

Welcome to the Biweekly Restoration Information Update Page. This web site

- Provides current information on wetland and river corridor restoration projects
- Recognizes outstanding restoration projects
- Provides 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 or mail it to Kathryn Phillips, Biweekly 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 serves or has the appearance to serve as advocating or lobbying for any political, business, or commercial purposes.

Contents

- [Feature Article](#) - Our feature article recognizes outstanding restoration projects or programs.
- [Five-Star Restoration Projects Update](#) - Five-star restoration projects will be revisited periodically to see if the modest amount of funding, between \$5,000 and \$20,000, has helped the local restoration partners achieve their goal.
- [Community-Based Restoration Partnerships](#) - This section highlights innovative community-based partnerships working to restore wetlands and river corridors.
- [Funding for Restoration Projects](#) - Here you'll find information pertaining to grants and other funding sources available to local watershed groups and other grassroots community organizations to implement restoration projects.
- [News and Announcements](#) - This section includes up-to-date information on regulatory issues affecting restoration, conference and workshop announcements, and other newsworthy tidbits.
- [Restoration-Related Web Sites](#) - Check out other groups on the Web that are helping in the effort to restore wetlands and river corridors.
- [Information Resources](#) - Books, journals, fact sheets, videos, and other information resources to aid you in your restoration project are provided here.
- [Ask a Restoration Question](#) - Post your restoration related question. Answers will be provided by the EPA and Bi-Weekly readers.

Feature Article

Illinois Kettle Marsh In Recovery

Illinois Natural History Survey researchers, in cooperation with the Champaign County Forest Preserve District, the Grand Prairie Friends, and The Nature Conservancy, have worked to restore a 10-acre kettle marsh along the Middle Fork of the Vermilion River. Historically a wetland, this area had been drained by underground field tiles and used as pasture. In 1990 the drainage tile system was dismantled, restoring the natural hydrology. Almost immediately wetland vegetation began to return, emerging from the existing seedbank, as well as establishing from nearby seed sources and from seeds brought in by wildlife. Forty-six species were recorded in the first year alone, dominated by native plants such as spikerush, water plantain, beggar-tick, and marsh yellow cress. Little vegetation was planted. Natural revegetation and community development were allowed to proceed at their own pace.

As documented by vegetation sampling since 1991, wetland plants like duckweed, smartweed, sedge, and millet became established and flourished almost immediately, while others, such as

arrowhead and rice cutgrass, did not reach prevalence for a couple of years. Although rare at first, problematic, aggressive species, such as cattail and reed canary grass, became more dominant in the passing years. This growing and diverse wetland plant community encouraged the immigration of wildlife. Songbirds, shorebirds, rails, waterfowl, muskrats, coyotes, rabbits, deer, turtles, frogs, and snakes have all found this new wetland. Two birds listed as endangered in Illinois have been observed in the wetland—the pied-billed grebe and the northern harrier (marsh hawk).

Research, monitoring, and management of the wetland are continuing with the help of Illinois State Geological Survey researchers. In addition to continued vegetation sampling, water levels both above and beneath the ground are being monitored with staff gauges and groundwater wells. Researchers are investigating the development of the plant community over time and hope to relate these changes to the hydrology of the wetland. Initial results indicate that certain plant species, such as beggar-tick, spikerush, and ragweed, fluctuate dramatically between wet and dry years.

Monitoring of potentially problematic, aggressive plant species is continuing, and when necessary control measures are taken. In November 1994 a controlled burn was conducted in an effort to help control cattail and reed canary grass. In response to this action, plant species diversity increased sharply, to more than 60 species. Unfortunately, both target species increased slightly, while two highly desirable species (arrowhead and water plantain) decreased greatly. Based on these conflicting results, the use of fire as a management tool to control problem vegetation in the wetland is still being studied. Because of the uncertainty of fire, in 2002 researchers plan to apply herbicide to try control the continuing spread of reed canary grass throughout the wetland.

In addition to restoring the wetland, researchers have worked to restore the native prairie and oak savanna habitats surrounding the wetland. This continuing process involves many aspects of vegetation establishment and management, including the seeding and planting of prairie species and the regular use of fire to control problem vegetation and encourage the growth of fire-adapted prairie and savanna species. Researchers frequently host work parties at the site to remove invasive species such as garlic mustard, bush honeysuckle, and multiflora rose.

