

# **Bi-weekly Wetland and Stream Corridor Restoration Update**

## **Issue 37**

### **September 26, 2002**

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Welcome to the Bi-weekly Wetland and Stream Corridor Restoration Update. This Web site

- Provides current information on wetland and river corridor restoration projects
- Recognizes outstanding restoration projects
- Offers a forum for information sharing

We welcome the submission of articles and announcements related to your restoration project. Just send your write-up to EPA's contractor at [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com) or mail it to Rebecca Schmidt, Bi-weekly Restoration Update Coordinator, Tetra Tech, Inc., 10306 Eaton Place, Suite 340, Fairfax, VA 22030. We will carefully consider your submission for inclusion in a future update. If your submission is selected, please note that it might be edited for length or style before being posted. Because this Web site is meant to be a public forum on restoration information, we cannot post any information that is copyrighted or information that advocates or lobbies for any political, business, or commercial purposes or has the appearance of doing so.

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## **Feature Article**

### **Washington State Water Utility Restoration Efforts Continue**

Clark Public Utilities in Clarke County, Washington, is working with AmeriCorps volunteers, landowners, and the public to improve the health of a local stream. In 1992 the utility started the Salmon Creek Enhancement Program. The program seeks to increase community awareness and improve the water quality in the 92-square-mile Salmon Creek basin, which constitutes the majority of the Clark Public Utilities service area.

Since the program began, staff members at Clark Public Utilities have spearheaded implementation of voluntary buffers along the creek, tree planting events, trash clean-up days, meetings to educate landowners on stream bank revegetation and sediment issues, and fencing projects to keep livestock out of the creek. Project volunteers have planted more than 500,000 trees and fenced more than 68,000 feet of streambank areas. Over the life of the project some 350,000 steelhead and trout have been reared and released.

In February Clark Public Utilities hosted its first tree planting event of the year for utility employees and community volunteers. This past April it hosted a second tree planting event along with an Earth Day celebration that offered educational and children's activities. The utility followed up the planting events with a work day to help maintain newly planted trees and shrubs. Volunteers had the chance to battle invasive plants, water thirsty trees, and perform other necessary maintenance activities.

The community involvement component of the project has helped increase public awareness about watershed issues. "Twenty years ago before the project began, people didn't think about much of anything in the way of watershed protection," commented Mick Shutt, communications director at Clark Public Utilities. "Now, community members have begun to think about the health of the creek, but there is still more that can be done." Over the years, the project has involved more than 1,000 volunteers and encouraged community members to think about what goes into the creek and what can be done to protect it.

Throughout the project, Clark Public Utilities has also received help from AmeriCrops volunteers. AmeriCorps is a national service program that addresses critical needs of communities in the areas of education, health, human needs, public safety, and the environment.

Clark Public Utilities' efforts have not gone unnoticed. In late spring 2002, the Washington Department of Agriculture honored the utility with the Director's Citation Award, the highest award the Department presents to individuals, groups, or organizations that have contributed to programs that promote the agricultural community. The award noted the utility's efforts to work with farmers and other landowners to improve water quality and habitat in Salmon Creek.

For more information see [www.clarkpublicutilities.com/news\\_releases/02%20releases/02news.asp](http://www.clarkpublicutilities.com/news_releases/02%20releases/02news.asp) or contact Alexis Paul, the utility's volunteer coordinator, at 360-992-8510, or by e-mail at [volunteercoordinator@clarkpud.com](mailto:volunteercoordinator@clarkpud.com).

*If you'd like your project to appear as our next featured article, e-mail a short description to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*

## **Five-Star Restoration Projects Update**

The goal of EPA's Five-Star Restoration Program is to bring together citizen groups, corporations, the Youth Conservation Corps, students, landowners, and government agencies to undertake projects that restore stream banks and wetlands. The program provides challenge grants, technical support, and peer information exchange to enable community-based restoration projects. A few Five-Star restoration projects are being revisited to see if the modest amount of funding (between \$5,000 and \$20,000) has helped the local restoration partners achieve their goals.

**Project Title:** Cedar Key—Pepper Free  
**Five-Star Grant:** \$5,700  
**Grant to:** Cedar Key Garden Club  
**Location:** Cedar Key, Florida  
**Grant Year:** 1999

### **Original Project Description:**

In an effort to arrest the spread of the Brazilian pepper (BP) tree and eventually eradicate the invasive species from Cedar Key, the Cedar Key Garden Club will mobilize federal, state, and local agencies as well as students and community volunteers. The invasive tree will be removed from both public and private lands. In addition to the on-the-ground-effort, the project will also use flyers, posters, newspaper articles, and other techniques to educate homeowners, lawn maintenance providers, developers, youth, and others on the problem of the BP and methods for its identification and eradication. The National Marine Fisheries Service Community-based Restoration Program is providing partial funding for this project.

