Title:LONG-TERM ECOLOGICAL RESEARCH (LTER) in COASTAL OCEAN ECOSYSTEMS
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LONG-TERM ECOLOGICAL RESEARCH (LTER) in COASTAL OCEAN ECOSYSTEMS

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Program Announcement

NSF 03-599

DIRECTORATE FOR GEOSCIENCES
DIVISION OF OCEAN SCIENCES

FULL PROPOSAL DEADLINE(S): 1 May 2003 by 5:00 P.M. local time.
NATIONAL SCIENCE FOUNDATION

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SUMMARY OF PROGRAM REQUIREMENTS

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GENERAL INFORMATION

Program Title: LONG-TERM ECOLOGICAL RESEARCH (LTER) in COASTAL OCEAN ECOSYSTEMS

Synopsis of Program: This is part of a continuing series of announcements as part of the NSF's Long-Term Ecological Research Program (LTER) and is the third announcement from the Geosciences Directorate in support of the LTER Program. This announcement solicits proposals to augment this nationally and internationally critical research program, and to support long-term research in fundamental, interdisciplinary environmental science.

Cognizant Program Officer(s):

* Phillip Taylor, Biological Oceanography, Program Director, Geosciences, Ocean Sciences, 725 N, telephone: 703-292-8582, e-mail: prtaylor@nsf.gov .

Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):
* 47.050 --- Geosciences

ELIGIBILITY INFORMATION
* Organization Limit: None
* PI Eligibility Limit: Proposals that are submitted to this Announcement of Opportunity and are either previously or subsequently submitted in a substantially similar form to another NSF Program or special announcement, will be returned without completion of the review.
* Limit on Number of Proposals: None

AWARD INFORMATION
* Anticipated Type of Award: Continuing Grant
* Estimated Number of Awards: Up to 3 awards., averaging $750,000 per year for up to six years in the initial six-year duration.
* Anticipated Funding Amount: Approximately $1.5-2.3 million total for first year of all awards pending the availability of funds and depending on the quality of proposals received.

PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS
A. Proposal Preparation Instructions
* Full Proposals: Supplemental Preparation Guidelines
  - The program announcement/solicitation contains supplements to the standard Grant Proposal Guide (GPG) proposal preparation guidelines. Please see the full program announcement/solicitation for further information.

B. Budgetary Information
* Cost Sharing Requirements: Cost Sharing is not required except the standard for NSF awards.
* Indirect Cost (F&A) Limitations: Not Applicable.
* Other Budgetary Limitations: Other budgetary limitations apply. Please see the full program announcement/solicitation for further information.

C. Deadline/Target Dates
* Letters of Intent (optional): None
* Preliminary Proposals (optional): None
* Full Proposal Deadline Date(s): 1 May 2003 by 5:00 P.M. local time.

D. FastLane Requirements
* FastLane Submission: Required
* FastLane Contact(s):
  - Brian Dawson, Information Technology Specialist, GEO/OAD, Directorate for Geosciences, 705 N, telephone: 703-292-4727, e-mail: bdawson@nsf.gov .

PROPOSAL REVIEW INFORMATION
* Merit Review Criteria: National Science Board approved criteria. Additional merit review considerations apply. Please see the full program announcement/solicitation for further information.

AWARD ADMINISTRATION INFORMATION
* Award Conditions: Standard NSF award conditions apply.
* Reporting Requirements: Standard NSF reporting requirements apply.

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SUMMARY OF PROGRAM REQUIREMENTS



## I. INTRODUCTION

To enhance the scope and disciplinary breadth of the Long-Term Ecological Research (LTER) Network, the National Science Foundation (NSF) announces a competition for up to three (3) new LTER sites that focus on ecological systems in the coastal ocean; here meaning ecological systems from the shoreline outward on continental shelves and including the Laurentian Great Lakes, Congressionally defined and interior oceans.

With an initial set of six sites selected in 1980, the National Science Foundation established the Long-Term Ecological Research Program to conduct research on long-term ecological phenomena. The present total of 24 sites represents a broad array of ecosystems and research emphases. The LTER Program is supported at present by many parts of the NSF. The research activities are supported by the Division of Environmental Biology, the Office of Polar Programs, the Division of Social, Behavioral and Economic Sciences, and the Division of Ocean Sciences. Additional support for educational and international activities is provided by the Education and Human Resources Directorate and the Division of International Programs, respectively.

