



Commonwealth of Massachusetts

## DIVISION OF ECOLOGICAL RESTORATION

[DER Home](#)
[Restoration](#)
[Riverways Program](#)
[About DER](#)

[• DER Home •](#)

### Newsletters

#### 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.](#)
- [Support Land and Water Conservation with a "Land and Water" Specialty License Plate](#)
- [Previous Issues](#)
- [Newsletter Archive](#)

## ***Ebb&Flow***

The Division of Ecological Restoration ***Ebb&Flow*** #5- October, 2010

***An electronic newsletter from the Massachusetts Division of Ecological Restoration***

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

[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, Ebb&Flow Readers -***

For the Division of Ecological Restoration (DER), the fall is not only marked by the sights and sounds of colorful leaves adrift on gurgling trout streams, but also by the rumble of heavy equipment and the invigorating movement of restored water flows to inland and coastal waterways.

The recent completion of ecological restoration projects in Fitchburg, Newbury, Plymouth, Quincy, Hingham, Cohasset and Hull, and projects soon to be underway in Gloucester, Cohasset, Brewster, Fairhaven and Clarksburg, will ensure that 2010 is a remarkable year for ecological restoration and community revitalization in the Commonwealth.

Fall highlights include:

- With the opening of new tide gates, 94-acres of Straights Pond in Hingham, Hull and

Cohasset (click [here](#) for more details) will be ecologically enhanced. The completion of this project marks a significant milestone; over 1,000 acres of wetland have been restored in Massachusetts.

- By November's end, one of the largest dams in Massachusetts will be removed, a 16' tall, by 150' long wall of concrete in the north Berkshire town of Clarksburg. This dam has been degrading premier coldwater habitat along the North Hoosic River for almost a century. [Click [here](#) and [here](#) for recent news stories on this project.]
- In downtown Fitchburg, the Division just [celebrated](#) the completion of the improvements to the North Nashua River and the adjacent Riverside Park, a key link in the [Fitchburg Greenway](#). The project involved removing a 325' long granite wall that had separated the river from its banks since the 1930s. This is an example of a restoration project that not only improves a once maligned river but helps revitalize an urban community.

While spring is the season most often associated with renewal and rebirth, DER and our many partners are making the case that the fall can also be a restorative season.

The lead article in this edition of *Ebb&Flow* is all about the recent release of BioMap2, which (among many other things) will help guide agency, land trust and others' land conservation efforts to target the areas of greatest importance for sustaining our biological diversity and the ecological integrity of the Commonwealth's landscape. The DER looks forward to partnering with others in utilizing BioMap2's database and implementing BioMap2's recommendations.

Lastly – the MA Executive Office of Energy and Environmental Affairs (EEA)'s [The Great Outdoors](#) blog, which I participate in, has a new, Google-powered [events calendar](#), which lists events sponsored and/or publicized by the Commonwealth's natural resource agencies. Many events are also listed in *Ebb&Flow's* Calendar section below, along with the usual panoply of upcoming grant opportunities, web resources and more.

See you on the water soon.



*Tim Purinton, Acting Director*

[> Top of page](#)

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## Feature Article

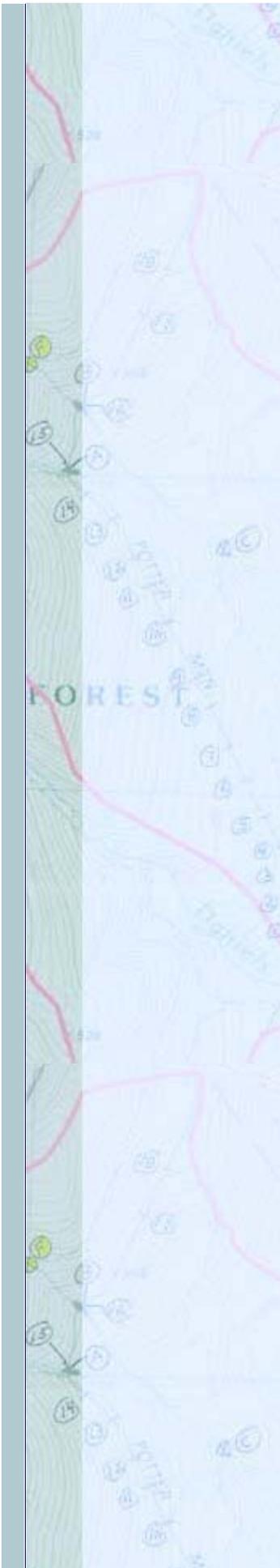
Wildlife Officials and The Nature Conservancy Announce Publication of BioMap2

GRAFTON – Officials from the Department of Fish and Game (DFG) and The Nature Conservancy released [BioMap 2](#), a comprehensive land conservation strategy that includes an [updated map](#) of the Commonwealth's most critical lands, waters and habitats, and a plan to protect the Commonwealth's plants and wildlife in the context of a changing climate.

"The more we know about our natural resources, the more we can do to protect and manage them for future generations to enjoy," said Energy and Environmental Secretary Ian Bowles, whose office includes DFG. "This new map is an important tool to plan our land, habitat and wildlife conservation future."

BioMap2 was developed by a partnership between DFG 's Division of Fisheries and Wildlife (MassWildlife) and its Natural Heritage and Endangered Species Program, and The Nature Conservancy.

"BioMap2 is the Commonwealth's conservation planning blueprint that includes a new



climate change planning element designed for a changing world," said DFG Commissioner Mary Griffin. "It promotes the protection of the biodiversity of all our native species by using the most up to date natural resource data to identify the most ecologically significant habitats across the state."

The new edition is an expansion of the Natural Heritage and Endangered Species Program's 2001 BioMap, which provided conservation planning guidance to agencies, land trusts and other non-profit groups by converting 25 years of natural heritage biodiversity data into town-by-town maps showing habitats for rare species and important natural communities. Nearly 72,000 acres identified as core habitat in 2001 have since been protected, as well as over 44,000 acres of supporting natural landscape. Combined, this represents nearly 70 percent of all lands protected in Massachusetts by all conservation entities since 2001. BioMap2 expands the existing planning resource by including new analyses identifying large, intact natural landscapes and diverse ecosystems and takes into account the possible ecological impacts of climate change.

"BioMap2 builds upon the success of the original BioMap published in 2001 and the Living Waters biodiversity conservation plan from 2003," said MassWildlife Director Wayne MacCallum. "This plan is critically important in promoting the conservation of the state's rare species and many other wildlife species and habitats of conservation concern, furthering the goals of the Division of Fisheries and Wildlife's [State Wildlife Action Plan](#)."

