



Commonwealth of Massachusetts

## Division of Ecological Restoration

DER Home

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Riverways Program

About DER



· DER Home ·

### Newsletters

## ***Ebb&Flow #8***

The Division of Ecological Restoration ***Ebb&Flow*** #8 - June, 2011

***An electronic newsletter from the Massachusetts Division of Ecological Restoration (DER)***

<http://www.mass.gov/dfwele/der>

#### In this Issue

- Welcome Letter
- Feature Story
- Division News
- Resources and Grants
- Calendar
- Non-Government On-line Resources
- On-line Resources
- Publications and Videos, etc.
- Previous Issues
- Newsletter Archive

[Welcome Letter](#)

[Feature Article](#)

[DER News and Project Updates](#)

[Grant, Prize, Contest, Award and Fundraising Opportunities](#)

[Calendar](#)

[On-line Resources](#)

[Non-Governmental On-line Resources](#)

[Publications, etc.](#)

Welcome Letter

***Greetings, restoration friends and colleagues,***

Stream flow scientists and restoration practitioners have embraced the concept of “[environmental flow](#)”. Environmental flows sustain healthy, functioning aquatic ecosystems, through adequate streamflow as well as natural variability in the timing and magnitude of those flows. Achieving environmental flow requires balancing multiple interests for water. This is tricky business and is at the core of what the DER flow restoration and River Instream Flow Stewards (RIFLS) Program seeks to achieve through monitoring and implementation.

The lead article of *Ebb&Flow* highlights two communities that have taken discrete actions (with DER assistance) to address stream flow alteration, Scituate and Georgetown. These two communities, in their efforts to restore First Herring Brook and Parker River, are using multiple techniques, from zoning to rebates to, try to achieve

environmental flows.

To help you consider flow restoration for your river and stream, Russ Cohen has assembled a host a resources and references related to natural stream flow restoration and water conservation, making this issue of *Ebb&Flow* more flow-focused

than usual. These flow-related items are highlighted by a water drop  so you can easily pick them out.

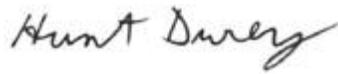
Finally, kudos to those that came out for the many [May and June river and wetland events](#) and a hearty thanks to our partners for your continuing support.

See you on the water.

Sincerely,



*Tim Purinton, Director*



*Hunt Durey, Acting Deputy Director*



[> Top of page](#)

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### Feature Article



Restoring Streamflow: Scituate and Georgetown show how it can be done

*By Laila Parker , Watershed Ecologist, DER*



*View of the streambed of the barely-flowing First Herring Brook in Scituate several summers ago. Fish and other aquatic organisms and habitats are placed under severe stress during these unnaturally-low-flow conditions. More widespread adoption of water conservation practices in Scituate should reduce these stressful conditions.*

One of the greatest pleasures of summertime can be relaxing on a lush green lawn. But lawn watering can reduce the natural streamflows necessary to support healthy aquatic organisms and ecosystems. Volunteers in DER's [River Instream Flow Stewards](#) (RIFLS) Program monitor streamflow at sixty sites across Massachusetts. In many cases, their data indicate unnaturally low summertime flows, due in part to increased summer water use. Through the RIFLS program, DER is working closely with a number of communities and watershed organizations to promote water conservation and other measures, with the goal of enabling more natural streamflow patterns and volumes. This article describes two communities that are taking great strides towards streamflow restoration.

### ***First Herring Brook in Scituate***

RIFLS volunteers from the First Herring Brook Watershed Initiative began monitoring streamflow in First Herring Brook in 2003, and over the years have monitored a total of six sites with the assistance of RIFLS staff. These sites represent both the inflows to and outflows from the Town of Scituate's reservoir systems. Collected data have helped to highlight the impacts of the town's reservoir management and groundwater withdrawals on stream flows, which affect the viability of migrating herring and other river-dependent aquatic life.

In 2011, DER provided a small grant to the [North and South Rivers Watershed Association](#) (NSRWA), a partner of the First Herring Brook Watershed Initiative. This spring, NSRWA worked with Scituate's Water Resources Committee to develop a regulation limiting the use of automated sprinklers to one day per week between Memorial Day and Labor Day. The Scituate selectmen passed this restriction in late March. NSRWA developed and mailed a [brochure to explain the watering restriction](#) in the greater context of First Herring Brook. Grant money has also been used to purchase radio meters to enable frequent data collection of water use among high-use residences. These data will help the town to assess the effectiveness of the new lawn watering restriction and to enforce the restriction.

In addition, DER, [The Nature Conservancy](#) and the [Stockholm Environment Institute](#)

(SEI) used RIFLS data to inform modeling of alternative water management strategies. Scituate, the NSRWA, and SEI are currently working together, with support from DER, to rerun the “WEAP” ([Water Evaluation And Planning](#)) model to identify appropriate reservoir levels to trigger water bans and to investigate the effects of restoring the Galen Damon Pond headwaters dam for streamflow management. Information from the model will be incorporated into an operational plan for targeted releases from the reservoirs at times when water is available and releases could benefit aquatic life.

### ***Parker River in Georgetown***

Over the last several decades, the Parker River has run dry in Georgetown in the summer and fall with increasing frequency. To better understand the issues, [Parker River Clean Water Association](#) (PRCWA) volunteers and RIFLS staff established and have monitored a total of five stream gauges on the upper Parker River and its tributaries, beginning in 2004.

RIFLS gauge data and volunteer observations indicate that the river has run dry immediately downstream of Georgetown’s wellfield in past summers. Georgetown water customers currently use about twice as much water in the summer as in the winter. The impact to the river is likely compounded by the fact that the town’s wells are located very close to the river. Significantly reducing summertime water consumption could thus have a significant beneficial impact on streamflows.

Acting on this opportunity, the PRCWA and the [Georgetown Water Department](#) recently applied for and won a [Water Conservation Grant from the Massachusetts Department of Environmental Protection](#). These monies are funding leak detection (the town pays for leak repair), a [rebate program for water-saving toilets and washing machines](#), [public outreach](#), including a [Water Conservation Committee](#), and water conservation education in the Penn Brook elementary school. Banners, newspaper articles, postcard mailings, public service announcements on cable TV, [slide presentations posted on-line](#), residential water audits, and rain-only (no irrigation) lawn demonstration plots are all part of the effort to encourage residents to “[Drop 10%](#)” (a campaign to reduce water consumption at least 10%). The Georgetown Water Department, Georgetown’s water conservation coordinator, the PRCWA, and RIFLS staff recently began conversations with the new management of the Black Swan Country Club regarding efforts the club is taking to conserve water in operations of its 18-hole golf course, as well as opportunities for indoor water conservation.

Increasing groundwater recharge could also improve the Parker River’s water balance. The PRCWA, with DER support, worked towards [passage of several regulations to better encourage stormwater infiltration](#) through Low Impact Development approaches. In the spring of 2011, Georgetown revised the site plan approval bylaw and subdivision regulations as well as Water Department regulations, and passed a new stormwater bylaw.

If you think streams in your community and/or watershed might be suffering from unnatural flow conditions, please contact Laila Parker at (617) 626-1533 or [laila.parker@state.ma.us](mailto:laila.parker@state.ma.us) to discuss options for documenting the problem through streamflow monitoring as well as the tools available for restoring environmental streamflows.



[> Top of page](#)

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## Division of Ecological Restoration News and Project Updates

Spring of 2011 was the season of the completion ceremony. DER and partners attended three major project completion events – all of these projects were DER

Priority Projects, including the award-winning [Eel River Headwaters Restoration](#) (Plymouth), the [ARRA-funded Stony Brook Restoration](#) (Brewster) and the [removal of the Briggsville Dam to restore the Hoosic River North Branch](#) (Clarksburg). These three projects alone resulted in the restoration of almost 40 miles of stream continuity and almost 100 acres of wetland. Special thanks to State Senators Ben Downing and Dan Wolf and State Representative Gail Cariddi for attending and speaking at these events. Visit the [DER's Active Habitat Restoration Priority Projects map](#) for more details and photos of these and other DER restoration projects.



