

ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

Federal Agency Name(s): Office of the Under Secretary (USEC), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce

Funding Opportunity Title: Financial Assistance to Establish five NOAA Cooperative Science Centers at Minority Serving Institutions

Announcement Type: Initial

Funding Opportunity Number: NOAA-SEC-OED-2011-2002684

Catalog of Federal Domestic Assistance (CFDA) Number: 11.481, Educational Partnership Program

Dates: Informational teleconferences with the Federal Program Officer will occur on Wednesday, July 21, 2010 and Wednesday, August 25, 2010 (time 3:00 p.m. Eastern Time). Interested applicants should register by contacting oed.epp10@noaa.gov and include in the Subject line of the e-mail: "Interested in FFO Teleconference - Need Details" and provide the interested parties name, institution, telephone number, and selected information teleconference date in the body of the e-mail no later than two weeks prior to the scheduled informational teleconference. Where possible, individuals from the same institution should try to call in using one telephone line. Full applications must be submitted through Grants.Gov no later than November 15, 2010. Applicants must comply with all requirements contained in this notice in the Federal Register and the FFO announcement. For those applicants without Internet access, paper applications (a signed original and two copies) and a flash drive with the application in MS Word and/or PDF format may be submitted to the Office of Education: NOAA Office of Education, Educational Partnership Program, 1315 East-West Highway, Room 10700, Silver Spring, Maryland 20910. Paper applications must be submitted no later than November 15, 2010. Facsimile transmissions and electronic mail submission of full applications will not be accepted. Please note: Hard copy applications submitted via the U.S. Postal Service may take up to four (4) weeks to reach NOAA's Office of Education; therefore applicants are advised to send hard copy applications via expedited shipping methods (e.g. Fed Ex, UPS). Use of U.S. Postal Service or another delivery service must be documented with a receipt. Please Note: It may take Grants.gov up to two (2) business days to validate or reject the application. Please keep this in mind in developing your submission timeline. Applications postmarked or provided to a delivery service after that time will not be considered for funding. Applications submitted via the U.S. Postal Service must have an official postmark; private metered postmarks are not acceptable. In any event, applications received later than five (5) business days following the postmark closing date will not be accepted.

Funding Opportunity Description: NOAA's Office of Education (OEd), Educational Partnership Program (EPP) with Minority Serving Institutions (MSIs) solicits applications from accredited postsecondary MSIs to establish five NOAA Cooperative Science Centers (CSCs). These five CSCs are designed to create collaborative partnerships among MSIs and NOAA's Line Offices. NOAA's mission as stated in the FY2009 - 2014 NOAA Strategic Plan, is "To understand and predict changes in Earth's environment and conserve and manage coastal and marine resources to meet our nation's economic, social, and environmental needs," the Uniform Resource Locator for NOAA Strategic Planning is http://www.ppi.noaa.gov/strategic_planning.html. Additional information about NOAA may be found on the Web site: www.noaa.gov. Each NOAA Cooperative Science Center must conduct education and research that directly supports NOAA's mission. The purpose of these CSCs at MSIs is to: (1) Educate students in science, technology, engineering, and mathematics (STEM) fields related to the CSCs' research areas to increase the number and diversity of NOAA's and the nation's STEM workforce; (2) Conduct research in collaboration with NOAA scientists and engineers to better understand the significance of changes in the Earth's oceans, coasts, Great Lakes, weather and climate; and, (3) Build capacity and sustainability in NOAA-relevant STEM areas at all center institutions. The CSCs are to leverage existing education and research program capabilities to train and graduate students in NOAA-mission STEM fields including broader disciplines (e.g., economics and social sciences). The CSCs are to build sustainable capacity, maintaining newly established curricula, as well as upgraded research facilities that will enhance their ability to conduct NOAA education and research that contributes to a pipeline of students trained in STEM fields. The EPP is designed to enhance capacity at MSIs that educate, train, and graduate students in STEM fields and to increase environmental literacy by establishing partnerships with academia, the private sector, and other Federal, state, tribal and local agencies. Additional program details may be found on the website: www.epp.noaa.gov. Interested applicants should be responsive to both the notice in the Federal Register and the Federal Funding Opportunity (FFO). A PDF version of both the Federal Register Notice and the FFO are available at <http://www.epp.noaa.gov/>.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

The Office of Education (OEd) Educational Partnership Program (EPP) with Minority Serving Institutions (MSIs) is a competitive education program designed to strengthen and enhance the education and training capabilities supported by research to develop programs directly related to NOAA's mission at MSIs. EPP provides funding to eligible Minority Serving Institutions (MSIs), on a competitive basis, to educate and graduate students in NOAA-mission sciences and technology. The program's goal is to increase the number of students from underrepresented communities who are educated and graduate with degrees in sciences that directly support NOAA's mission.

For the purpose of this program, Minority Serving Institutions are: Historically Black Colleges and Universities, Hispanic-Serving Institutions, Indian Tribally Controlled Colleges and Universities, Alaska Native-Serving Institutions, and Native Hawaiian-Serving Institutions, as identified on the 2007 United States Department of Education, Accredited Postsecondary Minority Institution list (<http://www.ed.gov/about/offices/list/ocr/edlite-minorityinst.html> and <http://www.ed.gov/about/offices/list/ocr/edlite-minorityinst-list-tab.html>) are eligible to apply. A proposed center's principal academic institution must be an accredited MSI with a Ph.D. degree-granting program in a STEM field that directly supports NOAA's mission. Applications will not be accepted from non-profit organizations (except organizations that are classified as Institutions of Higher Education), foundations (except foundations that represent Institutions of Higher Education), auxiliary services or any other entity submitted on behalf of MSIs. Private and /or public sector and community college partnerships are encouraged. Partnerships with community colleges may be considered as a mechanism to build the undergraduate pipeline of four-year academic institutions. A Cooperative Science Center may partner with one or more institutions that have demonstrated education and research performance in NOAA-related sciences. While the center will be established at an MSI, consortia with non-minority serving institutions partners will not be restricted. If a cooperative agreement is awarded to a consortium of institutions, the consortium must propose a governance structure that includes a single director and one award. Where multi-institutional applications between majority and MSIs are submitted, no less than eighty percent (80%) of the total funds shall be awarded to the MSI(s). The MSI lead cannot issue sub-awards for more than twenty percent (20%) of the total project costs to majority institutions.

