Commonwealth of Massachusetts Department of Fish & Game *Mary B. Griffin, Commissioner*

DIVISION *of* ECOLOGICAL RESTORATION

Tim Purinton, Director

Ebb&Flow

An electronic newsletter from the Massachusetts Division of Ecological Restoration

Ebb&Flow #22

December, 2014

An electronic newsletter from the Mass. Department of Fish and Game's Division of Ecological Restoration (DER)
http://www.mass.gov/der

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Last but not Least

Greetings, restoration friends and colleagues:

What strikes me most when I read the advance copies of ***Ebb&Flow***, and this is especially true for this edition, is how much exciting work is underway in the restoration realm. In Massachusetts, ecological restoration is advancing at a furious clip; in fact a dam is being removed as I write, on one of my favorite trout streams, Fall River in Gill and Greenfield.

All this buzz of activity is the by-product of well-constructed partnerships, grant writing, and lots of strategic planning. Take a look at our project updates, and you can't help feel that no other state is doing as much to restore rivers and wetlands. The results are clean water, healthy ecosystems and a surge of economic growth.

As mentioned, there are reasons for this chorus of activity. A major reason is that MassDEP and DER staff worked hard to clarify and streamline the permitting of restoration projects. This has culminated in new regulations that create a pathway for proactive ecological restoration projects. You can learn more about this online, and at several training sessions (see the Calendar below for more info).

Remember to check the Grants and Calendar sections of ***Ebb&Flow***, which Russ Cohen works so hard to pull together to assist our NGO partners. Many grant deadlines and other dates are fast-approaching, so don't miss a chance to restore, protect and preserve your favorite rivers and streams.

See you on the water --

Sincerely,

Tim Purinton, Director

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Restoration in the News

- An EEA press release issued 9/30/14 announced the granting of $52,000 in state funding (via DER) for two river restoration projects: a $40,000 grant to the Town of Plymouth, to support the removal of the Plymco Dam on Town Brook; and a $12,000 grant to the Center for Ecosystem Restoration, to provide project management support for the Shawsheen River Restoration Project in Andover, which involves the planned removal of two dams. The latter grant was reported on in the *Lawrence Eagle-Tribune* on 10/13/14.
- The *Norwell Mariner*, on 10/8/14 reported on the recent removal (with DER's help) of a dam on Third Herring Brook in Norwell, a significant step forward in restoring migratory fish spawning and habitat.
- *WWLP Channel 22* in Springfield covered the Kinne Brook dam removal story on 10/10/14 (see more in the Feature Article below).
- On 10/13/14, the *Berkshire Eagle* published a guest editorial by Lauren Stevens in support of the ongoing collaboration by The Nature Conservancy (TNC), UMass/Amherst, the Berkshire Environmental Action Team (BEAT), the Hoosic River Watershed Association (HooRWA), the Housatonic Valley Association (HVA), MassDOT, DER and others to identify culverts and bridges that act as barriers to the movement of fish and wildlife, and how their wise redesign and replacement can help the human infrastructure's ability to withstand stronger storms, as well as restore habitat connectivity and quality.
- An EEA press release issued 10/14/14 announced a $612,000 grant to advance the Herring River Estuary Restoration Project in Wellfleet and Truro, one of the largest and most ambitious coastal habitat restoration projects in New England, and where DER is playing a major role. The recent grant announcement was also reported on by the *Cape Cod Times* on 10/14/14, and the paper covered the Project again on 12/1/14.
- The *New Bedford Standard-Times*, on 10/13/14, reported on the Buzzards Bay Coalition's recent receipt of $365,000 in funds flowing from the Bouchard oil spill litigation. The money will be used to help remove a barrier to anadromous fish passage in the Horseshoe Pond section of the Weweantic River in Wareham.
- An EPA press release issued 10/15/14 applauded the creation of the Southeast New England Coastal Watershed Restoration Program, which promotes a broad ecosystem approach to protecting and restoring the coastal watersheds of southeast New England (coastal areas from Westerly, R.I. to Chatham, Mass., including all waters of Rhode Island, southern Cape Cod, Narragansett Bay and Buzzards Bay). The program, consisting of government and non-government organizations, is currently working collaboratively and innovatively to maintain and improve water quality and habitat conditions within these coastal watersheds. Click here, here, here and here for more info.
- An EEA press release issued 10/31/14 was timed to coincide with an event announcing the completion (with DER's help) of marsh restoration construction efforts at Town Creek, a tributary of the Merrimack River in Salisbury, continuing efforts to prepare the Commonwealth's infrastructure for the impacts of climate change while preserving important natural habitats. The announcement was also covered in the Amesbury paper and reported on in the Newburyport Daily News, which followed up with a related article.
- A 11/4/14 story posted to Masslive.com reported on the proposed removal of an old, wooden dam on Amethyst Brook in Pelham, a dam that was hidden from view for centuries until the Bartlett Rod Shop dam, located just downstream, was removed (with DER's help), and the freely-flowing stream exposed it.
- A 12/8/14 story in the Gloucester Times reported on a recent grant award to support the naturalization of the Little River in Gloucester (read more about DER's involvement in that project in DER Updates below).

Feature Article:

In Addition to Hitting the Books, These College Students are Hitting the Brooks!

By Carrie Banks, Stream Team and Westfield River Wild and Scenic Committee Coordinator

Westfield State University's Stream Ecology Course conducting pre-restoration monitoring and fish sampling along Kinne Brook.

Chester, MA – Engaging students in hands-on, in-the-brook learning is one way to inspire students to consider a field in river conservation work. There are many opportunities to apply university-driven research and learning to on-the-ground restoration. Through partnerships with faculty and students, DER is not only able to remove barriers and restore rivers, but we can also document and monitor stream conditions, including water quality, habitat, physical and biological.

Taking in a deep breath of fresh air and getting their feet wet is one opportunity students in Westfield State University's Stream Ecology and Water Resources courses have enjoyed over the past three years, as they helped to survey, document and monitor conditions along Kinne Brook in Chester.

A small, cold-water tributary to the Middle Branch of the Westfield River, Kinne Brook is surrounded by forested hills, much of which is part of the MassWildlife's Hiram H. Fox Wildlife Management Area.

The goal of the Kinne Brook Restoration Project is to remove three fish passage barriers to restore habitat connectivity to over ten miles of spawning and rearing habitat for Eastern Brook Trout, slimy sculpin, and other coldwater fish species. The project successfully removed the first barrier – a small private dam – in September.

Two weeks later, students were back out on the brook, monitoring Brook Trout movement. The data collected over the past three years is compiled into annual reports, which help the Restoration Project Team in meeting regulatory requirements, as well as match and funding obligations. More importantly, it adds an educational component and opportunity for the students to learn about the various aspects of restoration.

Throughout the project, students get exposed to possible career paths relating to ecological restoration as they interact with project team members, including fishery biologists, engineers, grant writers, wetland consultants, regional planners, and contractors. With two more culverts targeted for replacement in 2014-2015, there will be many additional opportunities for students to get valuable hands-on and in-the-brook experience. Click here to read the EEA press release; and here to read an article, see more photos, and a video of the students' fish monitoring of Kinne Brook, and here to read an op-ed piece in support of the project, all posted to MassLive.com.

Views (looking upstream) of Kinne Brook in Chester, before (left photo) and after (right photo) the dam removal.

David Mountain *in Memoriam*
By Tim Purinton

When a mentor passes, the loss inspires reflection upon life choices, and the pivotal points that determine personal trajectory. A mentor is not always a close friend, or a family member, but can still profoundly impact a perspective and direction.

Mentors reveal potential and opportunities to effect meaningful change. Dave Mountain, longtime president and founder of the Parker River Clean Water Association, helped me see that I could take a simple love of a river and turn it into a profession. That's alchemy. When someone outlines steps to transform passion into livelihood, it's as if water was turned into wine. David Mountain had a unique ability to build success from scratch, to resolve sticky problems, and to convince other people that his vision was the clearest.

Dave Mountain passed away last month. With his passing, the Parker River lost its greatest steward, advocate and friend. Dave's professional profile included deep expertise in: acoustics, computer simulation, biomedical electronics, biomedical signal processing, sensory biology, conservation biology, and land use planning. I wonder how many others benefited from his alchemy. Thanks, Dave, for all you poured into the Parker River and for being a great mentor. [Click here to read an obituary posted on Boston University's web page (where Dave worked), and here to read one published in the *Newburyport Daily News*.]

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Division of Ecological Restoration News and Project Updates

Restoration Project Updates

By Alex Hackman, DER Restoration Specialist/Project Manager

Greetings ***Ebb&Flow*** readers! We at DER continue to be thankful for your support, and for the opportunity to work with you to restore our rivers and wetlands. Below are a few quick project updates. Readers are welcome to contact me directly with questions, comments, or for more information about any of these projects (alex.hackman@state.ma.us). Be well and Happy Holidays!

Upper Roberts Meadow Brook Dam Removal – New DER Priority Project (Northampton)

DER is now supporting the City of Northampton's effort to remove the City-owned Upper Roberts Meadow Brook Dam, located in the Leeds section of Northampton. Staff has been working closely for the past few months with the City and their consultant – GZA GeoEnvironmental, Inc. – on a range of issues including sediment management, permitting, and historical mitigation elements. The project is in the semi-final engineering design phase, and permitting is expected to begin soon. The project will involve controlled removal of the 35-foot high curved stone-block spillway, and restoration of a free-flowing coldwater stream above the dam. Expected benefits include improvements in water quality and stream habitat, elimination of a safety hazard and ongoing costs/liability for the City, and compliance with MA DCR Office of Dam Safety regulations. DER looks forward to more work in the community over the next several months, leading to dam removal activities hopefully commencing by early summer. The project is receiving grant and loan support from the EEA Dam and Seawall Repair and Removal Fund. Thanks to staff from MA DEP's Western Regional Office, DFG's Division of Fisheries and Wildlife, and the U.S. Army Corps of Engineers for their recent input regarding sediment management issues.

