U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Water

Office of Science and Technology

Request for Proposals

BIOLOGICAL CRITERIA PROGRAM

OVERVIEW INFORMATION

This is a Request for Proposals (RFP) for the Office of Water (OW), Office of Science & Technology (OST), Health and Ecological Criteria Division (HECD), Ecological Risk Assessment Branch (ERAB)--Biological Criteria Program. This action announces the availability of funds under Statutory Authority of Section 104(b)(3) of the Clean Water Act. This assistance program is described in the Catalog of Federal Domestic Assistance Section 66.436 titled Surveys, Studies, Investigations, Demonstrations, and Training Grants and Cooperative Agreements. There are no costsharing or matching requirements.

DATES

Opening Date: November 1, 2004 Closing Date: January 1, 2005

All proposals must be submitted to EPA Headquarters at the address shown below postmarked prior to, or on, the closing date of this RFP announcement. Proposals postmarked and received after the deadline may not be considered.

HOW TO APPLY

Two hard copies and an electronic version (WordPerfect or compatible software such as MS Word) of each proposal should be submitted to EPA Headquarters, the Ecological Risk Assessment Branch. Please mail all paper versions of proposal materials to the address listed below in address A. Applicants selected for funding based on the

evaluation criteria in this RFP will receive a notice of such from EPA and will be asked to send all paper copies of the federal assistance application package to this address as well. If diskette copies, CD copies or other electronic media are sent, please send these via FEDEX to address B. Due to security procedures used to screen postal mail (irradiation), CDs, diskettes and other electronic media will be destroyed if sent to address A.

Address A: (PAPER MAIL ONLY, No CDs or Diskettes)

William F. Swietlik, Chief Ecological Risk Assessment Branch Biocriteria RFP 2005 US EPA Office of Water Office of Science and Technology Health and Ecological Criteria Division (4304T)1200 Pennsylvania Avenue, NW Washington, DC 20460

Address B: (FEDEX ONLY)

William F. Swietlik, Chief **Ecological Risk Assessment Branch** Biocriteria RFP 2005 **US EPA** Room 7233R 7th Floor Connecting Wing 1301 Constitution Avenue, NW Washington, DC 20460

FUNDING OPPORTUNITY DESCRIPTION

EPA seeks to award financial assistance to State water pollution control agencies, Federally recognized Indian Tribal Governments, institutions of higher education, interstate agencies, and other public or nonprofit private agencies, institutions, organizations and individuals under the authority of Section 104(b)(3) of the Clean Water Act to support research within various ecoregions and waterbodies nationwide to support the development and implementation of biological assessments and criteria within specific EPA Regions of the country. The focus of this research will serve to better understand the complex relationships among physical and biological responses of water bodies. Funding will be provided to support the development and implementation of biological assessments and criteria into water quality standards programs by States and Tribes including such activities as, conducting state-wide assessments, compiling bioassessment databases, analyzing biological data, developing indexes, reference conditions, classification systems, holding workshops and meetings, taxonomic training, revising water quality standards, improving designated aquatic life uses and maintaining and operating technical support capabilities/ centers for the States and Tribes.

AWARD INFORMATION

For biological assessments and criteria, the focus for 2005 will be on providing direct technical support to the States and Tribes for the development and implementation of biological criteria into their water quality standards programs.

For this competition, the Program anticipates awarding either grants or cooperative agreements. With cooperative agreements, EPA may have substantial involvement in the project implementation. Awards may range from approximately \$5,000 to \$20,000 (maximum of \$30,000 per

EPA Region for those regions in which applications will be accepted). EPA encourages cost sharing among applicants and will add funds to existing grants or cooperative agreements, where feasible, to reduce administrative costs.

ELIGIBILITY INFORMATION

Eligible Applicants:

Agencies and organizations selected for funding must be knowledgeable in the areas of biological assessments and criteria and water quality standards programs, in addition to demonstrating a strong ability to leverage resources.

State water pollution control agencies, Federally recognized Indian Tribal Governments, institutions of higher education, interstate agencies, and other public or nonprofit private agencies, institutions, organizations and individuals are eligible to apply for this program. Non-profits must be a 501(c)(3) organization.

For this fiscal year (October 1, 2004 to September 30, 2005), proposals will be accepted for projects that are located within the following EPA Regions and their States:

EPA Region 1: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont & 10 Tribal Nations

EPA Region 5: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin and 35 Tribes

EPA Region 7: Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations

EPA Region 8: Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations

EPA Region 9: Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations

EPA Region 10: Alaska, Idaho, Oregon, Washington and Native Tribes. In this

Region, project proposals focusing on developing biological assessment and criteria tools for wetlands, large rivers and lakes are the highest priority under this RFP.

National Scope: Project proposals of national scope may also be submitted.

Cost Sharing or Matching:

There are no cost-sharing or matching requirements.

