

Summer 2006

# Natural News

A Publication of The U.S. Environmental Protection Agency, Region 8 Ecosystem Protection Program



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*Field trip in Park City, Utah as part of NPS Conference. Marcella Hutchinson, EPA Region 8 NPS staff, and Dennis Clark, NPS program manager, South Dakota.*

~ Photo by Jack Wilbur, Utah Department of Agriculture and Food

## Park City National Nonpoint Source Coordinators Meeting ~ Peter Monahan, EPA Region 8

The State of Utah and EPA Region 8 hosted the National Nonpoint Source Coordinators' Meeting in Park City June 19-22, 2006. EPA and state nonpoint source (NPS) program coordinators gathered to discuss issues facing watershed managers at the national, state, and local levels. The meeting attracted 169 participants (most ever) from all over the United States, including Hawaii. There were representatives from forty states, all 10 EPA Regions, and EPA Headquarters.

The meeting provided opportunities to discuss and identify solutions to improve water quality and to document successes from control of non-point

sources of pollution. Discussions focused on watershed planning, load-reduction modeling, and effectiveness monitoring. Additional information was provided through a series of technical and programmatic presentations and two special-topic workshops.

A pre-meeting workshop was held to assist the States and EPA on approaches to watershed planning. EPA's new Watershed Planning Handbook was discussed in detail during this interactive workshop. The session taught participants how to develop and implement a watershed plan using all 9 elements. Participants also learned about new tools being developed and reviewed successful case studies. You may download a copy of EPA's new Watershed Planning Handbook at [http://www.epa.gov/owow/nps/watershed\\_handbook/](http://www.epa.gov/owow/nps/watershed_handbook/)

At the meeting, state agencies brought posters that illustrated watershed restoration success stories. The posters highlighted how the integration of a state water program through the watershed planning process is important to achieving water-quality improvements. A contest was held to determine the best poster presentation. The winning poster, submitted by the State of Virginia, was about the Shenandoah Valley watershed project.

Pete Nowak from the University of Wisconsin-Madison gave a well-received presentation entitled "People, Science, and the Next Generation of

(Continued on page 2)

Water Quality Policy.” His objective was to illustrate how we need to rigorously, and in a scientifically valid fashion, incorporate the “human dimension” into existing policies, knowledge, and methods to address water-quality degradation from agricultural sources. To see conference proceedings, including Pete’s presentation, please visit the website <http://www.ag.state.ut.us/conservation/npsconf.html>

For more information on the conference or the Nonpoint Source Program at EPA Region 8, contact **Peter Monahan** at (303) 312-6946 or [monahan.peter@epa.gov](mailto:monahan.peter@epa.gov)

### **EPA Targeted Watersheds Grant Program Request for Proposals Available ~ Darcy Campbell, EPA Region 8**

Two funding opportunities were announced on August 15, 2006. See details at: <http://www.epa.gov/twg>

### **Request for Proposals for Capacity Building Projects (Proposals due October 16, 2006)**

EPA is soliciting proposals from entities to provide capacity building, training, and education services to watershed organizations. EPA is requesting capacity building proposals with either a national scope (*i.e.*, serving watershed organizations nation-wide), or with a geographic or ecoregional scope. Proposals serving the Great Plains, Arid West, and/or Appalachia are encouraged. These capacity building cooperative agreements will help watershed organizations examine water-related problems in the context of the larger watershed in which they exist, develop solutions to those problems by creatively applying the full array of available tools, including federal, state, and local programs, and restore and protect water resources through strategic planning and implementation that draw in public and private sector partners. The goal of the capacity building component of the Targeted Watersheds Grant program is to develop capacity so that watershed groups are able to implement environmental restoration and protection measures. Estimated total funding is \$1,600,000 to \$3,200,000.

### **Availability of Funds for Implementation Projects (Proposals due November 13, 2006)**

EPA is soliciting proposals for projects that will result in the protection, preservation, and restoration of a watershed that incorporates a watershed-based approach and meets the prescribed criteria. Both the watershed approach and the Targeted Watersheds Grants focus on multi-faceted plans for protecting and restoring water resources that are developed using partnership efforts of diverse stakeholders. Activities proposed for funding are not required to address the entire watershed, but are expected to have been based on a comprehensive assessment and plan for the watershed. The goal of the Targeted Watersheds Grant Program is to advance

successful partnerships and coalitions that have completed the necessary watershed assessments and have a technically sound watershed plan ready to implement. Estimated total funding is \$7,100,000 to \$16,000,000.

