Water Outreach Education Facilitating Access to Resources and Best Practices

Project Goal

To help natural resource professionals choose appropriate techniques and resources for water management education programs.

A project of the University of Wisconsin–Environmental Resources Center with funding from USDA Cooperative State Research, Education and Extension Service (CSREES)



What is a best education practice?

"A best practice can be defined as a program or practice that has been clearly defined, refined through repeated delivery, and supported by a substantial body of research."

— Anthony J. Fedler "Defining Best Practices in Boating, Fishing, and Stewardship Education" July 2001

BEP Key Informant Surveys – an Overview

n its mission to promote best water education practices, the Water Outreach Education Project (also known as the Best Education Practices, or BEP, Project) conducted two surveys of natural resources management and outreach professionals from across the United States. The surveys specifically identified how the project can make water education resources more accessible and how it can help these professionals choose appropriate educational techniques. The findings also helped shape objectives for project products, including

a pilot web site and other resources.

The full report of the Key Informant Surveys is available at **www.uwex.edu/erc/waterbeps**

Who are the key informants?

Two surveys, a pilot and a revised version, were created with guidance from the project advisory team. The first survey was self-administered by 18 water quality coordinators attending the 2002 National Water Quality Coordinators' Conference Workshop in Boise, Idaho. The revised survey was used to interview 21 natural resource and water education professionals and volunteers (the *telephone informants*).

The informants are diverse in background, position and professional responsibilities. The percent of time they reported spending on outreach and education ranged from 5% to 100%. Professionally, educationally, and to a lesser extent geographically, they represent a broad spectrum of the population of the natural resource management and outreach education providers for whom the project is being conducted.

What was learned from the informants?

Both surveys revealed that in general, it is important for educators to have help assessing the needs of their audiences, assessing and selecting the highest quality resources, and finding and accessing water education materials.

Respondents also suggested the following services that would facilitate water outreach and education efforts:

 Enhance communication among providers engaged in water outreach and education across the nation;

- Easy access to credible, high-quality, and up-to-date water outreach and education materials, curricula, and best education practices;
- 3. Assurance that the BEP web site is always current, credible and of high quality
- 4. Links to web sites commonly accessed and used by these professionals.

► Use of the Internet -

All survey informants use the Internet to access water outreach and education information and materials.

- Reasons for using: Respondents use the Internet because it provides fast and easy access to a wide variety of information, because they could find good material to use with specific audiences, and because they can get the material immediately.
- Favorite Web sites: Nongovernmental organization (NGO) sites were by far the most favored Internet sites among the *telephone informants*. They also reported using state and federal agency sites (U.S. Environmental Protection Agency [EPA], U.S. Geological Survey [USGS], and others). Extension water quality respondents favored federal sites (especially EPA), Extension, and state natural and environmental resource agency sites.
- Valued design characteristics: Web sites of most use and interest to the informants provide easy access to information they need. These sites contain high-quality information and are well maintained (i.e., up-to-date and relevant), easy to use, visually appealing, credible, clearly organized, and relevant to the informants' interests.

The informants will not use or return to a site if it is difficult to use in any way or lacks needed information. They find them difficult to use when site navigation is illogical or slow (especially when bogged down by too much glitz), contain too much text or advertising; or have broken links to other resources.

Anticipated BEP Project Products

BEP Internet Project Products

- BEP pilot web site
 - Best education practices short-cuts to education strategies and techniques
 - Links to state education resources
 - Synthesis of applicable theories and education techniques
- On-line short course
- **Other BEP Project Products**
- Water Outreach Education Handbook for researchers
- Year-three conference
- Web site evaluation
- BEP symposium to address gaps in water education resources

BEP resources will be posted on the web site as they are developed.

► Favored sources of materials and advice

Respondents relied on their colleagues, national programs, and federal agencies for resources and gave specific criteria for assessing the quality of educational resources.

- **Colleagues:** The informants rely most on their colleagues for educational materials and advice.
- National education programs: The telephone informants prefer to obtain their water education materials from national education programs like Project WET and Project WILD, as well as from Extension and state agencies. They favor these sources because the materials are high quality, dependable, and easy to access and use.
- Federal agencies/Internet: Extension water quality respondents prefer to obtain their water education resources from Federal agencies and the Internet because they are high quality and they fill specific needs of the informants.

► targeted audiences

The *telephone informants* work with a wide range of audiences including residents, landowners, homeowners, and families (youth), nongovernmental organizations (NGOs), special interest groups, and elected/public officials among others. The Extension water quality respondents

Respondents gave specific criteria for choosing educational resources:

- Easy to access
- Usable "right out of the box" without additional preparation
- Wide variety of material, adaptable
- Hands-on activities
- Contain all necessary handouts
- Relevant
- Accurate
- Correlate to state education standards
- Contain clear education objectives
- Concise
- Engaging
- Simple layout
- Visually appealing Road tested and dependable
- Unbiased

work more with their agency partners. They reported working with their agency partners three times more than any other audience (61% to \leq 22%).

► Instructional strategies

Respondents use a variety of instructional strategies but most often used hands-on-activities, lectures and presentations. Both groups also reported using demonstrations, publications and a variety of other education techniques and practices to address the needs of their audiences.



Recommendations for Future Action

The key informants' responses support the objectives of the project. The results also confirm that the anticipated BEP Project products are consistent with what the informants need and want. *Telephone informants* also provided additional information about their needs, ideas, and preferences for their outreach and education work. This information will be incorporated into the content and design of the BEP Web site.

Selected conversational responses are outlined in the report that can be found at:

www.uwex.edu/erc/waterbeps

In addition, survey results:

- Provided details needed to tailor the BEP Web site to fit users' Internet preferences and patterns of use.
- Suggested new ways of enhancing communication among water education professionals and volunteers.
- Revealed the particular challenges of maintaining the BEP Web site as a credible and high-quality resource after current project objectives have been met.



For more information please go to www.uwex.edu/erc/waterbeps or contact Kate Reilly, Project Coordinator at 1-608-WATER20.

Water Outreach Education – Facilitating Access to Resources and Best Practices is a collaboration of USDA CSREES and other public and private clean and safe water partners to promote best education practices (BEPs) for water education and to improve access to education resources and strategies.