The OEd EPP is comprised of four program components. Each program component is administered through competitive processes. The program components are: the Undergraduate Scholarship Program (USP); the Graduate Sciences Program (GSP); the

Environmental Entrepreneurship Program (EEP); and the Cooperative Science Centers (CSCs).

Applications for the Cooperative Science Centers shall support NOAA's mission as defined in NOAA's Strategic Plan, located at http://www.ppi.noaa.gov/strategic_planning.html, and the NOAA Education Strategic Plan at <http://www.oesd.noaa.gov/council/index.html>. The OEd EPP supports the following act, plans, and vision:

- * American Competes Act;

<http://thomas.loc.gov/cgi-bin/bdquery/z?d110:H.R.2272>:

- * U.S. Ocean Action Plan;

<http://groups.ucanr.org/HumboldtBayEBM/files/38672.pdf>

- * NOAA Next Generation Strategic Plan

http://www.ppi.noaa.gov/strategic_planning.html;

- * NOAA Education Strategic Plan

http://www.education.noaa.gov/plan/09_NOAA_Educ_Strategic_Plan_Color.pdf

- * NOAA Five-year Research Plan; and,

<http://www.nrc.noaa.gov/plans.html>

- * NOAA Twenty-year Research Vision

<http://www.nrc.noaa.gov/plans.html>.

Institutions may compete for an award to establish a Cooperative Science Center based on the following criteria:

Atmospheric Cooperative Science Center

Atmospheric Cooperative Science Center applications should fully address the ability to conduct collaborative research in numerical weather prediction, data assimilation, climate modeling, climate analysis and prediction, water resources, and/or studies that lead to improvements in warning and forecast operations. Key area of focus could include collaborative research that: (1) advances the understanding of the weather-climate linkage, cloud and precipitation processes, airborne particulate matter, health sensitivities to weather and climate, and planetary boundary layer processes (especially in complex terrain); (2) improves quantification of forecast uncertainty, long-range forecasting and regional downscaling, storm prediction accuracy (including initiation of convection), precipitation type and start/stop times; (3) advances the development of high resolution coupled models within an Earth system framework, and the assimilation and integration of observations (especially for hard-to-observe areas); and (4) integrates social science studies with weather and climate studies to enhance decision support capabilities. Applications should demonstrate the mechanism by which the Atmospheric Cooperative Science Center will utilize training in the fields of study above to facilitate the research and education priorities of NOAA.

Atmospheric Center graduates should have competencies in the National Weather Service's course requirements for meteorologists that include: 1. Twenty-four (24) semester hours in meteorology including six semester hours in weather analysis and prediction of weather

systems (synoptic/mesoscale):

1. Six (6) semester hours of atmospheric dynamics and thermodynamics; three semester hours of physical meteorology; and two semester hours of remote sensing technology of the atmosphere and/or instrumentation;
2. Six (6) semester hours of physics with at least one course that includes laboratory sessions;
3. Three (3) semester hours of ordinary differential equations; and,
4. Nine (9) semester hours of course work appropriate for a physical science major in any combination of three or more of the following: physical hydrology, statistics, chemistry, physical oceanography, physical climatology, radiative transfer, aeronomy, advanced thermodynamics, advanced electricity and magnetism, light and optics, computer science. There is a prerequisite or co-requisite of calculus for course work in atmospheric dynamics and thermodynamics, physics, and differential equations. Calculus courses must be appropriate for a physical science major.

The center's application should address how its graduates will meet these course requirements.

Living Marine Resources Cooperative Science Center

Living Marine Resources Cooperative Science Center applications fully should address the ability to support education and research in marine science with an emphasis on biological assessments, stock assessment, marine chemical assessments, habitat quality, coastal ecology - including ecosystem management and monitoring, aquaculture, social science, economics, and climate impacts on marine ecosystems). Applications should demonstrate the mechanism by which the Living Marine Resources Cooperative Science Center will utilize training in the fields of study above to facilitate the research and education priorities of NOAA.

Living Marine Resources Cooperative Science Center graduates should have core competencies in the course requirements with a major studies in biology, zoology, or biological oceanography that include at least thirty (30) semester hours in biological, marine, and aquatic science and fifteen (15) semester hours in a combination of physical, mathematical, and social sciences. The course work must include:

1. At least fifteen (15) semester hours in zoology beyond introductory biology or zoology in such course as invertebrate zoology, comparative anatomy, histology, physiology, embryology, advanced vertebrate zoology, genetics, entomology, and parasitology.
2. At least six (6) semester hours of training applicable to fishery biology in such subjects as fishery biology, ichthyology, limnology, oceanography, algology, planktonology, marine or fresh water ecology, invertebrate ecology, principles of fishery population dynamics, or related course work in the field of fishery biology.
3. At least six (6) semester hours of training in chemistry, physics, mathematics, or statistics.

4. At least six (6) semester hours of training applicable to fishery or resource economics or social science.

The following nine courses are indicated by NOAA's National Marine Fisheries Service (NMFS) (U.S. Dept. of Commerce and Dept. of Education. 2008. The shortage in the number of individuals with post-baccalaureate degrees in subjects related to fishery science, NOAA Tech. Memo. NMFS-F/SPO-91, 84 p. -

http://www.st.nmfs.noaa.gov/report_congress/ShortageOfDegrees.pdf) as the essential courses in preparing students to conduct high-level quantitative population dynamics/stock assessments for the Federal government and elsewhere.