Continued monitoring of the entire restoration will ultimately allow the effectiveness of various habitat management techniques to be evaluated. Although restoration and management are still underway, the overall goal of this project is to develop a natural, functioning, wetland-centered ecosystem that contributes to the natural resources of Illinois. Researchers also hope to gain valuable knowledge about the science of restoration and apply it successfully to similar types of restoration and management projects in the future.

For more information contact Brian Wilm at the Illinois Natural History Survey at 217-244-2176 or bwilm@mail.inhs.uiuc.edu. An online article written by Brian Wilm, Scott Simon, and Marilyn Morris in the January-February 1996 INHS Reports is available at

www.inhs.uiuc.edu/chf/pub/surveyreports/jan-feb96/wetlands.html. [EXIT disclaimer >](#)

If you'd like your project to appear as our next Featured Article, email a short description to restorationupdate@tetrattech-ffx.com.

[Top](#)

Five-Star Restoration Projects Update

The goal of EPA's Five-Star Restoration Program is to bring together citizen groups, corporations, youth conservation corps, students, landowners, and government agencies to undertake projects that restore streambanks 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: Potomac Basin Wetland Restoration

Five-Star Grant: \$10,000

Grant to: Alexandria Seaport Foundation

Location: Alexandria, Virginia

Project Description:

The Alexandria Seaport Foundation (ASF) will work with local at-risk youth and adult volunteers to build on past shoreline stabilization and wetland restoration efforts on two highly polluted streams in the Potomac Basin and a section of the Potomac shoreline. Overall, the project will enhance and restore a total of 140 acres of stream bank and 4,500-feet of tidal shoreline. It is expected to result in significant reductions in sediment, nitrogen, and phosphorus loadings to the Potomac River, an American Heritage River. Youth and community volunteers will aid in reseeding and planting water-filtering plants, cutting vines and other invasive nonnative plant species, and planting trees. Some youth with special interests and needs will be offered an opportunity to become paid environmental apprentices, who will work on wetland projects, perform greenhouse duties, and work in Alexandria Seaport Foundation's water quality lab. Overall, the project will heighten the community's awareness of the values and functions of wetland and stream ecosystems through direct involvement in restoration activities. The National Marine Fisheries Service Community-based Restoration Program is providing partial funding for this grant.

Update:

ASF continued to accomplish many of the goals set out in its wetland restoration program. They hired a new environmental program manager and created two apprentice positions for environmental and wetland remediation. The project partners constructed two ponds at Daingerfield Island, planted more than 50 Virginia white pine saplings at Four Mile Run, and cultivated over 500 wetland seeds on private lands along the Potomac shoreline. They also removed more than 150 bags of trash and 30 tires, and they saved at least 150 trees on the Potomac shoreline. ASF conducted stream and buffer restoration at Chinquapin, a new site. ASF worked diligently to keep the public involved and informed. They created a new wetland propagation program with the Mount Vernon High School greenhouse. They also held 10 community wetland workshops in the Potomac watershed for schools, community organizations, and environmental service groups. More than 200 school-age children visited Dyke Marsh. Some were given boat tours while others toured the marsh on land. About 600 people attended community workshops held by the Foundation. ASF also partnered with several related organizations, including Americorps, Argus House, and Retired Senior Volunteer Program.

Project Title: Rouge River Riparian Restoration

Five-Star Grant: \$10,000

Grant to: Dearborn Public Schools

Location: Dearborn, Michigan

Project Description:

Ford Motor Company management has taken a leadership role in worldwide wildlife habitat enhancement on public lands as well as on its own properties. In the Rouge River project, Ford is partnering with Dearborn Public Schools to increase public involvement and commitment to riparian and wetland protection and enhancement in their community. The Dearborn Public Works Department has identified an opportunity to improve a section of the Rouge River riparian zone that has substantial public visibility. Students from the school district, under the technical direction of local experts drawn from the University of Michigan-Dearborn and conservation groups, will help establish riparian schoolyard habitats and a source of plants to be used on the Rouge River riparian restoration project. The students, as part of their community service program, will work with officials from the Public Works Department, the Friends of the Rouge River, and the Wildlife Habitat Council in the restoration and maintenance program for the Rouge River.