The DER recently issued an [RFR \(Request for Nominations\)](#) for its [Priority Projects for 2012](#). The intent of this process is to assist DER in identifying and selecting aquatic habitat restoration and river revitalization projects that present significant benefits to the Commonwealth for directed assistance and services. Selected projects will be eligible to receive: (1) technical assistance from DER staff, (2) technical services by consultants via contract to the DER, and/or (3) limited direct funding for implementation. Through this RFR process, DER will choose a select number of priority restoration and revitalization projects that will be eligible for services as described above, and staff will work in partnership with the Applicant and other project partners to implement the project through the various phases of restoration and/or revitalization. These projects will remain eligible to receive such support until the project is complete unless new information warrants a revision of status; project partners do not need to resubmit a nomination in subsequent years. Projects may be undertaken by a single entity but most often are completed in collaboration with State, Federal, non-profit and other organizational partners. Awards of direct funding are generally made to the project Applicant but may be made to other project partners to facilitate project completion. Nominations must be received in the DER office by 5:00 p.m. on Monday, July 11, 2011.

Click [here](#) or contact Nick Wildman at (617) 626-1527 or Nick. [Wildman@state.ma.us](mailto:Wildman@state.ma.us) for more info.

#### [Follow the Cape Cod Water Resources Restoration Project](#)



Anyone with an interest in protecting coastal water resources can follow the progress of the [Cape Cod Water Resources Restoration Project](#) through updates from project partners on the new [CCWRRP Blog](#), [Twitter](#) and [Facebook](#). Click [here](#) for more info.



[> Top of page](#)

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#### Resources and Grants

Grant, Prize, Fellowship, Contest, Award, Fundraising, etc.  
Opportunities

*(presented in rough chronological order by application/nomination/entry deadline)*

The Mass. Department of Conservation and Recreation (DCR)'s [Greenways and Trails Program](#) recently announced the availability of the next round of [Recreational Trails Grants](#), with an application deadline of October 1, 2011. The Recreational Trails Program (RTP) provides funds to non-profit organizations, municipal, state, and federal land managers to develop and maintain recreational trails and trail-related



facilities for both non-motorized and motorized recreational trail uses. RTP grants are 80-20 challenge grants. In other words, 80% of the project costs are reimbursed to grantees, but at least 20% of the total project value must come from other sources (local match). There is a minimum award amount \$2,000 and a maximum of \$50,000. More money may be available for multi-town, regional projects. The Recreational Trails Program allocates 30% of its funds to motorized use, 30% to non-motorized use, and 40% to diverse use projects. DCR will be holding a workshop on this topic on Wednesday, June 29 from 6:00-8:00 PM at the Berkshire Athenaeum (Pittsfield Public Library), One Wendell Avenue, in Pittsfield. The workshop will go over the program requirements for the RTP, discuss the scoring criteria, provide examples and presentations on successful grant projects and provide feedback and answer any questions that potential applicants may have about the program or about their specific projects and how they fall within the requirements of the program. Contact Amanda Lewis at [Amanda.lewis@state.ma.us](mailto:Amanda.lewis@state.ma.us) or (413) 586-8706 ext. 19 to sign up for the 6/29 workshop or for other info on this grants program.

The [National Fish and Wildlife Foundation](#) (NFWF)'s [Native Plant Conservation Initiative](#) supports on-the-ground conservation projects that protect and restore native plant communities, including pollinators, on public and private lands. The program funds multi-stakeholder projects that focus on the conservation of native plants and pollinators under any of the following areas: conservation, education, restoration, research, sustainability, and data linkages. In 2011, applicants are encouraged to coordinate with federal agencies projects that benefit eastern North American early successional habitat (the other preferred habitat types aren't found in this region). Eligible applicants include nonprofit organizations and local, state, and federal government agencies. The application deadline is June 30, 2011; click [here](#) for more info.

The [Buzzards Bay National Estuary Program](#) (BBNEP) is seeking proposals from eligible Buzzards Bay watershed communities for [Buzzards Bay Watershed Municipal Minigrants](#) for projects that help meet the BBNEP's goals to protect and restore water quality and living resources in Buzzards Bay and its surrounding watershed. A total of \$180,958 of federal funds is available. To view the Request for Responses, visit [www.Comm-PASS.com](http://www.Comm-PASS.com) and search for document number "ENV 11 CZM 07." For more information about the program and past awards, see the [BBNEP funding web page](#). Proposals are due by June 30.

The [Mass. Office of Coastal Zone Management](#) (CZM) has released a Request for Qualifications (RFQ) seeking proposals from coastal communities to serve as pilots for implementing coastal shoreline and floodplain management strategies supported by CZM's [StormSmart Coasts program](#). Beginning in September, CZM will provide each pilot community with direct technical and outreach assistance to apply strategies that are most appropriate for the community's capacity, goals, and specific coastal issues. The support provided by CZM will be in-kind assistance rather than any direct funding or contracts. To view the RFQ, visit the [Comm-PASS website](#) and search for solicitation "ENV 11 CZM 06." For information about the previous round of projects, see the [StormSmart Coasts Pilot Projects web page](#). Proposals are due by July 1.

 [YSI](#), an employee-owned company that supplies instruments, software, and data collection platforms for environmental monitoring and testing, has established the [YSI Foundation](#), which donates a portion of company profits to environmental causes as well as educational and charitable organizations. The [YSI Foundation's 6th "Who's Minding the Plant" environmental grant award program](#) will go to a deserving nonprofit focused on monitoring environmental change through high temporal and/or spatial resolution, autonomous water quality monitoring (see the RFP for more details). The YSI Foundation will award two grants (selected by an outside selection committee) – \$25,000 to the first recipient and \$15,000 to the second recipient. The grant awards will be announced at the 2011 [Coastal and Estuarine Research Federation](#) (CERF)'s 21st Biennial Conference, [Societies, Estuaries and Coasts: Adapting to Change](#), November 6-10, 2011 in Daytona Beach, Florida. The

grant award recipients will be notified beforehand so arrangements can be made to accept the awards at the Conference. Applications (electronic only) are due on July 1, 2011; click [here](#) or contact Susan G. Miller, President, YSI Foundation, at (937) 657-1710 or [smiller@ysi.com](mailto:smiller@ysi.com) for more info.

The [NewAlliance Foundation](#) supports nonprofit organizations that enhance economic vitality and improve the quality of life in the communities historically served by NewAlliance Bank in Connecticut and Western Massachusetts. The Foundation's funding priorities include Community Development (which includes parks and the environment) The application deadline is July 1, 2011; click [here](#) to apply or for more info.

[Tourism Cares](#), a nonprofit organization funded primarily by the tourism industry is dedicated to preserving the travel experience for future generations. The [Tourism Cares Worldwide Grant Program](#) provides grants to tourism-related nonprofit organizations throughout the world. Primary consideration is given to projects that focus on capital improvements that conserve, preserve, or restore sites of exceptional cultural, historic, or natural significance. An additional focus area is the education of local host communities and the traveling public about the preservation of exceptional sites. The program strives for a balanced distribution of grants to U.S. and non-U.S. organizations. The final application deadline for 2011 is July 1; click [here](#) for more info.

Earlier this year, the [Mass. Division of Conservation Services](#) (DCS) announced the availability of FY 2012 grant funding for two programs: "PARC" (a.k.a. [Massachusetts Parkland Acquisitions and Renovations for Communities](#)) funding is available for the acquisition of parkland or the development or renovation of a park. "LAND" (a.k.a. [Massachusetts Local Acquisitions for Natural Diversity](#)) funding is available for the acquisition of conservation land. The maximum grant award for both grants is \$500,000. The application deadline for both these programs is Thursday, July 14, 2011 at 3:00 PM. Click [here](#) or contact Melissa Cryan at (617) 626-1171 or [Melissa.Cryan@state.ma.us](mailto:Melissa.Cryan@state.ma.us) for more info.

The [Pulling Together Initiative](#), a program of the [National Fish and Wildlife Foundation](#) (NFWF), supports nonprofit organizations and local, county, and state government agencies engaged in collaborations that will help control invasive plant species. To be competitive, a project must prevent, manage, or eradicate invasive and noxious plants through a coordinated program of public/private partnerships. In addition, projects should increase public awareness of the adverse impacts of invasive and noxious plants. In 2011, projects that take place in [NFWF priority landscapes](#) in coordination with federal agencies are strongly preferred. Pre-proposals must be submitted online by July 15, 2011. Click [here](#) or contact Teal Edelen at (202) 857-0166 for more info.