**Project Update:**

The Cedar Key Garden Club used this grant to eradicate the BP on Cedar Key. BP is an aggressive, nonnative tree that is encroaching on the habitat of the ecologically productive black mangrove and threatening the biodiversity of the Cedar Key island group.

The Pepper Free project has covered the geographic area of the Cedar Keys, including about 500 acres of upland and 2,500 acres of “conservation area.” The partnership estimates that 75 percent of the BP in the Cedar Keys has been treated and that 90 percent of the large trees have been eradicated. The number of plants killed is in the thousands, ranging in size from tiny seedlings to 30-foot-high multitrunked giants with branches that arch to the ground covering 400 square feet.

A number of organizations contributed to the success of this project, including the Cedar Key Garden Club, City of Cedar Key, Levy County Board of Commissioners, U.S. Fish and Wildlife Service, Forestry Youth Academy, Cedar Key School Marine Science Club, Cooperative Extension Service of the Institute of Food and Agricultural Sciences at the University of Florida, Department of Environmental Protection, Cedar Key State Park, and Suwannee River Water Management District. Contributions include volunteer hours, money, landfill for disposal of the BP, training, publications, and materials and equipment.

The public has been educated on the BP problem and identification and eradication of the plant. This was done with flyers distributed at City Hall and the local hardware store, as well as exhibits at festivals and other locations. Posters about BP have been displayed at City Hall, the Market, and the Jiffy stores. Newspaper articles have been published in several newspapers. An eradication session was presented to lawn maintenance providers. Do-it-yourself BP eradication kits, including an instruction publication, sprayer, chemical resistant gloves, protective eye wear, and ready-to-use herbicide were developed and are loaned to homeowners so that they can treat the BP on their own property.

Several ecological benefits have been observed since the clearing of the BP. Areas of roadside and marsh edge that were once shaded by an impenetrable thicket of BP now reveal seedlings of desirable native plants such as cedar, saw palmetto, wax myrtle, and sweet bay—signs of the restoration of the island habitat. Without the overwhelming competition from the fast-growing BP, black mangroves, cordgrass, salwort, and glasswort are thriving in ecologically productive communities essential for water quality, fishing, and clam aquaculture.

The Garden Club will continue to lead the battle to make Cedar Key pepper free. This grant has enabled the partnership to buy the necessary equipment and materials, establish the systems, and develop the networks that will be used to continue the eradication of BP. Cedar Key is being divided into sectors with a “Pepper Patrol” volunteer for each sector. That person monitors the area for BP seedlings and resprouts that will be pulled or sprayed. The club will maintain its

cooperative relationship with other organizations working to control BP. [Updated March 2002.]

**Project Title**            **Lorenzan Creek Salmon Enhancement**  
**Five-Star Grant:**        **\$11,000**  
**Grant to:**                **Skagit Fisheries Enhancement Group**  
**Location:**               **Skagit County, Washington**  
**Grant Year:**              **2000**

**Original Project Description:**

The Lorenzan Creek Salmon Enhancement project seeks to improve habitat for native salmon and trout species in Lorenzan Creek, a tributary of the Skagit River in northwest Washington. The Skagit Fisheries Enhancement Group (SFEG) is a nonprofit community organization dedicated to the enhancement of salmon resources through education, restoration, and public involvement. SFEG will work with People for Salmon, local members of the Boy Scouts of America, and others to revegetate riparian areas with native plants and to install log structures to add habitat complexity to the stream. Members of the local community will participate in post-project monitoring after being trained by the project partners to identify returning adult salmon. Partial funding for this grant is being provided by the National Marine Fisheries Service Community-based Restoration Program.

**Project Update:**

In fall 2001 the Skagit Fisheries Enhancement Group completed fish passage improvement on Lorenzan Creek. This project opened nearly 2 miles of habitat to migrating salmon, steelhead, and cutthroat. In addition to the \$11,000 received through the Five-Star Program, project partners—including the Washington State Salmon Recovery Funding Board and the Skagit Conservation District—contributed more than \$35,000 in matching funds.

The project, identified in a 1997 Washington Department of Fish and Wildlife report prioritizing culverts in need of replacement, consisted of removing an 18-inch culvert and constructing a bridge over Lorenzan Creek. The project makes 9,725 square meters of habitat above the project site accessible to coho and cutthroat trout. About 8,000 square meters of this habitat is a wetland complex that provides excellent habitat for rearing juveniles. Local Boy Scouts helped throughout the construction phase of this project and will continue to help conduct spawning surveys upstream of the newly installed bridge. [Update March 2001.]