## II. PROGRAM DESCRIPTION

While coastal ocean regions are sites of intense human influence and activity, Only two of the existing sites explicitly focus on the coastal ocean –the continental shelf region from the coastline outward. The Palmer Station LTER is solely focused on this earth system in Antartica; the Santa Barbara Channel LTER looks at the interface with near-shore coastal and terrestrial systems. In addition, four LTER sites are estuarine and “upstream” in their focus on coastal systems.

This competition for Coastal Ocean LTER sites is supported by the Division of Ocean Sciences (OCE) in the Directorate for Geosciences (GEO). It is coordinated with the Division of Environmental Biology (DEB) in the Directorate for Biological Sciences (BIO),which is the lead Division responsible for the LTER Program at the NSF.

The research proposed in response to this announcement should emphasize major ecological processes, and questions/hypotheses germane to coastal marine ecological systems. The work should seek to understand the predominant causes of ecological variability and/or long-term change, and how populations, communities, and ecosystems of the coastal ocean respond. Projects that extend the traditional ecological disciplines represented at LTER sites by incorporating elements of behavioral, evolutionary, and physiological ecology are particularly encouraged. As the extant suite of U.S. LTER Program focuses on terrestrial, freshwater, and land/sea interface systems, preference in this competition will be given to projects that emphasize outer coastlines, coastal oceans, and Laurentian Great Lakes. {I like this section, good job]

In order to achieve major advances in our understanding of these coastal systems, the following elements are encouraged:

--inter-disciplinary, process-oriented, research coordinated among investigators;
--experimental studies across a range of appropriate and manageable spatial and temporal scales;
--development of conceptual, analytical and numerical models to guide the research;
--data management activities to facilitate comparisons with research in other systems; and
--comparative approaches comprising parallel studies in different localities or different ecosystem types.

Proposals submitted to this competition must support the general mission of the LTER Network as outlined below. The research should be innovative and justify well the need for long-term support to understand ecological systems and processes.

The LTER Program

The LTER Network is a collaborative effort among over 1200 scientists and students investigating ecological processes over long temporal and broad spatial scales. The Network extends the opportunities and capabilities of the individual sites to promote synthesis and comparative research across sites. The Network is managed by an Executive Committee and a larger Coordinating Committee comprised of representatives of the LTER sites. The LTER Network Office supports, facilitates, and enhances the research and creative activities developed by the LTER Network. In addition, the LTER Network Office plays a leadership role in developing and implementing data and information management standards and protocols for the LTER Network, as well as for the broader community of environmental scientists. Additional information about the LTER Network and the LTER Network Office can be obtained from the LTER homepage on the world wide web at http://lternet.edu.

Prospective investigators are strongly urged to contact current LTER Principal Investigators to learn more about the structure, management and expectations of an LTER site. Additional information and advice regarding LTER proposals and the integration of new sites into the LTER Network can be found at http://www.lternet.edu/propinfo.

An International LTER (ILTER) Network has been more recently developed, coordinated by the LTER Network Office. The purpose of the ILTER is to encourage the development of a world-wide network of long-term research sites. Proposals for land/ocean-margin LTER sites may also consider the potential for developing international collaboration in conjunction with ILTER. Information on ILTER can be found at http://www.ilternet.edu.

## III. ELIGIBILITY INFORMATION

The categories of proposers identified in the Grant Proposal Guide are eligible to submit proposals under this program announcement/solicitation.

## IV. AWARD INFORMATION

Approximately $1.5-2.5 million is available for the first year of support for proposals selected for funding , pending the availability of funds and depending on the quality of proposals received. Up to 3 awards, averaging $750,000 per year for six years each are anticipated.