The Middlebury, VT-based [Orton Family Foundation](#) invites proposals from small cities and towns committed to planning for a future that preserves and enhances their "heart and soul"—those places, people and customs that make them unique. The Foundation helps communities navigate change while upholding what they value most. The Foundation's [Heart & Soul Community Planning](#) provides technical/financial assistance that helps to unlock potential by identifying local values, building a vision from them, and prioritizing actions. The Foundation seeks to partner with towns where community partners are ready to harness the inherent ability of citizens to imagine and achieve a better future. The Foundation will select four communities (two in New England) to receive training, technical assistance and up to \$100,000 in supporting funds over two years. During this two-year period, communities are expected to provide a 1:1 match through a combination of in-kind resources and a minimum \$25,000 cash match. The submission deadline is July 20, 2011. Click [here](#) for more info on the Heart & Soul assistance opportunity, [here](#) for a series of archived podcasts on this topic, and if you need further information or clarification, you can contact the Foundation at [rfp@orton.org](mailto:rfp@orton.org).



The Jack Forté Foundation (no web page), a Boston-area family foundation, makes small grants to environmental and other organizations for general operating support and other purposes. Requests for funding should include the following: a description of the organization and the proposed project, if applicable; how support would be used; an annual budget; the most recent audited financial statements, or if not available, a copy of Form 990; a list of directors or trustees; and evidence of §501(c)(3) status. Requests should be submitted before July 31, 2011, to: John H. Forté, President, Jack Forté Foundation, P.O. Box 600805, Newtonville, MA 02460-0008, (617) 928-0008.

Are you trying to protect your local rivers, save an unspoiled landscape, or build trails to help everyone in your community enjoy nature? Then you might want to apply for assistance from the National Park Service (NPS)'s [Rivers, Trails, and Conservation Assistance](#) Program (RTCA – click [here](#) to read the June 2011 version of the RTCA's informative [Conservation + Recreation](#) electronic newsletter). Through the RTCA Program, the NPS provides staff who can guide communities in conserving waterways, preserving open space, and developing trails and greenways (click [here](#) to read an inspiring story about the revitalization of the Spicket River Greenway in Lawrence and Methuen, a project receiving RTCA assistance). Potential applicants are strongly encouraged to discuss their project ideas with [the NPS RTCA staff near you](#) before submitting an application. Applications for the next round of technical assistance can be submitted until August 1. Click [here](#) to apply or contact Charles Tracy at (617) 223-5210 or [Charles\\_tracy@nps.gov](mailto:Charles_tracy@nps.gov) for more info.



Now in their ninth year, the [savewater! awards®](#) are Australia's leading awards for water sustainability. These prestigious awards recognize and reward excellence in water conservation and efficiency by business, government, schools, local communities, and individuals. Several of the awards categories (Photographic, Product Innovations, and Water Utilities) are open to entities outside of Australia. Entries are accepted until August 8, 2011; click [here](#) for more info.

The mission of the Pittsburgh-based [Roy A. Hunt Foundation](#) is “to support organizations that strive to improve the quality of life”. The geographic focus of the Foundation's giving is Southwestern Pennsylvania (primarily in Pittsburgh) and New England (mainly the Boston area), although organizations of particular interest to individual Trustees may be located anywhere throughout the United States. The foundation's two basic [funding programs](#) are [General Grants](#) (typically for general operating support) and Special Initiatives, two of which are [Community Development](#) (including parks and open spaces) and [Environment](#) (where grants are intended “to facilitate the protection and conservation of natural resources and healthy ecosystems by supporting sustainable solutions to root causes of environmental damage”). The application deadlines for the next round of Special Initiative Grants is August 1, and September 15 for General Grants, but letters of inquiry are welcomed at any time. Click [here](#) for more details on how to seek funding.

The Boulder, CO-based [Access Fund's Climbing Preservation Grant Program](#) funds projects that preserve or enhance climbing access and opportunities (including land acquisition) and conserve the climbing environment throughout the United States.” We are most interested in making grants to organizations and individuals that identify and work on the root causes of local climbing access and conservation issues and that approach issues with a commitment to long-term change. Because we believe that true change will occur only through a strong grassroots movement, our funding focuses on organizations that build a strong base of local climber support and activism.” The annual application deadlines are March 1 and August 1; click [here](#) for more info.

The goal of the [Future for Nature Foundation](#) is to protect species of wild animals and plants. In pursuit of this goal, the Foundation has established the [Future for Nature Award](#), which rewards and funds individuals for their internationally



outstanding species protection efforts. The Future for Nature Award is a prestigious international award, which celebrates tangible achievements in protecting wild animal and plant species. The Future for Nature Awards are awarded annually during the Future for Nature Conference at Burgers' Zoo in Arnhem, the Netherlands. The application deadline is August 31, 2011; click [here](#) to apply or for more info.

The U.S. EPA's "[Apps For The Environment](#)" Challenge welcomes software developers to find new ways to combine and deliver environmental data in a new app that uses EPA data, addresses one of [Administrator Lisa Jackson's Seven Priorities](#), and is useful to communities or individuals. EPA encourages you to use other environmental and health data too. The winners will be honored at a recognition event in Washington, D.C. this fall and the winning apps will be publicized on EPA's website. Submissions are due by September 16, 2011 and you can [find more details here](#). If you have an idea for a new app, please participate in the discussion and [submit your idea for an app](#) in the Data and Developers Forum. Click [here](#) for more info.

The Richard Saltonstall Charitable Foundation (no web page) provides funding to a number of Massachusetts-based conservation and historic preservation organizations. There are no specific application forms or deadlines. Requests for funding can be submitted to: Dudley H. Willis, Trustee, Richard Saltonstall Charitable Foundation, 50 Congress St., Room 800, Boston, MA 02109 Telephone: (617) 227-8660.

The David and Catherine Moore Family Foundation (no web page) gives grants to environmental and other advocacy organizations, primarily in New York and Massachusetts. Requests for funding should include a description of the organization and the reason for the request to: David E. Moore, c/o D'Arcangelo Co., LLP, 3000 Westchester Ave., Purchase, NY 10577. Telephone: (914) 694-4600.

The Silver Tie Fund (no web page), a private foundation, has a history of contributing funds to a number of river and land conservation organizations in Massachusetts. Submit written requests for funding to: Silver Tie Fund, c/o Paul Cohen, 38 Payson Terrace, Belmont, MA 02478. Telephone: (617) 484-4167.

The Dorothy F. Thorne Foundation (no web page), a small family foundation, gives grants to §501(c) (3) educational, arts and other organizations in New England and elsewhere. Organizations requesting funds should submit information on the group's mission and history, beneficiaries of its services, other sources of revenues, the amount requested as well as other expected sources of funding, the most recent financial statement and operating budget, and evidence of a funding strategy that demonstrates wide community involvement. Requests for funding should be submitted to: Dorothy F. Thorne Foundation, c/o John Akin Jr., 110 Lakeside Ave., Suite A, Seattle, WA 98122-6594. Telephone: (206) 709-1565.

The Missouri-based Arch W. Shaw Foundation (no web page) provides funding to conservation and other nonprofit organizations in Massachusetts and several other states. Types of support include project support, general support, building funds, endowments and research. Interested applicants should contact the Foundation for more info on application procedures and deadlines. Contact: Mr. William W. Shaw, Trustee, Arch W. Shaw Foundation, HC 3, Box 60 - B, Birch Tree, MO 65438 Telephone: (417) 764-3701, (417) 764-3706 (FAX).

The San Francisco-based George Frederick Jewett Foundation East (no web page) provides funding to conservation and other nonprofit organizations in Massachusetts as well as in New York and Washington, DC. The Foundation's areas of interest include education, libraries, music, historic preservation and the environment, including population issues and scientific research. Types of support include project support, general support, building funds, equipment and land/property acquisition. Interested applicants should submit a brief letter of inquiry to: Ms. Toni Bermudez, Program Grants Coordinator, George Frederick Jewett Foundation East, 235 Montgomery Street, Suite 612, San Francisco, CA 94104 Telephone: (415) 421-

1351, (415) 421-0721 (FAX). If the project is of interest to the Foundation, information on submitting a formal application will be sent to you.