### **EPA Region 8 Grant Awards for 2006 Regional Geographic Initiative (RGI) ~ Cynthia Gonzales, EPA Region 8**

Eight RGI grants totaling \$355,256 were awarded as part of the 2006 EPA Regional Priorities Grant Program. This year RGI received 27 proposals that fell under the criteria of “protect and restore water quality on a watershed basis.” The five recipients are listed below:

#### **Summit County, Utah**

Summit County Storm Water Sub-Basin Monitoring  
**Clear Creek Watershed Foundation**  
Watershed Sustainability

#### **Department of the Interior, Fish and Wildlife Service**

Big Hole Watershed Feedlot Restoration

#### **West Dakota Water Development District**

Ground Water Tracing Methods for Assessment of Source Water Risk in a Karst Aquifer

#### **Colorado Watershed Assembly**

Colorado Watershed Assembly Combined Conference

Also, in FY06 RGI received five proposals that fit the criteria for “community-based air toxics.” The three recipients are listed below:

#### **Mountain Studies Institute**

Air Quality in the San Juan Mountain High Country:  
Assessment of Mercury Risks and Development of an Outreach Program

#### **American Lung Association**

Campaign to Reduce Children’s Exposure to Environmental Tobacco Smoke

#### **Montana Department of Environmental Quality**

Get into the Zone: Clean Air Zone Montana

The FY07 Request for Proposals will be issued in late October, 2006. The solicitation will be posted at [http://www.epa.gov/region08/community\\_resources/grants/grants.html](http://www.epa.gov/region08/community_resources/grants/grants.html) (see Regional Priorities Grant Program) or visit <http://www.grants.gov>.

For more information contact **Cynthia Gonzales** at (303) 312-6569 or [gonzales.cynthia@epa.gov](mailto:gonzales.cynthia@epa.gov)

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## Application of Elements of a State Water Monitoring and Assessment Program for Wetlands

~ Jill Minter, EPA Region 8

EPA's Office of Wetlands, Ocean and Watersheds has recently released a new document, *Application of Elements of a State Water Monitoring and Assessment Program for Wetlands*, which recommends a basic approach for integrating wetlands into state water monitoring programs. It is specific to wetlands, and provides supplemental information to the EPA's 2003 guidance entitled *Elements of a State Water Monitoring and Assessment Program*.

EPA's goal is to continue working with states over time to build their capacity to monitor and assess wetlands. While several states in EPA Region 8 have made considerable progress in the development and testing of wetland assessment methods, additional work is needed in applying those methods and demonstrating how acquired information can be used to help achieve and document the goal of increasing the quality and quantity of the Nation's wetlands. By the end of 2007, all states should have a description of wetland monitoring and assessment activity included within their water monitoring strategy.

Local watershed and wetland managers will also benefit from the work being conducted at the state level. A strong state wetland monitoring and assessment program built using these elements will provide tools and information that can be used at a local level to prioritize and evaluate the performance of wetland management activities such as protection, restoration, and compensatory mitigation. The document can also serve as a framework for a scientifically sound approach to conducting wetland monitoring and assessment at many scales.

This document is available online at: <http://www.epa.gov/owow/wetlands/monitor/>. Other publications and information on wetlands monitoring and assessment are also available on this website.

For more information, contact **Jill Minter** at (303) 312-6084 or [minter.jill@epa.gov](mailto:minter.jill@epa.gov)

## Monitoring and Assessing Wetlands Condition: Innovative Projects and Partnerships in North Dakota ~ Jill Minter, EPA Region 8

EPA supports States, Tribes, and local government agencies in building wetland management programs by providing technical assistance and funding through our Wetland Program Development Grants. One priority that EPA has identified for these grants is supporting the development of comprehensive monitoring and assessment programs for wetlands. This is the first of series of articles that will highlight projects underway in Region 8 States that support this priority and the longer-term goal of increasing the quantity and improving the quality of the Nation's wetlands. This article highlights the partnership and work being done to assess prairie potholes in North Dakota.