## Community-Based Restoration Partnerships

### National Guard and Local Scouts Join Forces to Restore and Conserve Wetlands

When Camp Dodge, just outside of Des Moines, Iowa, gained 60 acres of wetland and associated uplands, the National Guard members jumped at the opportunity to study wetland restoration. The acquisition, which boosted the post's size to 4,300 acres, included a tiled and farmed wetland and another virtually undisturbed wetland that are giving researchers a chance to study how and when a restored area can achieve the same functions as an unaffected wetland in the same climate and location.

National Guard members used geologic testing to help make the decision to break the tile that drained the hydric soils of the wetland. This was done in June 1996. The following spring the wetland filled, and it has since established itself as a permanent wetland. The next step was to restore the vegetation of the wetland to attract wildlife. Using a Legacy grant from the Department of Defense and an Iowa State University planting plan for the wetland, a Boy Scout took on the task of organizing the restoration. Andrew Rowland, a senior at Des Moines's Hoover High School, organized 40 Boy Scouts, Explorer Scouts, and other Des Moines high school students to restore the wetland vegetation for his Eagle Scout project. In May 1998 they converged at Camp Dodge to learn about wetland restoration techniques from Paul Wetzel, an Iowa State University professor, and to plant wetland plants and seeds.

Before the restoration began, researchers conducted baseline studies to determine what plants and animals were present so that additional species could be documented later. Now, years later, researchers are studying the vegetation, hydrology, birds, amphibians, reptiles, and invertebrates as the new plants become established and the soil recovers from decades of drainage and row-cropping. The Geological Survey Bureau of the Iowa Department of Natural Resources installed monitoring wells to gauge changes in the water table.

Partners include the Iowa Department of Natural Resources, Natural Resources Conservation Service, Polk County Conservation Board, and Iowa State University. For their restoration and conservation efforts, the Iowa Army National Guard received the Secretary of the Army's 1997 Environmental Award for Natural Resources Conservation.

The wetlands are within Camp Dodge, where the Army National Guard, Air National Guard, Army Reserve, Marine Corps Reserve, Reserve Officer Training Corps, and law enforcement officers train, but the wetlands themselves will not be used for training. The wetlands are not open to the public except through announced field trips. For more information see [www.ag.iastate.edu/centers/iawetlands/cases/Ftdodge.html](http://www.ag.iastate.edu/centers/iawetlands/cases/Ftdodge.html) or contact Mary Jones, Environmental Specialist at Camp Dodge, 515-252-4648.

### A Day of Caring for Newmarket Creek

Information for this article was taken from "Day of Caring Flows Like Water," an article in the September 13, 2002, issue of the *Hampton Roads Daily Press*.

More than 60 volunteers gathered to help clean up the Newman Creek watershed as part of the Day of Caring organized by the United Way of the Virginia Peninsula. The Day of Caring is designed to help local volunteers get actively involved with the mission and needs of local nonprofit organizations, and it marks the start of the organization's 2002 fund-raising campaign.

The United Way organized the cleanup of Newman Creek and its associated riparian areas. Volunteers from the aircraft carrier *Ronald Reagan*, NASA Langley Research Center, the shipbuilding office at Northrop Grumman Newport News, and Youth Challenge (a program that helps treat substance abusers) gathered to remove debris from the stream. Shopping carts, sign posts, fast food containers, and even a sign displaying the message "Proud to be an American" were among the debris pulled from the stream. Removing the debris from the channel will improve water flow and ensure that the trash does not eventually end up in the Chesapeake Bay. The project, a part of the International Coastal Cleanup Project, was cosponsored by United Way of the Virginia Peninsula and the Hampton and Newport News public works departments. For more information, read the article written about the project in the September 13, 2002, issue of the *Hampton Roads Daily Press*. The article is available at [www.dailypress.com/news/local/dp-49898sy0sep13.story](http://www.dailypress.com/news/local/dp-49898sy0sep13.story).

*If you are part of an innovative community-based partnership that is working to restore river corridors or wetlands, we'd like to hear from you. Please send a short description of your partnership to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*

## **Achieving Restoration Results**

### **Montana Prairie Potholes Are for the Birds**

The Partners of the Prairie Pothole Joint Venture II Project have restored a virtual paradise for shorebirds and waterfowl in Montana. Through six projects in Montana's Prairie Pothole region, the project has conserved and enhanced more than 68,000 acres of wetland and grassland habitat. The shallow lakes, wetlands, wet meadows, and prairie of the Prairie Pothole region provide nesting habitat for shorebirds, waterfowl, grassland birds, and a variety of fish. Long-billed dowitchers, western grebes, black-crowned night herons, mallards, Canada geese, and piping plovers have all been identified in the restored habitat of the project area. Fish species, including the yellow perch, have also benefitted from the restoration projects.