## V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

### A. Proposal Preparation Instructions

Proposals to join the LTER Network

In developing proposals and planning the research for LTER projects in coastal ocean ecosystems [Phil: Can this be standardized throughout? See below], potential LTER project groups are expected to demonstrate that they can provide the scientific and organizational coordination of their projects with ongoing research at the 24 existing sites, and, where appropriate, with international sites, as well. Research questions, analytical methods, information management, and data accessibility protocols are all important areas for coordination that must be explicitly addressed.. An LTER proposal may be submitted for a site with ongoing research, or for a site which would require an entirely new effort. It should be noted, however, that in previous competitions the existence of major, relevant long-term databases for a site was viewed positively by peer reviewers. In addition, the Principal Investigator(s) will be expected to make a long-term time commitment to the proposed project, and to participate in relevant LTER Coordinating and Executive Committee activities. In general, LTER investigators are expected to contribute to network-level, cross-site and synthesis activities, and to adhere to LTER Network data management policies (see the LTER homepage on the world wide web at http://www.lternet.edu).

Proposal Content

To date, the general mission of the LTER Network has been to (1) understand ecological phenomena which occur over long temporal and broad spatial scales, (2) create a legacy of well-designed and documented ecological experiments, (3) conduct major syntheses and theoretical efforts, and (4) provide information necessary for the identification and solution of environmental problems. LTER research should be developed around a site-specific conceptual framework that generates questions requiring experiments and observations over long time frames and broad spatial scales. The conceptual frameworks of the existing LTER sites are broadly focused around five core areas:

- pattern and control of primary production,
- spatial and temporal distribution of populations selected to represent trophic structure,
- pattern and control of organic matter accumulation in surface soils and sediments,

patterns of inorganic inputs and movements of nutrients through soils, groundwater, and surface waters, and

- patterns, frequency, and effects of disturbance to the research site.

The five core areas help to focus and integrate LTER research within and across sites. These core areas are broadly defined and must be incorporated into the research proposed in coastal ocean ecosystems. In addition to the traditional LTER core areas, research at coastal ecosystem LTER sites will:

- increase the understanding of the organization and function of coastal ocean ecosystems,
- investigate the linkages between these systems and adjacent terrestrial and marine systems, and

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Proposal Format

Proposals submitted in response to this program announcement/solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF Grant Proposal Guide (GPG NSF-03-2). The complete text of the GPG is available electronically on the NSF Web Site at: http://www.nsf.gov/cgi-bin/getpub?gpg . Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (301) 947-2722 or by e-mail from pubs@nsf.gov .

Proposers are reminded to identify the program solicitation number (NSF 03-???) in the program announcement/solicitation block on the proposal Cover Sheet. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

Please note the page limits contained in this announcement take precedence over those given in the GPG. Additionally, collaborative proposals (*sensu* NSF guidelines) will not be accepted. Each project must be managed by a single institution with other institutions involved via sub-awards.

Proposals will be subjected to initial screening for the requirements in the GPG and this announcement, and will be returned without review or advance notification for non-compliance. Proposals will not be forwarded to other Programs if found to be inappropriate for this competition.

Proposals should be clearly identified by a title starting with the acronym, "LTER:," and the following should be placed on the cover sheet in the box for the NSF Organizational Unit, "LTER, NSF 03-??." Proposals must be limited strictly to 25 single spaced pages for the body of the research narrative, including figures and tables (i.e., introduction, literature review, hypotheses, methods, data analysis, and logistics). The proposal text should be single-spaced with a 12-point font (or larger) and one inch (2.4cm) margins on all sides.

Proposals should include explicit plans for the documentation, archiving, and dissemination of research data. All funded participants must adhere to the data management policies applying to recipients of federal funding from OCE and DEB, as well as the LTER Network policies (see the LTER homepage on the world wide web at http://www.lternet.edu). Proposals should be prepared in the following format:

Section 1. Results from prior NSF support (as per *Grant Proposal Guide* (GPG, NSF-03-2). (≤ 5 pages of narrative; total of 5 pages maximum*). * The lists of publications and datasets for this section may be put into the Supplementary Documentation part of Fastlane (be sure to follow the format requirements).