To produce BioMap2, DFG and MassWildlife partnered with The Nature Conservancy for its expertise in landscape-scale planning and approach to help forests, rivers, coastlines, wetlands and wildlife to cope with the affects of climate change.

"Climate change is already affecting our lives and the places we live," said Wayne Klockner, The Nature Conservancy's Massachusetts state director. "As we work to reduce our carbon emissions, we must also adjust how we protect and manage our lands and waters to build their resiliency in the face of these impacts."

"When the first version of BioMap was released, it quickly became one of the principal tools that Massachusetts land trusts used to set their land protection priorities," said Bernie McHugh, Director of the Massachusetts Land Trust Coalition. "BioMap2's refined data and climate-sensitive approach makes it even more useful and timely for land conservationists."

The first copies of the BioMap2 Map and Report were distributed at a news conference on October 14, following the quarterly meeting of the [Massachusetts Land Trust Coalition](#), held at the Brigham Hill Community Farm in Grafton. Hard copies of the Report and Map will be provided to state agencies, land trusts and other conservation groups statewide, and is available from the [Natural Heritage Program](#) by clicking [here](#) or calling (508) 389-6360 . Electronic versions of the BioMap2 statewide map, report and the interactive database will be available soon via [MassWildlife's Natural Heritage Program's BioMap2 web page](#).

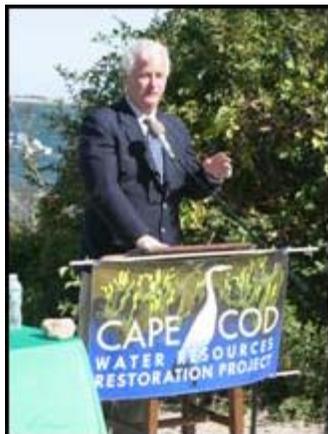
[NOTE: As of 10/22/10, much of the info and links on this web page still refer to the previous (2001) BioMap database; these will be updated soon with the new BioMap2 info.]

[> Top of page](#)

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[Division News](#)

[Restoration Project Update](#)



The [Cape Cod Water Resources Restoration Project](#) began in dramatic fashion on September 20 in Barnstable. Strong winds over the water at Scudders Landing boat launch provided the backdrop for the event, which included DFG Commissioner Mary Griffin, as well as a keynote speech by Congressman Bill Delahunt (pictured). The ceremony marked the official start of the project focused on the natural resources of Cape Cod. DER is partnering closely with Cape Cod towns and the USDA Natural Resources Conservation Service (funders of the project) to complete five salt marsh restoration projects by the end of 2011. An additional 17 projects are being developed for construction in the future. The “Cape Cod Project” is projected to inject about \$30 million over ten years into shellfish, fish passage and salt marsh restoration projects Cape wide. Click [here](#) to read the press release and view additional photos taken at this event.

[> Top of page](#)

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## Resources and Grants

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

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

The [Lawrence Foundation](#), a private family foundation based in Santa Monica, CA and founded a decade ago, makes grants to support environmental, education, human services and other causes. The grant application process is fairly simple and is initiated by submitting a grant application using the [Common Grant Application](#). You are first advised to take a look at the [Grant Guidelines](#) and [Application Process](#) to help ensure your proposal's chances of success. Grant applications are due either April 30 for the June grant cycle or October 31 for its December grant cycle. Click [here](#) and [here](#) for more info.

The finalists have been announced in the [2010 Rachel Carson Sense of Wonder Contest](#), a poetry, essay, photo and dance contest sponsored by the U.S. EPA, Generations United, the Dance Exchange, and the Rachel Carson Council, Inc. Teams consisting of at least one young and one older person were asked to share their “sense of wonder” felt for some aspect of their natural surroundings. Click [here](#) to view the work of the finalists and vote for your favorites. The deadline for voting is November 1.

Few of us are aware that a full 3% of the U.S.'s electric power generation is used for treating, pumping and distributing water. Water alone has become a crisis-level issue but with cheap, abundant sources of power declining, what will happen if we don't find ways to reduce how much energy is consumed for water supply and treatment? [Imagine H2O](#) is turning that concern into an opportunity via its [\\$100,000 global competition entitled The Water-Energy Nexus](#) to find the world's most promising water businesses that save energy. Innovations could focus on a number of areas including water heating/cooling, pumping and transport or low-energy treatment. Entries will be accepted September 1 to November 15, 2010; click [here](#) for more info.

The [Open Space Institute](#) recently announced a third round of funding for its [Saving New England's Wildlife](#) grant program. Interested nonprofit conservation organizations and agencies are invited to submit a Letter of Intent (LOI) for capital and non-capital



grants. Please note that the application process and deadlines are different for the two types of grants. Click [here](#) for details on the Saving New England's Wildlife capital grants (deadline: November 8, 2010), and click [here](#) for more details on the non-capital grant (deadline: November 19, 2010).

The [Echoing Green Fellowship Program](#) invests in outstanding emerging social entrepreneurs to help them launch new organizations that deliver bold, high-impact solutions to society's most difficult problems. Each year, Echoing Green awards 12 to 15 two-year fellowships to entrepreneurs worldwide who are creating innovative social change organizations. Fellowships are provided to individuals (at least 18 years of age) or partnerships (organizations led by two people) with: innovative solutions to significant social and environmental problems; strategies to create high-impact, sustainable change in people's lives; and the ability to grow and lead a new organization. Fellows receive seed funding (\$60,000 for individuals and \$90,000 for partnerships) and technical support to turn their innovative ideas into sustainable social change organizations. The application deadline is November 12, 2010; click [here](#) or [here](#) to apply, or write to [Rebecca@echoinggreen.org](mailto:Rebecca@echoinggreen.org) for more info.

The annual [Volvo Environment Prize](#) is awarded for "outstanding innovations or scientific discoveries which in broad terms fall within the environmental field". The prize is awarded by an independent foundation, and past Laureates represent all fields of environmental and sustainability studies and initiatives. The Volvo Environment Prize Foundation invites universities, research institutes, scientists and engineers as well as other individual and organizations to submit nominations. The nomination deadline is November 15, 2010; click [here](#) to nominate and [here](#) for more info.

The NOAA [Open Rivers Initiative](#) (ORI) provides funding and technical assistance to catalyze the implementation of locally-driven projects to remove dams and other river barriers, in order to benefit living marine and coastal resources, particularly diadromous fish. Projects funded through the Open Rivers Initiative must feature strong on-the-ground habitat restoration components that foster economic, educational, and social benefits for citizens and their communities in addition to long-term ecological habitat improvements for NOAA trust resources. Proposals selected for funding through this solicitation will be implemented through a cooperative agreement. Funding of up to \$6,000,000 is expected to be available for ORI Project Grants in FY 2011. The NOAA Restoration Center within the Office of Habitat Conservation will administer this grant initiative, and anticipates that typical awards will range from \$200,000 to \$750,000. The closing date for application is November 17, 2010; click [here](#) to apply and [here](#) for more info.