The Greensboro, NC-based Grace Jones Richardson Testamentary Trust (no web page), endowed partly from the proceeds of the sale of Vicks VapoRub, provides small grants to a large number of environmental and other organizations throughout the U.S. Although the foundation does not accept unsolicited requests for funding, it is possible that contacting the Trust (c/o Piedmont Financial Trust Co., P.O. Box 20124, Greensboro, NC 27420, (336) 574-8675) might result in an invitation to do so.

The Cynthia & George Mitchell Foundation provides funding to a number of environmental causes (although apparently little or nothing so far in New England ). If you'd like to give them a shot, send a written request for funding to: The Cynthia and George Mitchell Foundation, P.O. Box 8937, The Woodlands, TX 77387. No particular proposal format is required.



## Calendar

*(sorted chronologically by date of event, submission deadline, etc.)*



Hosted by the [New England Water Works Association](#), the [2011 Sustainability Congress](#), **Confronting the Challenges of Water Allocation**, will take place on Monday, June 20, 2011 at the Massachusetts Institute of Technology - Walker Memorial Building 50 in Cambridge. The mission of the Sustainability Congress is to strengthen the relationship among water suppliers and various related groups such as watershed associations, regulators, and others within the environmental community, in order to proactively address the many ongoing issues of sustainability facing water resources and our water supply community. This year's Congress will feature MIT's Dr. Larry Susskind, a world-renowned mediator and trainer, and the day will be interactive - Dr. Susskind will guide us through a role-play exercise about water management. Registration for the day is just \$25 and includes lunch. Click [here](#) for more info.



A workshop entitled **Get Your Message Out With Water Words That Work**, hosted by the [Waquoit Bay National Estuarine Research Reserve](#), will take place on Tuesday, June 21 from 9:00 AM – 3:00 PM at the Hyannis Golf Club. Make a splash with your communications! Relearn the language that everyday citizens use and you'll become more confident and successful as you set out to enlighten the uninformed and persuade the undecided to take a stand or take action on behalf of our rivers, lakes, and oceans. D.C.-based environmental consultant Eric Eckl's [Water Words That Work](#) environmental message method is a six-step process for transforming professional language into action language that will help make your next fundraising, issue advocacy, and behavior change campaign a success. Click [here](#) or contact Tonna-Marie Rogers at [tonna-marie.surgeon-rogers@state.ma.us](mailto:tonna-marie.surgeon-rogers@state.ma.us) or (508) 457-0495 ext. 110 to sign up or for more info.



The U.S. EPA's Region One/New England office will soon issue new [Small Municipal Separate Storm Sewer System \(MS4\) Stormwater General Permits in New Hampshire and Massachusetts](#), which will likely include more prescriptive requirements designed to improve the effectiveness of the municipal stormwater management



programs. The next generation MS4 permits are likely to include new requirements for illicit discharge detection and elimination, outfall monitoring, and dischargers to impaired water bodies. There is also a growing awareness of the benefits of using Low Impact Development (LID) techniques to promote groundwater recharge, improve urban environments, and prevent pollution. The EPA is offering a [free, full-day training clinic](#) on Wednesday, June 22, 2011 in Holyoke, MA, to help New England municipal staff, officials, and other practitioners understand the requirements of the new Small Municipal Separate Storm Sewer System (MS4) Stormwater General Permits and promote more use of low-impact development (LID) practices. Click [here](#) for more info.

The [National Conference on Engineering & Ecohydrology for Fish Passage](#) will take place from Monday, June 27 to Wednesday, June 29 at UMass/ Amherst. Fish Passage 2011 will be of interest to researchers, educators, practitioners, funders, and regulators who have an interest in advancements in technical fishways, nature-like fishways, stream restoration and stabilization, dam removal, road ecology, and the myriad of funding, safety, climate change, and other social issues surrounding connectivity projects. Click [here](#) for more info.



A free webinar hosted by [River Network](#) and entitled [An Artificial Distinction: Tools for Addressing Low Flow Problems under the Clean Water Act](#) is scheduled for 1:00 PM on Wednesday, June 29, 2011. Presented by Merritt Frey of River Network, this intermediate-level webinar will explore ways to better use Clean Water Act tools to protect and restore in-stream flows in our rivers. Our discussion will include tying water quality standards to flow needs, applying the states' 401 water quality certification power more broadly to flow issues, and expanding creative use of the Total Maximum Daily Load program to better identify and remedy habitat and/or flow-related impairments. Each finding is illustrated with real world examples from the states and includes recommendations for – and limitations to – importing the policy ideas into new states. Participants should have a basic understanding of Clean Water Act concepts in order to benefit from this webinar; to do that you might want to review River Network's [on-line course on the Clean Water Act](#). Click [here](#) to sign up or for more info on the webinar.

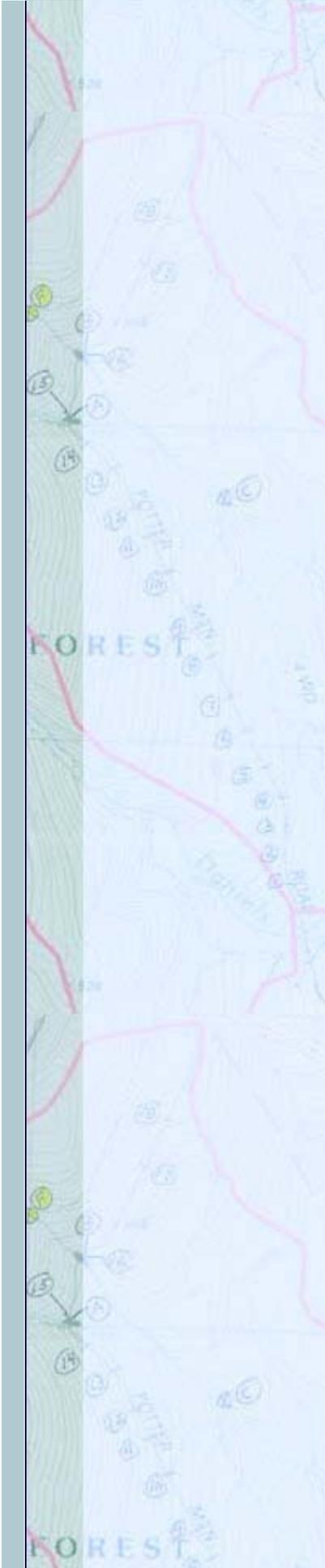
The [4th National Conference on Ecosystem Restoration](#) (NCER) will be taking place from August 1–5, 2011 in Baltimore, MD. The purpose of NCER is to provide an interactive forum for physical, biological and social scientists, engineers, resource managers, planners and policy makers to share their experiences and research results concerning large-scale ecosystem restoration on both national and international levels. The conference is designed to bring together scientists and engineers, policy makers, planners and partners who are actively involved in or affected by all aspects of ecosystem restoration regardless of project or program size. Participation by federal, state and local agencies, tribal governments, NGO's, private companies, water resource engineers and managers, environmental consultants, policy makers, scientists, researchers, modelers, environmental interest groups and students has been the hallmark of past NCERs and will continue in NCER 2011. Click [here](#) or contact Beth Miller-Tipton at (352) 392-5930 for more info.

[> Top of page](#)

#### On-line Resources



The U.S. Environmental Protection Agency (EPA) is launching a new strategy to [promote the use of "green infrastructure"](#) by cities and towns to reduce stormwater runoff that pollutes the nation's streams, creeks, rivers, lakes and coastal waters. Green infrastructure decreases pollution to local waterways by treating



rain where it falls and keeping polluted stormwater from entering sewer systems. In addition to protecting Americans' health by decreasing water pollution, green infrastructure provides many community benefits including increased economic activity and neighborhood revitalization, job creation, energy savings and increased recreational and green space.

Large volumes of polluted stormwater degrade the nation's rivers, lakes and aquatic habitats and contribute to downstream flooding. Green infrastructure captures and filters pollutants by passing stormwater through soils and retaining it on site. Effective green infrastructure tools and techniques include green roofs, permeable materials, alternative designs for streets and buildings, trees, rain gardens and rain harvesting systems. As part of the strategy, EPA will work with partners including local governments, watershed groups, tribes and others in ten cities (including Boston) that have utilized green infrastructure and have plans for additional projects. Click [here](#) for more info.