Section 2. Develop and explain the conceptual framework that provides the unifying theme for the proposed Coastal Ocean LTER research. (≤ 20 pages of narrative *plus* ≤ 15 pages of illustrations, tables and figures; 35 pages total maximum, but no substitution is allowed of narrative pages for graphics pages). Describe in some detail the long-term experiments, sampling protocols, and monitoring to be done, and explain how they fit into your conceptual framework. Describe the methods and data analyses such that the quality of these long-term efforts can be critically evaluated by reviewers. In addition, describe any short-term, mechanistic experiments, empirical studies, sampling programs, modeling efforts, etc., that will be conducted. Again, describe the methods and planned analyses in detail and explain how these short-term studies fit into the conceptual framework. Also, conceptually integrate these above efforts to the proposed long-term studies. Outline any regionalization, cross-site, or other collaborative efforts involving the LTER network that are planned if they are not part of your core program (network activities). Close this section with a synthesis that ties together the proposed research activities.

Overall, an LTER site should be conducting hypothesis-driven, long-term research coupled with short-term mechanistic studies to derive understanding of long-term dynamics. Modeling efforts are important, and should be discussed in detail where appropriate.

Section 3. Describe the research management plan for the proposed site. (≤ 2 pages of narrative *plus* ≤ 1 page for figures/tables; 3 pages maximum). Specifically, describe how funding, research, and participation decisions will be made and implemented. What efforts will be made to encourage non-LTER scientists

from your institution or other institutions to use your site as a research platform? Include any plans for enhancing diversity of scientists at your site.

Section 4. One of the strengths of the LTER network is the quality of and emphasis on information management and metadata standards. (≤ 3 pages narrative *plus* ≤ 1 pages of tables/figures; 4 pages maximum). It is expected that data derived from LTER funding will be made freely and widely available as soon as possible (not to exceed 2 years after collection), although exceptions are made for some types of data. Describe the proposed data and information management system and metadata standards to be used at your site. How will the data management activity be implemented in the design of research projects? How is the data manager involved in the design of research projects? What mechanisms will you employ to assure that researchers contribute their data to the LTER databases? How quickly are data sets made available to other researchers? What criteria, if any, will be used to limit or provide other researchers access to data sets? How often will data sets be updated on the World Wide Web?

Section 5. Describe your outreach program, including educational activities at all levels, public activities, media interactions, implications/applications of your research to policy and management, etc. Include a plan for the development of your outreach program. (≤ 2 pages text *plus* ≤ 1 page of tables/figures; 3 pages maximum).

Section 6. Literature Cited in Sections 1 & 2. Pages as needed.

Section 7. Budget pages and detailed budget description. Funding will be provided at $750,000 per year for six years. It is expected from the outset that all projects will seek and document significant extramural funding from sources other than NSF and the home institutions of the investigators. Describe any cost sharing, other sources of funding, how the LTER funds will be leveraged at your site, and what other in-kind services will be provided and by whom.

Section 8. Provide a one-page curriculum vitae (CV) for each PI and senior scientist listed in the proposal, and for key international participants, if relevant. List only FIVE publications per investigator on their CV. Also, provide one separate alphabetical list of all scientific collaborators and a list of conflicts of interest for all of the PIs and other LTER participants whose CVs' appear in the proposal, rather than listing these separately on each CV. *Do not list conflicts separately on each CV.*
submit this under Supplemental Material" in FastLane . In addition submit this collaborator/conflict list to the Program Officer in charge.

Section 9. Current and Pending support of each PI and senior investigator.

Protocols for safety and security - Proposals that work directly with microbes retrieved from extreme environments are expected to address appropriate safety and security issues (isolation, ultraclean facilities, decontamination and access) in the research and management plans. Investigators are expected to follow appropriate guidelines established for the Microbial Observatories announcement (http://www.nsf.gov/pubs/2002/nsf02118/nsf02118.txt).

Ship time - Proposals may require the scheduling of NSF-UNOLS ship time. These proposals must include a completed NSF-UNOLS Request Form (NSF Form 831). The UNOLS form may be obtained from the NSF Division of Ocean Sciences Ship Operations Program, National Science Foundation by calling (703) 292-8581, or directly from the UNOLS World Wide Web site at http://www.unols.org.