Update:

City of Dearborn employees, Ford volunteers, and students of all ages prepared various sites along a section of the Rouge River for the installation of more than 3,500 native trees, shrubs,

flowers, and grasses. In October 1999, 42 high school students planted 1,500 plants along the Rouge River at Ford Field. In 2000 more than 5,000 plants, along with interpretive signs, were installed along the river to demonstrate to the community the benefits of ecological restoration, such as water quality protection and wildlife habitat. In addition, small nature areas established by elementary schools in 1999 were expanded in 2000.

Project Title: Saline Wetland Restoration and Interpretive Park

Five Star Grant: \$10,000

Grant to: City of Lincoln, Public Works & Utilities

Location: SLincoln, Nebraska

Project Description:

The City of Lincoln in partnership with Lancaster County, Lower Platte South Natural Resources District, and a private landowner are working together to restore 54 acres of a saline wetland area. These wetlands and the plants they support are very rare in Nebraska, and their restoration will expand current knowledge of saline wetland systems. In addition to completing the restoration, an interpretive trail that explains the origin and ecology of saline wetland systems, history of the salt industry in Lincoln, history of the railroad in Nebraska, and facts about wetland restoration methods will be developed and constructed.

Update:

The partnership has completed construction of the restoration portion of the project. Fly ash was used to stabilize dispersive clays in the berm and thus minimize erosion. "Fish-scale" berms were also designed to concentrate salts required for the wetlands. Future work includes the construction of the mentioned 2-mile interpretive trail. The berm constructed to restore hydrology to the site will also serve as the base for the trail. Several interpretive signs printed with multicolored enamel to resist weathering will be installed, as will boardwalk spurs into the wetland. A parking lot big enough to accommodate school buses has also been incorporated into the plan.

Project Title: Wellspring Wetland Restoration Initiative

Five Star Grant: \$8,000

Grant to: North Florida Educational Development Corporation

Location: Quincy, Florida

Project Description:

The North Florida Educational Development Corporation, partnering with the City of Quincy, Florida, Department of Environmental Protection and others, will employ at-risk youth during a 6-week summer session to restore wetlands along Quincy Creek. The wetlands are along a 3-acre former industrial site that is being redeveloped as an organic food processing plant. Youth will remove large debris, trash, and nonnative plants that have overtaken the area. In addition to the work experience and job skills the youth will gain, the Florida Department of Water Management and the Florida Agricultural and Mechanical College Institute of Environmental Equity and Justice will provide an environmental education component for the project. In the long term, the area is envisioned to become Quincy's only downtown park, a place where the citizens can walk, bicycle, enjoy the outdoors, and gather for community events.

Update:

The work crew for the Wellspring Initiative Restoration Project was made up of at-risk students from an alternative school in Gladstone County, Florida. Students exhibiting good behavior in class were chosen to work on the project and were paid for the work they completed. The North Florida Educational Development Corporation supervised the team.

From the very beginning, the work crew encountered some unique challenges. When restoration work began in summer 2000, the workers found the site completely overgrown with kudzu vine, a

fast-growing invasive species. Record high summer temperatures limited the amount of time workers could spend on the project, and to complicate matters further, a nest of snakes was found on the restoration site. All these factors slowed the work that could be done by the restoration team.

Despite the difficulties, the restoration project continued. Workers removed large items such as shopping carts, barrels, tires, and concrete and metal construction materials from the site and cut back sections of kudzu vine. Removing these large objects reduced the number of hiding spots for the snakes and allowed predators, mainly owls and hawks, to naturally reduce the snake population.

After a variety of possibilities were examined, goats were brought in to clear the kudzu vine. They proved to be the best method of clearing the vine because the slope of the site prevented the use of heavy equipment and pesticides were not recommended because they could harm the existing wetland environment. Youth from the work crew received training on the proper care of goats from the Gladsen County Cooperative Extension. The Florida Department of Water Management provided further education on water basins, water quality, and watershed protection.

Despite the multiple challenges of this project, the project partners persevered and made the project a success. The City of Quincy fully endorsed the project and plans to use the restoration site as part of a city park.

For more information on EPA's Five-Star grant program, visit

<http://www.epa.gov/owow/wetlands/restore/5star/>.