1. Population Dynamics;
2. Fish Ecology;
3. Multivariate Statistics;
4. Sampling Theory;
5. Fisheries or Natural Resources Modeling;
6. Bayesian Statistics;
7. Stock Assessment;
8. Risk and Decision Analysis; and,
9. Fisheries or Natural Resources Computer Programming.

Graduates must be able to carry out a variety of tasks including: predicting population trends of living marine resources (LMR); developing harvest strategies that are consistent with National Standard 1 of the reauthorized Magnuson Stevens Fishery Conservation and Management Act, estimating the social and economic impacts of various management decisions on communities by decisions related to LMR. In addition, graduates must be able to design and carry out projects for LMR.

Environmental Cooperative Science Center

Environmental Cooperative Science Center applications should address the development of science and management tools to support balancing the often competing or conflicting demands of coastal resource use, economic development and marine transportation, and approaches to conservation, including protected area delineation and management.

Key focus areas should include:

1. Understand, assess, forecast and manage coastal impacts of climate change (e.g., sea level rise, ocean warming, ocean acidification), harmful algal blooms and coastal contaminants;
2. Develop science-based support and guidance for coastal and marine spatial planning, including special area management provisions and injured habitat restoration;
3. Foster and develop coastal decision-making tools to help resolve coastal issues in specific locations, and;
4. Understand, assess and forecast changing elevations related to sea level rise, subsidence, earthquakes or human activities.

Applications should demonstrate the mechanism by which the Environmental Cooperative Science Center will utilize training in the fields of study above to facilitate the research and education priorities of NOAA.

Graduates should have at least twenty-four (24) semester hours in a core science including physics, chemistry, biology, oceanography or environmental science. Supporting coursework in mathematics, engineering, geodynamics/geodesy, sociology, environmental ethics, economics, public policy, natural resource management, geographic information systems, global positioning system, or statistics would be an asset. Knowledge of pertinent research and analytical methodology, as well as the ability to apply the core sciences to policy and management issues, is required.

Remote Sensing Technology Cooperative Science Center

Remote Sensing Technology Cooperative Science Center applications should have particular emphasis in environmental satellite related research activities directed toward helping to sustain healthy coasts, to build sustainable fisheries, to recover protected species, to improve understanding of human-climate interactions, to develop satellite based methods for mapping and estimating carbon sources and sinks, to help improve weather forecasts and warnings, to provide improved environmental forecasts or analyses, and to prepare for future NOAA operational environmental satellite missions. The applications should address satellite meteorology research and applications; satellite sensors and techniques; environmental models and data assimilation. Applications should demonstrate the mechanism by which the Remote Sensing Technology Cooperative Science Center will utilize training in the fields of study above to facilitate the research and education priorities of NOAA. The center will be expected to:

1. Provide an organizational setting to promote and establish programs and research relating to remote sensing technology by drawing upon multiple disciplines and involving collaboration with multiple performing and research-sponsoring partners;
2. Serve as a model for outreach, input, and collaboration that help ensure that research can be applied to solving priority NOAA remote sensing technology, current satellite system optimization, and future satellite system development and planning;
3. Expand research in remote sensing technology, satellite data management, and user access technologies; and,
4. Support multi-disciplinary research projects aimed at NOAA's remote sensing technologies mission responsibilities, to include: (a) Passive radiometric remote sensing technology; (b) Passive multi-spectral remote sensing technology; (c) High spectral resolution (hyperspectral) remote sensing technology; (d) Active and passive microwave remote sensing technology; (e) Space weather sensor technology, calibration and data analysis techniques; (f) Satellite sensor development and demonstration in the categories above; (g) Technologies relating to satellite data acquisition, data distribution, mission operations, and mission planning; and, (h) Technologies relating to improved user data

access and data management.

Through such multi-disciplinary research, explore new approaches to enhance the use of present and future environmental satellites to meet the rapidly changing environmental needs of the Nation.

Scientific Environmental Technology Cooperative Science Center

Proposals for the Scientific Environmental Technology Cooperative Science Center should address the ability to support education and research in physical and social sciences at an MSI. The physical sciences include but are not limited to, meteorological and oceanographic sensor and satellite telecommunications technologies, remote sensing, and observational and information technology systems, applied mathematics, applied physics and computer applications and engineering. For the purposes of this program Scientific Environmental Technology includes an emphasis on the following: meteorological sensors (wind, visibility, humidity, etc.), oceanographic sensors (wave, water quality, microwave altimeters, beacons, navigational, etc.), airborne and ship based observing systems, chemical observations, observational and information technology systems (satellite telecommunications, telecommunications, data collection packages, modems, drivers, protocols, etc.). Scientific Environmental Technology also includes the analysis of global observing systems, including simulations to determine the role of each observing subsystem, determination of optimal mixes of observing systems, and the costs associated with various observing systems. Applications should demonstrate the mechanism by which the Scientific Environmental Technology Cooperative Science Center will utilize training in the fields of study above to facilitate the research and education priorities of NOAA.

Scientific Environmental Technology graduates must be able to carry out a variety of tasks including: understanding meteorological and oceanographic needs; identifying potential sensor, observational, and information technologies; developing sensor; observational, and information technology systems; testing and evaluating meteorological and/or oceanographic systems.

