Dowgiallo@noaa.gov.

Business Management Information. Laurie Golden, NCCOS/CSCOR Grants Administrator, 301-713-3338/ext 155, Internet: Laurie.Golden@noaa.gov.

B. Content and Form of Application Submission

Applications submitted in response to this announcement are strongly encouraged to be submitted through the Grants.gov web site. Electronic Access for the full funding announcement for this program is available via the Grants.gov web site: http://www.grants.gov. These announcements will also be available at the NOAA web site: http://www.ofa.noaa.gov/%7Eamd/SOLINDEX.HTML or by contacting the program official identified below.

If you are unable to access this information, you may call NCCOS/CSCOR at 301-713-3338 to leave a mailing request.

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, additional background information is available on the NCCOS/CSCOR home page.

1. Proposals

As previously stated, applications should be submitted through www.Grants.gov unless an applicant does not have internet access. In that case, hard copy proposals will be accepted (refer to IV. Application and Submission Information).

2. Required Elements

For clarity in the submission of proposals, the following definitions are provided for recipient 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 Abudget 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 Aaward period@ is also referred to as project period in 15 CFR 14.2(cc).

Each proposal must include the following ten elements or it will be returned to sender without further consideration:

(a) Standard Form 424. At time of proposal submission, all applicants anticipating direct funding shall submit the Standard Form, SF-424, AApplication for Federal Assistance,@ to indicate the total amount of funding proposed for the whole project period. This form is to be the cover page for the original proposal and all requested copies.
Multi-institutional proposals must include signed SF-424 forms from all institutions requesting funding.

(b) Signed Summary title page. The title page should be signed by the Principal Investigator (PI). The Summary title page identifies the project's title, starting with the acronym: CRES 2006, a short title (less than 50 characters), and the PI's 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, but no signatures are required on the title page from the additional institutions. 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, the COP Summary Proposal Budget Form and accompanying budget justification must be submitted for each subcontractor. For further details on budget information, please see Section (g) Budget 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.

(d) Project description. The description of the proposed project must be complete and divided into annual increments of work that include: identification of the problem, scientific objectives, proposed methodology, relevance to the CRES 2006 program goals, and its scientific priorities. For CRES 2006 project proposals, the project description (including relevant results from prior support) should not exceed 15 pages. Page limits are inclusive of figures, other visual materials, and letters of endorsement, but are exclusive of references, a milestone chart, and letters of collaboration from unfunded

collaborators.
This section should clearly identify project management with a description of the functions of each PI within a team. It should provide a full scientific justification for the research, rather than simply reiterating justifications presented in this document. It should also include:

(i) The objective for the period of proposed work and its expected significance;

(ii) The relation to the present state of knowledge in the field and relation to previous work and work in progress by the proposing principal investigator(s);

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

(iv) Potential coordination with other investigators.

(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 15-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 SF424A Budget Form for each fiscal year increment. Multi-institution proposals must include a SF424A for each institution, and multi-investigator proposals using a lead investigator with a contractor/subgrantee approach must submit a SF424A 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 SF424A. All applications must include a budget narrative and a justification to support all proposed budget categories. Any ship time needs must be clearly identified in the proposed budget. The proposer 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 should be included with the proposal.

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

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

(ii) 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;

(iii) A list of all persons (including their organizational affiliation) in alphabetical order, with whom the investigator has collaborated on a project or publication within the last 48 months, including collaborators on the proposal and persons listed in the publications. If no collaborators exist, this should be so indicated;

(iv) A list of persons (including their organizational affiliation) with whom the individual has had an association like thesis advisor or postdoctoral scholar sponsor;

(v) A list of the names and institutions of the individual=s own graduate and postgraduate advisors.

The material presented in (c, d, and e) is used to assist in identifying potential conflicts or bias in the selection of reviewers.

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(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. 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.

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(j) 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. The following documents appear under Required Elements within each FFO. Submit in the order requested and File Names shown below.