Other:

We encourage recipients of Federal funds to familiarize themselves with the regulations applicable to assistance agreements found in the Code of Federal Regulations (CFR) Title 40, Part 30 for non-profit organizations and institutions of higher education group, and Part 31 for State and local government entities (see http://www.epa.gov/docs/epacfr40/chapt-l.info/subch-B.htm. You may also obtain a copy of the CFR Title 40, Part 30 and Part 31 at your local U.S. Government Bookstore, or through the U.S. Government Printing Office.

In accordance with Federal statutes and regulations and EPA policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from the Environmental Protection Agency.

EPA reserves the right to reject all proposals or applications and make no awards based on federal government budgetary circumstances or other programmatic factors.

OVERVIEW

The identification of water quality degradation requires appropriate monitoring tools. Such tools help us detect and characterize the cause and source of chemical, physical and biological impairment. Bioassessments are the primary tool to

evaluate the biological condition of a waterbody. Bioassessments consist of surveys and other direct measurements of aquatic life—aquatic vegetation and algae, fish, insects, crayfish, salamanders, frogs, worms, snails, mussels, etc.—in the waterbody. Bioassessments, along with other physical and chemical assessments, are crucial for evaluating the health of a waterbody.

Aquatic life integrates the cumulative effects of different stressors such as excess nutrients, toxic chemicals, increased temperature, and excessive sediment loading. Therefore, bioassessments allow us to measure the aggregate impact of the stressors. Because biological communities respond to stresses over time, they provide information that more rapidly-changing water chemistry measurements or toxicity tests do not always produce. As such, bioassessment provides a more reliable assessment of long-term biological changes in the condition of a waterbody. The central purpose of assessing biological condition of aquatic communities is to determine how well a water body supports aquatic life.

Bioassessments reflect the condition of overall ecological integrity (i.e., when the biology is healthy, typically the chemical and physical components of a waterbody are also in good condition). Therefore, bioassessments directly assess the condition of ecosystem health, a primary goal of the Clean Water Act (CWA). Biologists and other natural resource scientists use accepted scientific principles to derive biocriteria from bioassessment data. Biocriteria are narrative descriptions or numerical values that states and tribes can adopt into water quality standards to describe a desired condition for the aquatic life in waters they have designated for aquatic life use. The standards, in turn, are used along with chemical and physical criteria to better manage water resources.

The use of biological assessment and criteria for managing the Nation's waterbodies is progressing and is equipping the states, tribal nations, and EPA with a more effective

set of monitoring tools for protecting the ecological integrity of our water resources. In recent years, progress has been made in using bioassessments to establish biocriteria. In 1994, twenty states were beginning a biological assessment program for streams and rivers, and fourteen states had biological programs in place. However, only eleven were developing or had developed biocriteria based on their monitoring programs. By 2001, most states and several tribes had established biological monitoring programs for streams and small or wadeable rivers and were using quantitative biocriteria. The development of biocriteria for bodies of water other than streams and wadeable rivers is more recent.

Bioassessments provide crucial water quality information for managing complex water quality problems. Many natural, chemical, and physical integrity factors directly influence biological integrity. Hence, attaining biological integrity reflects good waterbody health. When human activities disrupt chemical and physical integrity, biological integrity is also compromised, and ecological health declines. Bioassessments are the tool for measuring biological condition and serve three primary functions:

- 1. screening or initial assessment of conditions
- 2. characterization of impairment and diagnosis; and
- 3. trend monitoring to evaluate improvements or further degradation.

One use of bioassessments is to help states and tribes develop expectations for acceptable biological conditions. This is done through a technical process of establishing aquatic life goals, referred to as aquatic life uses (ALU). Biological assessments allow various levels of ALUs, so that one set of standards supports intact communities in a waterbody, and other sets of standards establish restoration goals for rural or urban streams or other altered ecosystems. Using several types, or tiers, of ALUs allows states and tribes to allocate limited resources to

waterbodies in proportion to their need for protection.

APPLICATION & SUBMISSION INFORMATION

Proposals: (PLEASE NOTE)--

This year the EPA Biocriteria Program is requiring applicants to submit a short proposal as the first step in the application process.

Once projects are screened under the proposal stage based on the evaluation criteria in this RFP, applicants will be notified by EPA of the status of their particular proposal (selected for funding or rejection). For those projects selected for funding, EPA will require applicants to submit a complete federal assistance application package. This two step process should save applicants time and effort.

Complete Application Packages:

Once an applicant is notified that their proposal has been accepted for funding, a complete application package must be submitted. The Application Kit for Federal Assistance is available at: http://www.epa.gov/ogd/grants/how to apply. htm. This website explains how to complete SF-424A Budget Forms and describes cost principles for a Federal grant. Paper copies of application kits may also requested by contacting the Environmental Protection Agency, Grants Administration Division, 3903R, Washington, DC 20460.

Grant applicants will be required to provide a Dun and Bradstreet (D & B) Data Universal Numbering System (DUNS) number when applying for Federal grants or cooperative agreements. Organizations can receive a DUNS number in one day, at no cost, by calling the dedicated toll-free DUNS Number request line at 1-866-705-5711 or by visiting www.dnb.com.