B. Program Priorities

NOAA expects the Cooperative Science Centers to develop mechanisms and approaches to increase opportunities and to make courses and seminars offered at the center available to students at other center partner institutions. All NOAA EPP CSC-funded students must be United States citizens and full-time students. The center will also be required to use a minimum of thirty percent (30%) of the award for direct student support, which includes, but is not limited to, scholarships, fellowships, travel expenses to professional meetings, and for conducting site research. A student tracker database must be created and maintained at the center's lead and partner academic institutions. The student tracker database tracks direct student support and funding (direct and indirect) as well as the students' progress including alumni and post graduate employment. Institutions may compete for an award to establish a

Cooperative Science Center based on the following program priorities:

1. Established CSCs will be required to develop a Strategic, Implementation, and Science Plans within the first three and five months, respectively, of the cooperative agreement. The plans shall specifically address the education, outreach, scientific research, and administration of the center. The strategic plan shall include a plan to engage all partnering institutions. The implementation plan shall include performance metrics with targets / goals across all components of the center. The implementation plan should include approaches to synchronize "best practices" in education, outreach, scientific research, and management practices among the partnering institutions. The science plan should provide an approach to accomplish the scientific research proposed by the center.
2. Accredited MSI with Ph.D. Program: The Cooperative Science Center's principal academic institution must be an accredited MSI with a Ph.D. program in one of the NOAA-mission science areas.
3. Student Development Plan: A student development plan that addresses, at a minimum, student mentoring, professional development, and career guidance.
4. Postdoctoral Program: A Postdoctoral program that supports two-year fellowships must be established at each center. All NOAA EPP-funded postdoctoral fellows must be United States citizens. The CSC is required to provide funding for two postdoctoral positions. During the two-year fellowship, the postdoctoral research should be collaborative among the postdoctoral fellows, CSC scientists and NOAA scientists and must address NOAA-mission science areas.
5. Sustainability Program: Sustainability strategies must be developed and incorporated into the Cooperative Science Center's Strategic Plan. The strategies should describe the center institutions' commitment to facilitating and furthering the center's education, outreach, and research plans and goals. The strategies should address student support, maintain newly established curricula as well as upgraded research facilities if NOAA funding is not immediately available at the end of the five-year project award cycle.
6. Cooperative Science Center Management Key Positions:
The following positions are required to be filled within the first year of the cooperative agreement.
 - a. Center Director: The Center Director must be based at the lead MSI Ph.D. granting institution. The Center Director must allocate a minimum of twenty-five percent (25%) of their time to lead the Cooperative Science Center. The CSC Director is also responsible for leading the activities associated with establishing and developing a CSC by conducting the following:
 - * Managing, planning, coordinating, organizing, implementing, reporting and monitoring the CSC finances, administration, education, scientific research, outreach and recruitment;
 - * Providing all grant deliverables (e.g., performance and financial reports, implementation plan and student tracker database forms);
 - * Oversee student development;

- * Contributing to the OEd EPP program report;
 - * Co-planning the biennial NOAA EPP Education and Science Forum;
 - * Developing comprehensive reporting for all CSC sponsored activities; and,
 - * Incorporating activities (e.g., leveraging) to make the CSC sustainable.
- b. Deputy Director: A Deputy Director must be identified at each center. The Deputy Director shall have the credentials and experience to act on the behalf of the Center Director, as needed and allocate a minimum of 20% of their time to CSC activities.
- c. Distinguished Scientist(s): A CSC Distinguished Scientist tenured position must be filled within one year of CSC establishment at the lead MSI institution. The Distinguished Scientist must allocate one hundred percent (100%) of their time to manage the center research. The CSC Distinguished Scientist is responsible for:
- * Developing and managing significant research projects for the CSC including its partnering academic institutions;
 - * Leading the development and assessment of the CSC Science Plan;
 - * Facilitating and coordinating scientific research between NOAA and CSC scientists including other EPP center scientists;
 - * Leading, organizing and conducting scientific meetings;
 - * Coordinating scientific research among the CSC partners and ensuring that research conducted is in support of NOAA's mission;
 - * Maintaining outstanding research accomplishments;
 - * Writing research proposals;
 - * Leveraging resources - submit proposals to other funding organizations;
 - * Developing reports on research accomplishments for all CSC supported activities; and,
 - * Mentoring students.
- d. Program Coordinator: A Program Coordinator position must be created to manage the center administration including activities such as the budget tracking, student tracking, etc. The Program Coordinator must allocate one hundred percent (100%) of their time to manage the center administration. The Program Coordinator is also responsible for facilitating the process that produces the semiannual performance report and the September 30, January 31, and June 30 Cooperative Science Center student tracker deliverables.
7. Course and Seminar Delivery Mechanisms: NOAA expects the center to develop mechanisms and approaches that increase center student course and seminar offerings among the center institutions.
8. Social Science Component: Social science must be an integral component of the center. Suggested social science fields include those currently emerging within NOAA such as economics, sociology, public policy, communications, and geographical information systems.
9. Education and Science Forum: On a rotational basis, established CSCs are required to host the biennial NOAA Education and Science Forum and lead with NOAA the planning of the event. The Forum provides a venue where Center educational and scientific research

results are shared. The purpose of the Forum is to allow NOAA education and scientific research accomplishments to be presented via technical and poster sessions by faculty, students and NOAA scientists. Funding for the Forum will be provided to the host center via the Grants process. The hosting center submits an Education and Science Forum application (including a detailed budget and budget justification) via Grants Online.

10. Cooperative Science Center Evaluation: The CSC's performance determines yearly funding. Each center shall also undergo and a third-year cumulative evaluation of its program (education and outreach, research, and administration) during the third year of the five-year award period. The evaluation will be conducted by an evaluation panel with members external to NOAA's EPP. The evaluation outcomes determine the CSC's fourth and fifth year funding.

11. Other Program Priority: Within the first year that the center is established, they are required to develop, with the help of the educators, scientists, academic and career counselors, the strategy for aligning and ensuring that graduates will successfully attain the core competencies identified.