[Top](#)

Community-Based Restoration Partnerships

Trees for Streams Program Takes Off

A tree planting program initiated by the Lamoille County Natural Resources Conservation District and Nature Center is making a difference in local streams. The program, Trees for Streams, encourages landowners to work with the Natural Resources Conservation Service and community volunteers to stabilize stream banks and establish forested riparian buffers in the Lamoille and Little River watersheds in central Vermont's Lamoille County. Last year the program successfully planted 1,400 willow wattles and 2,300 trees and shrubs at a cost of \$4,035.

Volunteers from the community, six area schools, Johnson State College, and the Vermont Youth Conservation Corps provided much of the labor. The partners' efforts helped stabilize more than 1.5 miles of stream bank running through 23 different properties. The Lake Champlain Basin Program, the U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program, the Vermont Department of Environmental Conservation, and participating landowners provide financial support for the program. For more information, contact the Lamoille County Natural Resources Conservation District and Nature Center, 109 Professional Drive, Suite 2, Morrisville, VT 05661 at lcnature@pwshift.com or see www.pwshift.com/lcnature. [EXIT disclaimer >](#)

Vermont Volunteers Helping Lewis Creek

Stream bank restoration has become a yearly affair for the Lewis Creek Association (LCA). Since 1992 the LCA has provided coordination and training for local volunteers to restore stream banks and instream and streamside habitats along Lewis Creek in western Vermont. Their efforts have led to the restoration of nearly 5,000 feet of Lewis Creek stream bank in four towns between Vermont's Green Mountains and Lake Champlain. The LCA has taught stabilization techniques such as alder brush roll construction and placement at the toe and in the bank, coconut fiber roll placement at the toe of the bank, cedar tree cutting and moving to the stream bank, and tree revetment (placing cedars along the stream bank with duckbills and heavy wiring). LCA has also taught various planting techniques, including making tree and shrub cuttings, constructing and placing willow wattles, cutting and placing willow stakes, planting rooted stock (whips), using brush blanketing, and using Tubex tree shelters.

In May 2001 the LCA helped scout and student volunteers use many of these techniques at four stream bank restoration sites in Starksboro, Ferrisburgh, and Charlotte, Vermont. More than 100 community volunteers participated, including four Boy Scout troops, the entire University of Vermont School of Natural Resources restoration ecology class, Ferrisburgh Central School

Community Service Club, Starksboro Robinson School and Conservation Commission, and LCA families and friends. The volunteers helped plant 1,500 trees and shrubs to improve fish and wildlife habitat and reduce nonpoint source pollution in the Lewis Creek watershed. For more information, see www.lewiscreek.org/stream_bank.htm [EXIT disclaimer](#) or e-mail scottpond@aol.com.

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.

[Top](#)

City Program Restores Watersheds

The City of Portland is working to restore native vegetation in the area's watersheds. Through its Watershed Revegetation Program, the city's Department of Environmental Services forms partnerships with public and private landowners to restore degraded stream bank and upland areas. Property owners pay from 50 to 100 percent of the project expenses. Environmental Services coordinates the contract labor and provides native plants, other materials, and technical assistance. Projects typically include upland plantings, riparian zone grading and planting, and wetland construction. By developing a large-scale program, the city has found a way to restore the watersheds in a cost-effective manner while supporting the local economy and tapping local technical resources. The program provides

- Cost efficiency - Using professional forestry contractors and reforestation techniques, 78 percent of project funds are spent on the planting and maintenance. A large-scale program increases wholesale purchasing power for labor, plants, and materials.
- Maintenance and monitoring - Projects are maintained and monitored for 5 years. Maintenance includes weeding, mulching, inter-planting, and watering.
- Development of partnerships - The program combines the efforts of many agencies, businesses, and individuals to restore riparian areas and watersheds.
- Experience - The city staff has more than 40 years of combined experience with native plants and reforestation.
- Use of local labor and materials - Local contract nurseries and farm and forest contractors provide over 95 percent of the project labor and plant materials.
- Guaranteed plant diversity - The program produces and uses seed and plant materials of 37 grass species, 15 shrub species, and 13 tree species, and the list grows each year.