B. Budgetary Information

Cost sharing is not required in proposals submitted under this Program Announcement.

C. Deadline/Target Dates

Full Proposals must be submitted by the following date(s): 1 May 2003, by 5:00 PM Local Time.

D. FastLane Requirements

Proposers are required to prepare and submit all proposals for this Program Announcement through the FastLane system. Detailed instructions for proposal preparation and submission via FastLane are available at: http://www.fastlane.nsf.gov/a1/newstan.htm . For FastLane user support, call the FastLane Help Desk at 1-800-673-6188 or e-mail fastlane@nsf.gov . The FastLane Help Desk answers general technical questions related to the use of the FastLane system. Specific questions related to this Program Announcement should be referred to the NSF program staff contact(s) listed in Section VIII of this announcement/solicitation.

Submission of Electronically Signed Cover Sheets. The Authorized Organizational Representative (AOR) must electronically sign the proposal Cover Sheet to submit the required proposal certifications (see Chapter II, Section C of the Grant Proposal Guide for a listing of the certifications). The AOR must provide the required electronic certifications within five working days following the electronic submission of the proposal. Proposers are no longer required to provide a paper copy of the signed Proposal Cover Sheet to NSF. Further instructions regarding this process are available on the FastLane website at: http://www.fastlane.nsf.gov .

VI. PROPOSAL REVIEW INFORMATION

A. NSF Proposal Review Process

Reviews of proposals submitted to NSF are solicited from peers with expertise in the substantive area of the proposed research or education project. These reviewers are selected by Program Officers charged with the oversight of the review process. NSF invites the proposer to suggest, at the time of submission, the names of appropriate or inappropriate reviewers. Care is taken to ensure that reviewers have no conflicts with the proposer. Special efforts are made to recruit reviewers from non-academic institutions, minority-serving institutions, or adjacent disciplines to that principally addressed in the proposal.

The two National Science Board approved merit review criteria are listed below (see the Grant Proposal Guide Chapter III.A for further information). The criteria include considerations that help define them. These considerations are suggestions and not all will apply to any given proposal. While proposers must address both merit review criteria, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which he/she is qualified to make judgements.

(1) What is the intellectual merit of the proposed activity?
How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

(2) What are the broader impacts of the proposed activity?
How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

NSF staff will give careful consideration to the following in making funding decisions:

Integration of Research and Education

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

Additional Review Criteria

Proposals that are submitted to this Announcement of Opportunity and are either previously or subsequently submitted in a substantially similar form to another NSF Program or special announcement, will be returned without completion of the review.

B. Review Protocol and Associated Customer Service Standard

All proposals are carefully reviewed by at least three other persons outside NSF who are experts in the particular field represented by the proposal. Proposals submitted in response to this nnouncement/solicitation will be reviewed by Mail Review followed by Panel Review.

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

A summary rating and accompanying narrative will be completed and submitted by each reviewer. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the identities of reviewers, are sent to the Principal Investigator/Project Director by the Program Director or by using FastLane. In addition, the proposer will receive an explanation of the decision to award or decline funding.

Proposers will be contacted by the Program Officer after the recommendation to award or decline funding has been approved by the . Division Director. This informal notification is not a guarantee of an eventual award.

NSF is striving to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. The time interval begins on the closing date of an announcement/solicitation or the date of proposal receipt (whichever is later). The interval ends when the Division Director accepts the Program Officer's recommendation.

In all cases, after programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at one's own risk.

## VII. AWARD ADMINISTRATION INFORMATION

A. Notification of the Award

Notification of the award is made to the submitting organization by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program Division administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See section VI.A. for additional information on the review process.)

B. Award Conditions

An NSF award consists of: (1) the award letter, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award letter; (4) the applicable award conditions, such as Grant General Conditions (NSF-GC-1)* or Federal Demonstration Partnership (FDP) Terms and Conditions;* and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. Cooperative agreement awards also are administered in accordance with NSF Cooperative Agreement Terms and Conditions (CA-1). Electronic mail notification is the preferred way to transmit NSF awards to organizations that have electronic mail capabilities and have requested such notification from the Division of Grants and Agreements.