C. Program Authority

The applicable statutory authorities follow:

- * 15 U.S.C. 1540;
- * Fish and Wildlife Coordination Act, 16 U.S.C. 661, as amended by the Reorganization Plan No. 4 of 1970;
- * Cooperative research and training programs for fish and wildlife resources, 16 U.S.C. 753(a);
- * National Marine Sanctuaries Act, 16 U.S.C. 1431;
- * Coastal Zone Management Act of 1972, as amended, 16 U.S.C. 1451 et seq.;
- * Magnuson-Stevenson Fishery Conservation and Management Reauthorization Act of 2006, 16 U.S.C. 1891a;
- * 33 USC - US Code - Title 33: Navigation and Navigable Waters (January 2003)
 - Sec. 883a. Surveys and other activities, and,
 - Sec. 883d. Improvement of methods, instruments, and equipments; investigations and research;
 - Sec. 1442. Research program respecting possible long-range effects of pollution, overfishing, and man-induced changes of ocean ecosystems;
- * Meteorological Services, 49 U.S.C. 44720;
- * White House Initiative on Educational Excellence for Hispanic Americans Commission, Executive Orders 13230;
- * White House Initiative on Historically Black Colleges and Universities, Executive Order 13256;
- * White House Initiative on Tribal Colleges and Universities, Executive Order 13270;
- * American Indian and Alaska Native Education, Executive Order 13336;

- * Increasing Economic Opportunity and Business Participation of Asian Americans and Pacific Islanders, Executive Order 13339; and,
- * America Competes Act H.R. 2272.

II. Award Information

A. Funding Availability

All funding is contingent upon availability of Federal appropriations. NOAA anticipates that up to \$3 million will be available annually for each Cooperative Science Center. Five awards will be made to five successful applicants; total funds of approximately \$75 million are available to support the proposed five (5) Cooperative Science Centers for a period of five years, subject to appropriations. NOAA will not accept applications requesting more than \$15 million under this solicitation. Subject to Congressional appropriations, NOAA anticipates making awards in the summer 2011. Awards will be funded incrementally on an annual basis for a five-year period and are subject to the availability of funds and acceptable performance. There is no obligation on the part of NOAA to cover pre-award costs unless approved by the Grants Officer as part of the terms when the award is made.

B. Project/Award Period

The earliest start date for Cooperative Science Center awards is anticipated to be July 1, 2011. Full applications must cover a project/award period of five (5) years. Multi-year awards will be funded incrementally on an annual basis. Applications are required to have 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 that have an award/project period of more than twelve (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, submissions and approval of both progress and financial reports, and is at the sole discretion of the agency. Performance is assessed through performance and financial reports and substantial involvement in center activities, and a third-year formal evaluation of the center. Once approved, full applications are not required for the continuations into the out years.

C. Type of Funding Instrument

The funding instrument available for this opportunity is a cooperative agreement since NOAA staff will be substantially involved in aspects of the project. NOAA will be substantially involved in the development of research priorities, conducting cooperative activities with recipients, and facilitating staff exchanges and internship opportunities for students at MSIs.

(1) Cooperative Agreements: A cooperative agreement implies that NOAA will collaborate with recipients in the design and 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.

(2) Applications will be competed against one another.

(3) Funds will be provided solely through the EPP Program.

III. Eligibility Information

A. Eligible Applicants

For the purpose of this program Minority Serving Institutions: Historically Black Colleges and Universities, Hispanic-Serving Institutions, Indian Tribally Controlled Colleges and Universities, Alaska Native-Serving Institutions, and Native Hawaiian-Serving Institutions, as identified on the 2007 United States Department of Education, Accredited Postsecondary Minority Institution list (<http://www.ed.gov/about/offices/list/ocr/edlite-minorityinst.html> and <http://www.ed.gov/about/offices/list/ocr/edlite-minorityinst-list-tab.html>) are eligible to apply. A proposed center's principal academic institution must be an accredited MSI with a Ph.D. degree-granting program in a STEM field that supports NOAA's mission. Applications will not be accepted from non-profit organizations (except organizations that are classified as Institutions of Higher Education), foundations (except foundations that represent Institutions of Higher Education), auxiliary services or any other entity submitted on behalf of MSIs. Private and /or public sector and community college partnerships are encouraged. Partnerships with community colleges may be considered as a mechanism to build the undergraduate pipeline of four-year academic institutions. A Cooperative Science Center may partner with one or more institutions that have demonstrated education and research performance in NOAA-related sciences. While the center will be established at an MSI, consortia with non-minority serving institutions partners will not be restricted. If a cooperative agreement is awarded to a consortium of

institutions, the consortium must propose a governance structure that includes a single director and one award. Where multi-institutional applications between majority and MSIs are submitted, no less than eighty percent (80%) of the total funds shall be awarded to the MSI(s). The MSI lead cannot issue sub-awards for more than twenty percent (20%) of the total project costs to majority institutions.

B. Cost Sharing or Matching Requirement

There is no statutory matching requirement for this funding.

C. Other Criteria that Affect Eligibility

N/A

IV. Application and Submission Information

A. Address to Request Application Package

Complete application packages, including required Federal forms and instructions may be found on www.grants.gov. Electronic access to the Full Funding Opportunity Announcement for this program is available via www.grants.gov. The Federal Funding Opportunity announcement will also be available at the NOAA EPP web site: www.epp.noaa.gov. Application packages may be requested by submitting a request to the NOAA Office of Education, Educational Partnership Program, 1315 East-West Highway, Room 10600, Silver Spring, Maryland 20910.

B. Content and Form of Application

1. Applications

Applicants should apply through the Grants.gov web site (www.grants.gov), the clearinghouse for Federal financial assistance. A complete standard NOAA grant application package should be submitted in accordance with the guidelines in this document. Applications, electronic or paper should be no more than seventy-five (75) pages (numbered) in length, excluding budget, investigators vitae, and all appendices. Federally mandated forms are not included within the page count. The applications should have a table of contents and page numbers.