The program has expanded tremendously. In 1997 the program's first year, the city planted fewer than 100,000 trees and shrubs on 50 acres. Each year the number of plants and acres has increased. In 2001 the city planted almost 300 acres of native vegetation with more than 700,000 trees and 200,000 shrubs. For more information, see www.cleanrivers-pdx.org/clean_rivers/watershed_revegetation.htm [EXIT disclaimer](#), write City of Portland Environmental Services, 1120 Southwest Fifth Avenue, Room 1000, Portland, OR 97204, or call 503-823-7740.

Florida Restores Wetlands in Kissimmee Prairie Preserve State Park

The Florida State Park Service recently completed a restoration project at Seven Mile Slough, located in the state's Kissimmee Prairie Preserve State Park. The 47,000-acre Kissimmee Prairie Ecosystem Restoration Project, composed of public and private lands, was born out of a desire by the park staff and adjacent landowners to help solve water resource problems that had been compounded by El Niño's extreme wet and dry periods. The landowners joined with the South Florida Water Management District and obtained a \$997,000 grant from the U.S. Fish and Wildlife Service. More than \$600,000 of those funds were spent entirely on restoration in the state park. The goal of the project was to use an ecosystem management approach to restore wetlands, enhance wetlands, and enhance the dry prairie found in the geographic area known as the Kissimmee Prairie Ecosystem. A secondary benefit was the creation of more natural water storage areas. Before the acquisition by the state, the Kissimmee Prairie Preserve State Park property had been used for agriculture. Past landowners had installed at least 76 miles of drainage ditches and altered the land surface to support vegetable crops. By the time the project

was completed, contractors had removed nearly 89 million cubic feet of dirt and filled all 76 miles of drainage ditches. The restored area has rebounded and now provides tremendously improved wetland and dry prairie habitats for waterfowl, migratory birds, fish, and wildlife. For more information, see www.dep.state.fl.us/parks/ncr/successes.htm [EXIT disclaimer >](#).

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.

[Top](#)

Funding for Restoration Projects

New Listings:

Georgia's Greenspace Program

The Georgia Greenspace Program establishes a framework within which developed and rapidly developing counties and their municipalities can preserve community greenspace. The program is voluntary, noncompetitive, and county-based. It awards grants to counties that develop and implement plans to permanently protect at least 20 percent of the county's geographic area as natural, undeveloped greenspace. Preference is given to plans that focus on water quality protection in rivers, streams, and lakes; flood protection; wetland protection; reduction of erosion through protection of steep slopes, areas with erodible soils, and stream banks; protection of riparian buffers and other areas (such as marsh hammocks) that serve as natural habitat and corridors for native plant and animal species; and scenic protection.

The program is funded by the Georgia Greenspace Trust Fund. The Trust Fund may also hold federal funds, state appropriated funds, donated funds, and any interest income. These monies are reserved for grants to eligible counties and cities with approved community greenspace programs to defray the costs of acquiring real property or conservation easements that qualify as greenspace.

For additional information on the Greenspace Program, visit the web site

www.dnr.state.ga.us/dnr/greenspace [EXIT disclaimer >](#), write Georgia Greenspace Commission, c/o Georgia Department of Natural Resources, 7 Martin Luther King Jr. Drive, SW, Room 146, Atlanta, GA 30334-4002, or call 404-656-5165.

Clean Ohio Fund

In Governor Bob Taft's 2000 State of the State address, the Governor outlined his vision for the Clean Ohio Fund. He announced that he would seek voter approval for a \$400 million program to preserve green space and farmland, improve outdoor recreation, and revitalize blighted neighborhoods by cleaning up and restoring polluted properties.

The vision, approved by an overwhelming majority of the Ohio Legislature, was placed on the ballot in November 2000. Voter approval made the Clean Ohio Fund a reality. The Clean Ohio Green Space Conservation Program was created to fund the preservation of open spaces, sensitive ecological areas, and stream corridors throughout Ohio. For more information on the Clean Ohio Fund, visit www.state.oh.us/cleanohiofund. [EXIT disclaimer >](#)

Please send any news you have on funding mechanisms available to local community organizations to restorationupdate@tetrattech-ffx.com.