The U.S. EPA has released for public comment (until July 11, 2011) a [draft permit that will help improve our nation's waterways by regulating the discharge of stormwater from construction sites](#). Stormwater discharges during construction activities can contain sediment and pollutants that harm aquatic ecosystems, increase drinking water treatment costs and pollute waters that people use for fishing, swimming and other recreational activities. The proposed [Construction General Permit](#) (CGP) includes a number of enhanced protections, including enhanced provisions to protect impaired and sensitive waters. Some of the significant proposed permit modifications include new requirements for emergency-related construction, required use of the electronic notice of intent process, sediment and erosion controls, natural buffers or alternative controls, soil stabilization and pollution prevention. The permit will be effective in areas where EPA is the permitting authority, including four states (including Massachusetts and New Hampshire). Click [here](#) to access an archived webcast on this proposed permit.

The [National Environmental Services Center](#) has developed three [video public service announcements](#) (PSAs) about the importance of septic system maintenance for community water quality. Presented in a humorous light, each video provides the message that homeowners are responsible for safeguarding water through proper septic tank operation and maintenance.

Americans depend on clean and abundant water. However, over the past decade, interpretations of Supreme Court rulings (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* and *Rapanos v. United States*) removed some critical waters from Federal protection, and caused confusion about which waters and wetlands are protected under the [federal Clean Water Act](#). As a result, important waters now lack clear protection under the law, and businesses and regulators face uncertainty and delay. The Obama Administration is committed to protecting waters on which the health of people, the economy and ecosystems depend.

To that end, on April 27, the U.S. EPA and the U.S. Army Corps of Engineers released a [Draft Guidance on Identifying Waters Protected by the Clean Water Act](#) which clarifies how EPA and the Corps will identify "Waters of the United States" under the Clean Water Act (i.e. guidance on determining whether a particular waterway, water body, or wetland is protected by the Clean Water Act). The draft guidance reaffirms protections for small streams that feed into larger streams, rivers, bays and coastal waters. It also reaffirms protection for wetlands that filter pollution and help protect communities from flooding. Discharging pollution into protected waters (e.g., dumping sewage, contaminants, or industrial pollution) or filling protected waters and wetlands (e.g., building a housing development or a parking lot) require permits. This guidance will keep safe the streams and wetlands that affect the quality of the water used for drinking, swimming, fishing, farming, manufacturing, tourism and other activities essential to the American economy and quality of life. It also will provide regulatory clarity, predictability, consistency and transparency.



The draft guidance will be open for 60 days of public comment to allow all stakeholders to provide input and feedback before it is finalized. Click [here](#) to read or comment on the draft Guidance and [here](#) to read an info sheet supporting the proposed guidance put out by a coalition of conservation organizations including the [Theodore Roosevelt Conservation Partnership](#), [Trout Unlimited](#) and several other groups.

The National Oceanic and Atmospheric Administration (NOAA)'s [Coastal Services Center](#) recently launched a [Conserving Coastal Wetlands for Sea Level Rise Adaptation](#) website, which provides spatial techniques, resources, and examples to help communities identify coastal wetland and other vulnerabilities in the face of sea level rise and prioritize wetland conservation efforts that incorporate sea level rise considerations.

The [U.S. Fish and Wildlife Service](#) (USFWS) is seeking public comment and information necessary to prepare a [draft National Fish, Wildlife, and Plants Climate Adaptation Strategy](#), which will provide a unified approach for reducing the negative impacts of climate change on fish, wildlife, plants, habitats, and our natural resource heritage. Comments are due by July 1.

The [U.S. Fish and Wildlife Service's Schoolyard Habitat Program](#) promotes naturalized habitat areas created by students, for students. It is ecologically sound, integrated into the curriculum and designed to encourage long-term natural resource conservation and stewardship. Typical projects created through this program include wetlands, meadows, woodlands, and variations among them based on specific ecoregions. Many projects are planned through multiple phases and become more dynamic over time as children from various classes build upon the existing work of past students. The Program recently announced the availability of its [Schoolyard Habitat Project Guide](#), a roadmap for transforming your school grounds into a destination that will engage the entire school community in habitat restoration. Once you use this how-to guide, your school community will connect to the natural world, not by sitting inside and looking out, but instead by being outside and looking deeper. This is not a book about why schoolyard projects are important, but a guide on how to make the best one suited for your site. Check [here](#) to download the Guide, write to [R8SchoolYardHabitat@fws.gov](mailto:R8SchoolYardHabitat@fws.gov) to request a hard copy, or contact Valerie Fellows at (703) 358-2285 or [Valerie\\_fellows@fws.gov](mailto:Valerie_fellows@fws.gov) for more info.

The U.S. Fish and Wildlife Service recently launched a virtual Book Club called [America's WILD READ](#). The first book is noted ecologist E.O. Wilson's first novel *Anthill*, the story of a boy whose Huck Finn-inspired summer in rural Alabama teaches him deeper understandings of nature and its most ruthless predators. Readers will also share insights on two related essays: *Thinking Like a Mountain* by Aldo Leopold, an early founder of the land conservation movement, and *Once and Future Land Ethic*, by Dr. Curt Meine, senior fellow at the Aldo Leopold Foundation. Click [here](#) for more info and to take part in the discussion.

This past March 1, the [River and Stream Continuity Partnership](#), made up of UMass/Amherst, The Nature Conservancy, the Mass. Division of Ecological Restoration (DER) and American Rivers, released a revised version of the [Massachusetts River and Stream Crossing Standards](#). Click [here](#) to access this and related documents (crossing standards from other New England states, e.g.) and [here](#) to download the new Mass. standards in .pdf format.

The [Massachusetts Geographic Information System](#) (MassGIS) has recently put online a [set of maps that intends to clarify which lands and waters are under regulatory "tidelands" jurisdiction](#). Tidelands Jurisdiction data are a set of nine related feature classes which, in combination, represent the presumed tidelands jurisdiction of MassDEP under M.G.L. c. 91 and the Waterways regulations in 310 CMR 9.00. Documenting the extent of tidelands jurisdiction is important because of the public's rights in tidelands, and their associated regulatory and legal implications.



**[BioMap2: Conserving the Biodiversity of Massachusetts in a Changing World](#)**,

produced earlier this year by the [Massachusetts Natural Heritage & Endangered Species Program](#) in partnership with The Nature Conservancy and the Massachusetts Audubon Society, is designed to guide conservation in Massachusetts over the next decade by focusing land protection on areas most critical for the long-term persistence of rare and other native species and their habitats. The *BioMap2* Report, interactive maps, and supporting data and documentation are now all available on-line in electronic format. Click [here](#) and [here](#) for more info.

Can You Distinguish a Brook Floater Mussel (endangered) from a Zebra Mussel (invasive)? Paddlers and others can provide an important service by learning to identify freshwater mussel species and reporting your observations to state environmental agencies. This information will help them assess the health and distribution of freshwater mussel populations, and can lead to earlier identification of invasive populations. To assist in that effort, the state of Connecticut has produced **[A Field Guide to the Freshwater Mussels of Connecticut](#)**, which features clear diagrams and full-color photographs to help you identify freshwater mussel species found in the waters of our region. Connecticut . The *Field Guide* and accompanying [CT DEP website page about freshwater mussels](#) also contain a Field Survey Data Form that you can download to record your observations. [See also the Mass. Dept. of Conservation and Recreation's [Zebra mussel brochure](#) – call the DCR at (617) 626-1250 to report a Zebra Mussel sighting.]

The most recent (Summer 2011) edition of the [Narragansett Bay Journal](#), put out by the [Narragansett Bay Estuary Program](#), is chock-full of great articles, including [one describing two successful dam removal projects](#) and [another reviewing two recently-published books](#): ***Freshwater Fish of the Northeast***, by Matt Patterson & David A. Patterson, and ***Golden Wings & Hairy Toes: Encounters with New England's Most Imperiled Wildlife***, by Todd McLeish. Click [here](#) to read a short version of the newsletter's contents and [here](#) to download the newsletter in its entirety.