The Partners of the Northeastern Montana Prairie Pothole Joint Venture II include Montana Fish, Wildlife, and Parks; Ducks Unlimited; U.S. Fish and Wildlife Service; The Nature Conservancy; Delta Waterfowl; Pheasants Forever; and the Assiniboine and Sioux Tribes. Together these partners have

- Restored or established 282 acres of wetlands and protected 41,500 acres of native prairie and 24 miles of riparian habitat by developing restoration grazing systems at the Fort Peck Reservation.

- Replaced the failing dam with a new structure that allows refuge staff to manage water in the 1,500-acre Homestead Unit marsh system on the Medicine Lake National Wildlife Refuge.
- Enhanced a 58-acre shallow wetland at Lake Creek Marsh.
- Created 64 acres of wetlands at the Mosquito Creek Marsh and Whitetail Dam sites.
- Worked with private landowners to create, restore, or enhance an additional 770 acres of wetland habitat on private land.

To accomplish these projects, partners contributed some \$2,624,000 in addition to a \$640,000 North American Wetlands Conservation Act grant to achieve their conservation goals.

Information for this article was taken from the winter 2002 issue of *Birdscapes*. For more information, contact Mike Rabenberg, U.S. Fish and Wildlife Service, Medicine Lake National Wildlife Refuge, 223 North Shore Road, Medicine Lake, MT 59247. Phone 406-789-2305; e-mail [michael\\_rabenbert@fws.gov](mailto:michael_rabenbert@fws.gov).

### **Bridging the Gap for Wetland Restoration**

The City of Madison, Wisconsin, has begun a long-term wetland restoration project at its Cherokee Marsh Conservation Park. In January 2002 the city began the first phase of a wetland restoration project to tackle a problem that has been 30 years in the making. Back in the 1970s a sewer pipe was installed through a peat wetland adjacent to the Yahara River. Unfortunately, much of the peat washed out to the river before vegetation could stabilize, creating an open water ditch. The chasm grew wider with time, and just prior to the restoration effort it measured 60 to 200 feet wide. Diverse wetland plant communities (fen, wet prairie, sedge meadow) continued to be consumed by the growing ditch. The very soft, muddy bottom of the ditch was making it difficult for these emergent plants to grow. Sediments stirred up by carp further complicated the matter.

The City's challenge? Devise a scheme to assist nature in healing this "wound." They needed a restoration technique that could "bridge" the ditch and encourage vegetation to grow. The City's solution? Create floating platforms crossing the ditch and help plants grow on top of or in the platforms. Each platform is constructed of woven wire fencing; baled leaves; and willow, aspen, and cottonwood logs. Installation was a bit tricky. The city chose to install the platforms over the ice for easier access to this difficult site. A crew from the Wisconsin Conservation Corps installed seven "floating bridges" on the ice across the ditch. The logs and leaf bales, attached to the woven wire fence at 5-foot intervals, provide flotation. Logs driven into the mud through holes in the ice provide stability. Cross-linked structures between several of the "floating bridges" form a lattice network, increasing the strength of the structures.

In June 2002, the city planted the "floating bridges" with a variety of emergent wetland plants. Some were started as seeds or tubers placed on or in the leaf bales. Others were installed in pieces of coconut fiber matting, which were contract-grown by a native plant nursery. The nursery grew the plants in the matting for 6 weeks. Lashing these prevegetated mats onto the wire fencing will keep them in place while they become established. The City hopes the network of woven wire fencing will provide structure,

allowing the plants to gain a foothold. In 3 to 5 years the wetland plants should close the ditch with a solid cover of vegetation, healing this old wound on the landscape.

This article was adapted from the City of Madison's *People for Parks* newsletter, spring 2002 edition. To see the original article, visit [www.ci.madison.wi.us/parks/newsletter/Spring%202002.pdf](http://www.ci.madison.wi.us/parks/newsletter/Spring%202002.pdf).

*If you are part of an innovative restoration project that has had positive results, we'd like to hear from you. Please send a short description of your project to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*

## **Funding for Restoration Projects**

### **Free Fundraising Tip Sheet**

Non-Profit Nuts & Bolts is offering a free tip sheet called "How to Develop an Effective Fundraising Plan." The tip sheet outlines the development of a 12-month fundraising program and includes helpful information on when to start the planning process and who to involve. To request a copy, visit [www.nutsbolts.com/np-tipSheet.htm](http://www.nutsbolts.com/np-tipSheet.htm).