Content and Form of Proposals:

Each proposal should not exceed five pages of double spaced text on 8.5" x 11" paper using 12 point font size and should be structured according to the following annotated outline (Proposals that do not meet the page limit and content requirements may not be considered):

I. Applying Organizational Information:

- A brief paragraph identifying the organization and its water quality/data analysis or biocriteria experience.
- Names, phone numbers, business addresses, e-mail addresses for Principle Investigator(s) and key associates.
- A description of facilities, equipment and other supplies to be able to meet the evaluation criteria listed above.
- A written description of the expertise as required under the evaluation criteria listed above.

II. Project Description:

- (1) Description of the Project:
 - A summary description of what is proposed in the project and how the project will be carried out.
- (2) Time frames and key milestones for completing the project.
- (3) Expected products.
- (4) Benefits of the project results or products to the applying organization, to state or tribal agencies, other stakeholders or to the citizens or public at large.

III. Quality Assurance Procedures

- Brief (two to three paragraphs) statement of quality assurance procedures which will be used in the project.

IV. Funding Summary:

- The total funding requested and a summary budget describing in general categories how the requested funds will be spent.

Applicants are advised to clearly mark any information they consider to be confidential. EPA will make final confidentiality determinations in accordance with Agency regulations at 40 CFR Part 2, Subpart B.

Intergovernmental Review:

The funds associated with this announcement require Executive Order (E.O.) 12372, "Intergovernmental Review of Federal Programs", review. E.O. 12372 structures the federal government's system of consultation with states and local governments on its decisions involving grants, other forms of financial assistance, and direct development. Under E.O. 12372, states, in consultation with their local governments, design their own review process and select the federal financial assistance and direct development activities they wish to review. If selected for funding, the recipient of the federal assistance agreement will be required to send a copy of their application and proposal to the appropriate State Clearinghouse Office for an intergovernmental review, if applicable. (See: http://www.whitehouse.gov/omb/grants/spoc. html)

Funding Restrictions:

Pre-award costs will be allowed when adequately identified in the approved application.

APPLICATION REVIEW INFORMATION

Criteria:

All project proposals will be ranked on the basis of the following evaluation criteria. Ranking for each criterion is based on a scale of 0 (does not meet the requirement) to 5 (exceeds the requirement).

- Existing expertise in biological assessment and criteria development.
- Existing/immediate capability to provide technical support for States and Tribes on biological assessments and criteria development and implementation.
- Expertise with geographical influences on biological assessment and criteria development.
- Expertise with local water body types (i.e., lakes and reservoirs, great rivers, streams, small rivers, headwaters, intermittent and ephemeral systems, estuaries and coastal marine waters, and wetlands).
- Expertise in biological assessment data handling, analysis and storage.
- Adequate existing facilities, laboratories, taxonomic identification equipment, sampling equipment, etc., for the conduct of successful biological assessments and the provision of support to the States and Tribes.
- The project supports the goals and objectives of the biocriteria program for each respective Region in which it is located as well as the goals and objective of the National Program.
- The project results in biological criteria or assessment protocols, or is a crucial component of the process leading to these products.

Review and Selection Process:

EPA Headquarters will send copies of the submitted proposals to each EPA Regional Biocriteria Coordinator for review. Each Regional Biocriteria Coordinator will make a recommendation to approve or reject any proposal in their region in accordance with the criteria described below. In consultation with the Regional Biocriteria Coordinators, Headquarters will review each project and recommendation, and with Headquarters concurrence, the recommended projects will be funded and managed through the Regional grants administration offices.

AWARD ADMINISTRATION INFORMATION

Award Notices:

Successful applicants will receive a notice of award through postal mail or by email. The notice of award signed by the grants officer (or equivalent) is the authorizing document, and will be mailed to the individual signing the original application.

Administrative and National Policy Requirements:

Please see the Grants Administration Division website samples of EPA's terms and conditions for administrative and national policy requirements: www.epa.gov/ogd/grants

Reporting:

In negotiating these grants, EPA will work closely with recipients to incorporate appropriate performance measures and reporting requirements into each grant agreement consistent with 40 CFR 30.51, 31.40, 35.115, and 35.515. These regulations provide some flexibility in determining the appropriate content and frequency of performance reports, depending on the complexity of the project. At a minimum, however, the reporting schedule must require the recipient to report at least annually.

Quality Assurance (QA/QC) Procedures:

At a minimum, QA/QC procedures will be required for all projects involving the generation of original data, or the collection and usage of secondary data. These will be required in the terms and conditions of the award.

AGENCY CONTACTS

For pre-application assistance or any questions related to this request for proposals, please contact:

William F. Swietlik swietlik.william@epa.gov 202-566-1129: voice 202-566-1140 or 1139: fax

Applicants are responsible for the content of their proposals. The receipt of information and pre-application assistance from EPA does not guarantee consideration for funding.

OTHER INFORMATION

Should a dispute arise during the course of this competition, the resolution process described in 40 CFR 30.63 and Part 31, subpart F will be used.