View of the spillway at the Upper Roberts Meadow Dam, to be removed in 2015 by its owner, the City of Northampton.

Old Mill Dam Removal, Charles River (Bellingham) – New DER Priority Project

View of the spillway at the town-owned Old Mill Dam, on the Charles River in Bellingham.

DER is now supporting the Town of Bellingham's effort to remove the Old Mill Dam on the Charles River in Bellingham. Staff has been recently focusing their technical assistance on sediment sampling, testing, and management alternatives with the Town's engineering consultant (Pare Corporation). The project is receiving grant and loan support from the EEA Dam and Seawall Repair and Removal Fund and general support from Charles River Watershed Association . Following chilly field work in December and design updates, the project is expected

to begin the permitting coordination process under MEPA in early 2015. DER is excited to support the first pro-active dam removal on the Charles River, and looks forward to providing more updates in 2015.

International Paper Co. #2 Dam Removal, Fall River (Gill/Greenfield)

Spillway to be removed December 2014, Fall River (photo credit Amy Singler American Rivers)

Final preparations are underway to remove the only dam on the beautiful Fall River, located on the Gill/Greenfield border. The project is a pilot effort between DER, the US Fish and Wildlife Service (USFWS), and American Rivers to use in-house resources to design, permit, and implement a small and highly beneficial removal action. The Fall River is home to a wide range of resident and diadromous fish, including Atlantic salmon (an adult was just identified in the river in November!). The river enters the Connecticut River just downstream of the large Turner's Falls Dam, making the pristine waterway an ideal candidate for ocean fish looking to move upstream into spawning grounds. Removal of the approximately 8-foot tall spillway is expected to open up approximately 40 miles of coldwater habitat. Portions of the abutments will be left in place to address local historical interests. Thanks to Dr. Allison Roy's class at UMass Amherst for providing valuable pre-removal data collection, and to the ongoing efforts by Peter Mitchell and others at Mass. DEP to monitor the quality of the river. SumCo Eco-Contracting is under contract to remove the dam, with financial support from USFWS and the National Oceanic and Atmospheric Administration. Thanks also to the provide landowners for allowing access for construction equipment, and to the involvement of both the Gill and Greenfield Conservation Commissions.

Turner Dam Removal, Nissitisset River (Pepperrell)

DER recently contracted with Gomez and Sullivan Engineers to begin final engineering design and permitting work for the project. Permit applications are expected to be filed this coming winter, leading to dam removal anticipated in September of 2015. Funding for the assessment and design phases (2103-2015) has been provided by DER, with contribution from the Greater Boston and Squan-a-tissit chapters of Trout Unlimited. The project is expected to open up approximately 20 miles of high quality upstream river habitat, and also restore several acres of functional wetland/floodplain just upstream of the dam. Funding for implementation has been secured as part of the $5 million DOI/NFWF Sandy Resiliency award to DER, covering numerous dam removals and other work around Massachusetts.

Turner Dam Removal Project team and supporters from Trout Unlimited, Nashua River Watershed Associated, Town of Pepperell, and Nashoba Conservation Trust, attending a 2014 Select Board Meeting

The project research team labors through and enjoys the rocky downstream reach to assess river conditions (summer 2014).

Removal of the dam is expected to facilitate final land acquisition by MassWildlife (DFW), who will permanently protect the riverfront area and provide public access. Special thanks to mussel expert Peter Hazelton of the Mass. Natural Heritage and Endangered Species Program (NHESP), fisheries biologist Leanda Fontaine from DFW, and Dr. Denise Burchsted of Keene State College, for organizing and collaborating on pre- and post-removal monitoring activities. The dam removal will involve the passive release of approximately 7,000 cubic yards of clean sediment to downstream reaches to improve stream-bottom habitat conditions. As this section of the Nissitisset River is home to one the few known populations of the endangered Brook Floater mussel, as well as several other threatened species, this project provides an excellent opportunity for studying the effects of dam removal on habitat conditions, fish, and mussel populations.

Tidmarsh Farms Restoration Project (Plymouth)

DER recently contracted with Inter-Fluve, Inc. to complete final engineering designs, permitting, and pre-bidding preparations for this 250-acre wetland and stream restoration project in the Manomet section of Plymouth. Numerous pre-construction activities are underway, including extensive monitoring, collection of large wood (see photo), collection of seed, and care for thousands of young Atlantic white cedar trees to be planted in 2016. Many

thanks for the tireless work by the landowners (Tidmarsh Farms, Inc.), including MIT scientist Glorianna Davenport, for extraordinary efforts to establish the Living Observatory.

Hundreds of logs and stumps have been stockpiled, for eventual placement onto the restored bog surface in 2016.

Thousands of Atlantic White Cedar trees, grown on-site, from seed collected from the Eel River Headwaters Restoration Project in Plymouth.

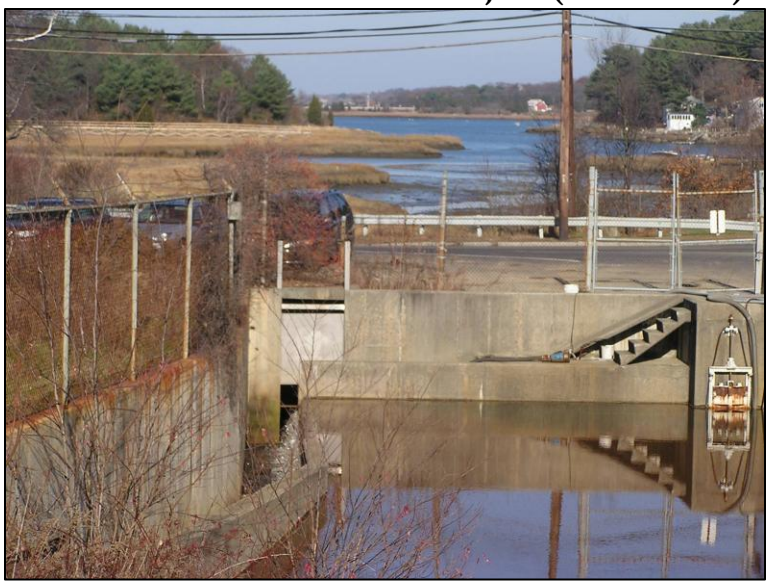
DER remains grateful for the contributions from neighbors and partnering organizations, including Mass Audubon, USDA's Natural Resource Conservation Service, NOAA, the Town of Plymouth, American Rivers, UMass Boston/Amherst, MIT, and many others. We expect to receive final permits later this winter, and put the project out to bid in early spring of 2015. Keep your fingers crossed for our final outstanding grant application with the USFWS, with decisions expected in January. Expect an exciting 2015 of large scale wetlands and stream restoration action on the ground. In the meantime, you can learn more about this project by visiting the Tidmarsh Farms website.

Tel-Electric Dam Removal, West Branch Housatonic River (Pittsfield)

View of the defunct spillway at the Tel-Electric Dam, on the West Branch Housatonic River in Pittsfield.

DER recently contracted with Princeton Hydro, LLC for preliminary engineering design and permitting work for this challenging urban dam removal. On-the-ground data collected in expected to begin this month, leading to extensive hydrologic and hydraulic modeling and engineering design to assess potential risks to nearby infrastructure, estimate reductions in upstream flood hazards, and develop safe methods for dam removal. DER is grateful for the continued technical contributions from the City of Pittsfield, MA DEP, and the U.S. Fish and Wildlife Service. The project was awarded approximately $1 million as part of the DOI/NFWS Sandy Resiliency award to DER, and dam removal is expected to take place by late summer 2016. This project will provide valuable lessons for urban river revitalization, sediment management, and work around tight infrastructure.

Little River Naturalization Project (Gloucester)



View (looking downstream) of the lower end of the freshwater section of the Little River in Gloucester, where vulnerable coastal infrastructure will be removed and natural systems restored.

With financial support from the U.S. Fish and Wildlife Service, DER recently contracted with Milone and MacBroom to revisit and update project designs. DER and others are supporting the City of Gloucester's work to

remove a concrete fish ladder and attached sludge lagoon, daylight a portion of the stream, and re-construct a natural stream channel and small salt marsh at the outlet of the freshwater section of the Little River, adjacent to the City's water treatment plant. The effort had been on hold for several years as the City worked with an abutting property owner through a series of concerns. Now resolved, the project team is back to work. Congratulations to the City of Gloucester for the just-announced grant award from the Office of Coastal Zone Management's Coastal Community Resilience Grant Program, which will support project implementation in 2015. Thanks to the continued support and technical input from DFG's Division of Marine Fisheries, NOAA, and the USFWS.

Completed Projects – Where are they now?

From time to time, we'll try to post photos of our completed projects. With the end-of-year upon us, it seems like a good time to reflect on past work, be thankful for what we've been able to accomplish together, and share these visual updates on just a few completed projects...

Wellingsley Brook Restoration Project (Plymouth)

3 small dams were removed and the channel rebuilt in 2012. This photo is from summer 2014.