The wetlands in the Prairie Pothole Region of North Dakota are a valuable local, state, and national resource. These wetlands provide significant habitat for North American waterfowl. They also protect water quality through filtering sediment and nutrients and help maintain normal watershed hydrology by reducing runoff.

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**Hooded Merganser.**

**70 percent of North America's waterfowl depend on Prairie Pothole wetlands for their existence.**

~ Photo by Paul McIver,  
EPA Region 8





***Prairie Pothole in North Dakota***

~ Photo by Shawn Dekeyser, North Dakota State University

These wetlands are also under significant risk of being destroyed or degraded by certain agricultural practices and by development.

The federal government has been cooperating with local partners in recent years to offset past wetland loss and degradation. There has been much investment and activity in wetland restoration and implementation of best management practices across the state. How successful have these restoration efforts been across such a broad scale?

In order to answer this and other important questions, EPA Region 8 has been partnering with the North Dakota Department of Health, North Dakota State University (NDSU), the USDA Agricultural Research Station, EPA's Environmental Monitoring and Assessment Program and Wetlands Research Program, and other North Dakota wetland partners to develop methods to monitor and assess the condition of prairie pothole wetlands in the Missouri Coteau ecoregion. These studies follow the framework and three-level approach described in EPA's new document, *Application of Elements of a State Monitoring and Assessment Program for Wetlands* (see the section *Publications and Web Resources* in this issue). EPA has been providing funding to support this work through the Wetland Program Development Grants.

Under a phased approach, several projects have been conducted that will lead to an eventual assessment of the condition of prairie pothole wetlands. Shawn Dekeyser (NDSU) has developed an Index of Plant Community Integrity, a key Level III tool for evaluating the

condition of these wetlands using wetland plant indicators. His current and planned studies over the next several years will support development of a rapid assessment technique (Level II) to assess the wetland condition in a relatively small amount of time and a probabilistic survey to estimate wetland quality for the Missouri Coteau ecoregion. Coordinated with these studies, Rebecca Phillips (USDA) and Ofer Beerli (University of North Dakota School of Aerospace Sciences) are developing new landscape analysis tools (Level I) using remote sensing to track seasonal and annual hydrologic and hydric vegetation variability. These satellite-based products will provide wetland abundance, distribution, and condition data for a suite of wetland classes independent of field surveys. Together these North Dakota projects serve as a model for our region and the country. These studies are designed to help North Dakota develop programs to preserve the biological integrity of the Prairie Pothole Region. The information obtained from these studies will be used by agencies to focus their efforts toward areas in need of restoration, reclamation, and/or protection. In the future, land managers and government agencies can periodically revisit wetlands and retest to detect trends and actions that need to be taken.

For more information, you can contact **Mike Ell**, Division of Water Quality, North Dakota Department of Health, at [mell@state.nd.us](mailto:mell@state.nd.us) or **Jill Minter**, Wetlands Program, US EPA Region 8, at [minter.jill@epa.gov](mailto:minter.jill@epa.gov) or (303)312-6084.

## **New Wetlands Fact Sheets**

### **~ Paul Mclver, EPA Region 8**

EPA has two new fact sheets that will be of interest to anyone concerned about wetlands. The first one is "Wetlands: Protecting Life and Property from Flooding." This fact sheet explains how wetlands help reduce the impacts of flooding and gives examples from around the country. Two examples are from EPA Region 8, including Horseshoe Park in Rocky Mountain National Park, Colorado and the Vermillion River in South Dakota.

The second fact sheet is entitled "Economic Benefits of Wetlands." It explains how wetlands can reduce the cost of improving drinking water quality, reduce flood-control costs, and provide recreation such as hiking, bird watching and photography, and fisheries and wildlife habitat that can contribute to local economies.

A third document is a publication from the Mountain Studies Institute in Silverton, Colorado. "Wetlands of the San Juan Mountain Region" describes the functions and values of the San Juan wetlands and the major wetland types found in the region, including the very rare iron fens. The San Juan Mountain Range is one of the few places in the world that contain iron fens.