The [NOAA Restoration Center](#) and the [Gulf of Maine Council on the Marine Environment](#) (GOMC) recently announced a request for proposals for their [Habitat Restoration Grants Partnership](#). The Partnership provides funding and technical expertise aimed restoring native diadromous fish and other marine, estuarine and riverine species of regional significance. The projects, which are selected to offer long-term ecological benefits and promote effective community restoration, have focused on restoring degraded riverine habitats, salt marshes, eelgrass meadows and shellfish beds. The deadline for optional letters of intent is 5:00 PM EST on November 29, 2010. Applications must be submitted to the GOMC between February 2 and March 15, 2011. Click [here](#) to download the RFP or contact the Maine Coastal Program's Habitat Restoration Coordinator, Slade Moore, at [slade.moore@maine.gov](mailto:slade.moore@maine.gov) for more info.

The U.S. Forest Service's [National Urban and Community Forestry Challenge Cost-Share Grant Program](#) provides support for urban and community forestry projects that have national or multi-state application and impact. Preference will be given to program development, research, and collaborative efforts that address the following priority issues: how management of urban and community forests can help mitigate greenhouse gas emissions or help communities adapt to climate change, the influence of urban and community forests upon public health, and the influence of urban and community forestry upon economic development. Click [here](#) to apply or for more info; the application deadline is November 29, 2010.

The [SeaWorld/Busch Gardens Environmental Excellence Awards](#) recognize the



outstanding efforts of K-12 students, teachers and nonprofit community groups across the U.S. who are working at the grassroots level to protect and preserve the environment. Eight projects will be selected to receive \$10,000 grants and all-expense paid trips for selected students and adult leaders to a SeaWorld or Busch Gardens park for a special awards event. Previous award-winning projects have tackled a wide variety of environmental problems, including habitat restoration, school yard beautification, waste reduction, environmental education, wildlife protection, and natural resource conservation. The application deadline is December 1, 2010; click [here](#) to apply or for more info.

[Restoring Rivers: Stream Barrier Removal Grants](#), a program of [American Rivers](#) and [NOAA's Community-Based Restoration Program](#), will provide funding to support projects in several regions (including New England) to benefit [diadromous](#) fish species. Grants up to \$100,000 will be awarded for three distinct project phases: feasibility analysis, engineering design, and construction. Proposals are due December 8, 2010. Click [here](#) or [here](#) or contact Serena McClain at (202) 347-7550 ext. 3004 or [rivergrants@amrivers.org](mailto:rivergrants@amrivers.org) for more info.

The [Temper of the Times Foundation](#) promotes the use of standard marketing concepts to increase environmental awareness. Recognizing that organizations working to protect the environment often have limited access to paid media, the Foundation provides funds to underwrite advertising designed to promote wildland ecosystem conservation and restoration in the United States. Grants ranging from \$5,000 to \$15,000 may be used to fund the production of print, radio, or television ads; to pay for advertising space or airtime; or to produce or distribute pamphlets, books, videos, or press packets. Applications must be submitted via e-mail by December 15, 2010. Click [here](#) and [here](#) for application guidelines and procedures.

The [President's Environmental Youth Awards](#) (PEYA) recognizes young people across America involved in projects that demonstrate their commitment to the environment. Young people in all 50 states and the U.S. territories are invited to participate in the program. Projects recognized by PEYA include recycling programs in schools and communities; construction of nature preserves; major tree planting programs; videos, skits, and newsletters created by students that focused on environmental issues; and environmental science projects. To be eligible to compete, a student or students, sponsored by an adult, must submit to their local EPA regional office evidence of a completed project as defined in the PEYA application, as well as a completed application. The deadline for submitting a PEYA application is December 31, 2010 – click [here](#) to access an application form, or contact Kristen Conroy at (617) 918-1069 or [conroy.kristen@epa.gov](mailto:conroy.kristen@epa.gov) for more info.

The [Disney Worldwide Conservation Fund](#) (DWCF) manages an annual cash awards program to support efforts to study and protect the world's wildlife and ecosystems that also involve community participation and address human needs. Along with a focus on species and habitat conservation science, DWCF encourages programs that engage local residents and benefit both human and animal communities. The fund's interests are in furthering the support of established conservation programs, particularly those long-term in nature, that contain a strong scientific field studies component; promote education, awareness, and training, and demonstrate a marked benefit to in-country participants, habitats, and species by working with local communities, regional/national non-governmental organizations, and government agencies that directly impact the initiative. While applications are accepted by invitation only, e-mails of inquiry are accepted on an ongoing basis. The fund recommends that inquiries be submitted no later than January 1, 2011 to be considered for an invitation to apply. Invited applications will be due by January 25, 2011. Click [here](#) for more info.

The Minneapolis-based [Carolyn Foundation](#) seeks to improve the lives of children and families, communities, and the environment. [Environmental grants](#) are divided between responsive grantmaking for which the Foundation will consider unsolicited requests and Foundation-initiated grants for which it does not accept unsolicited requests. Under the Environmental area, the Foundation is focusing its awards on renewable energy programs, although it will consider other environmental proposals if funds allow. All proposals must



address root causes and create systemic and sustainable solutions and change; address global issues with local interventions that address local needs, as well as global needs; develop and implement solutions that can be replicated in other areas; and collaborate effectively with others in the community. The next application deadline is January 15, 2011. Visit the Foundation's [FAQ page](#) or contact Executive Director Becky Erdakl at (612) 596-3279 for more info.

The goal of the [Switzer Environmental Fellowship Program](#) is to support highly talented graduate students in New England and California whose studies are directed toward improving environmental quality and who demonstrate the potential for leadership in their field. Awards have been made to students pursuing environmental policy, economics, land and water conservation, public health, journalism, architecture, environmental justice, business and law as well as the more traditional sciences of biology, chemistry and engineering. Fellowship applicants are evaluated based on their commitment to environmental problem-solving and their potential for creating positive environmental impact. The Fellowship provides a one-year \$15,000 cash award for graduate study as well as networking and leadership support to awardees. The application deadline is January 15, 2011; click [here](#) to apply or for more info.

Projects supported by the [Veolia Environment Foundation](#), the charitable giving arm of the France-based company [Veolia](#), must be community-oriented, non-profit initiatives. The Foundation gives preference to projects likely to mobilize the skills of Company employees, who support project leaders as sponsors (Veolia has a number of facilities and employees located in Massachusetts.) Click [here](#) to read the Foundation's 2009 report, to see the types of projects the Foundation funds. Click [here](#) for more info on how to apply for funding and which projects are eligible. While the Foundation has fully committed its funding allocation for 2010, grant seekers are invited to apply for funds again early in 2011.