Eel River Headwaters Restoration (Plymouth) – 1.5 miles of stream channel rebuilt, 40 acres of restored cranberry farm, 2 culverts replaced, and 20,000+plants installed in 2010. Photos are from 2014.

The planted Atlantic white cedars are doing well!

Former dry cranberry farm surfaces are wetlands again.

The former stagnant impoundment looks a lot better (now a flowing stream again), post-dam removal.

The Eel River Restoration Project site continues to host numerous tours and student groups every year (see above and below).

Bartlett Rod Shop Co. Dam Removal, Amethyst Brook (Pelham), completed in 2012.

This photo (looking upstream), is from fall 2014.

More Restoration Project Updates

By Nick Wildman, DER Priority Projects Coordinator

'Tis the season to be jolly! And with your support, DER continues to work on a number of high priority restoration projects across Massachusetts. Below are a few project updates. Feel free contact me directly with questions, comments, or for more information about any of these projects (nick.wildman@state.ma.us). Happy Holidays!

Mill Pond Dam Removal Complete! (Third Herring Brook, Hanover)

Third Herring Brook flows though the stabilized breach through the Mill Pond Dam. The former impoundment is to the left.

November saw the completion of work at the Mill Pond Dam on Third Herring Brook in Hanover. Thanks to good weather, contractors from T-Ford Company under the direction of engineers from GZA GeoEnvironmental completed the removal of the dam and restoration of the stream channel through the site. Third Herring Brook forms the part of the border between Hanover and Norwell and this removal is hopefully one of the first in a series that will restore fish passage and ecological functions from Jacobs Pond down to the confluence with the North River. The project also removes a great liability from the South Shore YMCA, who owns the site. The North and South Rivers Watershed Association deserves special kudos for co-leading this project with the Y since the early 2000's! Job well done!

Plymco Dam Removal (Town Brook, Plymouth)

After years of planning, permitting and other work conducted via a collaboration with the Town of Plymouth, NOAA, the U.S. Fish and Wildlife Service, and a host of other partners, removal of the Plymco Dam on Town Brook in Plymouth will begin in December! This project will be very similar to last winter's work that removed the Off Billington Street Dam, located just downstream. All together, removal of the Plymco Dam is the second-to-last dam removal planned to help restore fish passage and other ecological functions to this historic brook. The project engineer is Milone & MacBroom of Springfield, and construction implementation will be handled by D&C Construction.

Volunteers in a "bucket brigade" to carry migrating herring over the Plymco Dam in April of 2014, This will no longer be necessary once the dam is removed.

Quinapoxet (Oakdale) Dam Removal Study (Quinapoxet River, West Boylston)

Georgeann Keer, Wetland Scientist and Project Manager

Historic photo of the Quinapoxet Dam, shortly after its 1905 construction.

DER is excited to partner with the Massachusetts Water Resources Authority (MWRA) and the MA Department of Conservation and Recreation (DCR) on the Quinapoxet Dam Priority Project, located adjacent to the Oakdale Transfer Station and the outlet of the Quabbin Aqueduct (conveying water from the Quabbin to the Wachusett

Reservoir) in West Boylston. With the utility of the existing semi-circular dam, constructed in 1905, in question, the project team is undertaking a feasibility study to determine the potential for its removal. Unlike many other dam-removal projects, where dam history and methods of construction are lost to the annals of time, the project partners were able to provide a significant treasure trove of construction drawings and photographs that will facilitate the current investigation. Removal of the spillway and restoration of a free-flowing river would benefit aquatic habitat, eliminate a potential dam-safety hazard and facilitate passage for fish, including wild trout and landlocked salmon.

View of the Quinapoxet Dam as it appears today.

DER, MWRA, and DCR staff meeting to discuss next-steps and kick-off of feasibility investigation of the Quinapoxet Dam Removal Project.

South Middleton Dam Removal (Ipswich River, Middleton)

By Kristen Ferry, Aquatic Habitat Restoration Specialist

South Middleton Dam, Ipswich River, Middleton

Preliminary design plans have recently been completed by the consulting firm InterFluve for the removal of the South Middleton Dam on the Ipswich River. The South Middleton Dam, owned by Bostik Inc., an industrial adhesives company, is the third dam from the mouth of the Ipswich River, and the only dam without fish passage. The dam blocks river herring, American eel, and sea lamprey from accessing 57 miles of upstream mainstem and tributary habitat. It also exacerbates flooding to upstream residences, creates a barrier for paddlers (no public portage), and it is considered by Bostik to be a hazard and liability. DER, NOAA Fisheries, and the Ipswich River Watershed Association have been working since 2009 to evaluate the removal of this dam. The completion of this early design work was made possible by support from American Rivers, the Massachusetts Environmental Trust, the Corporate Wetlands Restoration Partnership, and DER. Currently, the Project Team is reviewing the preliminary plans, and the second phase of design is anticipated to begin this winter, with permit-ready plans expected by spring. Funding for implementation has been secured as part of the $5 million DOI/NFWF Sandy Resiliency award to DER. Kudos to the Ipswich River Watershed Association and the rest of the Project Team for moving this project along!

Parkers River Tidal Restoration (Yarmouth)

By Kristen Ferry, Aquatic Habitat Restoration Specialist

The second and largest phase of design is underway for the Parkers River and Seine Pond Restoration project in Yarmouth. Parkers River and Seine Pond are a 162-acre coastal habitat complex consisting of river bed, salt pond and salt marsh. The system drains into Nantucket Sound and leads to Long Pond, a freshwater pond which supports a locally-important herring run. The Parkers River Bridge on Route 28 presently causes a restriction to tidal flow and is in poor condition. This project will replace the existing 18-foot span bridge with a 30-foot span bridge, which will greatly increase tidal exchange, improve water quality in Seine Pond, and reduce the water velocity under the bridge for migrating fish and other aquatic organisms. Implementation of the Parkers River project is being supported by $2.8 million in US DOI Hurricane Sandy Mitigation Funding. The consulting firm Louis Berger Group is leading the design work and coordination with MassDOT, the bridge owner. The dedicated Project Team

supporting this complex infrastructure project includes staff from the Town of Yarmouth, the Cape Cod Conservation District, the USFWS, and DER.

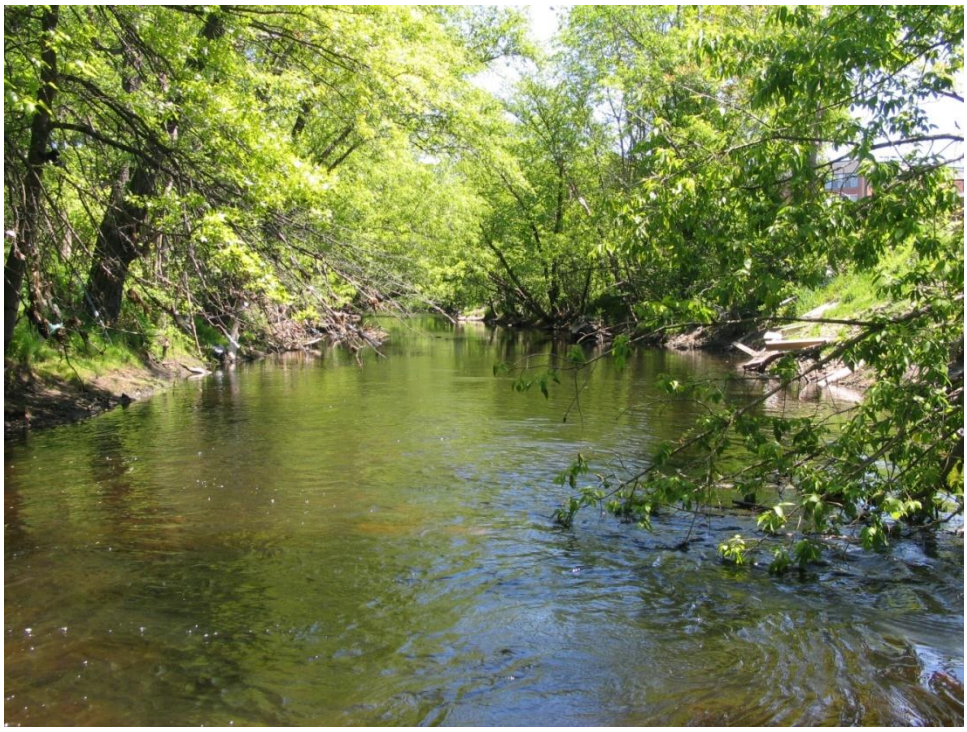
The Parkers River Bridge and tidal restriction, Route 28 in Yarmouth

DER Staff update: We are pleased to share the news that **Tim Chorey** recently joined DER as a Stream Continuity Specialist. Tim will be working with Massachusetts municipalities and road managers to build capacity for replacing undersized culverts with structures that will improve river connectivity while also improving resilience to flood events. For the last two years (2012-14), Tim worked for Vanasse Hangen Brustlin, Inc. as an Environmental Scientist, where he permitted several complex energy transmission and transportation projects. He also served as an expert in sediment and erosion control for a wide variety of large-scale land development and transportation projects, and oversaw complicated construction projects for environmental permit compliance. Prior to that, Tim worked for SumCo Eco Contracting as a Construction Superintendent. For more than three years at SumCo, Tim worked on over 100 ecological restoration projects, including river restoration/construction, culvert replacement, wetland restoration/construction and pond dredging. Tim specialized in construction operations and water control during these projects. Before working at SumCo, Tim worked as a Survey Crew Chief and Environmental Scientist with Beals and Thomas, Inc. Tim received his B.S. from Colorado State University in Watershed Science, with a Minor in Geology. A Massachusetts native, Tim grew up in Southborough and currently lives in Millis,where he serves on the Conservation Commission.