### **Sunbeam Corporation Philanthropy**

The Sunbeam Corporation makes contributions to organizations or projects with 501(c)(3) status. Consideration is given to requests from organizations in the areas of family services, community and civic, art, and culture, general health, and environment and conservation. For complete details, visit [www.sunbeam.com/corporate\\_philanthropy.htm](http://www.sunbeam.com/corporate_philanthropy.htm).

### **U.S. Fish & Wildlife Service Wetlands Grants**

The U.S. Fish & Wildlife Service is offering about \$2 million in grants to help preserve wetlands threatened by development. Priority will go to proposals forming partnerships ensuring long-term wetlands conservation. Eligible applicants include public and private agencies and organizations. Applicants must propose "on-the-ground" projects ready for implementation. Administrative overhead can't make up more than 10 percent of project costs. Funding priority will go to initiatives benefitting larger wetlands. Individual grants will not exceed \$50,000. Apply by November 29. For more information, visit [northamerican.fws.gov/NAWCA/USsmallgrants.html](http://northamerican.fws.gov/NAWCA/USsmallgrants.html) or contact Keith Morehouse, Fish & Wildlife Service small grants coordinator, at 703-358-1784.

*Please send any news you have on funding mechanisms available to local community organizations to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*

## **News and Announcements**

### **Innovative Public-Private Partnership Creates Red River National Wildlife Refuge**

On August 26, 2002, Interior Secretary Gale Norton dedicated the Red River Wildlife Refuge in Natchitoches, Louisiana, and recognized the partnerships that made it possible. The Red River National Wildlife Refuge in Louisiana owes its existence to Entergy Corporation, The Conservation Fund, the U.S. Fish & Wildlife Service, and other volunteers. The refuge is the product of a carbon sequestration (trapping) project that will offset the environmental impacts of fossil fuel emissions, provide new fish and wildlife habitat, and bring recreation-driven economic benefits to northwest Louisiana along the Red River Valley in Natchitoches Parish near Shreveport.

“The dedication of Red River National Wildlife Refuge represents a triumph of cooperation and partnership in the service of conservation,” said Secretary of the Interior Gale Norton. “Thanks to the contributions of Entergy and The Conservation Fund, the new refuge will provide habitat for fish and wildlife while offering the citizens of Louisiana recreational opportunities. At the same time, the restoration of the bottomland hardwood forest will remove 240 tons of carbon from the atmosphere each year, providing cleaner air.”

The Conservation Fund purchased 600 acres of nonproductive agricultural acreage along the Red River with financial assistance from New Orleans-based Entergy Corporation. After reforestation, the corporation plans to donate the property, along with a management endowment, to the U.S. Fish & Wildlife Service. This gift will become the first tract of land in the Red River National Wildlife Refuge. This arrangement illustrates recent strides by businesses and environmentalists, who are increasingly forming strategic alliances for their mutual benefit.

Entergy, in partnership with Environmental Synergy, Inc., has already planted more than 180,000 native trees on the property. Over the next 70 years, the trees will sequester 275,000 tons of atmospheric carbon dioxide, as well as provide important bottomland hardwood habitat benefitting migratory birds, turkeys, white-tailed deer, and other wildlife.

“This powerful public-private partnership represents a breakthrough in using voluntary and market-driven approaches to address two of the nation’s top environmental concerns—climate change and habitat protection,” said Lawrence A. Selzer, president of The Conservation Fund. “We applaud the leadership of Senator Landrieu and Congressman McCrery and the commitment of Entergy in balancing economic goals with environmental principles.”

“Entergy is working toward sustainable development that creates value and provides safe, reliable, affordable, clean energy with a constantly shrinking environmental impact,” noted Curt Hebert, Entergy’s executive vice president of external affairs. Hebert added that Entergy’s management is acutely aware that societal and environmental issues will become more important globally, nationally, and especially within the regions in the United States where the company operates.

Carbon sequestration takes advantage of the fact that as plants grow, they incorporate carbon from the atmosphere into their structure through the process of photosynthesis. Sequestration programs encourage corporations and governments to plant trees to offset the impact of carbon emissions. As the trees reach maturity and their growth slows, they also need and “trap” less carbon.