The Mass. Dept. of Conservation and Recreation (DCR), in partnership with the Federal Highway Administration is now accepting applications for [Recreational Trails Program - Statewide Trails Education Grants](#). This is the first round of educational grants which will be awarded under the Mass. Recreational Trails Program (RTP) and will likely become an annual offering through the program, dependent upon funding. The RTP will award 2-3 new grants with a maximum award amount of \$10,000 focused on statewide trail education initiatives which address all user groups in Massachusetts (motorized and non-motorized). The deadline for this grant application is February 1, 2011. Click [here](#) or contact Amanda Lewis at (413) 586-8706 ext.19 or [Amanda.lewis@state.ma.us](mailto:Amanda.lewis@state.ma.us) for more info.

[DoSomething.org](#) is an on-line community where young people learn, listen, speak, vote, volunteer, ask, and take action to make the world a better place. The [Do Something Awards Program](#) identifies and provides direct funding to exceptional young social entrepreneurs, activists, and community leaders in the U.S. and Canada who have significantly changed the world. Along with financial grants, Do Something Award winners and nominees receive the full support and guidance of the team at DoSomething.org as they grow and expand their projects or organizations. Applicants must be citizens or residents of the U.S. or Canada and age 25 or under. On-line submissions for Do Something's \$500 [Seed](#) and [Growth](#) grants are accepted at any time. Click [here](#) and [here](#) to read Do Something's Awards and Grants FAQ pages, and [here](#) for the judging criteria.

The [Max and Anna Levinson Foundation](#) makes grants to nonprofit organizations committed to developing a more just, caring, ecological and sustainable world. The Foundation seeks people and organizations that combine idealism, dedication and genuine concern with rigorous analysis and strategic plans, and that foster a sense of social connection, mutual recognition and solidarity. The Foundation's environmental funding includes the Protection of Ecosystems and Biological Diversity and the Development of Environmental Movements. While the Foundation does not accept unsolicited proposals they do accept letters of inquiry at any time (click [here](#) for the on-line format), and approved grants typically fall within the \$15,000 to \$25,000 range.

The Boston-based [Cedar Tree Foundation](#) makes grants to support Environmental Education, Environmental Health and Sustainable Agriculture, and gives particular

consideration to proposals demonstrating strong elements of environmental justice and/or conservation (click [here](#) to see past grants). While the Foundation does not accept unsolicited proposals, they do accept letters of inquiry, which may be submitted at any time (click [here](#) for more info). Contact the Foundation at 100 Franklin Street, Suite 704, Boston, MA 02110, (617) 695-6767 or [info@cedartreefound.org](mailto:info@cedartreefound.org) for more info.

The New York City-based [G. Unger Vetlesen Foundation](#) makes grants to a number of environmental and conservation-related projects in the Northeast and elsewhere (click [here](#) to see a listing of past grant recipients and grant amounts). The Foundation encourages grant seekers to submit letters of inquiry (LOI) in order to ascertain if your organization and its proposed project or program fit within the Foundation's guidelines (click [here](#) for more info). LOIs may be submitted at any time. Write to [info@monellvetlesen.org](mailto:info@monellvetlesen.org) for more info.

The [Shared Earth Foundation](#) is committed to the tenet that all creatures have an enduring claim to sustainable space on this planet. It believes that today's human beings have the responsibility to share Earth's resources with other creatures and future generations by limiting their adverse impact on the planet, and by enriching and protecting Earth's wild life and the places they inhabit. To this end, the Foundation will fund organizations that promote protection and restoration of habitat for the broadest possible biodiversity, which foster respect for other species and individual creatures, which work to limit detrimental human impact on the planet, and which further the inherent right of all creatures to share the Earth. While the Foundation does not accept unsolicited applications, it is possible that [submitting a pre-application](#) or a short letter of inquiry might result in an invitation to apply (write to The Shared Earth Foundation, 113 Hoffman Lane, Chestertown, MD. 21620).

[Environment, Conservation and Wildlife: New Foundation Funding](#), recently compiled by [Jankowski Research](#), provides on-line access to full profiles of over 1,000 foundations (including over 500 New Foundations) funding conservation, wildlife and the environment. You also receive an index to over 1,000 foundations giving to conservation and wildlife listed by headquarters state. All of these funders have given over \$50,000 to conservation, wildlife and the environment. You'll also get access to the full [GrantsDirect](#) database, which has over 95% of all assets and giving for new foundations. Click [here](#) or call (301) 916-3303 to order or for more info.

Other fundraising ideas: [Network For Good](#) recently announced the availability of a new free "e-book" entitled [How to Raise A Lot More Money Now - 50 Great Ideas from 11 Top Experts](#). Click [here](#) to download or for more info. There's also a free on-line white paper by [Event 360](#) on the [reasons why people participate in fundraising events](#), which you can download by clicking [here](#). You may also benefit by reading [115 Tips to Help You Raise More Money by Mail](#).

[> Top of page](#)

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## Calendar

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

The [Mass. Association of Conservation Commissions](#) (MACC)'s **2010 Fall Conference** is scheduled (as usual) for two times and locations: the eastern conference is Saturday, October 23 in Wellesley Hills [walk-ins are welcome], and the western conference is Saturday, November 6 in Northampton Click [here](#) for more details.

A conference entitled [Ten Year Perspective on Water Resource Issues in New England: Where Have We Been, and Where Are We Going?](#), hosted by the [New England Water Works Association](#) (NEWWA), will take place on Thursday, October 28, 2010 at the Holiday Inn in Boxborough, MA. Click [here](#) for more info.

A free one-day workshop will be held at [US Army Corps of Engineers office in Concord, MA](#) on Thursday, October 28 to present updated rainfall data for the Northeast and

to demonstrate the new [Extreme Precipitation for New York & New England](#) web tool. This update and the web tool were developed by the Northeast Regional Climate Center at Cornell, funded by the Natural Resources Conservation Service (NRCS). Contact Dave Nelson of the NRCS at (413) 253-4363 or [David.Nelson@ma.usda.gov](mailto:David.Nelson@ma.usda.gov) to sign up or for more info.

**[Blending Conservation Design and the New Urbanism](#)**, a webinar presented by Randall Arendt (see Publications below) and scheduled to take place on Thursday, October 28 from 1:00 PM – 2:30 PM, describes the crossover between Conservation Design and the New Urbanism, showing how they can be blended, using greenway planning principles, which always need to be applied at the very front-end of the design process. This program shows how higher density neighborhoods can be designed around the central organizing principle of an open space network and incorporate distinctive features of the natural and cultural landscape, producing more sustainable results. Click [here](#) to sign up or for more info.