Spicket River Revitalization (Lawrence)

By Cindy Delpapa, River Ecologist

The banks of the Spicket River in Lawrence were a hub of restoration activity this past summer. While this flood-prone stretch of river has been straightened, modified and neglected in the past, more recently, local efforts, coordinated by Groundwork Lawrence, are working to draw positive attention to ambitious plans for the river (click here for more info). The reward for this effort manifested in state Gateways Cities funding to build a greenway along the river in Lawrence (click here or here for more info). With a population of 77,600, Lawrence has about 11,000 people per square mile, and the neighborhood along the Spicket is one of the densest in the city.



View (looking downstream) of the Spicket River and Greenway in Lawrence.

With a new greenway being built, DER was able to work with the City and local river advocates to include in-stream habitat enhancements and dedicated river access points under a DER Urban River Priority Project. Restoration designs for four river reaches incorporated the unique needs of each section. In-stream boulder clusters helped diversify habitat in all four areas. Rock vanes were designed to redirect river energies away from an eroding bank at one of the four restoration sites. Nearby granite steps down to the water's edge should also reduce erosion, since random foot paths have the potential to wear into erosion gullies. A dedicated access area will concentrate foot traffic to the granite steps.

Placing boulders in the river in small clusters to improve habitat. Placement is guided by a river restoration specialist, who is able to "read the river" to locate best sites for the boulder features.

Hoosic River Restoration Project Update (North Adams)

Judy Grinnell (center of photo) of the Hoosic River Revival at the recent announcement of $500K of state bond funding for the Hoosic River Restoration Project. Others in the photo (from L-R): State Representative Gail Cariddi; State Senator Ben Downing; DER Director Tim Purinton; DFG Commissioner Mary Griffin; and North Adams Mayor Dick Alcombright.

Over 70 people gathered in Noel Field in North Adams recently to attend a significant event in the ongoing story of the Hoosic River restoration priority project. Before a supportive crowd, State Senator Ben Downing provided the welcome news that $500,000 in environmental bond funding would be allocated to the project during fiscal year 2015. Senator Downing and State Representative Gail Cariddi worked to secure funding in the recently-enacted Environmental Bond to provide funding for a restoration pilot for the Hoosic River in North Adams, to modify the aging concrete flood chutes into a more river and community river corridor. DER will be managing the funding, and has already released an RFR for design and engineering services for the Study Reach. [Click here to read a *Berkshire Eagle* article promoting the event and here to read one reporting on the event; here to read an *Eagle* op-ed piece in support of the project; here to read additional coverage of the event posted to iBerkshires.com; and here to read/listen to a segment on WAMC/ Northeast Public Radio about the event and the Project.]

RIFLS (River Instream Flow Stewards) Update

Stump Brook Flow Restoration Priority Project, Halifax

by Michelle Craddock, DER Flow Restoration Specialist

DER has recently taken on Stump Brook in Halifax as its latest streamflow priority project. Stump Brook flows out of Monponsett Ponds, and is bordered by Mass Audubon's Stump Brook Wildlife Sanctuary, Halifax's Stump Brook Preserve and DFG's Burrage Pond Wildlife Management Area. DER joins in the on-going efforts of many partners currently working to improve conditions in Stump Brook and Monponsett Ponds, including the Towns of Halifax and Hanson, Monponsett Watershed Association, Jones River Watershed Association, City of Brockton, Mass Audubon, US EPA, Mass. DEP, Mass. Department of Public Health and the Mass Wildlife.

Unnaturally low flow is a common occurrence in Stump Brook, due to upstream dam management and diversion of water from Monponsett Ponds for the City of Brockton's drinking water supply. Current water management is not only a detriment to aquatic habitat in Stump Brook, but also contributes to water quality problems in Monponsett Ponds. The Ponds are subject to frequent cyanobacteria blooms and associated beach closures, that are the result of many factors, including loading from cranberry bog operations, stormwater runoff and internal phosphorus cycling. Water quality problems are exacerbated by the practice of diverting water from Monponsett Pond, which reverses the natural flow of water toward Stump Brook. The reversal of flow brings nutrient-rich water from the western basin to the relatively cleaner eastern basin and also reduces potential flow out into Stump Brook. Concerns are

being raised about possible adverse impacts of the diversion on drinking water quality (click here to read a recent article on this subject).

A view of Stump Brook from the dam below the outlet of Monponsett Pond shows low flows.

Cyanobacteria blooms in Monponsett Ponds result in frequent beach closures.

DER's role in this project will focus on understanding the hydrology of Monponsett Ponds and Stump Brook, and restoring a more natural flow regime there. Although our role in this project is in its early stages, we expect to assist with completion of a study to better understand the hydrology and natural flow regime of Stump Brook, as well as to help inform a management plan for the Stump Brook dam.

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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 New England Stormwater Collaborative, formed in 2013 by the New England Water Works Association (NEWWA), New England Water Environment Association (NEWEA) and the New England Chapter – American Public Works Association, is looking for your community's ideas on how you are enhancing your ability to deliver stormwater management services. The **New England Stormy Awards** will recognize simple, imaginative and inventive ways that New England communities are **increasing staff capacity, funding, or political support for stormwater management programs**. The Collaborative will be awarding the Top Three Ideas with free admission and recognition at the April 2015 NEWWA Spring Conference in Worcester, MA. Please click here for more information and to submit your winning idea before the **December 31 deadline**. Fill out the form here to submit your best idea. If your idea can be photographed or shared, snap a picture and include that. Submitters do not have to write a paper, but best ideas winners will be invited to give a 15-minute presentation at the award session in April 2015. Click here or write to nestormwater@gmail.org for more info.

The **President's Youth Environmental Awards (PEYA) Program** promotes awareness of our nation's natural resources and encourages positive community involvement. Since 1971, the President of the United States has joined with EPA to recognize young people across the U.S. for protecting our nation's air, water, land, and ecology. One outstanding project from each EPA region is selected for national recognition. Projects are developed by young individuals, school classes (K-12), summer camps, and youth organizations to promote environmental stewardship. Winning projects in the past have covered a wide range of subject areas, including environmental science projects, construction of nature preserves, major tree planting programs, videos, skits, and newsletters that focused on environmental issues. The application **deadline** for the regional PEYA awards is **December 31, 2014**; applications for PEYA certificates are accepted on a year-round basis. Click here or contact Kristen Conroy at (617) 918-1069 or conroy.kristen@epa.gov at the EPA's Region One/New England office for more info.

The mission of the **Nature's Path EnviroKidz Giving Back Program** is to empower the children of today to change their present and future world and to protect endangered species and environments. The program provides grants of up to $20,000 to nonprofit organizations in the U.S. and Canada that address one of the following project action areas: wildlife and endangered species conservation, habitat restoration and conservation, education of children and youth about environment issues, and helping at-risk kids through environmental and/or conservation-based programming. Funded projects must be run through or in partnership with a K-12 school/classroom, or the project must work directly with school-aged youth in the community. The application **deadline** is **December 31, 2014**; click here to apply or for more info.

"Green Chemistry" is the design of chemical products and processes that reduce or eliminate the generation of hazardous substances. The EPA's **Presidential Green Chemistry Challenge Awards** recognize organizations that have created a groundbreaking process or product that helps promote public health while protecting the environment. Award-winning technologies have reduced 826 million pounds of hazardous chemicals, saved 21 billion gallons of water, and eliminated 7.8 billion pounds of carbon dioxide releases. The award categories include: academic, small business, greener synthetic pathways, greener reaction conditions and designing greener chemicals, and climate change. The nomination **deadline** is **December 31, 2014**; click here to download the nomination package and here for more info.

Founded in 1987 by the investment firm General Atlantic and named after a William Blake poem about creating a better world, **Echoing Green** invests in **outstanding emerging social entrepreneurs** to help them launch new organizations that deliver bold, high-impact solutions to society's most difficult problems. Echoing Green offers the following three distinct fellowship programs: the **Global Fellowship**, which supports young leaders worldwide who are deeply connected to the needs and potential solutions that may work best for their communities; the **Black**

Male Achievement Fellowship, which invests in emerging leaders dedicated to improving the life outcomes of black men and boys in the U.S.; and the **Climate Fellowship**, which supports the best next-generation social entrepreneurs committed to working on **innovations in mitigation and adaptation to climate change** (click here to read a blog posting about the current Climate Change fellow). Fellowships are provided to individuals (at least 18 years of age) or partnerships (organizations led by two people). Fellows receive stipends ranging from $70,000 to $90,000 and technical support to turn their innovative ideas into sustainable social change organizations. Applications may be submitted until **January 5, 2015**; click here to apply and here for more info.

American Rivers' **Anthony A. Lapham River Conservation Fellowship** provides an excellent professional development opportunity for talented post-graduates pursuing careers as leaders in the field of conservation advocacy. Recent graduate degree (MA/MS/PhD/JD/MBA) recipients will focus on an applied research project that will make a tangible contribution to American Rivers' mission. Working with a team of professional staff, the individual will apply practical research and advocacy skills and develop a network of professional contacts in their field of expertise. The individual will be an integral part of a dynamic organization comprised of experienced conservationists and emerging leaders and will participate in a range of organizational functions including staff retreats and Board of Directors meetings. Click here to download detailed info about this Fellowship and how to apply; the application **deadline** is **January 5, 2015**.