The Red River Valley represents a historic corridor for migratory birds funneling out of North America to the Gulf Coast. An important tributary of the Mississippi River, the Red River has one of the most degraded watersheds in Louisiana. Eventually, the refuge will encompass 50,000 acres. In addition to protecting wildlife habitat and enhancing air quality, it will offer public recreation opportunities such as hunting, fishing, hiking, and educational outreach programs. For more information, see <http://news.fws.gov/newsreleases/r4/C9F4E89A-D06F-433E-86745B914A9A7B96.html>.

### **U. S. Department of Agriculture Joins The Nature Conservancy in Protecting Florida Ranchlands and Restoring Wetlands**

In June 2002 the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS) and The Nature Conservancy announced pilot projects to restore and manage wetlands in the Lake Okeechobee watershed in south Florida. The pilot projects are partnerships between the ranchers, the Conservancy, and the NRCS, and they use a combination of public and private funds to purchase conservation easements on rangelands and flowage easements over former wetlands. The wetlands were ditched and drained years ago to create drier pastures for cattle grazing. They will now be restored to hold and filter water and to re-create wildlife habitat.

The Conservancy project, called Florida Lands and Outstanding Waters (FLOW), is intended to demonstrate how a substantial proportion of the almost 350,000 acres of ditched and drained ranch wetlands in the Lake Okeechobee watershed could be restored to their original character and function. Functioning in a natural way, these wetlands would then be a significant element in storing and cleansing water for the restoration of the Everglades ecosystem.

The FLOW project assists ranchers in restoring and permanently managing wetlands in three ways: (1) It purchases conservation and flowage easements over ditched and drained wetlands and surrounding buffer lands; (2) it pays for the physical restoration of the wetlands through filling ditches and installing control structures; and (3) it allocates funds for the maintenance and management of the restored area over a 10-year period.

The NRCS will fund a portion of the conservation easement acquisition costs using funds from the 2001 Farmland Protection Program. The Conservancy will fund restoration of wetlands on the XL Ranch, and the remainder of the funding for the pilot will come from a grant to the Conservancy by a private donor. For more information see <http://nature.org/wherewework/northamerica/states/florida/press/press693.html> or contact Jill Austin at 407-682-3664 ext.129 or by e-mail at [jaustin@tnc.org](mailto:jaustin@tnc.org).

## **Wisconsin DNR Habitat Restoration Grants Announced**

Nine Wisconsin conservation groups working to restore and protect native areas in the state will be awarded almost \$100,000 in funds through a relatively new program designed to assist small, grassroots groups that would not otherwise be eligible for such funding. The Habitat Restoration Grant Program was started in 2000 by the Natural Resources Foundation (NRF) and the state Department of Natural Resources to help small conservation groups that don't have tax-exempt, nonprofit (501(c)(3)) status undertake long-term habitat restoration projects.

The Habitat Restoration Grant program supports projects that restore native habitats, especially prairie, oak savanna, riparian areas, stream buffers, rivers, lakes, or wetlands; benefit rare, threatened or endangered species; restore sites where dams have been removed; complement other adjacent conservation projects; support existing conservation goals and objectives; and provide opportunities for education and outdoor recreation (although educational supplies are not funded by the program).

DNR staff work with grant recipients to accomplish their conservation goals. In turn, the agency receives additional labor to meet management goals that otherwise would be difficult or impossible, explains Shahla Werner, NRF grants coordinator. "These grants offer an excellent way for the DNR to promote and establish partnerships at the local level," she notes.

Several of the nine conservation groups plan to restore prairie communities. For example, the Deer Creek Sportsmen's Club of Dane County will restore the 20-acre Deer Creek Prairie Vista in Donald Park, a newly dedicated county park. Activities will include clearing the area of invasive species, collecting and planting native species, and trail maintenance. Friends of the Whitewater Prairie plans to purchase seed to reconstruct a 2-acre wet prairie and a 1-acre oak savanna near Friar's Woods in Jefferson County.

Several other projects involve shoreline or aquatic habitat improvements. For example, the Baraboo River Canoe Club will receive funding to restore areas newly exposed by dam removal. Plans include removing trash and debris, planting native species, and removing invasive buckthorn and honeysuckle along the Baraboo riverbank. The *Lake Arrowhead Conservation Club* will restore shoreline by removing seawall and implementing a native plant buffer. For more information see [www.dnr.state.wi.us/org/caer/ce/news/on/#art5](http://www.dnr.state.wi.us/org/caer/ce/news/on/#art5) or contact Shahla Werner at 608-266-1430.