2. Required Elements

For clarity in the submission of applications, 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 "budget period." A budget period is typically twelve (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 application must include the following twelve elements or it will be returned to sender without further consideration:

a. Federal Forms. Each application must include the required forms: (1) Application for Federal Assistance (Standard Form 424); (2) Budget Information for Non-construction Programs (Standard Form 424A, see section g below); (3) Assurances for Non-construction Program (Standard Form 424B); (4) Certification Regarding Lobbying (CD 511); (5) Disclosure of Lobbying Activities (Standard Form LLL). At time of application submission, all applicants anticipating direct funding shall submit the Standard Form, SF-424, "Application 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 application and all requested copies. A Multi-institutional application must include signed SF-424 forms from all institutions requesting funding.

b. Signed summary title page. The title page should be signed by the Center Director Principal and Deputy Center Director. The Center Director and Deputy Center Director's full name, title, organization, telephone number, fax number, email and mailing address. The Deputy Center Director shall be qualified to assume the responsibility of carrying out the application in the absence of the Center Director. The requested budget for each fiscal year should be included on the summary title page. A multi-institution application must identify the lead institution and 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. The lead investigator and separate budget information is not requested on the title page for institutions that are proposed to receive funds through a sub-agreement to the lead institution; however, accompanying budget justification must be submitted for each subcontractor or subgrantee. For further details on budget information, please see Section (g) Budget.

c. One-page abstract summary. An application abstract summary that is submitted at the time of application shall include the following: (1) name of the proposed Cooperative Science Center; (2) name of the school, college, or department of the applying institution; (3) the NOAA Line Office that will align with the proposed center; (4) education focus and objectives of the proposed center; (5) research focus and objectives of the proposed center; (6) administrative structure at a high-level of the proposed center and, (7) a brief summary of work to be completed. The abstract summary should clearly address program priorities (Section I.B. of the FFO). The summary should appear on a separate page, headed with the application title, institution(s), Center Director, Deputy Director, proposed investigator(s), total proposed cost, and budget period. It should be written in the third person. The summary is used to help compare applications quickly and allows the respondents to summarize these key points in their own words.

d. Cooperative Science Center description. The description of the proposed center must be complete and divided into annual increments over a five-year period. The center

description should address the following:

- (1) Program Objectives;
- (2) Program Priorities;
- (3) Evaluation Criteria;
- (4) Education focus and objectives;
- (5) Research focus and objectives;
- (6) An approach to achieve measurable center objectives including measurable targets should be clearly described for all partners in center activities;
- (7) Expected deliverables should be clearly described and aligned with CSC and EPP program priorities outlined in this FFO; and,
- (8) Administrative structure (school, college, department and/or reporting structure).

The center description should include relevant accomplishments from prior programs, education and research, particular programs funded by NOAA and other organizations in support of education and research. Also, include past collaborative projects to indicate record of successful, meaningful collaboration(s) in education and outreach, and research. Since 2005, please document the (STEM) education, research (capability and capacity), and other administrative outcomes (institutionalized programs) that were achieved as a result of NOAA or other funding in support of education and research. In the documentation, also include a summary of the graduation rates at the bachelors, masters, and doctorate levels. If yearly analyses of graduation rates versus national statistics were conducted, please include the information. Any links to published summary reports or articles that illustrate program performance may be provided. This section should clearly identify program management with a description of the role of the Center Director, Deputy Director, Distinguished Scientist, Program Coordinator and each Principal Investigator. The time allocation of all the Principal Investigators identified in the application should be clearly described. All applications should allocate minimum of twenty-five percent (25%) of the principal investigators time to the Cooperative Science Center. It should also include:

- (1) The goals and measurable outcomes for the period of proposed work and its expected relevance to NOAA's mission;
- (2) A discussion of how the proposed program will enhance and support NOAA's mission;
- (3) Potential coordination with other academic partners and/or the private sector.

e. References cited. 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.

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

g. Budget. At time of application submission, all applicants are required to submit a SF424A Budget Form for each fiscal year increment. Multi-institution applications must include a SF424A for each institution, and a multi-investigator application using a lead

investigator with a subgrantee approach must submit a SF424A for each subgrantee. The lead institution shall identify the partnering institutions as OTHER on the budget form (not Contractor). Each subcontractor 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 subcontractor or subgrantee regardless of the dollar value and indicate the basis for the cost estimates. List all subcontractor or subgrantee costs under line item 6.f. contractual on the SF424A.

h. Budget justification. All applications must include a detailed budget narrative and a justification to support all proposed budget categories. The detailed budget breakdown shall also include details for each proposed partnering institution. All applications also must clearly identify the funds for direct student support and equipment purchases. Any ship and/or aircraft time needs must be clearly identified in the proposed budget. The applicant is responsible for requesting ship and aircraft time through appropriate channels and for meeting all requirements to ensure the availability of requested platform time. Copies of relevant ship and/or aircraft time request forms should be included with the application.

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. For each principal investigator, submit a list which includes a project title, supporting agency with grant number, investigator months, dollar value, and duration. Requested values should be listed for pending support. Describe 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.

j. Evaluation of program. The applicant is required to provide a plan for evaluation of center accomplishments with specific criteria and performance measures for education, outreach, research and administrative activities. If the project is selected for funding the evaluation plan may be further refined with the Federal Program Officer.

k. Federal, state and local government activities. The application should include a list of related Federal, state and local government activities, including other efforts funded through NOAA, that the proposed work would affect and describe the relationship between the proposed project and those plans or activities.

C. Submission Dates and Times

Full applications must be submitted through Grants.Gov no later than November 15, 2010. Applicants must comply with all requirements contained in this notice in the Federal Register and the FFO announcement. For those applicants without Internet access, paper applications (a signed original and two copies) and a flash drive with the application in MS Word and/or PDF format may be submitted to the Office of Education: NOAA Office of Education, Educational Partnership Program, 1315 East-West Highway, Room 10700, Silver

Spring, Maryland 20910. Paper applications must be submitted no later than November 15, 2010. Facsimile transmissions and electronic mail submission of full applications will not be accepted. Please note: Hard copy applications submitted via the U.S. Postal Service may take up to four (4) weeks to reach NOAA's Office of Education; therefore applicants are advised to send hard copy applications via expedited shipping methods (e.g. Fed Ex, UPS). Use of U.S. Postal Service or another delivery service must be documented with a receipt. Please Note: It may take Grants.gov up to two (2) business days to validate or reject the application. Please keep this in mind in developing your submission timeline. Applications postmarked or provided to a delivery service after that time will not be considered for funding. Applications submitted via the U.S. Postal Service must have an official postmark; private metered postmarks are not acceptable. In any event, applications received later than five (5) business days following the postmark closing date will not be accepted.