Operation AmeriCorps a new initiative recently announced by the Corporation for National and Community Service (CNCS), asks tribal and local leaders to identify a **high-priority local challenge that AmeriCorps State and National, AmeriCorps NCCC and/or AmeriCorps VISTA members can holistically address in a relatively short period of time (no more than two years).** The grant competition is open exclusively to tribal and local governments, including counties, cities, towns, and school districts; and State Service Commissions. Proposals must be place-based, coordinated with existing community organizations, and with transformational outcomes. The solution may be a new initiative, or it may use national service to scale up an existing successful effort, but in either case AmeriCorps must be the additive ingredient to achieve transformative change at the local level. Prospective applicants are asked to submit a concept paper (maximum length: 10 pages) that describes their project. Applicants selected for step two will receive technical assistance and be asked to submit a full application. Prospective applicants are encouraged to **contact the Massachusetts Service Alliance** [(617) 542-2544 or ACApplicationsMA@mass-service.org] **as soon as possible**. The concept paper submission deadline is **January 5, 2015**; click here for more general info and here for more detailed info.

The Massachusetts Service Alliance (MSA) recently released a Request for Proposals (RFP) for **National Volunteer Week 2015 project initiatives**. MSA seeks to award mini-grants up to $4,500 to organizations performing projects or initiatives during National Volunteer Week (**April 12-18, 2015**) that either: 1) engage volunteers in a service project to meet an identified community need during National Volunteer Week (see page 7 of RFP); **or**: 2) support capacity-building efforts to enhance volunteer programming efforts that either kickoff or culminate during National Volunteer Week (see page 8 of RFP). Funding priorities include 1) youth-serving organizations, or agencies conducting youth development volunteer projects; and 2) volunteer connector agencies across the state (volunteer connectors include organizations that connect individuals with volunteer opportunities and support organizations in effectively using those volunteers to create meaningful change in local communities). **Responses** to the RFP are **due** by **Tuesday, January 6, 2015** at 12:00 noon; click here for more info.

Is your community working to become more livable and sustainable? Are you running into barriers in achieving these goals? Project for Public Spaces (PPS), recently announced the **availability of free technical assistance**, thanks to a grant from the EPA's Office of Sustainable Communities' Building Blocks for Sustainable Communities Program. Livability Solutions partners, which include the nation's leading experts in creating sustainable communities, will lead one- and two-day targeted workshops in communities around the U.S. Communities will learn how to use one of our tools or workshop approaches, such as walkability audits, green infrastructure valuation guides, shared use agreements, and community image surveys, that can help achieve goals of enhancing livability, creating lasting economic and environmental improvements, and improving residents' public and social health. A short report will be prepared for each community following the technical assistance. Eight to

ten communities will be selected to receive technical assistance this year. Click here to view profiles of past Building Blocks for Sustainable Communities projects to learn more about this program. The application **deadline** is **January 9, 2015**; click here to apply or 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 individuals and organizations to submit nominations. The nomination **deadline** is **January 10, 2015**; click here to read the nomination guidelines and here to submit a nomination.

The EPA's **Science to Achieve Results (STAR) Program** funds research grants and graduate fellowships in numerous environmental science and engineering disciplines through a competitive solicitation process and independent peer review. STAR is currently seeking applications on the topic of **quantifying water quality benefits**: specifically, proposing research to advance knowledge of how changes in water quality, including incremental or step improvements, can be valued at appropriate spatial scales using advanced non-use valuation methods for the Nation's inland fresh water small streams, lakes and rivers, estuaries, coastal waters, and the Great Lakes. The **deadline** to apply is **January 14, 2015**; click here or here for more info.

The **Purpose Prize**, sponsored by Encore.org, awards at least $100,000 each year to people over 60 who are taking on society's biggest challenges. The prize recognizes those with the passion and experience to create new ways to solve tough social problems. Nominees, who may be working for organizations in the nonprofit, public, or private sectors, must be legal residents of the U.S. or U.S. citizens living abroad who have initiated important innovations in an encore career. The nomination **deadline** is **January 15, 2015**; click here for more info.

The **Celebrate Urban Birds Mini-Grant Program**, an initiative of the Cornell Lab of Ornithology, supports community organizations, educators, and youth throughout the U.S. that host neighborhood events that **introduce the public and youth to birds found in urban areas**. Funded events should feature activities involving birds, community service, the arts, and greening. Examples of eligible events include bird-activity days at local museums, libraries, or community centers, as well as art and gardening activities at clubs, schools, or senior centers. Mini-grants ranging from $100 to $750 are provided. Organizations working with underserved communities are strongly encouraged to apply. The application **deadline** is **January 15, 2015**; click here to apply or for more info.

NOAA's Marine Debris Program (MDP) recently announced the availability of **funding** for **Marine Debris Prevention through Education and Outreach**. Projects awarded through this grant competition include (but are not limited to) those that: 1) encourage changes in behavior to address marine and coastal debris; 2) develop, use and disseminate tools, products, and campaigns to improve efforts to address marine and coastal debris; and 3) engage the public in active, personal participation (e.g. a small-scale shoreline cleanup with students or other hands-on activities, etc.). Project awards are expected to typically range from $30,000 and $60,000, although smaller or larger amounts are possible. Eligible applicants include: U.S. institutions of higher education, non-profit organizations, commercial (for-profit) organizations, and state, local and tribal governments. The application **deadline** is **January 15, 2015**; click here or here for more info.

The U.S. Forest Service's (USFS) Community Forest Program (CFP) protects forests that are important for people and the places they call home. Community forests provide many benefits such as places to recreate and enjoy nature; they protect habitat, water quality and other environmental benefits, and they can provide economic benefits through timber resources. Community Forests have also long been sites for environmental and cultural education. The USFS has released a call for applications for the coming round of **Community Forest Program (CFP) grants**. **CPF funds the preservation of threatened private forest land for public recreation, wildlife habitat and water quality protection, and sustainable forestry**. A CFP grant – which may not exceed $400,000 – will pay up to 50% of the property's acquisition. The property must be privately held, at least five acres, and at least 75% forested. Moreover, grant funding may only be used for fee acquisitions. CFP applications are due to State Foresters

[for Massachusetts, the State Forester is Peter Church, MA DCR, 251 Causeway St., Boston, MA 02114, (617) 626-1461, (617) 626-1449 (fax), peter.church@state.ma.us] by **January 15, 2015**. Contact USFS regional contact [Neal Bungard, (603) 868–7719, (603) 868–7604 (fax), or nbungard@fs.fed.us] for more info, or click here to read a fact sheet on the CFP and its grants program. [Other useful resources on this topic include ***Community Forests: A Community Investment Strategy*** (2007) and ***Community Forests: Needs and Resources for Creating and Managing Community Forests*** (2011), published by the Community Forest Collaborative.]

Launched in 2007, the Royal Bank of Canada (RBC)'s Blue Water Project is a 10-year global charitable commitment of $50 million to help provide access to drinkable, swimmable, fishable water, now and for future generations. The project's **Community Action Grants** range from $1,000 to $10,000 and are awarded to local or community-based organizations in the U.S., as well as Canada and the Caribbean. In 2013-2014, the RBC Blue Water Project will focus on supporting **initiatives that help protect and preserve water in towns, cities and urbanized areas with populations of more than 10,000 people** that focus on: Improved control and management of urban storm or rain water; Efficient and innovative use (or capture and reuse) of water in towns and cities; Protection and restoration of urban waterways; and Improved urban water quality. The application **deadline** is **January 22, 2015**; click here to apply or for more info.

The Massachusetts Service Alliance (MSA) recently announced that the ***2015-2016 Commonwealth Corps Request for Proposals*** (RFP) will be released in early January, and to keep an eye out for it at www.mass-service.org. The mission of Commonwealth Corps is to engage Massachusetts residents of all ages and backgrounds in direct service to **rebuild communities**, **address unmet community needs**, and **increase volunteerism**. Through this program, MSA partners with nonprofit organizations, academic institutions, and public entities to reinvigorate civic involvement to help address the Commonwealth's most urgent needs. Sponsoring organizations and agencies can apply to host 2-4 full-time members, or 3-6 half-time members, for a 10.5 month term of service from mid-August 2015 through late-June 2016. The work should advance at least one of these three priorities: Providing direct service; Building capacity of local organizations; and Recruiting and mobilizing additional volunteers. The **deadline** to submit an **Intent to Apply** form is **January 26, 2015**, and the **full application is due by noon on Thursday, February 12, 2015**. To help interested parties learn more about and prepare for the application, the MSA will be hosting two online technical assistance webinars: one on **Thursday 1/15/15** from 10:00 AM-11:30 AM, and one on **Wednesday 1/21/15** from 11:00AM-12:30 PM (registration details TBA in the RFP). In the meantime, potential applicants can get a sense of the program and application requirements by reviewing last year's RFP, which is available here (under "CC Host Site Partners"). Click here or contact Susie Flug, Commonwealth Corps Program Manager, at sflug@mass-service.org for more info.

The Bellingham, WA-based **Kinship Conservation Fellows Program** is "a ground-breaking environmental leadership program that emphasizes market-based solutions to environmental problems. Kinship's dynamic global network of 210 Fellows in 48 countries and 6 continents is collaborative, entrepreneurial, and dedicated to effective conservation." The Program is looking for conservation leaders with five years of experience, who are deeply committed to conservation, to apply to be part of the 2014 class of Fellows. A proposed project describing an environmental issue related to your work and your plans for developing a solution using market approaches will be a key part of your application. Successful applicants will be familiar with business and economic principles and be in a work environment where these principles can be integrated with conservation work. Eighteen applicants will be selected to participate. Each fellow receives a $6,000 stipend and lodging for one month. The 2015 fellowship is based in Bellingham and runs from June 28 to July 29, 2015. Click here to learn more about the program and here to apply; the application **deadline** is **January 27, 2014**.