[Top](#)

News and Announcements

Allegheny Energy Transfers 12,000 Acres to U.S. Fish and Wildlife Service

On February 14, 2002, Maryland-based Allegheny Energy, Inc., announced that the Allegheny Energy companies have taken a major step in preserving the unique plant and animal species in West Virginia's Canaan Valley by selling 12,000 acres of land to the U.S. Fish and Wildlife Service. The Fish and Wildlife Service will use the land to expand the Canaan Valley National Wildlife Refuge. Canaan Valley's elevation makes it the highest valley in the eastern United States. It contains one of the largest and healthiest freshwater stream and marsh ecosystems in the Appalachian Mountains, supporting populations of species not normally found in the region,

including the endangered Virginia northern flying squirrel and the Cheat Mountain salamander. To read the complete press release, see

www.alleghenyenergy.com/NewsReleases/2002/aenr021402.asp. [EXIT disclaimer >](#)

Coconino National Forest Expanded to Include Ephemeral Wetland In early January 2002, the Grand Canyon Trust completed the transfer of 247 acres inside the Dry Lake crater to the Coconino National Forest. Dry Lake features an unusual 60-acre ephemeral wetland inside a volcanic crater about 4 miles southwest of Flagstaff. It is home to a variety of plants and animals and is frequented by elk.

The Grand Canyon Trust negotiated the purchase and led fund-raising to protect Dry Lake. The purchase price of \$3 million plus interest, holding, and other costs made the total fund-raising goal \$3.8 million. The overall effort to raise funds for the purchase was made possible through \$2.5 million approved by Congress through the Land and Water Conservation Fund, plus local and national contributions.

Two development partnerships, Flagstaff Ranch Golf Club and Flagstaff Ranch Development, owned the 247 acres inside the caldera until this land transfer. The two partnerships still own and are developing land outside Dry Lake's ecologically valuable and fragile center. The original development proposal included a golf course in the middle of the Dry Lake crater. For more information, see www.grandcanyontrust.org/press/archive/pr010302.html. [EXIT disclaimer >](#)

Bush Creates First North American International Wildlife Refuge

In December 2001 President George W. Bush signed a bill officially creating the Detroit River International Wildlife Refuge, the first of its kind in North America. The refuge is located at the intersection of the Atlantic and Mississippi Flyways, through which an estimated 3 million ducks, geese, swans, and coots migrate annually. The refuge will conserve, protect, and restore habitat for the walleyes and 64 other kinds of fish, 29 species of waterfowl, and 300 species of migratory birds on more than 5,000 acres along the Lower Detroit River. The refuge includes islands, coastal wetlands, marshes, shoals, and riverfront lands along 18 miles of the Lower Detroit River from Zug Island south to the southern boundary of Sterling State Park in Monroe County, Michigan. The 330-acre Wyondotte refuge will be redesignated part of Detroit River International Wildlife Refuge.

[Top](#)

Upcoming Conferences and Events:

NEW LISTINGS:

Wetland Linkages: A Watershed Approach

June 2-7, 2002

Lake Placid, New York

The Society for Wetlands Scientists 23rd annual conference will focus on wetlands and their inextricable ties to energy, the economy, and ecology. Technical presentations are planned to address issues in the forefront of the news today, including isolated wetlands, wetlands and climate change, USGS global climate change research, and the natural history of the Adirondacks and the coastal wetlands of the Laurentian Great Lakes. Numerous other technical sessions will be held during the 6-day conference in Lake Placid, New York. For more information on topics being covered at the conference and for registration information, visit

www.sws.org/lakeplacid. [EXIT disclaimer >](#)

EMAP Symposium 2002:

The Condition of Our Nation's Streams and Rivers from the Mountains to the Coasts

May 7-9, 2002

Kansas City, Missouri

EMAP Symposium 2002 will be a 3-day symposium jointly sponsored by the U.S. Environmental Protection Agency's Office of Research and Development and the Council of State Governments. The symposium will address the Environmental Monitoring and Assessment Program's (EMAP) scientific programs and how they are targeted to meet state and tribal needs. The symposium will provide examples of research and technology transfer that have led to more efficient, less expensive, and more scientifically rigorous monitoring and a better understanding of the roles of monitoring, assessment, and research in identifying, diagnosing, and solving stream problems.