*These documents may be accessed electronically on NSF's Web site at http://www.nsf.gov/home/grants/grants_gac.htm. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (301) 947-2722 or by e-mail from pubs@nsf.gov.

More comprehensive information on NSF Award Conditions is contained in the NSF Grant Policy Manual (GPM) Chapter II, available electronically on the NSF Web site at http://www.nsf.gov/cgi-bin/getpub?gpm. The GPM is also for sale through the Superintendent of Documents, Government Printing Office (GPO), Washington, DC 20402. The telephone number at GPO for subscription information is (202) 512-1800. The GPM may be ordered through the GPO Web site at http://www.gpo.gov.

C. Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the PI must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period.

Within 90 days after the expiration of an award, the PI also is required to submit a final project report. Approximately 30 days before expiration, NSF will send a notice to remind the PI of the requirement to file the final project report. Failure to provide final technical reports delays NSF review and processing of pending proposals for that PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

NSF has implemented an electronic project reporting system, available through FastLane. This system permits electronic submission and updating of project reports, including information on project participants (individual and organizational), activities and findings, publications, and other specific products and contributions. PIs will not be required to re-enter information previously provided, either with a proposal or in earlier updates using the electronic system.

VIII. CONTACTS FOR ADDITIONAL INFORMATION

General inquiries regarding Research in Biogeosciences 2003 should be made to:

* Phillip Taylor, Biological Oceanography, Program Director, Geosciences, Ocean Sciences, 725 N, telephone: 703-292-8582, e-mail: prtaylor@nsf.gov.

For questions related to the use of FastLane, contact:

* Brian Dawson, Information Technology Specialist, GEO/OAD, Directorate for Geosciences, 705 N, telephone: 703-292-4727, e-mail: bdawson@nsf.gov.

## IX. OTHER PROGRAMS OF INTEREST

The NSF Guide to Programs is a compilation of funding for research and education in science, mathematics, and engineering. The NSF Guide to Programs is available electronically at http://www.nsf.gov/cgi-bin/getpub?gp . General descriptions of NSF programs, research areas, and eligibility information for proposal submission are provided in each chapter.

Many NSF programs offer announcements or solicitations concerning specific proposal requirements. To obtain additional information about these requirements, contact the appropriate NSF program offices. Any changes in NSF's fiscal year programs occurring after press time for the Guide to Programs will be announced in the NSF E-Bulletin, which is updated daily on the NSF web site at http://www.nsf.gov/home/ebulletin , and in individual program announcements/solicitations. Subscribers can also sign up for NSF's Custom News Service (http://www.nsf.gov/home/cns/start.htm) to be notified of new funding opportunities that become available.

## ABOUT THE NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Awardees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation. NSF welcomes proposals from all qualified scientists, engineers and educators. The Foundation strongly encourages women, minorities and persons with disabilities to compete fully in its programs. In accordance with Federal statutes, regulations and NSF policies, no person on grounds of race, color, age, sex, national origin or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from NSF (unless otherwise specified in the eligibility requirements for a particular program).

Facilitation Awards for Scientists and Engineers with Disabilities (FASED) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects. See the program announcement/solicitation for further information.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation about NSF programs, employment or general information. TDD may be accessed at (703) 292-5090, FIRS at 1-800-877-8339.

The National Science Foundation is committed to making all of the information we publish easy to understand. If you have a suggestion about how to improve the clarity of this document or other NSF-published materials, please contact us at plainlanguage@nsf.gov.

## PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in

connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the proposal review process; to applicant institutions/grantees to provide or obtain data regarding the proposal review process, award decisions, or the administration of awards; to government contractors, experts, volunteers and researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

Pursuant to 5 CFR 1320.5(b), an agency may not conduct or sponsor, and a person is not required to respond to an information collection unless it displays a valid OMB control number. The OMB control number for this collection is 3145-0058. Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Suzanne Plimpton, Reports Clearance Officer, Division of Administrative Services, National Science Foundation, Arlington, VA 22230, or to Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for National Science Foundation (3145-0058), 725 17th Street, N.W. Room 10235, Washington, D.C. 20503.

OMB control number: 3145-0058.