Partners for Places, an initiative of the Funders' Network for Smart Growth and Livable Communities, is a matching grant program that creates **opportunities for cities and counties in the U.S. and Canada to improve communities by building partnerships between local government sustainability offices and place-based foundations**. Through the program, funders invest in local projects to promote a healthy environment, a strong economy, and well-being of all residents. For **Round 6**, grants will range between $25,000 and $75,000 per year for up to two years, with a one-to-one match required by one or more local, place-based foundations. The proposal

must be submitted by a team of at least two partners consisting of the sustainability director of a city or a county, and the local, place-based foundation(s). The application **deadline** is **January 28, 2015**; click here for more info, as well as access the Request for Proposals, the FAQ page, or the Idea Bank. [See also *Why Are Certain Neighborhoods Ideal Candidates for Creative Placemaking Funding?*, a recent posting to InsidePhilanthropy.com.]

PeopleForBikes (PFB)'s **Community Grant Program** supports bicycle infrastructure projects and targeted advocacy initiatives that make it easier and safer for people of all ages and abilities to ride. PFB accepts applications from non-profit organizations with a focus on bicycling, active transportation, or community development; from city or county agencies or departments; and from state or federal agencies working locally. Most PFB grants, up to $10,000, go to **bicycle infrastructure projects, such as bike paths, trails or bridges, or mountain bike parks**. Interested applicants should submit an online letter of interest (LOI), which includes basic information about the applying organization and contact person, as well as an overview of the project proposed for funding. The PFB will then request a full project application from a short list of qualified applicants. The LOI **deadline** is **January 30, 2015**; click here to apply and here for more info.

The Mass. Department of Conservation and Recreation (DCR)'s **2015 Massachusetts Recreational Trails Program** (RTP) will make grants to support a variety of trail protection, construction, and stewardship projects throughout the Commonwealth. DCR is assisted by the **Massachusetts Recreational Trails Advisory Board** (MARTAB) in the administration of the RTP. Funds are disbursed to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. While the RTP generally provides grants in the $2,000-$50,000 range, grant proposals seeking as much as $100,000 may be awarded based on need, breadth and reach of the trail project. RTP grants are **reimbursement** grants, meaning grantees must apply for reimbursement after expenditures have been made and by providing the required documentation. The application **deadline** for 2014 RTP grants is **February 2, 2015**; grant awards will typically be announced and awarded about nine months after the grant deadline. Click here or contact RTP Coordinator Amanda Lewis at (413) 586-8706 ext. 19 or amanda.lewis@state.ma.us for more info.

The **EPA's 2014 Environmental Education (EE) Grants Program** has two parts: a **Model Grants Program**, for which an RFP has been issued, and a **Local Grants Program**, where the RFP is expected to be issued (by each EPA regional office) soon (contact Kristen Conroy [conroy.kristen@epa.gov or (617) 918-1069] for more info). Under the EE Model Grants RFP, EPA seeks grant proposals to support EE projects that promote environmental awareness and stewardship. Projects under this RFP will help provide people with the skills to take responsible actions to protect the environment. Proposals must include projects that design, demonstrate, and/or disseminate model EE practices, methods, or techniques. Each funded proposal must demonstrate replicability by locating and conducting the project in more than one state or U.S. territory during the project period. Three grants, for approximately $192,200 each, will be awarded under this RFP. The application **deadline** is **February 2, 2015**; visit the 2014 EE Grants Program webpage for details on how to apply. Responses to frequently asked questions will be posted shortly. [FYI: it's now easier to order EPA environmental education materials for your classroom. The National Service Center for Environmental Publications is offering new order forms, listing materials grouped by grade range (K-3, K-12, Elementary School, Middle School, High School, and General Information for Teachers). Each form has a picture of the item, title, brief description of the item, and the quantity limit that can be ordered.].

Earlier this fall, the EPA, in partnership with U.S. Forest Service and Fish and Wildlife Service, the Corporation for National and Community Service, FedEx, Southern Company, Bank of America and PG&E, announced the availability of funding under the **2015 Five Star/Urban Waters Restoration Program**, which is managed by the National Fish and Wildlife Foundation (NFWF). The grant program, offered in conjunction with the Urban Waters Federal Partnership, gives priority to **projects located in underserved, environmentally overburdened communities**. NFWF anticipates that approximately $2,000,000 in combined total funding will be available for projects such as: **wetlands creation and restoration; green infrastructure and stormwater management; citizen science and volunteer water monitoring; projects that reduce or eliminate trash from entering waterways; coastal habitat, riparian, urban forest restoration** and **other water quality protection and**

restoration projects in local communities (click here for more details on the specific funding priorities for each component of the Five Star program). The application **deadline** is **February 2, 2015**; click here (see right column) for more info, which includes links to an archived version of a NFWF-hosted webinar on 11/18/14 for potential applicants to the Five Star program; and click here for a press release relating to the Urban Waters Partnership.

Action For Nature (AFN), a non-profit organization, has created the **International Young Eco-Hero Awards** to recognize and reward the successful individual environmental initiatives of young people ages 8 to 16. "AFN encourages young people around the world to carry out individual environmental action projects. We believe that young people can have a positive impact on the environment and are vital in changing the way we live on our planet." Eligible applicants are engaged in self-initiated projects relating to environmental health, advocacy, research or protection of the natural world. Winners will receive public recognition, cash prizes and certificates for their outstanding efforts to help protect and preserve the environment. The application **deadline** is **February 28, 2015**; click here to apply and here for more info.

The U.S. Department of Housing and Urban Development (HUD), in partnership with the Rockefeller Foundation recently launched a $1 billion ***National Disaster Resilience Competition*** (NDRC) to help communities that have been devastated by natural disasters. The competition promotes risk assessment and planning and will fund implementation of innovative resilience projects to better prepare communities for future storms and other extreme events. Successful applicants will need to tie their proposals to the eligible disaster from which they are recovering. The competition is divided into two Phases: (1) the framing phase and (2) the implementation phase. Applications for Phase 1 are due in **March 2015**. Click here to access the "NOFA" (Notice of Funding Availability) and here for more info on this funding opportunity. [**Rebuild by Design**, a competition previously funded by HUD, Rockefeller, and other philanthropic partners, demonstrated the value of combining philanthropic, government, and other community resources to increase community capacity and innovation. The Rockefeller Foundation will support the goals of the NDRC by **convening resilience workshops around the country**. Teams from every eligible state and local jurisdiction will have the opportunity to gain a wide range of information and expertise on resilience. The workshops will help communities identify and assess their local risks and vulnerabilities, encourage sharing and peer-learning, and teach resilience-enhancing opportunities that will assist them in developing their proposals for the NDRC. Click here for more info on this initiative.]

The **William P. Wharton Trust** supports conservation, study and appreciation of nature through projects with tangible and lasting results, those that seek partnerships and that leverage funds to gain matching contributions. The Trust seeks to support projects that directly promote the conservation, study, and appreciation of nature, particularly (in order of priority): **Natural areas preservation**, primarily in Massachusetts and New England, including funding acquisitions of land for conservation purposes; **Management techniques designed to improve environmental quality and species diversity**; Bird and forestry research and management, especially at the applied level rather than the theoretical or molecular level; and Creation of materials or projects designed to **foster an appreciation of and a concern for wildlife and natural systems**. The Trust's next preliminary application **deadline** is **Sunday, March 1, 2015** at 2:00 PM. For more info, click here or contact the Trust c/o Choate Hall & Stewart, Two International Place, 32nd Floor, Boston, MA 02110, williampwhartontrust@choate.com, or call F. David Lucia, Trust Administrator, at (617) 248-5122.

One of the funding priorities for the Michigan-based **Carls Foundation** is the "**Preservation of natural areas**, open space and historic buildings and areas having special natural beauty or significance in maintaining America's heritage and historic ideals, through **assistance to land trusts and land conservancies and directly related environmental educational programs**." The Foundation has no formal application for grant requests. A letter of inquiry is not required, and phone calls are welcome. That said – the Foundation does have a set of guidelines and procedures that all prospective applicants should familiarize themselves with. Requests for funding are reviewed and acted upon three times per year; the next upcoming **deadline** is **March 1**. Click here for contact info and here for more general info.

The Waterman Fund's objective is to strengthen the human stewardship of the open summits, exposed ridgelines and alpine areas of the Northeast. The Fund seeks to further their legacy of stewardship through essays that celebrate and explore issues of wilderness, wildness, and humans through the **Waterman Fund annual essay contest**. "In conjunction with the Museum of the White Mountains' forthcoming exhibit on ***Woman and the Mountains***, the 2015 essay contest invites emerging writers to explore the question of who the stewards of wilderness are. Statistically, more men than women explore professional careers in the stewardship of wilderness and public land management. What, if any, bearing does the gender of stewards have on our shared and individual perceptions of, and relationship to, wilderness? Do you find a difference in how men and women experience and steward wilderness, personally or professionally? Alternately, does the spirit of wilderness transcend anything so human as gender? Is there a relationship between gender, wilderness exploration, and the management of these invaluable public lands? Emerging writers are encouraged to explore the interplay between men, women, and wilderness, with particular regard to how this shapes our individual and cultural perceptions and stewardship of wild places." The **deadline** for submissions is **April 15, 2015**. Click here for more info.