For more information, visit the symposium's web site at

www.csg.org/emap_symposium_2002.htm. [EXIT disclaimer >](#)

Healthy Ecosystems, Healthy People:
Linkages Between Biodiversity, Ecosystem Health, and Human Health
June 6–11, 2002
Washington, DC

The International Society for Ecosystem Health is joining with Conservation International's Center for Applied Biodiversity Science to present this conference addressing the complex linkages between biodiversity, ecosystem health, and human health. Plenary speakers, working groups, and poster sessions will discuss these linkages with the intent of gaining new understand that will affect environmental policy. The effects of changes in land cover on ecosystem functions and integrating environmental health and economic development will be among the topics discussed. For more information on the conference, visit www.ecosystemhealth.com/hehp. [EXIT disclaimer >](#)

[Top](#)

PREVIOUS LISTINGS

Hydrophytic Vegetation Workshop

March 20–23, 2002

Atlantic City, New Jersey

The goals of this conference are to investigate nationwide contemporary hydrophytic vegetation issues and increase dialogue between federal, state, and local regulatory agencies, nongovernmental organizations, the private sector, and the regulated community. Workshop activities will include sessions on vegetation sampling, remote sensing, problematic vegetation communities, and invasive species; a time for information exchange; and networking opportunities. The conference will be held at the Holiday Inn–Boardwalk in Atlantic City, New Jersey. The registration fee is \$160. For more information, contact Frank Reilly at (540) 286-0072 or reillygroup@msn.com.

AWRA Spring Specialty Conference: Coastal Water Resources May 13-15, 2002

New Orleans, Louisiana

The American Water Resources Association (AWRA) is sponsoring a conference directed toward coastal and water resources engineers, scientists, and managers who address a wide range of interdisciplinary concerns about coastal, estuarine, and inland systems. For more information, visit www.awra.org/meetings/Louisiana2002.

To post your restoration news and announcements, please send information to restorationupdate@tetrattech-ffx.com.

[Top](#)

Restoration-Related Web Sites

www.coastalamerica.gov/text/regions/gmregion.html [EXIT disclaimer >](#)

Coastal America's Regional Conservation Projects—Gulf of Mexico Region.

This web site briefly describes past, current, and proposed restoration projects in the Gulf of Mexico Region. The restoration projects include those working to reverse habitat degradation, coastal and shoreline erosion, pollution related to toxic substances and pesticides, nutrient enrichment, alterations to water flow, and declining living aquatic resources. *This site would be useful for anyone interested in ongoing restoration work in the Gulf of Mexico region.*

<http://dnr.metrokc.gov/wtd/shrp/assist.htm> [EXIT disclaimer >](#)

Small Habitat Restoration Program Technical Assistance. King County, Washington, Department of Natural Resources and Parks builds low-cost projects in rural and urban King County that enhance and restore streams and wetlands. This site provides basic information on how to use native vegetation to restore or enhance streams, wetlands, and their buffers. It includes instructions on how to determine the number and types of plants to use, how to prepare a

basic planting plan, and how to maintain the project. *This site would be useful for anyone looking for how-to restoration project information.*

www.shadesofgreen.bizland.com/tennhollow01.shtml [EXIT disclaimer >](#)

Tennessee Hollow Creek Restoration. This site offers a detailed look at the proposed plan to restore Tennessee Hollow Creek, one of two streams in San Francisco that have not been completely buried and built over with tall structures. The site offers a detailed report that describes the efforts of the Urban Watershed Project to restore the watershed. *This site would be useful for anyone planning a watershed-wide creek restoration project.*

www.epa.gov/owow/showcase/whiteriver/liberty_hill/libertyhill.html

Liberty Hill Farm Project. This web site provides information about a riparian restoration project using tree revetments, livestock fencing, and planting along the White River near Rochester, Vermont. *The site contains pictures depicting the site before, during, and after project completion.*

www.fs.fed.us/r9/gmfl/wrp1/habitat/habitaindex.htm [EXIT disclaimer >](#)

White River Partnership Habitat Restoration Projects. This site offers links to several stream restoration projects, each incorporating different restoration techniques (e.g., toe stabilization with rock and bio-engineering, root wad revetments, rock weirs). Each project description includes site information and restoration pictures. *This site would be helpful to anyone looking for examples of various restoration techniques.*

www.state.ak.us/adfg/habitat/geninfo/webpage/techniques.htm [EXIT disclaimer >](#)