D. Intergovernmental Review

Applications under this program are not subject to Executive Order 12372, "Intergovernmental Review of Federal Programs."

E. Funding Restrictions

1. Indirect Costs

The total dollar amount of the indirect cost proposed must be the lesser of twenty-five percent (25%) of the total proposed direct cost or the amount that would be authorized as a result of applying the indirect cost rate negotiated and approved by a cognizant Federal agency prior to the proposed effective date of the award. If the applicant does not have a current negotiated rate and plans to seek reimbursement for indirect costs, documentation is necessary to establish a rate and must be submitted within ninety (90) days of receiving the award.

2. Direct Student Support

The total dollar amount of the direct student support must be greater than or equal to thirty percent (30%), annually. The requirement is applicable to all Center academic institutions. The allowable direct student support includes stipends, scholarships, travel, and training. A budget and budget justification must be provided that includes a breakdown of approximate costs and narrative description for the applicable direct student support sub-categories indicated as follows:

- * Student stipends;
- * Student scholarships;
- * Student travel to
 - NOAA programs, facilities, and laboratories
 - Scientific conferences and workshops
 - Education and science forums and seminars; and,

* Student training - to attend training conferences, workshops, and seminars.

3. Foreign Travel Support

Foreign travel support is not available under this funding opportunity.

F. Other Submission Requirements

Universal Identifier

Applicants should be aware they are required to provide a Dun and Bradstreet Data Universal Numbering System (DUNS) number during the application process. See the October 30, 2002, Federal Register, (67, FR 66177) for additional information. Organizations can receive a DUNS number at no cost by calling the dedicated toll-free DUNS Number request line at 1-866-705-5711 or via the Internet at <http://www.dunandbradstreet.com>.

Applicants must comply with all requirements contained in the Federal Funding Opportunity. If Internet access is unavailable, paper applications (a signed original and two copies) and a flash drive with the application in MS Word and/or PDF format may be submitted to the Office of Education, Educational Partnership Program at the following address: NOAA Office of Education, Educational Partnership Program, 1315 East-West Highway, Room 10600, Silver Spring, Maryland 20910. Facsimile transmissions and electronic mail submission of full applications will not be accepted.

V. Application Review Information

A. Evaluation Criteria

Applications will be evaluated on the basis of the following evaluation criteria at the indicated weights. Additional explanation of each criterion is provided in the FFO to ensure that the applicant includes information that is considered important during the evaluation, in addition to any other information provided by the applicant:

1. Importance and/or relevance and applicability of proposed project to the program goals (20 points)

This ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, or local activities.

2. Technical/scientific merit (20 points)

This assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether there are clear project goals and objectives.

3. Overall qualifications of applicants (20 points)

This ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project.

4. Project costs (15 points)

The Budget is evaluated to determine if it is realistic and commensurate with the project needs and time-frame.

5. Education and Outreach (25 points)

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.

B. Review and Selection Process

Once a full application has been received by NOAA, an initial administrative review is conducted to determine compliance with the requirements and completeness of the application. This will include a determination by the program office or its designated initial review team as to:

1. Eligibility - Applications will only be accepted and reviewed by eligible MSIs as defined in III. A. Eligibility Information. In addition, the Cooperative Science Center's principal academic institution must be an accredited MSI with a Ph.D. program in one of the NOAA mission science areas in atmospheric, oceanic and environmental sciences; living marine resources science; remote sensing science and technology; and, scientific environmental technology.
2. Submission Date - Applications will only be accepted and reviewed if they are received in the NOAA EPP Office by the designated deadline, November 15, 2010.
3. Program Objectives and Priorities - Applications will only be accepted and reviewed if based upon a review of the abstract, the application meets the program priorities in Sections I. A. Program Objectives and I. B. Program Priorities.
4. Project Cost - Applications will only be accepted and reviewed if MSIs clearly demonstrate in the budget and detailed budget justification how requirements for thirty percent (30%) in direct student support will be met, and the maximum allowable budget of \$15 million is not exceeded.

Applications that do not meet the administrative review requirements will be deemed unacceptable and will not be evaluated and scored. The Grants Online system will document the results of the administrative review and notify the applicant.

Eligible applications for Cooperative Science Centers will undergo a technical review, ranking, and selection process to determine how well they meet the stated evaluation criteria. All applications will be evaluated and scored individually by each technical reviewer in accordance with the assigned weights of the above evaluation criteria. An independent peer panel review comprised of Federal and non-Federal experts with education, scientific, and administration expertise will be formed to review the applications. The peer panel will be comprised of approximately five to seven individuals, with each individual having expertise in a separate area. The individual peer panelist scores shall be averaged for each application and presented to the Selecting Official. No consensus advice will be given by the independent peer review panel. The reviewer's ratings are used to produce a rank order of the proposals. The Selecting Official selects applications after considering the peer reviews and

selection factors listed below. In making the final selections, the Selecting Official will award in rank order unless the proposal is justified to be selected out of rank order based upon one or more of the selection factors. The Selecting Official makes the final award recommendation to the Grants Officer authorized to obligate funds. Investigators may be asked to modify objectives, work plans or budgets, and provide supplemental information required by the agency prior to the award.