The Santa Monica, CA-based **Lawrence Foundation** is focused on making grants to support **environmental**, education, human services and other causes. The Foundation makes both program and operating grants and does not have any geographic restrictions. Nonprofit organizations that qualify for public charity status under section 501(c)(3) of the Internal Revenue Code or public schools and libraries are eligible for contributions or grants. Grant applications may be made by any organization that wishes to be considered for a grant and meets the Foundation's grant guidelines. The next application **deadline** is **April 30, 2015**; click here for more info.

The Boston-based **Ludcke Foundation** makes grants, typically in the $25-30,000 range, to a number of social service, education and youth-oriented conservation organizations and programs, primarily in the Greater Boston region (click here to see a list of past grantees). While the Foundation does not accept unsolicited proposals, it does accept Letters of Inquiry (LOI) from prospective grant seekers (click here for more details). The Foundation has two LOI submission deadlines annually (December 15 and **June 15**), and, if you are invited to apply, applications are due on March 1 and September 1. Contact Ms. Gracelaw Simmons, Grants Advisor, at (617) 391-3082 or gsimmons@gmafoundations.com for more info.

The **Rumphius Foundation**, "a non-profit organization, was established in March 2013 by Michael C. Schuller. The Foundation's name is derived from one of his favorite children's books, *Miss Rumphius* by Barbara Cooney, in which the central character seeks to travel, live by the sea, and most importantly, to make the world a little more beautiful than how she found it. Mike truly lived his life as Miss Rumphius did, making the world and our lives more beautiful in small but meaningful ways." The Foundation makes grants activities that conform to its mission. Prospective grant seekers should provide: the name of the individual or organization applying for the grant; details of the project or activity for which you are seeking funding; contact information (including a phone number, mailing address, and email address); and the amount of funding you are requesting. Please attach any supporting documentation and additional information you would like the Foundation to consider in evaluating your grant application. Please email your application to Rumphius.Foundation@gmail.com or mail it to: Rumphius Foundation, 23A Johnson St, Newburyport, MA 01950. Click here for more info.

Do you need help getting a project started? Do you have an idea and seed money but need help with administrative capacity? Are you involved with a small start-up that wants to become more established? Would you like to receive tax deductible donations but do not have 501(c)(3) status? The Open Space Institute's (OSI)'s **Citizen Action Program** (CitAc) provides support to grassroots sand/or fledgling groups engaged in work consistent with OSI's mission: to **protect scenic, natural, and historic landscapes to ensure public enjoyment, conserve habitats, and sustain community viability and character**. The Citizen Action Program can provide you with the necessary support to help you navigate the legal and financial aspects of your project, attract more donors, and make your work more effective. OSI helps community groups manage money, track donors and meet IRS requirements. The CitAc Program allows OSI to further enhance its mission to include work with groups that are making communities more livable, educating and communicating about environmental concerns, and protecting historic and natural resources. Eligible entities include those active in one of OSI's focus

areas (see, e.g., OSI's current work in New England). If you are interested in the Citizen Action Program, the first step is to write to citizenaction@osiny.org or call (212) 290-8200 ext. 307. Be prepared to talk about your project, its programs and its finances. Groups that pass the initial eligibility screen will be invited to submit an application, available here. Click here for more info.

The mission of the Maryland-based **Cornell Douglas Foundation** is "to provide small grants to organizations which promote the vision of the foundation: **advocating for environmental health and justice, encouraging stewardship of the environment, and furthering respect for sustainability of resources**". The Foundation's areas of interest include **watershed protection** and **land conservation**. The average grant size is $10,000, and proposals are accepted on a year-round basis. Click here for info on how to apply for funding; you might also want to read the checklist, which includes some helpful tips for enhancing your chances of success with this (and other) foundations.

The mission of the Scottsdale, AZ-based **Lodestar Foundation** is to maximize the leverage of philanthropic dollars, time and effort by: (1) supporting organizations, programs and projects that serve primarily to **encourage philanthropy, public service and/or volunteerism**; and (2) encouraging and supporting **long-term collaborations among nonprofits working in the same or complementary areas** in order to increase efficiency and/or impact and to reduce duplication of efforts, and the adoption of other sound business practices (click here for more details). Prospective grant seekers, and others, should click here to learn about how, and if, you, your organization(s) and/or project(s) might have a good fit with the Foundation's mission and priorities.

The Westport, MA **Van Sloun Foundation** (no web page) makes grants (generally in the $5 – 10,000 range) to education, environmental and other purposes, in Massachusetts, Minnesota and elsewhere. Prospective grant seekers should send grant requests to: Neil Van Sloun, P.O. Box 116, Westport, MA 02791. Telephone: (508) 636-4573. There are no specified application forms or deadlines.

The Boston-based **Oristaglio Family Foundation** (no web page) makes grants (generally in the $1-5,000 range) to social service, cultural and other charities, primarily in the Greater Boston area. Prospective grant seekers must be qualified §501(c)(3) tax-exempt organizations. Written requests for funds are preferred (although verbal requests may be considered), and should indicate the charitable purpose for which funding is sought. Send it to: Jeryl Oristaglio, Trustee, Oristaglio Family Foundation, 287 Commonwealth Avenue, Boston, MA 02115. Telephone: (617) 859-3088. There are no specified application forms or deadlines.

The New York City-based **Lamport Foundation** (no web page) gives small grants (primarily in the $100-$1,000 range) to environmental and or causes in Massachusetts and elsewhere. Prospective grant seekers should send a written request to: Mrs. Anthony M. Lamport, 432 East 84th St., New York, NY 10028. There are no specified application forms or deadlines.

The Danvers, MA-based **Gordon Foundation** (no web page) makes grants to for educational (particularly engineering and technology-related), and other purposes, primarily in Greater Boston and the North Shore. Prospective grant seekers should contact the Foundation in writing, with a description of the organization, the purpose for which funds are being requested, and the amount of the request. Applicants should also include a copy of the IRS letter confirming tax-exempt status. Send it to: Bernard M. Gordon, 16B Electronics Avenue, Danvers MA 01923. Telephone: (978) 750-6100. There are no specified application forms or deadlines. A notice of approval or rejection, or a request for more information, is usually mailed within two months.

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Calendar

(sorted chronologically by date of event, submission deadline, etc. Descriptive text for events provided below is obtained from the events' web pages.)

The Neponset River Watershed Association (NepRWA) is hosting a free screening of the documentary movie ***DamNation*** on **Wed. January 7, 2015**, beginning at 7:00 PM, at the Morrill Memorial Public Library in Norwood. "This powerful film odyssey across America explores the sea change in our national attitude from pride in big dams as engineering wonders to the growing awareness that our own future is bound to the life and health of our rivers." A discussion, led by NepRWA Executive Director, Ian Cooke, will follow the screening. Contact Nancy Fyler at NepRWA [fyler@neponset.org or (781) 575-0354 ext.307] to sign up or for more info. [If you can't make this screening and are a Netflix customer, you can now view *DamNation* through that service; click here for more info.]

If you had a recipe for managing a successful and effective nonprofit organization, what would be the key ingredients? ***A Recipe for Effective River and Watershed Organizations***, hosted by River Network, is a series of six 90 minute webinars to help Executive Directors and Board leaders implement best practices in six essential areas of nonprofit management. The webinars will be held on the **second Thursday of each month**, **January-June 2015, 1-2:30pm Eastern**. (**Jan. 8**, **Feb. 12**, **March 12**, **April 9**, **May 14** and **June 11**.) Register for any one, or for all, sessions. Click here to register and here for more info.

The Society for Ecological Restoration (SER) has put out a **Call for Proposals for Symposia, Workshops and pre-Conference Training Courses** for SER's 6th World Conference on Ecological Restoration. SER2015 will be held in Manchester, England from 23-27th August 2015, with pre-Conference Training Courses taking place at Manchester Metropolitan University on Friday, the 21st and Saturday, the 22nd of August. The Conference theme is *Towards Resilient Ecosystems: Restoring the Urban, the Rural and the Wild*. The **deadline** for submissions for symposia, workshops and pre-Conference training courses has been **extended** to **January 9, 2015**; click here to submit a proposal or for more info. There is also a call for abstracts for **oral and poster presentations**, with a deadline of **February 13, 2015**. Click here to submit or for more info.

Proposal writing is the skill most sought after by savvy nonprofit staff members. On the one hand, writing a grant proposal is quite simple and follows a basic formula. However, submitting a proposal may be your only chance to put the case for funding your organization in front of a foundation, so you want to be sure to do it right. In the GrantStation-sponsored webinar, ***How to Craft a Proposal to a Foundation***, Judith Margolin provides invaluable tips on developing a compelling proposal narrative, what your proposal package should include, how to let your funder take the lead, and advice on writing and submission techniques that get your proposal noticed by foundation decision makers. This webinar is for beginning and intermediate grantwriters who want to learn specifically about proposals to foundations. The webinar will be held on **Thursday, January 15, 2015**; click here to register or for more info.

You are invited to share your projects and presentations with the audience at the ***71st Annual Northeast Fish and Wildlife Conference***, scheduled to take place on **Sunday, April 19 - Tuesday, April 21, 2015** at the Newport Marriott in Newport, RI. Presentations are sought on the following topics: wildlife; freshwater fisheries; diadromous fisheries; marine fisheries; information & education; environmental law enforcement; and conservation engineering. The **deadline** for submissions is **January 15, 2015**; click here for more info.