*To post your restoration news and announcements, please send information to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*

## **Upcoming Conferences and Events**

### **New Listings**

#### **Arkansas Watershed Advisory Group's 2002 Conference: Watersheds and the Natural State**

October 4–5, 2002

Little Rock, Arkansas

The Arkansas Watershed Advisory Group's (AWAG) 2002 Watershed Conference is designed to provide useful information and training to a wide-ranging audience on the State of Arkansas' natural resources and the watershed approach. The conference will concentrate on four topics that were chosen to give attendees a better understanding of Arkansas' environmental challenges and potential solutions:

- Environmental Policy
- Watershed Health
- Water Supply and Availability
- Watershed Awareness and Education

The conference is designed to provide information and training on these topics through presentations, workshops, interactive discussions with environmental professionals, and field training at Fourche Creek and Lorange Creek. Visit [www.awag.org](http://www.awag.org) to register online.

#### **Hydrologic Extremes: Challenges for Science and Management**

October 13–17, 2002

Portland, Oregon

The intent of the conference is to convene scientists, government officials, and business personnel to share scientific and technical information on activities and developments within the fields of environmental hydrology and hydrogeology. The program will include keynote speakers, plenary sessions, short courses, and field trips. Sessions will cover topics including riparian processes, climate change, droughts and floods, stream temperature standards and modeling, endangered species, forest and watershed conditions, and channel and watershed morphology. This conference will be held in conjunction with the American Institute of Hydrology's 2002 Annual Meeting. For more information, visit [www.riparian.net/conference.htm](http://www.riparian.net/conference.htm).

## Previous Listings

### **Wetlands 2002: Restoring Impaired Wetlands and Other Waters**

October 7–9, 2002

Indianapolis, Indiana

This national EPA-sponsored conference is designed to assess the success and failure of science and policy related to the restoration of wetlands and related waters and to identify methods for future success. Conference sessions will address impaired wetlands and waters, restoration programs, monitoring and assessment, water quality standards for wetlands, isolated wetlands, integrating wetlands and watershed and land use management, and wetland regulation. For more information visit the Web site [www.Core4.org/Wetlands](http://www.Core4.org/Wetlands) or contact Tammy Taylor at [taylor@ctic.purdue.edu](mailto:taylor@ctic.purdue.edu).

### **Restoration in the Coastal Plain: Stream and Wetland Processes**

October 7–10, 2002

Wilmington, North Carolina

North Carolina State University Stream Restoration Institute, North Carolina Sea Grant, and North Carolina Cooperative Extension Service are sponsoring the fifth annual North Carolina Stream Restoration Conference. The conference will address various aspects of coastal plain processes and will include several case study presentations of coastal stream and wetland restoration projects completed within the last 5 years with a focus on projects implementing natural channel design approaches. The conference will also emphasize estuarine systems, biology (benthos) of coastal streams and wetlands, vegetation for the coast, woody debris in coastal streams, buffer regulations, drainage issues, beavers, habitat- and ecosystem-scale restoration, mitigation, site selection, watershed assessment, effects of coastal urban areas, landowner education, and dam removal. For more information, visit [www.bae.ncsu.edu/bae/programs/extension/wqg/sri/Conference/Conference2002.html](http://www.bae.ncsu.edu/bae/programs/extension/wqg/sri/Conference/Conference2002.html).

To post information about upcoming conferences and events, please e-mail [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).

## Restoration-Related Web Sites

[www.pitcherplant.org](http://www.pitcherplant.org)

**Meadowview Biological Research Station.** Meadowview is a nonprofit organization dedicated to preserving and restoring rare wetland plants, habitats, and associated ecosystems on the coastal plain of Maryland and Virginia. The site provides an on-line tour of pitcher plant bogs of the Southeast. It offers guides to propagation and reintroduction of pitcher plants. The site also describes several ongoing wetland education efforts in Maryland and Virginia. *The site would be useful for anyone interested in southeastern wetland flora.*

[www.mrc.com/CurrentRestoration.html](http://www.mrc.com/CurrentRestoration.html)

**Mendocino Redwood Company Restoration Project Site.** Mendocino Redwood Company (MRC) has been working with numerous groups and individuals to initiate and facilitate restoration work on the streams on its lands. This site provides information about many projects, including a short description, location, partners, and project status. A number of pictures of restoration projects in progress are included. *This site would be useful for anyone interested in stream restoration projects in the Northwest.*

<http://dnr.metrokc.gov/wlr/lands/weeds/weedid.htm>

**King County Noxious Weeds.** King County Washington maintains a noxious weed identification Web site to help landowners identify and remove nonnative invasive species. The site lists weeds by priority and features pictures of most. *This service would prove beneficial to those involved in the implementation and maintenance of restoration projects in the Northwest.*