**[From Polarization to Problem Solving: a Learning Exchange on Public Engagement](#)**, a conference taking place on Friday, October 29 at UMass Boston, will bring together New England's top public engagement practitioners—facilitators, public officials, school administrators, community leaders, and others—to discuss practical methods and policies for productive dialogue. Sponsored by the [MA Office of Public Collaboration at the University of Massachusetts Boston \(MODR\)](#) in collaboration with many other groups, the conference will focus on the following three topics: Quality Public Engagement: What is it--and how do we communicate it to others so it becomes broadly adopted?; Online Engagement: How can online technology enhance public engagement?; and Collaborations That Work: How can we strengthen connections between public administrators, engagement practitioners and the public? Click [here](#) to register or for more info.

A full-day workshop entitled **[Is Your Stream Restoration Project a Success? How Do You Know?](#)** is taking place on Sunday, October 31 in Philadelphia, PA in conjunction with the [2010 Annual Conference of the American Water Resources Association \(AWRA\)](#). Click [here](#) to download more info about this session, and [here](#) for more info on the Conference as a whole.

A call for abstracts is in effect (until November 1) for **[Sustainable Remediation 2011: State of the Practice](#)**, to take place from June 1-3, 2011 at UMass/Amherst. Topics include: sustainable and innovative technologies for green remediation; human health effects of contaminants at waste sites; human health implications of site reuse; contaminated land ecological revitalization, and community engagement and outreach. Click [here](#) for more info.

The [Massachusetts Service Alliance](#) is offering three workshops on volunteer recruitment and management this fall: **[Volunteer Management Boot Camp](#)**, on Wednesday, November 3 in Worcester; **[Taking a Fresh Look at Volunteer Recruitment](#)**, on Wednesday November 10 in Leominster ; and **[Building the Sustainability of Your Volunteer Program](#)**, on Tuesday, November 16 in Waltham. The registration fee for each of these programs is only \$30. Click [here](#) or contact Naomi Weiner at (617) 542-2544 ext. 218 or [nweiner@mass-service.org](mailto:nweiner@mass-service.org) to sign up or for more info.

The [Merrimack River Watershed Council](#) is hosting its **[35th Annual Meeting and Volunteer Celebration](#)** on Wednesday, November 3, 2010 , to be held from 6:30 PM to 8:30 PM at the MRWC offices in Belltower Square in Lawrence (click [here](#) for directions). The keynote presentation, **[Return of the Shortnose Sturgeon to the Merrimack River](#)**, will be made by Micah Kieffer, a fisheries biologist with the USGS who has studied sturgeon populations in the Merrimack River since the late 1980's; and Jessica Pruden, the Shortnose Sturgeon Recovery Coordinator with the National Marine Fisheries Service. This event is free and open to the public, but advance registration is requested. Please contact the MRWC at (978) 655-4742 [info@merrimack.org](mailto:info@merrimack.org) to sign up or for more info.

The [North and South Rivers Watershed Association](#) will be hosting its **[40th Anniversary Celebration](#)** beginning at 7:00 PM on Friday, November 5 at the [Cushing Center](#) in Norwell. Entrance is free and open to all. The event includes music, refreshments, an awards ceremony, a "40 Years of Saving Our Rivers Together" presentation and a 40th Birthday



Cake and Toast. Click [here](#) for more info.

The [Blackstone River Watershed Association](#) (BRWA) will host its **Annual Member Appreciation Event, Business Meeting and Buffet Dinner** on Saturday, November 6 from 5:30-8:00 PM, at the [DCR River Bend Farm Visitor's Center in Uxbridge](#). The festivities will feature a dusk-walk along the Blackstone Canal, led by DCR Park Supervisor Val Stegemoen, who will entertain members with "looney tunes heard around the campfire near the Blackstone Canal". This event is for members only, so if you have not yet joined, go to [www.thebrwa.org](http://www.thebrwa.org) to learn how you can sign up today! Please RSVP to 508-278-5200 or [info@thebrwa.org](mailto:info@thebrwa.org) for food planning.

**Living Along the River**, a staged concert of River Songs benefiting the [Connecticut River Watershed Council](#) (CRWC), is scheduled to take place at 2:00 PM on Sunday, November 7 at the [Academy of Music](#) in Northampton. "If you like country and bluegrass, acoustic string bands, banjos, a *capella* barbershop or flat-out rock, you'll love this concert". Call the CRWC at (413) 772-2020 ext. 207 to purchase tickets or for more info.

**Giving Power: New Fundraising Tools**, a free webinar sponsored by [Guidestar](#) and scheduled for Tuesday, November 9 at 1:00 PM, will show how giving tools can help nonprofits encourage donations. [KIMBIA](#) will share examples of how these tools have recently been deployed by nonprofits and how they boosted fundraising results. This powerful Web-based platform provides nonprofits with tools that give power back to the organizations and the donors who support them. Click [here](#) to sign up or for more info.

The [American Water Resources Association](#) has issued a [Call for Abstracts](#) (until November 11, 2010) for its 2011 Spring Specialty Conference, **Managing Climate Change Impacts on Water Resources: Adaptation Issues, Options and Strategies**, to be held in Baltimore from April 18-20, 2011. Click [here](#) for more info.

The **Annual Meeting** of the [Nashua River Watershed Association](#) is scheduled to take place on Friday, November 12, 2010, from 6:00 PM to 9:30 PM at the Devens Common Center, 31 Andrews Parkway, Devens, MA . The Keynote Speaker will be William Waterway Marks, the editor of the recently-published book **Water Voices from Around the World**. Reservations are required; reservation deadline is November 3rd. Contact Pam Gill, NRWA Development Associate, at [PamG@NashuaRiverWatershed.org](mailto:PamG@NashuaRiverWatershed.org) or (978) 448-0299 to reserve your space or for more info.

The [Taunton River Watershed Alliance](#) is hosting two screenings of the **Wild and Scenic Film Festival**: Friday, November 12, 6:30 PM at the Brockton Community Access, 1 North Main St., Brockton, and Saturday, November 13, 6:30 p.m., Brockton Public Library, 304 Main St., Brockton. The movie screenings last 90 minutes, and a different film will be shown each night. Coffee, pastries. \$5 one movie, \$7.50 both. Call (508) 828-1101 for more info.