C. Selection Factors

The merit review ratings shall provide a rank order of the applications to the Selecting Official for the final funding recommendation. The Selecting Official shall award in rank order unless the application 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, and,
 - 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 Section I. B. Program Priorities and I. A. Program Objective;
5. Applicant's prior award performance;
6. Partnerships and/or participation of targeted groups; and,
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.

Hence, awards may not necessarily be made to the highest scored applications. Unsuccessful applicants will be notified that their application was not among those recommended for funding.

D. Anticipated Announcement and Award Dates

Subject to the availability of funds, July 1, 2011 should be used as the anticipated start date on applications for the first year and is dependent on the completion of all NOAA / applicant negotiations and documentation supporting cooperative agreement activities. July 1, 2012, should be the start date for the second year, unless otherwise directed by the Federal Program Officer.

VI. Award Administration Information

A. Award Notices

Successful applicants may be asked to modify work plans or budgets, and provide supplemental information required by the agency prior to final approval of the award. The exact amount of funds awarded, the final scope of activities, and specific NOAA cooperative involvement with the activities will be determined in pre-award negotiations among the applicant, the NOAA Grants Office, and NOAA staff that will administer these grants. The notice of award is signed by the NOAA Grants Officer and is the authorizing document. It is provided by electronic notification or postal mail to the appropriate business office of the recipient organization. Work should not be initiated in expectation of Federal funding until a notice of award document is received electronically from the NOAA Grants Management Division in Grants Online, NOAA's online grants management system.

NOAA EPP will notify unsuccessful applicants in writing either electronically or by postal mail. Those applications that are not ultimately selected for funding will be destroyed.

B. Administrative and National Policy Requirements

1. Administrative Requirements

Successful applicants that accept a NOAA award under this solicitation will be bound by Department of Commerce standard terms and conditions. This document will be provided in the award package in Grants Online, NOAA's online grants management system, and can be found at: http://oamweb.ossec.doc.gov/gmd_updated-doc.html.

In addition, award documents provided by the NOAA Grants Office in the Grants Online award package may contain special award conditions limiting the use of funds for activities that have outstanding environmental compliance requirements to fulfill, and/or stating other compliance requirements for the award as applicable, such as requirements for submitting progress reports.

2. National Environmental Policy Act Requirements

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 not selecting an application. In some cases if additional information is required after an application is selected, funds can be withheld by the Grants Officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment on any impacts that a project may have on the environment.

C. Reporting

All financial (Standard Form 272 - Federal Cash Transactions Report) and progress (performance) reports shall be submitted electronically through the Grants Online system. Performance reports are to be submitted via Grants Online and are due semiannually. NOAA EPP provides performance report guidance in the CSC Handbook and on the EPP website. The Standard Form 269 financial report is due quarterly (December 31, March 31, June 30, and September 30). The financial expenditure must be submitted on a Standard Form 269 Financial Status Report as directed under 2 CFR 215.52- Financial Reporting. The completed SF 269 shall be provided to the NOAA OEd Budget Analyst and emailed to oed.epp10@noaa.gov. All grantees are required to submit tri-annually the student tracker database form via a web-based application. The data tri-annual deadlines are January 31, June 30, and September 30 of each year.

VII. Agency Contacts

For further information please contact Audrey Trotman (Federal Program Officer) for administrative and technical questions, telephone 301-713-9437 ext. 155, fax 301-713-9465, or e-mail Audrey.Trotman@noaa.gov. The alternative technical contact is Meka Laster, telephone 301-713-9437 ext. 147 or e-mail Meka.Laster@noaa.gov.

VIII. Other Information

A. 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 February 11, 2008 (73

Fed. Reg.7696), are applicable to this solicitation.

B. Paperwork Reduction Act

This document contains collection-of-information requirements subject to the Paperwork Reduction Act (PRA). The use of Standard Forms 424, 424A, 424B, SF-LLL, and CD-346 has been approved by the Office of Management and Budget (OMB) under the respective control numbers 0348-0043, 0348-0044, 0348-0040, 0348-0046, and 0605-0001.

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 PRA unless that collection of information displays a currently valid OMB control number.

C. Executive Order 12866 (Regulatory Impact Review)

This notice has been determined to be not significant for purposes of Executive Order 12866.

D. Executive Order 13132 (Federalism)

It has been determined that this notice does not contain policies with Federalism implications as that term is defined in Executive Order 13132.

E. Administrative Procedure Act/ Regulatory Flexibility Act

Prior notice and an opportunity for public comment are not required by the Administrative Procedure Act or any other law for rules concerning public property, loans, grants, benefits, and contracts (5 U.S.C. 553(a)(2)). Because notice and opportunity for comment are not required pursuant to 5 U.S.C. 553 or any other law, the analytical requirements of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.) are inapplicable. Therefore, a regulatory flexibility analysis has not been prepared.

F. Freedom of Information Act

U.S. Department of Commerce regulations implementing the Freedom of Information Act (FOIA) are found at 15 C.F.R. Part 4, "Public Information." These regulations set forth rules for the Department regarding making requested materials, information, and records publicly available under the FOIA. Applications submitted in response to this Federal Funding Opportunity may be subject to requests for release under the Act. In the event that an application contains information or data that the applicant deems to be confidential commercial information which is exempt from disclosure under FOIA, that information should be identified, bracketed, and marked as "Privileged, Confidential, Commercial or Financial Information." Based on these markings, the confidentiality of the contents of those pages will be protected to the extent permitted by law.

G. Permits and Approvals

It is the applicant's responsibility to ensure that all necessary Federal, state and local government permits and approvals for the proposed work to be conducted are obtained and effective before any research begins. Permits for proposed projects can be held by any formally and substantially involved collaborator, including a NOAA collaborator, provided the collaborator is receiving or providing resources associated with this announcement and

related awards. Failure to apply for and/or obtain Federal, state, and local permits, approvals, letters of agreement, or failure to provide environmental analysis, when necessary, will eliminate any further consideration of a proposed project for funding.