The fact sheets above ("Wetlands: Protecting Life and Property from Flooding," EPA 843-F-06-001 and the "Economic Benefits of Wetlands," EPA843-F-06-004) can be obtained from the National Service Center for Environmental Publications by ordering online at: [www.epa.gov/nscep](http://www.epa.gov/nscep) or by Email at: [ncepimal@one.net](mailto:ncepimal@one.net).

The booklet "Wetlands of the San Juan Mountain Region" can be obtained by calling (970) 387-5161 or contacting [www.mountainstudies.org](http://www.mountainstudies.org)

For information on wetlands contact **Paul McIver** at (303)312-6056 or [mciver.paul@epa.gov](mailto:mciver.paul@epa.gov)

## Wadeable Streams Assessment

EPA released the Wadeable Streams Assessment (WSA), which is the first consistent evaluation of the streams that feed rivers, lakes, and coastal waters. "Wadeable streams" are those which are shallow enough to be adequately sampled without a boat. They are an important natural resource that has been under-sampled in the past.

Conducted between 2000 and 2004, the study was based on sampling at 1,392 sites selected to represent the condition of all streams that share similar ecological characteristics in various regions. The survey found that stream conditions vary widely across the diverse ecological regions of the country, and that, in general, streams in the West were in the best condition.

The WSA is part of a series of surveys to evaluate all of the nation's waters. Coastal condition has already been evaluated. During the next five years, EPA will sample the condition of lakes, large rivers, and wetlands. The process will be repeated to provide ongoing comparisons of the state of the waters and point to possible future action.

More information on the Wadeable Streams Assessment can be found at <http://www.epa.gov/owow/streamsurvey>.

## EPA Kicks Off Survey of the Nation's Lakes

EPA, states, tribes and other partners soon will embark on a **Survey of the Nation's Lakes** to provide regional and national estimates of lake condition, similar to the draft Wadeable Streams Assessment. On April 25-28, 2006, EPA's Monitoring Branch co-sponsored a meeting in Chicago with 140 lakes experts, including representatives from 45 States, to plan the Lakes Survey. The meeting was cosponsored by the Chicago Botanic Garden and the North American Lake Management Society. The Survey will use a statistically valid approach which, like an opinion poll, randomly selects lake sites that represent the condition of all sites in regions sharing similar ecological characteristics.

Survey participants will use consistent sampling and analytical procedures to ensure that the results can be compared across the country. At the meeting, EPA provided packets to states (and tribes) identifying a preliminary list of sites that will be sampled in the summer of 2007. For more information on the Lakes Survey visit our Web site at: <http://www.epa.gov/owow/lakes/lakessurvey/>

## Grants/Funding Opportunities

### 2006/2007 EPA Targeted Watershed Grants

Go to <http://www.epa.gov/twg> or see article in this issue of *Natural News*.

### EPA Source Water Request for Applications

EPA announced a request for applications for integrating clean water, drinking water and land use planning tools. Proposals are due August 28, 2006. EPA expects to award one cooperative agreement, funded at \$230,000 initially. The full announcement is at <http://www.epa.gov/safewater/protect/funding.html>. States and local municipalities are eligible to apply; water suppliers and watershed groups are eligible if they have non-profit status.

### EPA and Partners Announce Five-Star Challenge Grants Award Recipients

On July 5, EPA, in collaboration with the National Fish and Wildlife Foundation, the National Association of Counties, the Wildlife Habitat Council, and Southern Company, announced the funding of more than \$518,000 to 39 locally led wetland and streamside restoration projects across the nation. The Five Star Challenge Grants Program awards funds to restoration projects that provide educational, ecological, social and economic benefits to the community.