Join the Milton Garden Club on Monday, November 15 for "**Paddler, Spare that Tree!**" **Ecology of Trees & Our Waterways**, a presentation by Russ Cohen, Rivers Advocate with the Mass. Division of Ecological Restoration/Riverways Program: What should be done about trees lying in a river? Should they be removed, pruned, relocated, or left undisturbed? What are the safety considerations? What is the appropriate balance between the competing desires of canoeists, kayakers, and other boaters who seek easy access; the interests of property owners concerned about flood drainage and a 'tidy' appearance; and the needs of fish, mammals, amphibians, insects and birds for adequate food, nesting, and cover? What is "large woody debris" in rivers, and how does it improve water quality and control flooding downstream? Russ will answer these questions as well as share some info about native species that are suitable for planting in riparian areas. Russ' talk will take place at 7:00 PM at the [Milton Public Library](#).

More and more, our communities need to understand new and better ways to deal with stormwater in order to protect our vital water resources. Generate less and infiltrate more is the new mantra. The [Blackstone River Coalition](#) invites you to **Putting Stormwater in its Place**, an afternoon workshop taking place on Thursday, November 18, 2010 at the Blackstone Public Library, 86 Main Street, Blackstone, MA. Participants will learn about



decentralized and natural stormwater management techniques known as Low Impact Development (LID) practices: how to design them, how to maintain them, how to apply them to existing development, and how to encourage them in your community. The keynote speaker is Rob Roseen, Director of the highly-acclaimed [UNH Stormwater Center](#). For more info, contact Peter Coffin, Coordinator, Blackstone River Coalition, at (508) 753-6087 or [peter.coffin@zaptheblackstone.org](mailto:peter.coffin@zaptheblackstone.org).

The Boston-based [Technical Development Corp](#) (TDC) is offering a full-day course entitled **[From Grants to Gifts: Diversify your Funding Base](#)** on Tuesday, December 7. Click [here](#) to register for this course, [here](#) for info on TDC's other upcoming courses for nonprofit organizations, and [here](#) for info on the course registration fees.

[> Top of page](#)

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### On-line Resources

A recently-released U.S. Geological Survey (USGS) report entitled **[A Fresh Look at Road Salt: Aquatic Toxicity and Water-Quality Impacts on Local, Regional, and National Scales](#)** found that tests of streams in the Milwaukee, WI area and elsewhere revealed serious adverse impacts to aquatic organisms caused by salt-laden runoff resulting from winter road-salting operations. Click [here](#) to read the report in the journal *Environmental Science and Technology*, [here](#) for a USGS press release summarizing the report's findings, [here](#) to read an article about the report in *Science Daily*, [here](#) to read an article in *NEIWPC's Interstate Water Report* and [here](#) to read a 2005 article from the *Proceedings of the National Academy of Sciences* raising many of the same concerns.]

The USGS's Northboro, MA-based [MA/RI Water Science Center](#) recently announced the availability of an on-line report entitled **[Effects of Water Use and Land Use on Streamflow and Aquatic Habitat in the Sudbury and Assabet River Basins, Massachusetts](#)**. The report, otherwise known as USGS Scientific Investigations Report 2010-5042, was authored by Phillip J. Zarriello, Gene W. Parker, David S. Armstrong, and Carl S. Carlson, and the study the report is based on was conducted in cooperation with the Mass. Department of Conservation and Recreation. Click [here](#) to download the report or to read a summary of the study's methodology and findings.

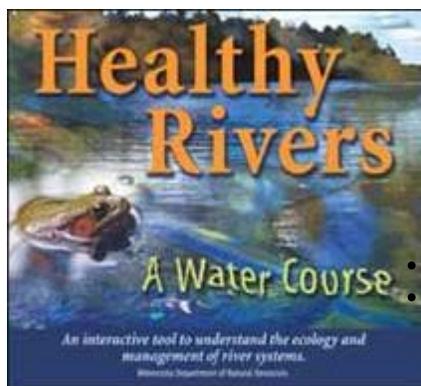
**[Water, Climate Change, and Forests: Watershed Stewardship for a Changing Climate](#)**, a report issued this past summer by the U.S. Forest Service, shows that forests play a critical role in protecting watersheds from the impacts of climate change and that ecosystems that have healthy watersheds can sustain changes and keep ecosystems functioning, especially if they're from forested areas. The report details the pressures on forests, including booming human populations and problems posed by climate change, from warmer temperatures to invasive species. It also details the importance of collaboration among forest managers to secure and steward watersheds. Click [here](#) to download a copy of the report. [Click [here](#) to download the U.S. Fish and Wildlife Service's new publication entitled **[Rising to the Urgent Challenge: Strategic Plan for Responding to Accelerating Climate Change](#)**.]

The RI Dept. of Environmental Management's Office of Water Resources has recently made its **[Freshwater Wetland Restoration Kit for Landowners](#)** available on-line. Recognizing that many potential wetland restoration and buffer restoration sites are located on private land, the freshwater wetland restoration kit was developed to raise awareness among landowners (i.e. individual homeowners, homeowner associations, small company owners, or heads of private corporations) and engage them in the development of potential projects. The documents in this kit have been designed to help landowners with varying levels of expertise through the process of restoring wetlands or wetland buffers on their land. The Kit has also been designed so that it can be added to in the future as needed. Click [here](#) or contact Christine Caron at (401) 222-4700 ext. 7419 or [christine.caron@dem.ri.gov](mailto:christine.caron@dem.ri.gov) for more info.

The [Massachusetts State Legislature](#) recently launched a new website, intended to make it easier for the public to access info about proposed legislation and learn about goings

on in the State House. The site, [www.malegislature.gov](http://www.malegislature.gov), includes an on-line photo tour, trivia, and more clearly defined sections on such topics as legislative committees and upcoming events. Another state-maintained web page, [Commonwealth Communities](#), is a good resource for finding information on the 351 cities and towns of Massachusetts provided by state agencies and official city/town websites. The info is accessed alphabetically by city/town name.

Along the coast of Massachusetts there are hundreds of places to access sprawling sandy beaches, rocky coastline, pristine salt marshes, and bustling ports and harbors. The [Mass. Office of Coastal Zone Management](#) (MCZM) recently posted on its web page a [CZ-Tip: Get to the Shore!](#), which focuses on coastal access in the Commonwealth, including public rights and responsibilities, public access sites, and environmental protection issues. Also recently posted: [C-Z Tip: Fall Planting on the Coast](#), which offers general and specific advice and suggestions on how to select, obtain, establish and maintain native plantings in coastal areas. Click [here](#) to download a copy of [A Planting Guide for Riparian sites along the Connecticut coast](#). [A similar Mass. species list has been developed for riparian areas; send an e-mail to [russ.cohen@state.ma.us](mailto:russ.cohen@state.ma.us) to request a copy.]