Streambank Revegetation and Protection: A Guide for Alaska. The Department of Habitat and Restoration in the Alaska Department of Fish and Game hosts a stream restoration web site that offers detailed descriptions and diagrams of various stream bank revegetation and protection techniques. The site also provides numerous pre- and post-project photographs. *This site would be useful for anyone looking for information about streambank restoration techniques.*

www.scarboroughmaine.com/marsh [EXIT disclaimer >](#)

Friends of Scarborough Marsh. This site details the efforts of a coalition of private citizens and organizations working to protect Scarborough Marsh, a 3,100-acre salt marsh just south of Portland, Maine. *This site provides detailed information about the marsh and why it needs to be restored.*

www.tprd.tornet.com/marsh.htm [EXIT disclaimer >](#)

Madrona Marsh Nature Center and Preserve. Madrona Marsh is one of the last remaining vernal marshes in southern California. This site explores the resources and activities available at the Nature Center and Preserve, including walks, tours, science camps and classes, and habitat restoration work parties. *The Madrona Marsh Nature Center and Preserve serves as a good example of the extent to which a community wetland can be used as an educational resource for the public.*

www.sdinsider.com/community/groups/ffs [EXIT disclaimer >](#)

The Friends of Famosa Slough. The Friends of Famosa Slough (FFS) is a nonprofit organization established to protect and restore the Famosa Slough as a natural wetland preserve and to promote public awareness of the importance of wetlands. The FFS site lists locations of trails and benches throughout the wetland, provides information on the history of and future plans for the slough, and includes photos of wetland areas and wetland plants and fish. *This site would be useful for anyone interested in visiting Famosa Slough or learning more about southern California native wetland plants and animals.*

Let us know about your restoration-related web site. Please send relevant URLs to restorationupdate@tetrattech-ffx.com.

[Top](#)

Information Resources

Wetland and Watershed Protection Toolkit for New York: Guidance Materials for Local Governments

by Association of State Wetland Managers, Inc., 2002

The Toolkit provides print and digital materials to help incorporate wetland resource management into municipal planning. Informational narratives and new and preexisting multimedia materials, including publications, web pages and links, a CD ROM, and posters, are included. Use of the Toolkit should facilitate increasing development and use of wetland and watershed management plans, increased understanding of and compliance with wetland regulations, and reduction of point and nonpoint source pollution. The Toolkit is available at <http://aswm.org/lwp/nys>

[EXIT disclaimer >](#)

The Virtual Tour of the Forest

Virginia Department of Forestry, 2002

This educational CD-ROM uses Virtual Reality to show 360-degree images of the forest as well as video of wildlife. The CD-ROM also features information on riparian forests, forest products, urban forestry, water quality, and fire. The 50-page teacher's guide (in .PDF format) is also included on the CD. The CD can be ordered for \$5.00 on-line at www.dof.state.va.us (see link for "Publications/Maps") [EXIT disclaimer >](#)

Climate Change Threatens Health of America's Lakes, Streams, Rivers and Wetlands

Pew Center on Global Climate Change, 2002

This report examines the threat that global climate change poses to lakes, streams, rivers, and wetlands throughout the United States. The report notes that the temperature increases and variations in weather patterns projected for the next 100 years will result in changes in the geographic distribution of freshwater fish, interfere with the reproduction of many aquatic species, impair water quality, and impose added stresses on wetlands and other sensitive aquatic ecosystems. This report is available on-line at www.pewclimate.org/. [EXIT disclaimer >](#)

Stream Management Publications

The Ohio Department of Natural Resources

The Ohio Department of Natural Resources' Division of Water offers a series of stream management publications, including An Introduction to Stream Management, Restoring Streambanks with Vegetation, Natural Stream Processes, Evergreen Revetments, Forested Buffer Strips, and Live Fascines. Materials addressing other restoration-related topics are also available. Each publication is available on-line at

www.dnr.state.oh.us/water/pubs/fs_st/streamfs.htm. [EXIT disclaimer >](#)

Tree Protection and Restoration

Center for Sustainable Design at Mississippi State University

This document, available at <http://abe.msstate.edu/csd/NRCS-BMPs/tree.html> [EXIT disclaimer >](#), addresses construction techniques for building around trees, tree driplines and root locations, and tree preservation and protection.

If you'd like to publicize the availability of relevant information resources, please send information to restorationupdate@tetrattech-ffx.com.