[www.great-lakes.net/lists/smartgrowth-washtenaw/2001-11/msg00005.html](http://www.great-lakes.net/lists/smartgrowth-washtenaw/2001-11/msg00005.html)

**Isolated Wetlands Listserv.** This Web page allows interested persons to sign up for a new Listserv to track developments across the country related to the protection of “isolated” waters and wetlands in the wake of the U.S. Supreme Court’s ruling in *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers*. This Listserv is hosted by the National Wildlife Federation. *This site would be useful for anyone wishing to hear the latest news on developments concerning isolated wetland regulation.*

[www.wa.gov/dnr/htdocs/fr/nhp/refdesk/herp](http://www.wa.gov/dnr/htdocs/fr/nhp/refdesk/herp)

**Washington Herpetofaunal Atlas Project.** The Herp Atlas provides the most current information available on Washington’s herpetofauna (amphibians and reptiles), including details on life history, habitat, status, threats, management concerns, and distribution. Information obtained through this project will be used to track the current status of each species, document rare species occurrences, analyze population trends, identify critical habitat, and establish conservation priorities. The Herp Atlas is a cooperative project of the Washington Department of Natural Resources, Bureau of Land Management, and Washington Department of Fish and Wildlife. *This site would be useful for anyone interested in amphibians and reptiles in the Pacific Northwest.*

[www.massland.org](http://www.massland.org)

**Massachusetts Land Trust Coalition.** This Web site was created to disseminate conservation information to Massachusetts Land Trust organizations. It provides links to a variety of news articles related to land trusts. It also has a conservation resources page with links to other land trusts, a list of optional land conservation practices, and sample legal advisories prepared by the Massachusetts Land Trust Coalition. *This site would be very useful for anyone exploring land conservation options.*

[www.ncsu.edu/sri](http://www.ncsu.edu/sri)

**North Carolina Stream Restoration Institute.** The goal of the Institute is to improve water quality and aquatic ecology through research, demonstration projects, and education of the public. This Web site provides links to numerous resources, including North Carolina native species lists and fact sheets on sediment, erosion, riparian buffers, and stream bank stabilization methods. *This site would be useful for anyone seeking information or resources related to streambank restoration.*

[www.epa.gov/OWOW/NPS/Ecology](http://www.epa.gov/OWOW/NPS/Ecology)

**Ecological Restoration.** This site features an EPA paper on ecological restoration. The paper includes several restoration case studies, a decision-making guide for restoration, and tips on determining the cost-effectiveness of restoration projects. *This Web site would be useful for anyone seeking to protect water resources by improving water quality in local streams.*

[www.riparianbuffers.umd.edu/slide.html](http://www.riparianbuffers.umd.edu/slide.html)

**Maryland Cooperative Extension Riparian Buffer Site.** The Maryland Cooperative Extension maintains this site on riparian buffers. The page contains links to fact sheets on trees, grasses, and shrubs to use in riparian buffers, managing buffers, and financial assistance options. The site also has links to a slide show on riparian buffers, plant and seed suppliers, and Web and reference resources. *This site provides extensive practical information on the creation and maintenance of riparian buffers.*

*Let us know about your restoration-related Web site. Please send relevant URLs to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*

## Information Resources

### California Botanical Information Now On-line

A unique, comprehensive online resource, CalFlora ([www.calflora.org](http://www.calflora.org)), offers botanical information that can be used for education, research, and conservation purposes. The data are organized by plant type and by county and include distribution, habitat, and life-form data for the approximately 8,430 vascular plant taxa known to be native or naturalized in California. Reflecting the local biodiversity, the database helps determine which plants are common, rare, or locally significant.

### Conserving Salmon: King County Accomplishments and Action Plan

King County, Washington, has developed a report that outlines how the county will perform environmentally sensitive work—everything from the way flood control levees are repaired to maintaining county roads and parks. These new business practices are a response to the federal listing of chinook salmon and bull trout as threatened species under the Endangered Species Act. The report details the changes that have resulted from more than 3 years of intensive scientific study and analysis of how King County meets its legal obligation to save these and other species. The Puget Sound region faced the first-ever such listing in an urban area. The county's challenge was preserving salmon while not endangering a vital economy. The report includes chapters on habitat protection and restoration and public outreach and education. It's available for download at [www.metrokc.gov/exec/esa/conservingsalmon02.htm](http://www.metrokc.gov/exec/esa/conservingsalmon02.htm).

*If you'd like to publicize the availability of relevant information resources, please send information to [restorationupdate@tetrattech-ffx.com](mailto:restorationupdate@tetrattech-ffx.com).*