

# **ANNOUNCEMENT OF AN EQUIPMENT LOAN PROGRAM FOR VOLUNTEER WATER MONITORING**

**By  
EPA New England**

## **I. PURPOSE OF AN EPA EQUIPMENT LOAN PROGRAM FOR VOLUNTEER WATER MONITORING**

The U.S. Environmental Protection Agency (EPA) has identified improved water quality monitoring as one of its highest priorities, in recognition of the value of monitoring data in guiding EPA's and the states' and tribes' efforts to improve the health of the Nation's waters. There are waters, however, that states, tribes and EPA are not able to monitor at all or only on at a very limited frequency. Here in New England, volunteer groups have played a valuable role in supplementing the available monitoring data. With this equipment loan program, EPA New England expects to support and enhance the work of existing monitoring groups and assist the start up of new groups who seek to monitor waters for which there is no current data.

This loan program is restricted to equipment only, and does not include expendable supplies. Attachment A contains examples of equipment, although there are other types of equipment that may be loaned that are not on this list. EPA is kicking off this equipment loan program during spring 2006, with the intention that it may continue to be offered in succeeding years.

## **II. EQUIPMENT EPA CAN PROVIDE TO VOLUNTEER MONITORING GROUPS**

Attachment A in this announcement contains examples of equipment that could be requested, with some estimated costs. Exact costs and specific equipment loaned would be refined through discussions with each selected group. The equipment loaned to each selected group this year will be limited to \$2,500 in value.

EPA currently has available basic water quality sets consisting of a YSI Model 85 Dissolved Oxygen Meter with 100 foot line for profiles, pH pen meters, and a barometer. This equipment would be available immediately for long-term loan to the selected groups, as requested in applications. Other equipment may also be provided to meet equipment needs.

## **III. ELIGIBILITY OF VOLUNTEER MONITORING GROUPS**

The equipment loan program is open to all volunteer monitoring groups in New England, including those coordinated by states, tribes, universities and other organizations. It is open to groups along a wide spectrum of experience levels – those that are just getting started as well as those with extensive and long-term experience.

As part of the loan program, selected groups will need to have a current Quality Assurance Program or Project Plan (QAPP). If a group is just getting started in monitoring, the QAPP will need to be final prior to receiving equipment.

The goals of data use must be for a local application and for sharing with at least one state or tribal agency for the purpose of assessing water quality conditions. Groups collecting data only for educational purposes will not be eligible for this program.

#### IV. SELECTION PROCESS

EPA intends to select as least two groups in each New England state. Two categories of monitoring will be given priority in the selection process:

- Organizations that currently provide monitoring data to a state agency, and are seeking to upgrade the type of methods used, and/or expand the number or types of monitoring sites. Expanding coverage on a watershed basis will be highly regarded by EPA.
- Small groups just getting started with monitoring who need equipment to get underway. Evidence of a commitment to undertake monitoring with a goal of producing data for long-term use is desirable.

Minimum criteria for ranking applications include at least the following:

- Complete information provided in application
- Identification of the type and number of pieces of equipment. Cost estimates are very helpful, but EPA understands that final costs will be determined at the time of purchase. Groups are encouraged to provide a list of equipment in order of priority.
- The group has a Quality Assurance Project or Program Plan, or indicates the intention of having a final QAPP prior to receiving monitoring equipment.
- A description or map indicating location and number of sample sites for which equipment will be used. If equipment will be used over an large number of sites, a description of how the monitoring program will be improved
- A statement about the use of the data by a state agency for reporting under a Clean Water Act or other federal statutory program. If a group is just beginning its monitoring program, a statement regarding the contact the group is working with at a state agency.
- A statement about providing data in a spreadsheet format (e.g., ACCESS, EXCEL, etc.)
- A statement identifying a goal of uploading data to EPA's national water quality data system, using a web-based approach. EPA will assist uploading the first year's data that is useable for sharing, if the group needs assistance.
- A statement regarding maintaining equipment in useable condition, and notifying EPA concerning loss or damage.

- A statement concerning the willingness to participate in an event highlighting this new equipment loan program and World Monitoring Day.

The application must also reflect agreement with additional conditions contained in this announcement

## V. CONDITIONS OF EQUIPMENT LOANS

- a. Each applicant selected may be asked, and if so agrees, to participate in a local press event announcing the loan program and/or associated with World Water Monitoring Day in the fall of 2006.
- b. Equipment can be loaned on a long-term basis of up to five years. After this period, an additional loan or return of equipment may occur.
- c. Applicant agrees to maintain equipment in good working condition.
- d. Equipment will be labeled as belonging to EPA and will remain EPA equipment for the duration of the loan.
- e. The applicant agrees to notify EPA upon loss or damage to the equipment. Damaged equipment may be repaired by EPA or may need to be returned to EPA without replacement, depending upon circumstances.
- f. A loan agreement will be signed by the responsible leader of the organization.
- g. Each group will be required to provide a brief (5 page maximum) annual environmental data report. The report will be due to EPA by March 1st of each year in which the monitoring equipment is on loan.
- h. Each applicant agrees to upload data to EPA's national water quality database (i.e., STORET or the Water Quality Data Exchange (WQX) currently under development). If not able to upload data, applicant or provide data in a compatible format to EPA for uploading to the national database. If EPA uploads the data, the group will need to provide metadata and other organizational information as needed.

## VI. APPLICATION PROCEDURE & SCHEDULE

Attachment B in this announcement is an outline for an application that can be used by groups. Applications should be limited to three pages, including an equipment list and a map of sites (if appropriate).

