



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)

Project Update

January 2003

Background

Federal agency plans for clean and safe water are intended to improve water quality in communities across the nation. Community involvement has been identified as the key to successfully implementing these plans. The Water Outreach Education Project, also known as the **Best Education Practices or BEP Project**, will connect natural resource professionals with resources they need to help citizens improve their understanding of water issues and develop water stewardship skills.

BEP Project objectives include:

- Translating research into practical strategies.
- Providing electronic access to education materials.
- Identifying education needs for specific water problems.
- Bringing nationally recognized water educators together to develop a national plan for water education.

Anticipated BEP Project products:

- BEP pilot Web site
 - ✓ Shortcut to education techniques
 - ✓ Synthesized research
 - ✓ Links to education resources
- On-line short course
- Researchers guide to water BEPs
- BEP Symposium to address gaps in water education resources

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 Fedler, *Defining Best Practices in Boating, Fishing and Stewardship Education*, July 2001





The Best Education Practices Project will work in collaboration with the federal agency clean and safe water partnership and other networks to develop and promote best education practices (BEPs) for water education and to improve access to education resources and strategies. Examples of BEPs incorporated in successful water programs include assessing audience needs; judging the quality of water education materials; choosing appropriate instructional strategies; developing instructional skills; and evaluating Web site resources.



Current Project Activities

To help natural resource professionals choose appropriate educational techniques and resources, familiar sources must provide access. **But, sources must also provide evidence that education is valued.** Current BEP Project activities involve building the case for value and organizing a system for access to resources.

Building the Case for Value

Why should natural resource professionals incorporate best education practices into water management programs? How will the BEP Project make the case that incorporating best education practices in their work is worth the effort and resources? We've taken a three-part approach toward answering these questions.

1. Study of Provider Needs

In 2002 we conducted the BEP Study of Providers Needs to identify what resources these professionals currently use, how the resources might better meet user needs, how the project can make them more accessible, and how it can promote the use of best practices in water outreach education. Informants included Extension Water Quality Coordinators as well as other U.S. water outreach and education professionals.

The study revealed that, in general, it is important for educators to have help assessing the needs of their audiences, help assessing and selecting the highest quality resources, and help finding and accessing water education materials. Respondents also suggested services that would enhance

Major categories of survey inquiry:

- ✓ Use of the Internet.
- ✓ Preferred sources of materials and advice.
- ✓ Targeted audiences.
- ✓ Instructional strategies used.
- ✓ Methods of assessing quality of resources.

outreach and educational efforts by water quality educators. For example, the informants recommended provision of some form of facilitated communication among providers. To learn more about the results of the study please see the *BEP Study of Provider Needs Report*. For a short summary of the report see *BEP Study of Provider Needs – An Overview*. Both can be found at www.uwex.edu/erc/waterbeps.

2. Model Education Techniques

Our study respondents outlined the instructional strategies they value for their outreach and education efforts. Summaries of these and additional model techniques are being developed for the BEP Web site.

3. Synthesis of Significant Research

The BEP Web site will offer a shortcut for quickly exploring the components of learning, theoretical foundations of education, and components of practice (planning, implementation and evaluation), which provide the basis for understanding the importance of BEPs.

In addition, we are conducting a literature search to identify research findings that apply to education of specific audiences. We are looking for any unique tips or strategies that have been tested and shown to be effective with target audiences.

Organizing a System for Access

What are the problems with finding and accessing water education materials and resources? What organizational and technical design techniques should we apply when building the BEP Web site? We have turned to the field of knowledge management and our colleagues for answers.

1. Knowledge Management Principles

The study respondents informed us about their successes and frustrations searching for resources. Their responses, knowledge management principles, and experts in the field of knowledge management are helping us develop a framework of organization for the BEP Web site. The following recommendations will guide our plan of work:

- ✓ Enhance and facilitate communication
- ✓ Provide quick rewards
- ✓ Make the BEP Web site relevant
- ✓ Emphasize rewards of using
- ✓ Provide evaluation and feedback tools
- ✓ Establish partners for technical development and support

The BEP Project will identify education strategies used successfully with:

- ✓ Recreational water users
- ✓ Local decision makers
- ✓ Industrial water users
- ✓ Retail business
- ✓ Landowners
- ✓ Watershed groups
- ✓ Riverway groups
- ✓ Policy makers
- ✓ Agricultural commodity groups



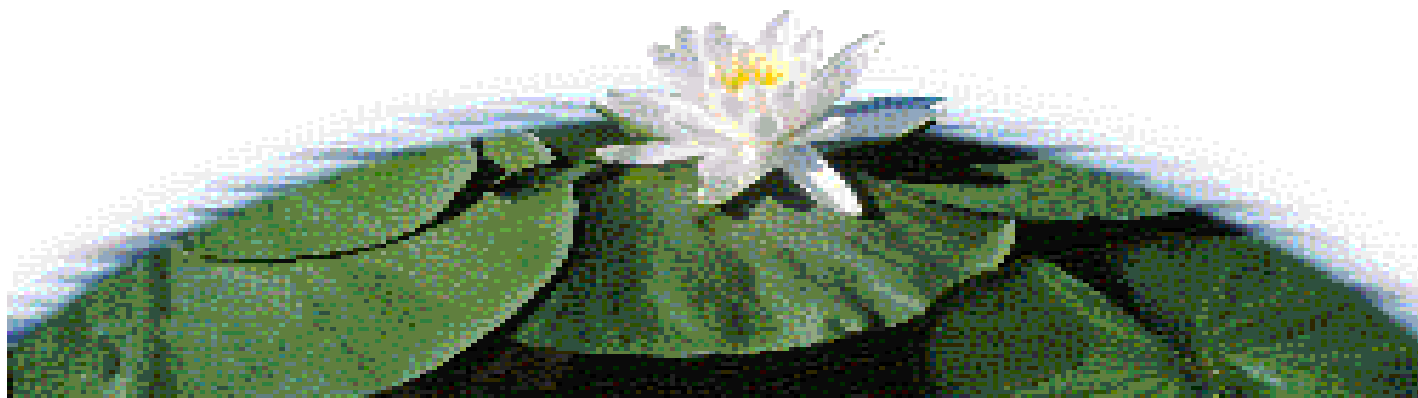
2. Opportunities for Collaboration

We will need the assistance and advice of the USDA/CSREES National Water Quality Program regional coordinators and state contacts to find and collect the information recommended by project advisors to date. Opportunities for contributions to the BEP Project include helping us identify contacts who can provide access to the following resources: state water education list serves; local/state water activities (Internet and non-Internet resources); links to peer-reviewed adult water education resources; and state resources that correlate to K-12 science and environmental education standards. Assistance is also needed for choosing "keywords" for Web site organization that will emphasize the eight National Water Quality Program theme areas and the Clean Water Action Plan objectives.



Conclusion

University water management research and the resources of our federal natural resource agencies are combined to benefit the citizens of our individual states through the national education network called Extension. BEP Project products will strengthen Extension's abilities to increase public understanding and involvement in community decision-making about water issues through improved education practices and improved access to education resources.



A CSREES Water Quality Program
National Facilitation Project

The Water Outreach Education Project is a collaboration of the University of Wisconsin Extension, USDA CSREES, and other public and private clean and safe water partners to promote best education practices for water education and to improve access to education resources and strategies.

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