A. Application for Federal Assistance (SF-424)

1. Complete the form. Only one SF-424 is accepted within grants.gov

2. In the case of multiple institutions requesting direct funding. Attach the additional SF-424 in “Other attachments”

see “K. Other Attachments Form” below

3. Label the file name as “SF424/Institution name.”

B. Summary Title Page

1. This an attachment. Label file name as “Summary Title Page.”

see “K. Other Attachments Form” below

C. One-page abstract/project summary

1. This an attachment. Label file name as "Abstract."
see "K. Other Attachments Form" below.

D. Project Description
1. This an attachment. Label file name as "Project Description."
see "K. Other Attachments Form" below.

E. References Cited
1. This an attachment. Label file name as "References."
see "K. Other Attachments Form" below.

F. Milestone Chart
1. This an attachment. Label file name as "Milestone Chart."
see "K. Other Attachments Form" below.

G. SF-424A - Budget Information for Non-Construction Programs
1. Complete the form. Only one 424A is accepted within grants.gov.
2. If additional pages are needed,
see "K. Other Attachments Form" below
3. Label the additional 424As by form "424A/institution name."

H. Budget Justification/Narrative
1. This an attachment. Label file name as "Budget Justification."
see "K" Other Attachments Form" below.
2. Label the additional budget justifications as "Budget justification/institution name."
3. Include ship time (if applicable) in the justification.

I. Biographical Sketch
1. This an attachment. Label file name as "Bio Sketch/PI name."
see "K". Other Attachments Form" below.

J. Current and Pending Support
1. This an attachment. Label file name as "Current/pending support."
see "K". Other Attachments Form" below.

K. Other Attachments Form
1. When submitting letters of support that are not included in the stated page limit of the project

narrative, prepare one document containing those letters. Label file name as Letters of Support.

2. Other appropriate documents may also be submitted here, e.g. “Data Management Plan.”

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.

Hard copy proposals should be clamped in the upper left-hand corner, but left unbound. The 2 additional copies can be stapled in the upper left-hand corner or bound on the left edge. Electronically submitted or hard copy page margin must be one inch (2.5 cm) at the top, bottom, left, and right, and the typeface standard 12-point size must be clear and easily legible. Proposals should be single spaced and single-sided.

C. Submission Date and Time

The deadline for receipt of proposals at the NCCOS/CSCOR office is 3 p.m., EST, September 1, 2005 (Note that late-arriving applications provided to a delivery service on or before September 1 ,2005 with delivery guaranteed before 3 p.m., EST on September 1, 2005 will be accepted for review if the applicant can document that the application was provided to the delivery service with delivery to the address listed below 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., EST, no later than 2 business days following the closing date.)

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D. Intergovernmental review

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Applications under this program are not subject to Executive Order 12372, AIntergovernmental 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.

F. Other Submission Requirements

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).

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 (25 percent).

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 (15 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).

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 in the field 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 4 to 8 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 officers. No consensus advice will be given by the independent peer mail review or the review panel.

The program officers 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 proposers will be notified of non-selection.

For the proposals rated by the panel as either ``Excellent,'' ``Very Good,'' or ``Good'', the program officers will (a) rank the proposals to be recommended for funding by average panel ratings, and/or by applying the project selection factors listed below; (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/CSCOR, 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 proposer. 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

The merit review ratings shall provide a 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 as set forth in sections I and IV.
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 September 2005. May 2006 should be used as the proposed start date on proposals, 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 to the appropriate business office of the recipient organization.

B. Administrative and National Policy Requirements

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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, 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 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/COP 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 NODC, and the Program Officer. 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/COP 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).

Data Reporting Requirements

Any data collected in projects supported by NCCOS/CSCOR must be delivered within two years of the initial observation to a National Data Center (NDC), such as the National Oceanographic Data Center (NODC), in a format to be determined by the institution, the NODC, and the Program Officer. This requirement may be fulfilled by providing the data to the NOAA Coral Reef Information System (CoRIS). 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. Therefore, the Principal Investigator(s) must include in their budget and work plan appropriate resources to devote to data management and submission requirements. 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).

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C. Reporting

All financial and progress reports shall be submitted electronically through the Grants Online system unless the recipient does not have internet access. In that case, hard copy financial reports are to be submitted to the NOAA Grants Officer and Performance (technical) reports are to be submitted to the NOAA program officer. Financial reports are semi-annual and Performance reports are annual.

VII. Agency Contact(s)

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