Once applications are received, an Equipment Loan Application Review Committee within EPA New England will review and make recommendations on selections. EPA will seek input from State agencies regarding selections, if there is no conflict of interest, i.e., if a state program is not an applicant. EPA may elect to maintain the list of applicants responding to this announcement, such that if additional funding is available over the next fiscal year, loans may be made available to more groups without new applications being submitted.

Applications will be accepted through close of business August 2, 2006 with selections to be announced by August 28, 2006.

Send applications to:

Diane Switzer  
EPA New England  
OEME-ECA  
11 Technology Drive  
North Chelmsford, MA 01863  
Email: [switzer.diane@epa.gov](mailto:switzer.diane@epa.gov)

For further information, please contact:

Diane Switzer  
Phone: 617-918-8377  
[switzer.diane@epa.gov](mailto:switzer.diane@epa.gov)

or

Katrina Kipp  
617-918-8309  
[kipp.katrina@epa.gov](mailto:kipp.katrina@epa.gov)

## ATTACHMENT A

**Estimated Prices for Certain Field & Laboratory Equipment (for the purpose of examples only).\*** Each group will have its own needs and may request equipment not on this list.

Water Quality Testing Kits (DO, pH, Temperature, Salinity, Secchi disk,) - \$200 - \$250  
DO modified winkler test kit - \$43  
Dissolved Oxygen & Temperature Meter (YSI brand or equivalent) – \$900 - \$1,600  
Salinity Refractometer - \$100  
Salinity Meter - \$700-\$800  
Water Bath - \$360  
Microscope for Phytoplankton - \$630  
Stereoscope - \$375  
Water Sampler (e.g., Kemmerer or equivalent) - \$310  
Hydrometer - \$10 - \$30  
D-frame Dip Net - \$40.00  
Plankton Net - \$150 to \$400

### **Other Types of Equipment**

Buckets  
Graduated cylinders  
Erlenmeyer or Volumetric Flasks  
Thermometers

### **Examples of Supplies (for which this Equipment Loan Program cannot be used)**

Gloves  
Filter paper  
Deionized/distilled water  
Microscope slides  
Disposable pipettes  
Paper towels  
pH buffers

\*Some methods that use test kits may not be EPA-approved or useable by states or local organizations as monitored sites, but may only be suitable as screening methods. The choice of equipment must be in accordance with the purpose and use of the data. The list provided above is for the purpose of rough estimations of equipment costs, and is without the benefit of knowing specific projects and methods to meet data use requirements. The mention of brand names in the list above, does not constitute recommendation of a specific company, but is for the sole purpose of assisting in equipment description.

**ATTACHMENT B**  
**APPLICATION FOR EQUIPMENT LOAN**

**I. NAME OF GROUP (S)**

Provide the name, address, and responsible leader of each group, with contact phone numbers, email addresses, and fax numbers. Indicate if this is a single group's effort, or a collaboration of two or more groups. Provide the name and lead contact information for each group.

**II. WATERS THAT WILL BE MONITORED**

- a. Indicate whether this is a new group and/or monitoring effort. If this is an existing group, provide a brief statement of past experience and use of data.
- b. State the purpose and intended use of data for your current project, and what environmental results the group is helping to achieve. Provide a brief description of the current water quality monitoring in the area, and whether the new monitoring effort will supplement existing work or provide data for areas not currently monitored.
- c. Provide the names of the waterbodies, the watershed and states in which waters are located. Indicate whether sample collection sites have location information (i.e. latitude & longitude) associated with them, and whether the information has been identified by use of GPS or other means. Include a map or sketch of the waterbody and collection sites if useful.

**III. WATER QUALITY CHARACTERISTICS THAT WILL BE MONITORED**

- a. Identify the parameters that the group monitors, or plans to monitor, and those for which the equipment will be used.
- b. Explain if monitoring will include collection of surface water samples, profiles through the water column, shallow water and/or deep water, and if there is one or multiple stations within each waterbody.
- c. Indicate if the group has a current Quality Assurance Project Plan (QAPP) that has been approved by EPA or another agency. If the monitoring program is in a start-up phase, indicate whether the group will work with EPA's Quality Assurance Office in developing a QAPP as a goal of the monitoring program.

#### IV. EQUIPMENT NEEDS – SPECIFIC TYPE AND QUANTITY

List the equipment needed including any known specifications or requirements the group has. Expendable supplies cannot be included with equipment. Please see Attachment A for examples of equipment, although the list should not be considered the only equipment for which a group may apply. Since the purchase price may be different at the time of ordering than listings in supply catalogs might indicate, it is acceptable to provide a list that initially exceeds the loan limit of \$2,500, as long as the order of priority, from highest to lowest, is indicated.

#### V. EXPECTED USE OF DATA

- a. Explain briefly how data will be used. Will it be shared a state agency, with other organizations, be used for annual reporting, a watershed report, or some other purpose?
- b. EPA New England expects groups borrowing EPA equipment to agree to work with the EPA regional STORET Coordinator to enable data meeting quality assurance requirements to be uploaded to the national STORET system for long-term storage and access by other potential data users. EPA will provide assistance in this as needed, including data spreadsheets as needed, and on a schedule that is comfortable for the monitoring groups. Indicating agreement with this goal is a condition of the equipment loan.

#### VI. CONCURRENCE WITH EQUIPMENT LOAN CONDITIONS

- a. A Long-Term Equipment Loan Agreement will need to be signed by the responsible leader for the group and by EPA New England. This agreement will constitute a loan for up to a five-year period. After five years, a new agreement or return of the equipment may be necessary. Identify the person who agrees to represent the group for the equipment loan.
- b. Deliverables should include at minimum a brief report on environmental data generated and how data is provided to a state agency and accessible by others. Data is to be placed into a spreadsheet format that is compatible with for uploading to EPA's national water quality database. EPA New England will provide assistance uploading data and supporting information to the national data system.