[> Top of page](#)

#### Non-government On-line Resources

*(in rough alphabetical order – the following are offered for information purposes only and are not an endorsement of the items listed below)*

Coastal Concerns blog

<http://coastlinesproject.wordpress.com>

This blog, [recently established by North Shore author Bill Sargent](#), covers topics such as the coastal effects of global warming, sea level rise, overfishing, habitat destruction and the siting of things like nuclear power plant and offshore oil facilities. The blog also publicizes funding opportunities for coastal-focused nonprofits, and opportunities to connect with coastal-minded colleagues.

Community Guide to Growing Greener

<http://www.commonwaters.org/resources/community-guide-to-growing-greener>

Recently published by the [Massachusetts Watershed Coalition](#) (MWC) and [available via a free download](#), the *Community Guide to Growing Greener* provides practical guidelines that explain how low impact practices and better site design will help communities grow greener and fix stormwater problems. Its information is easy to understand and apply for many types of proposed development projects. The Guide was created with the help of community boards in Hubbardston, Leominster, Rutland, Sterling and Westminster. Several communities have adopted this guidance, which does not add regulations but will help town boards and builders to achieve more sustainable development. Contact Project Coordinator Debbie Shriver at [debbieshriver@gmail.com](mailto:debbieshriver@gmail.com) or (978) 534-0379 for more info.

### Field Guide to Visual Water Quality Indicators

[http://www.cesd.umass.edu/twi/TWI\\_Projects/Visual\\_Water\\_Quality\\_Guide/index.html](http://www.cesd.umass.edu/twi/TWI_Projects/Visual_Water_Quality_Guide/index.html)

This new field guide, a product of the [Tri-State Connecticut River Watershed Initiative](#), and soon (if not already) accessible via “smart” phones, is intended to help people discern the difference between “natural” water colors due to natural phenomena (like the brownish tint due to tannic acid from decaying leaves) to “unnatural” colors that may indicate pollution (like a cloudy discharge coming from a leaky sewer pipe).

### Forester Publications Webinar Archives

<http://forester.net/university/webinars.html>

Forester Media, publisher of [Stormwater](#), [Water Efficiency](#) and several other magazines on related topics, all available via a free print or on-line subscription, has posted archived versions of several of its webinars. You can access these by clicking through the listed topic links and entering your email address and name. The topics currently available are: [Designing With Nature \(BMP Design Manual for Green Infrastructure and Low Impact Development\)](#); [NPDES Stormwater Phase II: The Public Elements – Promoting Sustainable Behavior](#); and [Fluvial Geomorphology 101 - What's Wrong About Rip-Rap](#). Contact Beth Tompkins at [bthompkins@forester.net](mailto:bthompkins@forester.net) for more info.

### Greater Boston Cycling and Walking Map

<http://trailmap.mapc.org>

Recently produced by the [Metropolitan Area Planning Council](#), this new map is the most comprehensive source of both bicycling and walking facilities in the region. The website and companion paper map covers more than 100 cities and towns in eastern Massachusetts, showing walking/hiking paths, bicycle facilities, regional trails, open space, public transit, and roads. The interactive, on-line map (accessible via computer and most Smartphones) allows you to customize your map experience by zooming in, selecting layers such as topography or street-level details, and by adding comments. Free paper versions of the map may be picked up at the [MAPC's Boston office](#), or you can download a .pdf version of that map by clicking [here](#). In the event that you know of biking, walking or hiking paths or other facilities that aren't depicted on the map, please report that missing info to David Loutzenheiser, MAPC Transportation Planner, at [dloutzenheiser@mapc.org](mailto:dloutzenheiser@mapc.org).

### Massachusetts Calling Amphibian Survey

<http://www.massnaamp.org>

This effort is a component of the [North American Amphibian Monitoring Program](#) (NAAMP), a collaborative effort among regional partners, such as state natural resource agencies, educational institutions and nonprofit organizations, and the U.S. Geological Survey (USGS) to monitor populations of calling amphibians. The USGS provides central coordination and database management. The regional partners recruit and train volunteer observers to collect amphibian population data, following the protocol of the NAAMP. The [Massachusetts North American Amphibian Monitoring Program](#) is seeking volunteers willing to adopt pre-selected routes in Massachusetts as part of a long-term amphibian monitoring program. This program relies on volunteer monitors as a cost-effective way to gather data over broad geographic areas. Click [here](#) for a list of available monitoring routes. If you are interested in adopting a route please contact Scott Jackson at [sjackson@umext.umass.edu](mailto:sjackson@umext.umass.edu) or (413) 545-4743.

### Massachusetts Land Trust Coalition MLT )

<http://www.massland.org>

Resources available at the MLTC's recently spiffed-up web page include: an [interactive map](#) showing which land trust(s) are active in each city or town; current and archived editions of the MLTC's informative [MASSLAND E-News](#) newsletter; and a [service providers directory](#) of ecologists, attorneys, accountants, web designers and other professionals who offer services to land trusts. Watershed associations and other

nonprofits may also benefit from these service providers.

#### Nonprofit Technology Network (NTEN)

<http://www.nten.org>

Billing itself as “the membership organization of nonprofit technology professionals” whose members “share the common goal of helping nonprofits use all aspects of technology more effectively”, NTEN’s mission is to “enable nonprofits to work with greater social impact” and “strategically use technology to make the world a better, just, and equitable place”. Resources at the NTEN webpage include [\*\*\*NTEN: Change: A Free Quarterly Online Journal for Nonprofit Leaders\*\*\*](#), which is intended to provide the guidance and practical considerations you need to make the sound investments and decisions that will help your organization meet its mission. Thanks to the support of Google, NTEN is proud to offer *NTEN:Change* for free. Click [here](#) to subscribe or for more info.

#### “Of Trout and Trees”

<http://northernwoodlands.org/articles/article/of-trout-and-trees>

Written by [Confluence](#) author Nathaniel Tripp and appearing in the [Spring 2011](#) issue of [Northern Woodlands Magazine](#), this article describes the threats to wild brook trout and their sensitive, “coldwater” habitats posed by the removal of streamside and in-stream trees and other vegetation, and fragmentation by roads and culverts, and describes the efforts of Trout Unlimited staff and volunteers to restore degraded stream habitats (by, e.g., replacing large wood in the streambed) to enhance their ability to support healthy aquatic ecosystems (click [here](#) for more info).

#### Trout Unlimited (TU) Conservation Training Materials

<http://videos.tu.org/ConservationTrainingRecordings>

TU has for the last several years offered a series of highly-informative and useful webcasts on various subjects relating to the protection, restoration and stewardship of “coldwater” fisheries, riverine organisms and habitats. While these webcasts are intended primarily for TU members as part of a “Tackle Box” of tools, the link above takes you to a “root” file where anyone can access archived editions of the webcasts. Click on the title that interests you, then on the “lib” folder for that topic, and then click on the “playback” file. Topics in this series include [Restoration Using Large Woody Material](#); [Principles of Successful River Restoration](#); [Monitoring Stream Habitat](#); [Small Dam Removal](#); and [Swimming against the Current: Assessing and Designing Culverts for Fish Passage](#). If you have any trouble accessing these webcasts, you can contact Rob Keith, TU’s Volunteer Operations Coordinator, at [RKeith@tu.org](mailto:RKeith@tu.org) or ( 703) 284-9425 , or [become a TU member](#) to access these training webcasts easily through the [Member Services](#) page.



WeTap

<http://www.pacinst.org/wetap/index.htm>

In an effort to help people kick the bottled water habit, the [Pacific Institute](#), and its Director, [Dr. Peter H. Gleick](#), in collaboration with Google, are in the process of rolling out a “WeTap” smart phone application. The app is intended to address a major water challenge: finding, supporting, and expanding the nation’s public drinking water fountains. Dr. Gleick, who authored [Bottled and Sold: The Story of Our Obsession with Bottled Water](#), states that “The average American now drinks nearly 30 gallons of commercial bottled water per year, up from 1 gallon in 1980, creating plastic waste and wasting energy. One of the reasons for this [explosive growth in the sales of bottled water](#) is the disappearance of public drinking water fountains.” The new app will do two things: permit smartphone users to add public drinking water fountains to a national database of fountains, with information on their location, condition, and quality, including uploading a photo; and permit smartphone users to find a working fountain when they want one.