Last but not least: [Healthy Rivers: A Water Course](#), developed by the [Minnesota Department of Natural Resources](#), is a captivating on-line program (also available in CD-ROM format) to understand the ecology, management, and stewardship of river and stream systems. A user-friendly multimedia tool, *Healthy Rivers* features:

- 220+ screens of information exploring the complexity and diversity of river systems.
- 540+ color photos and 70+ maps, illustrations, and graphic animations.
- Over 100 audio interviews, video clips, and music segments.
- More than 100 links within the program, 100+ links to external web sites, and a complete bibliography of over 100 references.

Click [here](#) for more info.

[> Top of page](#)

### Non-government On-line Resources

*(in rough alphabetical order)*

Association of Watershed and Stormwater Professionals (AWSP)'s Career Center

<http://www.awsp.org/careers.html>

Recently established by the [Center for Watershed Protection](#) (CWP), the AWSP serves as a Professional Membership Program for those engaged in watershed, stormwater and related work. The AWSP's Career Center connects watershed professionals with employment opportunities locally and nationally. Both job seekers and employers can benefit from this new service. The AWSP's Career Center is free to all job seekers and provides you with access to the best employers and jobs in the watershed field; the site includes options to post your resume and to receive email alerts on new jobs. For employers, the Career Center offers simple pricing options that allow you to advertise your position to quality candidates in the watershed field. A special introductory offer is available to employers for listing positions on the Career Center. [Click [here](#) or send an e-mail to



[membership@awsps.org](mailto:membership@awsps.org) for more info on the Career Center or for the AWSP in general; and click [here](#) for the Fall 2010 edition of the CWP's [Runoff Rundown](#) electronic newsletter.]

Crowdrise

<http://www.crowdrise.com>

Crowdrise is about volunteering, raising money for Charity and having the most fun in the world while doing it. Whether you're running a marathon, volunteering, or have causes that you care deeply about, [create your own fundraising pages](#) on Crowdrise and choose from over a million charities to raise money for (including some river and watershed protection/restoration groups). You can also [post all your volunteer projects on Crowdrise](#) so everyone sees how you're making a difference, or go a step further and [get your friends to sponsor your volunteer projects](#) to raise money for your favorite charitable causes. You can also use Crowdrise to [donate directly to your favorite Charity or support others' worthy Projects](#). [Nonprofits](#) can use Crowdrise's [easy fundraising platform](#) to turn your base of grassroots supporters into awesome, amazing grassroots fundraisers.

Explore Massachusetts: An Inside Look

<http://www.nature.org/wherewework/northamerica/states/massachusetts/science/art28847.html>

The link above takes you to a web page (maintained by the [Massachusetts Chapter of The Nature Conservancy](#)) filled with informative and inspiring stories about efforts to protect the nature of Massachusetts. Many of the stories focus on riverine and coastal habitats.

Goby.com

<http://www.goby.com>

Established a year ago, the Boston-based Goby website is a search engine focused on exploring fun things to do with your free time, from taking a unique vacation to creating this weekend's nature tour. With Goby you do one search, specifying what you want to do, where and when to find what you need about a desired trip or leisure activity, rather than hopping around from Web site to Web site and sorting through pages and links to often irrelevant info. Goby's activity topics are wide-ranging (see [outdoor-recreation](#), for example). While joining Goby enables you to assemble your own customized travel and activity preferences and share them with others, you don't need to join to use the service.

Housatonic River Guide and Head of the Housatonic

<http://www.housatonicriverguide.com> and  
<http://www.hvatoday.org/publications/HeadOfHousy.pdf>

A newly-produced, multi-faceted guide to the entire river, from its headwaters at Muddy Pond in Washington, MA to its outlet into Long Island Sound, the [Housatonic River Guide](#) not only includes the standard info paddlers need regarding [put-in and take-out points](#), it also includes links to the many [environmental associations](#) active in the watershed, links to the [websites for the 80 communities](#) in the watershed, [source-to-sea](#) and [vintage-postcard](#) photo galleries, and links to Housatonic-related [videos](#), including computer-simulated "[flyovers](#)" over selected portions of the watershed. The [Head of the Housatonic](#), recently produced by the [Housatonic Valley Association](#), is a full color map and guide highlighting unique and important cultural, historic and natural resources of the Housatonic River and Valley from its headwaters to Kent, CT. The map features riverfront walks, local and state parks, paddles along the river, and places of interest throughout the region. Hard copies are available free in area town halls, libraries and businesses, or from [HVA's offices in MA or CT](#), or click [here](#) to download in .pdf format.

The Connecticut River: Partnership for Conservation

<http://vimeo.com/14450101>

The link above takes you to an inspiring 15-minute video by award-winning New England-based landscape photographer [Jerry Monkman](#). The video puts a spotlight on the professionals Monkman worked with during his two-year documentary photography project in the Connecticut River watershed. 4.75 million acres in the watershed remain undeveloped and unprotected, providing ample opportunity for conservation. Click [here](#) for more info.

Trashpaddler

<http://www.trashpaddler.com>

Maintained by Al Pierce, a.k.a. "SuAsCo Al", Trashpaddler is an entertaining blog recounting Al's trash-collecting-by-kayak experiences on the Sudbury, Assabet and Concord Rivers and beyond. [Click [here](#) to read an article about Al Pierce's river-cleaning exploits that ran in the Boston Globe's West Weekly section on 9/9/10; [here](#) for a similar blog by Ed "The Web Guy" Thompson focusing on the Nashua River and tributaries; and [here](#) to visit the similar [Clean Up the River](#) blog.]

WaterSmart Innovations 2010 Conference Presentations

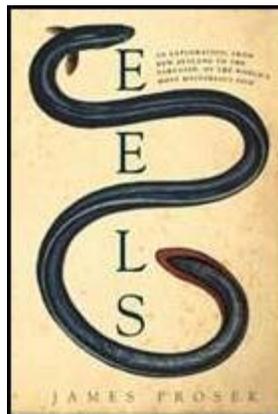
[http://www.watersmartinnovations.com/2010\\_sessions.php](http://www.watersmartinnovations.com/2010_sessions.php)

The [WaterSmart Innovations 2010 Conference](#), which took place earlier this month in Las Vegas, included many informative sessions on various aspects of water usage, efficiency and conservation. Many of the conference presentations are accessible on-line (in .pdf format). Click [here](#) or on the link above to access them.

[> Top of page](#)

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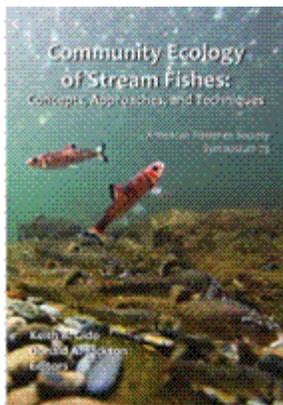
Publications and Videos, etc.