*"Let us love our country, but pledge allegiance to the earth and to the flora and fauna and human life that it supports – one planet indivisible, with clean air, soil and water; with liberty, justice and peace for all."*

*~William Sloane Coffin*

Through student training, youth are directly involved in the restoration efforts with the assistance of government agencies and local businesses, schools and organizations. For more information about this program, go to <http://www.epa.gov/owow/wetlands/restore/5star>

### **2006—2007 Global Releaf Grants Available**

Global ReLeaf, a program of American Forests, is offering annual grants towards tree planting projects. Project proposals are now being considered for the fall of 2006. Reimbursable grants are available to support projects restoring damaged forest ecosystems. For further information go to: [http://www.americanforests.org/global\\_releaf/grants/](http://www.americanforests.org/global_releaf/grants/). For support for fall 2006 planting projects please contact Ethan Kearns as soon as possible at (202) 737-1944 x224 or [ekearns@amfor.org](mailto:ekearns@amfor.org). For support in 2007, the deadline for proposals is January 15, 2007.

### **Conferences and Training**

**Sustaining Colorado Watersheds: Science and Restoration through Collaboration.** Save the date: October 4—6, 2006. This conference is co-sponsored by Colorado Watershed assembly, Colorado Watershed Network, Central Rockies Chapter of the Society for Ecological Restoration, and Colorado Riparian Association. It will be held in Breckenridge, Colorado. For more information go to: <http://www.ser.org/cerser/2006Conference.asp>

### **Publications and Web Resources**

#### **Benefits of Watershed-Based NPDES Permitting**

The EPA Watershed Academy hosted a webcast on July 19, 2006 to encourage a watershed-based approach to permitting. EPA recently issued several policy memos and guidance to promote watershed-based permitting. Webcast instructors discussed the benefits of watershed-based permitting, presented an explanation of the process and several mechanisms to implement watershed-based permitting, and

outlined how EPA will encourage this approach. The instructors also discussed issues related to managing stormwater and other wet weather-related impacts and present a case study related to activities in the City of Richmond, Va., designed to move toward a watershed-based approach.

An audio version of the Webcast is available at [www.epa.gov/watershedwebcasts/](http://www.epa.gov/watershedwebcasts/) or see <http://clu-in.org/studio/>

#### **EPA's New and Improved Menu of BMPs**

The National Menu of Best Management Practices for Stormwater Phase II is a valuable resource that helps industrial facilities, municipalities, and construction site operators maintain compliance with EPA's stormwater regulations. It was first released in October 2000. In 2006, EPA renamed, reorganized, updated, and enhanced the features of the website. These revisions include the addition of new fact sheets and revisions of existing fact sheets. Because the field of stormwater is constantly changing, EPA expects to update this menu as new information and technologies become available. It is available at <http://www.epa.gov/npdes/menuofbmps>

#### **Pesticide Database**

The Home Use Pesticide Database is on line at <http://homeusepesticide.org>

This site is an easy to use compilation of over-the-counter pesticides with links to labels or information sites. A user can sort by pesticide type (insecticide, herbicide, vertebrate control), and uses within the type (vegetable, fruit, houseplant, etc.) Organic gardeners can limit their search to organic materials only if desired. There are approximately 1,000 products in the database. From Bob Hammon, Area Extension Agent, Mesa County, Colorado.

#### **NACo Releases New Wetlands Brochure**

NACo has released a new brochure about wetlands and their benefits for local governments. To view the brochure, go to [www.naco.org/techassistance](http://www.naco.org/techassistance) and click on "Water Quality". To request a hard copy, contact Erik Johnston at [ejohnston@naco.org](mailto:ejohnston@naco.org) or 202-942-4246.

#### **The Center for Watershed Protection Wetlands & Watershed Article Series**

Article 2: "Using Local Watershed Plans to Protect Wetlands" is now available for free download at <http://www.cwp.org/wetlands/index.htm>

This article briefly describes a proposed framework for integrating wetland management in the context of local watershed planning efforts. It outlines the rationale for managing wetlands at the watershed scale, the basics of the watershed planning process, and 11 recommended watershed planning elements that relate to wetlands. Article 3 of the series, "Adapting Watershed Tools to Protect Wetlands," is also available.