## Wetlands-At-Risk Protection Tool (WARPT)

<http://www.wetlandprotection.org>

“Wetlands-at-risk” are those that are vulnerable to impacts from development or other land use activities and that have little protection from these impacts through federal, state or local measures. Recent court rulings have highlighted potential loopholes in the definition of which wetlands fall under the protection of the federal Clean Water Act, prompting state and local governments to inventory their wetlands that may no longer be considered ‘jurisdictional’, and seek to plug these loopholes. Yet, the reality is that even streams and wetlands that are regulated under the Clean Water Act may be at risk of being filled or otherwise impacted because: (1) the Clean Water Act’s Section 404 permitting program under which permits for disposal of dredge or fill material into wetlands are issued all the time; just because a wetland is regulated under this program does not mean it can never be filled; and (2) the Section 404 program does not regulate all types of activities, such as discharges of stormwater runoff into wetlands, and removal of wetland vegetation. Given this, almost all wetlands can be considered to some degree at-risk unless some kind of permanent and/or more protective measure (e.g., a conservation restriction or local wetlands by-law) is in place to prevent their destruction.

Recently developed by the [Center for Watershed Protection](#), WARPT is a process local governments and watershed groups can use to acknowledge [the role of wetlands as an important part of their community infrastructure](#), and develop a plan for protecting at-risk wetlands and their functions. The basic steps of the process include quantifying the extent of at-risk wetlands, documenting the benefits they provide at various scales, and using the results to select the most effective protection mechanisms. Resources on this page include links to a free webcast on WARPT that originally aired on May 4, and a [short brochure](#) explaining WARPT, as well as the WARPT itself.



World Rivers Review

<http://www.internationalrivers.org/en/node/6571>

[World Rivers Review](#) is the main newsletter for the [International Rivers](#) advocacy group. The link above takes you to the [June 2011 issue: Special Focus on Flow Restoration](#). Featured articles in this issue include stories on the [decommissioning and removal of dams on the Klamath and Elwha rivers](#); [excerpts of a new report on establishing and enforcing “environmental flows” for rivers](#) (see Publications) and [policy solutions from around the globe for protecting and restoring free-flowing rivers](#).

[> Top of page](#)

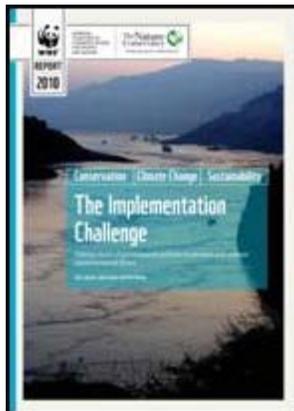
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#### Publications and Videos, etc.

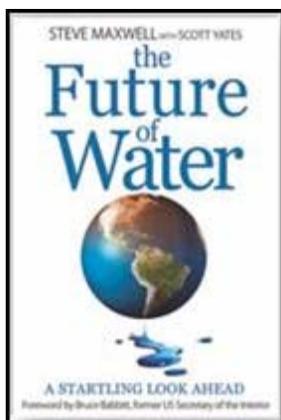
*(the following are offered for information purposes only and are not an endorsement of the items listed below.)*



Governments and water management authorities across the world have made significant and widespread progress in developing policies and laws to recognize environmental flow needs. Despite this significant policy development, in the majority of cases environmental flow provisions remain at the stage of policy and debate rather than implementation. Indeed, the defining characteristic of many contexts globally is precisely the lack of progress in translating these policies and intentions into action. While there has been progress in some places in capping future water development in recognition of environmental needs,

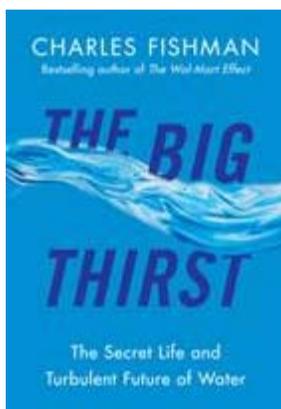


successful re-allocation of water or re-operation of infrastructure in systems that are already stressed has been infrequent. **[The Implementation Challenge: Taking stock of government policies to protect and restore environmental flows](#)**, recently published by the World Wildlife Fund and The Nature Conservancy, discusses the obstacles to implementation of environmental flow policies and offers possible solutions. Click [here](#) to download a copy and for related info.



 In **[The Future of Water: A Startling Look Ahead](#)**, published by the [American Water Works Association](#), author Steve Maxwell imagines life 100 years in the future and predicts that water efficiency and conservation practices have been broadly adopted. In Maxwell's future, water is allocated for different end use purposes in homes, businesses and industries. Maxwell expects this change in water management will be driven by economics, a changed approach to decision-making, and a broader, shared awareness of the preciousness and scarcity of water. In the final chapter Maxwell writes, "Water will shape the full spectrum of economic, political, and social trends, as well as how we make decisions. We will all begin to view water

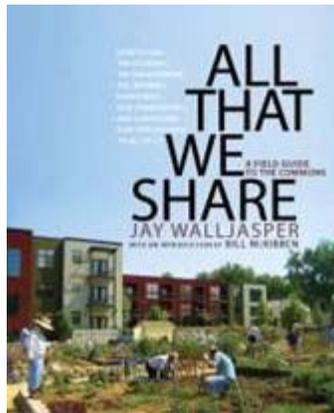
more as a precious resource rather than a free commodity to be exploited and wasted." If he's right, the next 100 years are going to be quite interesting for anyone interested in water management. Click [here](#) to order or for more info



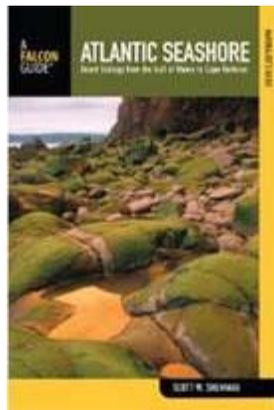
 In **[The Big Thirst: The Secret Life and Turbulent Future of Water](#)**, author [Charles Fishman](#) warns that everything about water is about to change—how we use it, how we share it, and how we value it. In an engrossing, globe-trotting narrative, he introduces the reader to people already grappling with water shortages, but points out that the challenge is not so much about water scarcity but rather how we can use it more equitably and protect it. The meaning of "clean" water has a wholly new connotation in an era when we can pollute water in new ways with residues of medicine and plastics. Fishman notes that some of the most innovative ways of conserving water are coming from big

businesses, including IBM , which has cut the water use in its microchip production 27% in the past eight years. Click [here](#) to read an excerpt of the book as well as an interview with the book's author.

 **[All That We Share: How to Save the Economy, the Environment, the Internet, Democracy, Our Communities, and Everything Else That Belongs to All of Us](#)**, edited by Jay Walljasper, is a field guide to

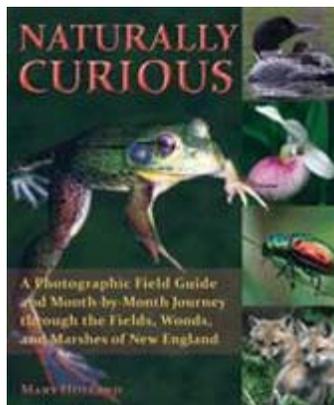


identifying and saving the things we all own together—from water to the Internet, and everything in between. Filled with practical solutions for today's economic, political, and cultural issues, it's a much-needed and thoroughly accessible field guide to the new world of the commons. Including success stories from communities across the country and around the world, this book is for anyone seeking new ways of thinking about our shared values. Click [here](#) for more info on the book, and visit [On The Commons](#) for related info.



**[The Naturalist's Guide to the Atlantic Seashore: Beach Ecology from the Gulf of Maine to Cape Hatteras](#)**, by Wheaton College professor [Scott W. Shumway](#), is an introductory guide to the natural history of plants and animals found in coastal environments of New England and points north and south. With high-quality illustrations, color photographs and clear, inviting text, the book describes the coastal habitats of the region along with the flora and fauna found there. These include complete and detailed descriptions of common habitats such as salt marshes as well as unusual habitats such as interdunal swales, “wetland oases” which serve as home to insectivorous plants and orchids. This book might make a useful carry-along for summer trips to the coast. Click [here](#) to order the book and

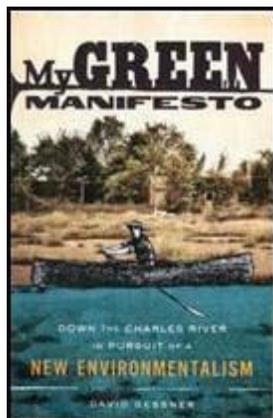
[here](#) to read a review.