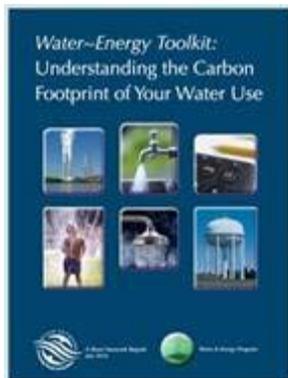
***Eels: An Exploration, From New Zealand to the Sargasso, of the World's Most Amazing and Mysterious Fish***, the latest book by acclaimed author, illustrator and naturalist/conservationist [James Prosek](#), is a cultural, geographical, and botanical investigation of the life cycles of the catadromous (living in fresh water and spawning in salt water) fish and their cultural significance amongst many peoples. Prosek delves into the closely-held traditions of the Maori of New Zealand, where eels are revered; into the beliefs of the Micronesian island of Pohnpei, where eels are considered members of a tribal clan; into the heart of the largest seafood market in the world, in Japan, a nation that consumes more than 130,000 tons of eels each year; into the reclusive world of Eel Weir Hollow in the Catskills, where fisherman Ray traps and smokes as much as one ton of eels a season; and to the fabled Sargasso

Sea, where eels are thought to start their trek to the world's lakes, rivers, and streams-- though, even now, no one knows precisely where the world's population of eels spawns. [Click [here](#) to read an excerpt of the book appearing in the July/August 2010 issue of [Orion Magazine](#), [here](#) for an article and [here](#) for photos appearing in the September 2010 issue of [National Geographic Magazine](#), and [here](#) to read Prosek's ***A Steady, Steep Decline for the Lowly, Uncharismatic Eel***, appearing in [Yale Environment 360 Magazine](#).]

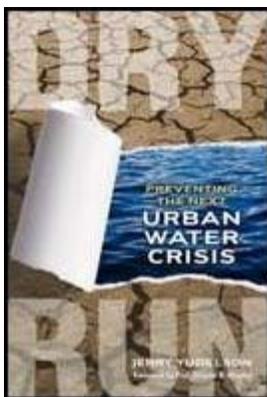
Stream fish community ecology is an exciting field of research that has expanded rapidly over the past two decades. Both conceptual and technological advances have increased our ability to characterize patterns of community structure across multiple scales and evaluate processes that regulate those patterns. The main focus of ***Community Ecology of Stream Fishes: Concepts, Approaches and Techniques*** recently published by the [American Fisheries Society](#), is to synthesize those advancements and provide directions for future research. Chapters are grouped into five main themes: macroecology of



stream fishes, stream fish communities in landscapes: importance of connectivity, conservation challenges for stream fishes, structure and dynamics of stream fishes, and role of fishes in stream ecosystems. Click [here](#) to order a copy or for more info.



If you've ever lugged around 5-gallon jugs of water for long, you know that water is heavy and moving it takes a lot of energy. In fact, moving, heating and treating water in the U.S. consumes 13% of all the electricity produced each year – and generates the same amount of greenhouse gases as 62 coal-fired power plants. [River Network's](#) new publication, ***Water-Energy Toolkit: Understanding the Carbon Footprint of Water Use***, is a guide to 11 tools and calculators that can help people and communities better understand the energy and carbon emissions embedded in their water consumption. The tools are designed to help you understand the energy intensity of your community's water system and which types of water-oriented strategies you should employ so that you can begin saving energy by saving water. The 28-page *Toolkit* is available for free (.pdf format) download by clicking [here](#), and click [here](#) to access River Network's [Water-Energy Toolkit](#) web page.



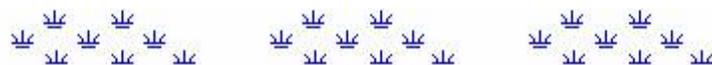
Fresh water shortages are an increasingly serious global problem. With water restrictions emerging in many developed countries and water diversions for industrial, urban and environmental reasons stirring up oceans of controversy, there is a growing thirst for innovative approaches to reducing our water footprint. The new book ***Dry Run: Preventing the Next Urban Water Crisis***, by [Jerry Yudelson](#), features original interviews with more than 25 water researchers and industry experts and proposes solutions for homes, buildings, facilities and schools. Examining the vital linkages between water, energy use, urban development and climate change, *Dry Run* demonstrates best practices for achieving "net zero" water use in the built environment including: water conservation strategies for buildings, factories, cities and homes; rainwater harvesting; greywater reuse and water reclamation systems; water efficiency retrofits; on-site sewage treatment; and new water reuse and supply technologies. Ideal for concerned citizens, building managers, homeowners, architects, engineers, developers and public officials faced with charting a course in a more arid future, *Dry Run* overflows with practical solutions. Click [here](#) to order or for more info.

Citing a looming freshwater crisis that could affect the nation's economy, the livability of our communities and the health of our ecosystems, a diverse coalition of businesses, farmers, environmental not-for-profits and government agencies issued a landmark call to action aimed at heading off a national crisis in water quality and supply. ***Charting New Waters: A Call to Action to Address U.S. Freshwater Challenges***, recently issued by participants in the [Johnson Foundation Freshwater Summit](#), is the culmination of an intensive two-year collaboration exploring solutions to U.S. freshwater challenges. The report's [Commitments to Action](#) identifies serious challenges to the quality and supply of freshwater, such as pollution and scarcity; competing urban, rural and ecosystem water needs; climate change; environmental and public health impacts; and a variety of economic implications. Click [here](#) to download the [Executive Summary](#), the [full report](#), or for more info, and [here](#) for a related



The [Mass. Watershed Coalition](#) (MWC)'s "[mwc-list](#)" [listserv](#) is a great source of information on river- and watershed-related funding and job opportunities, upcoming events, recent articles and more. Many of the posted items are time-sensitive and can't wait until the next edition of **Ebb&Flow**. You can access the mwc-list listserv at <http://lists.topica.com/lists/mwc-list@igc.topica.com>, where you can subscribe to receive the posted messages to your e-mail address, or simply read them on-line. Highly recommended!

[> Top of page](#)



**Division of Ecological Restoration Staff :**

Tim Purinton, **Acting Director**  
Hunt Durey, **Acting Deputy Director**  
Carrie Banks, **Stream Team and Westfield River Wild and Scenic Committee Coordinator**  
Jeremy Bell, **Wetland Restoration Specialist**  
Russell Cohen, **Rivers Advocate**  
Cindy Delpapa, **Stream Ecologist**  
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Franz Ingelfinger, **Restoration Ecologist**  
Georgeann Keer, **Wetland Scientist and Project Manager**  
Beth Lambert, **River Restoration Scientist**  
Chris Leuchtenburg, **River Restoration Data Researcher**  
Nick Wildman, **Priority Projects Coordinator**

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Timothy P. Murray, Lieutenant Governor  
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