### **Watershed Analysis Risk Management Framework (WARMF)**

WARMF is a watershed decision support tool developed by EPRI and a private contractor that has been applied to over 16 watersheds of varying size in the United States and internationally to address watershed planning issues, TMDL calculation, and the impact of potential management strategies such as BMPs or conversion of septic systems to centralized sewers. WARMF is unique in that in addition to being able to model traditional water quality constituents such as temperature, nutrients, dissolved oxygen, suspended sediment and coliform bacteria, it can be extended to simulate the impact of acid mine drainage (metals) and mercury fate and transport (including bioaccumulation in the food web). WARMF version 6.1 is now available for download through the EPA Ecosystem Research Division TMDL Modeling Toolbox (<http://www.epa.gov/athens/wwqtsc/>) and is now compatible with EPA BASINS.

### **EPA Publishes New "EPA Watershed Training Opportunities" Booklet**

EPA recently published a new **EPA Watershed Training Opportunities** booklet. It highlights watershed training opportunities sponsored by EPA's Office of Water and the Watershed Academy, including EPA-sponsored live training courses, Web-based training opportunities such as Webcasts, training materials such as documents and videos, and watershed-related Web sites that are available to EPA staff and others. The booklet is available at: <http://www.epa.gov/owow/watershed/wacademy/wtopps.html>.

### **New Book: Designing a Communication Campaign: the 4-P Workshop**

This World Conservation Union publication is the first in a series called "Lessons from the Field: Conservation Awareness" and provides a practical guide for conservation practitioners. The free 112-page book focuses on the creative process for strategic planning -- a critical component to design effective conservation awareness initiatives.

<http://www.conservation.org/xp/CIWEB/programs/awareness>

### **PLT'S New Pre-K through 8 Guide**

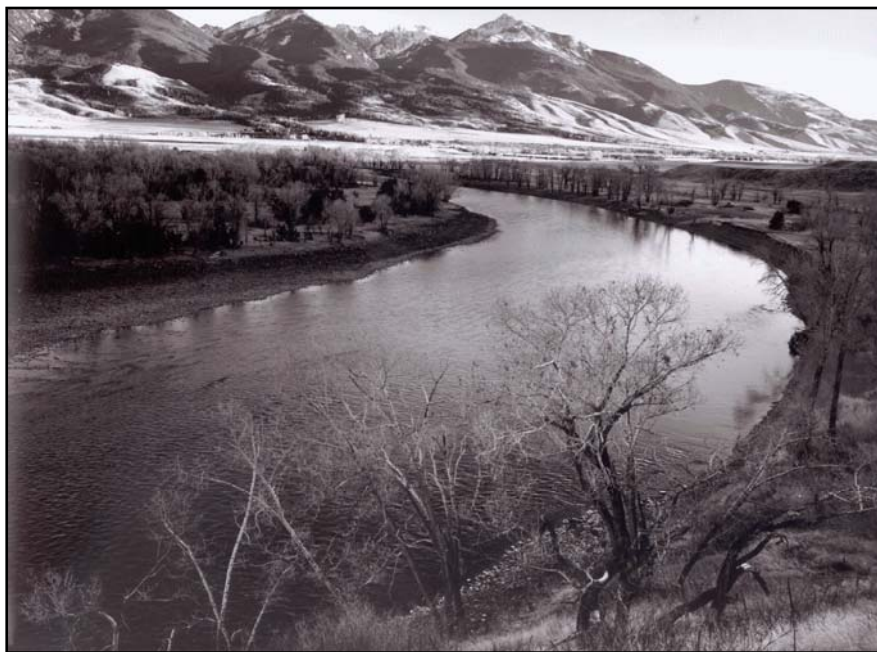
Educators who have attended a Project Learning Tree (PLT) workshop in the past can now order PLT's new PreK-8 Environmental Education Activity Guide directly from PLT. The guide's newest features --reading connections, technology connections, differentiated instruction, and assessment strategies -- help educators bring the environment into the classroom and still meet today's standards. Go to:

[http://www.plt.org/cms/pages/21\\_21\\_10.html](http://www.plt.org/cms/pages/21_21_10.html)

### **Summer Water Use**

Denver Water maintains a great website, including xeriscape (tm) and water rules/restrictions and tips for using water wisely and keeping your green space green.

Check out their website at <http://www.water.denver.co.gov/indexmain.html> for good summer landscape watering information, including BMPs for how much water your turf needs each week for each month of summer.



*Yellowstone River, Wyoming*

*~ Photo by Peter Ismert, EPA Region 8*



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## Natural News

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