**[Naturally Curious: A Photographic Field Guide and Month-by-Month Journey Through the Fields, Woods, and Marshes of New England](#)**, by Vermont-based naturalist [Mary Holland](#), leads you through the New England seasons out-of-doors: through the sun, rain, and snow; along roadsides and wetlands; above underground burrows and under treetop nesting sites, teaching you more about the creatures that frequent your backyard or the pond you visit every summer than you ever thought possible. *Naturally Curious* perfectly melds practical field guide with informal nature literature, providing you the remarkable opportunity to sit back, relax, and learn something fascinating about the natural world around you. Nearly 1,000 color photographs

should help newbie naturalists learn what to look for and where to find it. Months are color-coded and organized around species; amphibians, reptiles, birds, mammals, insects, arachnids and plants. Click [here](#) to order and [here](#) for Mary Holland's blog which gives you a good feel for the contents of the book.

In the new book **[My Green Manifesto: Down the Charles River in Pursuit of a New Environmentalism](#)**, due out next month, author [David Gessner](#) embarks on a rough-and-tumble journey down the Charles River, searching for the soul of a new environmentalism. With a tragically leaky canoe, a broken cell phone, a cooler of beer, and Mass. DCR environmental planner [Dan Driscoll](#) in tow, Gessner grapples with the stereotype of the environmentalist as an overzealous, puritanical mess. But as Dan recounts his own story of transforming the famously polluted Charles into an urban



haven for wildlife and wild people, the vision of a new sort of eco-champion begins to emerge: someone who falls in love with a forgotten space, and then fights like hell for it.

Considering everything from Ed Abbey's legacy to Jimmy Carter's sweater, Gessner points toward a scrappy environmentalism that, despite all odds, just might change the world. [Click [here](#) to read an article-length treatment of this story that appeared several years ago in the Natural Resources Defense Council's *OnEarth* Magazine.]

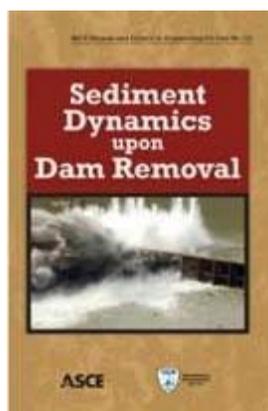


***The Sustainable Site: The Design Manual for Green Infrastructure and Low Impact Development***



, by Rodney W. Tyler, Alexander Marks, and Dr. Britt Faucette, provides readers with; an understanding of "green infrastructure" site design principles and techniques that are proven and performance-based; a standardized reference to specify and design sustainable management practices into site and master plans; an understanding of the current state of sustainable stormwater management and the trends affecting this growing discipline; 10 standard specifications and design criteria for construction activity, stormwater management and land-disturbing activity applications; and 14 standard specifications and design criteria for post-construction, retrofit, and green infrastructure stormwater management applications.

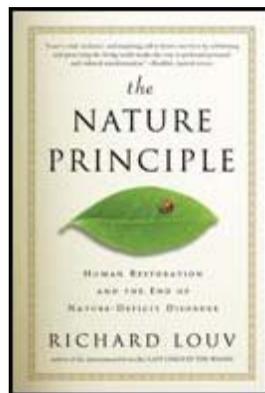
This design manual should be particularly useful to landscape architects and designers, horticulturalists, hydrologists, land use planners and planning boards, and public works engineers. Click [here](#) to order or for more info.



Dams alter ecology, block fish passage, increase downstream scour, and displace residents, and dam removal is now a common solution. Concerns have arisen regarding the behavior of stored sediment and overall stream geomorphology when the dam is removed. Because large amounts of sediment have collected behind many dams, the issue of what will happen to the impounded sediment if the dam is removed is of critical importance. A recently-published monograph entitled ***Sediment Dynamics upon Dam Removal*** (ASCE Manuals and Reports on Engineering Practice No. 122) provides guidance and documentation of numerical and physical modeling and field experience regarding dam removal and its modeling. This document may be a valuable aid to watershed and river agencies and their consultants, as well as to researchers. Click [here](#) to order or for more info.

Promoting physical activity among children and adults is a priority national health objective in the United States. Regular physical activity lowers the risk of chronic diseases and is an important strategy for reversing the obesity epidemic. ***The Power of Trails for Promoting Physical Activity in Communities***, a recently-published research brief by [Active Living Research](#), highlights findings about how the availability of walking, biking and hiking trails and other outdoor recreational spaces (like

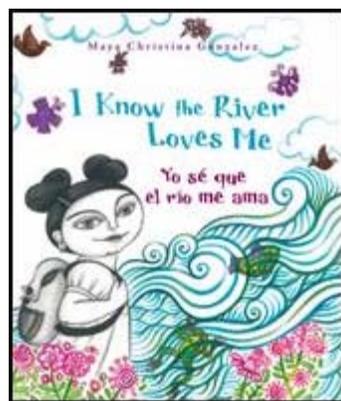
waterways) can enhance physical activity among diverse populations. [Active Living Research](#), a national program of the [Robert Wood Johnson Foundation](#), stimulates and supports research to identify environmental factors and policies that influence physical activity for children and families to inform effective childhood obesity prevention strategies, particularly in low-income and racial and ethnic communities at highest risk. (Click [here](#) for related info on the value of parks and open space for human and community health.)



In his bestselling, 2005 book [Last Child in the Woods](#), journalist [Richard Louv](#) sparked a national debate that spawned an [international movement to reconnect kids and nature](#). He coined the term “nature-deficit disorder”; influenced national policy; and helped inspire campaigns in over eighty cities, states, and provinces throughout North America. In Louv’s new book, [The Nature Principle](#), he delivers another powerful call to action—this time for adults. Supported by groundbreaking research, anecdotal evidence, and compelling personal stories, Louv identifies seven basic concepts that can help us reshape our lives. By tapping into the restorative powers of nature, we can boost mental acuity and creativity; promote health and wellness; build smarter and more sustainable businesses, communities, and economies; and ultimately strengthen human bonds. Click [here](#) for more info on the book, [here](#) to purchase a hardcover or audio version of the book, and [here](#) to read an excerpt of the book that recently appeared in *Outside Magazine*.



On a similar topic: the new documentary film [Mother Nature's Child](#) explores nature’s powerful role in children’s health and development through the experience of toddlers, children in middle childhood and adolescents. The film marks a moment in time when a living generation can still recall childhoods of free play outdoors; this will not be true for most children growing up today. The effects of “[nature deficit disorder](#)” are now being noted across the country in epidemics of child obesity, attention disorders, and depression. *Mother Nature's Child* asks the questions: Why do children need unstructured time outside? What is the place of risk-taking in healthy child development? How is play a form of learning? Why are teachers resistant to taking students outside? How can city kids connect with nature? What does it mean to educate the ‘whole’ child? Click [here](#) for more info on the film, to order a copy or to find (or host!) a screening near you (there’s a free [screening in Boston on June 27](#) – click [here](#) for more info).



Blues and greens swirl on the page and around a young girl who shares her love for her river. The river cools her in the summer, holds her up when she dives in, and takes care of her as she takes care of it. Maya Christina Gonzalez’s book [I Know the River Loves Me](#)/[Yo sé que el río me ama](#) is a tribute to the relationship people, and especially children, continue to have with their rivers. Each beautifully illustrated page carries a message, in both English and Spanish, about the personal relationship one can have with their river. While never talking explicitly about water pollution, one of the pages shows the girl with bottles and a six-pack ring beside her, as she says, “The river takes care of me and I take care of the river. I only leave behind what already belongs to her.” The author was inspired by the Yuba River in California – and rivers in India, Puerto Rico, Brazil, and Mexico – to share her love of rivers with her daughter and a new generation of river protectors.





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