As part of the Mass. Department of Environmental Protection's Regulatory Reform Initiative, new regulatory revisions have been **finalized (effective 10/24/14)** that provide clear standards and procedures for **ecological restoration projects**. This update should improve the permitting process for beneficial restoration projects, while requiring significant environmental impacts to be addressed in plans prior to permit application. Click here to read a summary of these, as well as other recent revisions to Mass. DEP's Wetlands, Waterways, and Water Quality Certification Regulations; here to access the revised regulations on Mass. DEP's website; and here to access the applicable forms. If you missed Mass. DEP's Regulatory Revision workshops that were conducted in November,

workshop materials can be found here, under "Education and Outreach". DEP's Wetlands Circuit Rider Program will be **conducting training sessions** to review these and other recent regulatory changes, and discuss how these revisions should be implemented. Upcoming training sessions include: **Thursday, January 15**, 9:00 AM – 12:00 Noon, Kingston Town Hall, 26 Evergreen Street in Kingston; **Friday, January 16**, 9:00 AM – 12:00 noon, Mattapoisett Public Library, 7 Barstow Street in Mattapoisett; and **Tuesday, January 20**, 1:00 PM - 4:00 PM, Mashpee Town Hall, 16 Great Neck Rd. N., Mashpee. For these and other workshops in the Southeast Region, please register via email to Christine.Odiaga@state.ma.us; click here (and scroll down) to find out if/when additional training sessions are scheduled.

In today's crowded online world, nonprofit organizations have access to an enormous array of communications channels. While it's easier than ever to reach potential members directly, competition for attention, involvement, and dollars is at an all-time high. "How can nonprofit organizations grab the attention of potential supporters in this crowded landscape? How can we successfully convert casual supporters to advocates, members, and donors?" The answers to these questions are revealed in a webinar entitled ***Clicktivist → Member: Building a Strong Ladder of Engagement***, scheduled to take place on **Wednesday, January 21, 2015** from 2:00PM - 3:00PM. As the webinar is hosted by the Alliance for Walking and Biking, the webinar's intended audience is groups engaged in active transportation, but the concepts discussed should have a broader application. Click here to sign up or for more info.

A kickoff meeting for a new initiative, ***Cost Effective Green Infrastructure in the Blackstone River Watershed***, is scheduled to take place on **January 21, 2015** from 8:00 AM - 9:30 AM at the Central Mass. Regional Planning Commission (CMRPC)'s Union Hall, Union Station in Worcester. Mass. Audubon, the CMRPC, Horsley Witten Group, Inc., and the Blackstone River Coalition are teaming up to assist communities in the Blackstone watershed with case studies illustrating success stories in reducing nutrient loads while making economic progress, workshops, and a competitive technical assistance program. This project will assist municipalities, businesses, and residents with practical methods to minimize costs of development and local infrastructure maintenance (e.g. roads and stormwater), reduce flooding, improve water quality, and protect and restore natural features that improve quality of life and property values. Please RSVP to shapingthefuture@massaudubon.org or (781) 259-2146, or contact Eric Smith [esmith@cmrpc.org, (508) 459-3322] for more info.

A Forester University webinar entitled ***Communicating the Value of Water*** is scheduled to take place on **Wednesday, January 21, 2015**, beginning at 2:00 PM. The presenter, Melanie Goetz, will "explore real-world tested strategies and solutions that you can implement today in your outreach programs to better communicate the value of water to the public and creating behavior change that sticks. Taking a note from behavioral economics, marketing, neurology research, and most importantly, those creative outliers who have dared to look at things differently and create positive change in public education, Goetz will outline the field-proven (and surprisingly simple) strategies and solutions offering an answer to your public outreach challenges. From coupons to charging for water by the gallon, there's much to learn from these unsung leaders and their successful outreach programs. Click here to register and here for more info.

The New England Water Environment Association (NEWEA) will be holding its ***2015 Annual Conference*** in Boston from **January 25-28**. Click here to download the conference program, and here to register or for more info.

Mass. Audubon's Wellfleet Bay Wildlife Sanctuary is currently (until **January 31, 2015**) accepting proposals for presentations at the ***20th Annual Cape Cod Natural History Conference***, scheduled to take place on **Saturday, March 14, 2015**. Professional or personal research, studies, or observations focusing on the ecology, behavior, status, or distribution of local plants, animals, natural communities, and/or environmental restoration projects on Cape Cod are accepted. Click here or contact conference coordinator Melissa Lowe at mlowe@massaudubon.org or (508) 349-2615 ext. 107 for more info.

"**Oysters** as a nutritious and sustainable local food. Oysters as purifiers of over-productive coastal waters and estuaries. Oysters as essential habitat for diverse marine life. Oysters as natural barriers to protect from destructive

storm surges. Why all this attention now? Although oysters have been performing all of these functions for millions of years, long before the initiation of human discourse, it seems that we are waking up to appreciate the fundamental roles oysters play in the coastal waters where humankind interacts with the sea and land. We envision futures with oysters as part of saving the well-being of the planet that sustains our ever-growing population. But are these various visions compatible, or are some mutually exclusive? This and other questions will be addressed at the ***Sixth International Oyster Symposium*** (ISO6) of the World Oyster Society, scheduled to take place on Cape Cod from **October 21-23, 2015**. ISO6 is expected to be "a dynamic, forward-looking three-day exchange where representatives from academia, industry, business, conservation, restoration, government, and cultural communities from around the world can share research, case studies, and projects relative to oysters and their place in ocean and coastal community preservation, and human affairs." A Call for Presentations has been issued, with the abstract submission **deadline** is **February 1, 2015**. Click here for more details, or here to express general interest in the Symposium.

You are invited to submit a paper for consideration as a professional or panel session at the ***8th WaterSmart Innovations Conference and Exposition***, scheduled to take place from October 7-9, 2015, in Las Vegas. Potential session topics include: Conservation and Incentive Programs, Drought Management, Landscapes and Outdoor Water Use; Rainwater/Greywater/Stormwater Harvesting; and Water Efficiency and the Environment. The **deadline** to submit an abstract is **February 2, 2015**; click here for more info and here to see/hear Sandra Postel's keynote address from the 2014 Conference. [Click here for info about and to access an archived version of an Alliance for Water Efficiency-sponsored webinar entitled ***Merging Technology and Science to Instill a Water Ethic: Innovative Customer Education Strategies for Water Managers***.]

In the workshop ***Wetland Shrubs In Winter***, sponsored by the New England Wild Flower Society and taking place at its Garden in the Woods property in Framingham, participants will "learn to identify wetland shrubs using a combination of branching patterns, bud and bark characteristics, habitat, persistent fruits, galls, and marcescent leaves. With a pond, a stream, and a bog, Garden in the Woods provides an excellent field site for study. We will begin with a short session indoors, then head into the Garden for a close look at 15 to 20 native New England shrubs (plus a non-native invasive or two) that grow in and around wetlands. Bring lunch and a hand lens if you have one, and dress for the weather." The workshop takes place on **Wednesday, February 4** from 10:00 AM – 2:00 PM. The instructor is Roland "Boot" Boutwell. Click here to sign up or for more info.

Held every February, ***New England Grows*** "is one of the largest and most popular horticultural and green industry events in North America – known for its progressive educational conference and world-class trade show." The 2015 event will take place at the Boston Convention & Exhibition Center from **February 4-6**. Educational seminars include: *Restoring Nature's Relationships: Understanding the Importance of Native Plants in Today's Urban Landscape*, by Professor of Entomology Doug Tallamy; *Rainwater Harvesting & Other Water-Conservation Strategies*; *Ecological Thinking for Non-Scientists: Using Nature as a Model*; and *Boston's Gardens & Green Spaces: What They Reveal about Yesterday, Today and Tomorrow*. Click here to register and here to download the event program.

The Second Annual **Southeastern Massachusetts Regional Conservation Forum** (RCF), co-hosted by the Southeastern Massachusetts Pine Barrens Alliance (SEMPBA), along with the MA Natural Heritage and Endangered Species Program and the Mass. Maritime Academy, is scheduled to take place on **Friday, February 6, 2015** at Mass. Maritime's campus in Buzzards Bay, MA. The Forum is intended to build collaborations among conservationists, conservation groups, municipal and state agencies and businesses to better protect, preserve and restore the Southeastern Massachusetts Atlantic Coastal Pine Barrens, a globally rare ecoregion, covering much of southeastern Mass. from Duxbury to Mattapoisett, Cape Cod, Martha's Vineyard and Nantucket Island. Presentations, breakout sessions, facilitated workshops and networking opportunities will focus on furthering and coordinating the conservation priorities identified by the participants of the 2014 RCF. The Forum will be preceded by a **North Atlantic Fire Science Exchange Field Trip** on **February 5**. Click here for more info on both events. Mass. Audubon's Joppa Flats Sanctuary and Education Center, along with the Parker River National Wildlife Refuge, will once again be co-sponsoring the ***Merrimack River Eagle Festival***, scheduled to take place on

Saturday, February 7, 2015 in Newburyport. Festival features include: eagle-spotting locations along the lower Merrimack with on-site interpreters; bus tours guided by expert birders starting in downtown Newburyport; a Live raptor demonstrations at Newburyport's City Hall; and children's nature activities and live bird demonstrations. Click here or call (978) 462-9998 for more info.

The ***Urban Riparian Symposium: Restoration, Collaboration, Innovation*** conference, scheduled to take place from **February 11-13, 2015** in Austin, TX, will provide an opportunity for natural resource professionals to share ideas, discuss management and policy issues, lessons learned in urban riparian and stream planning, assessment, design, construction, and evaluation. The symposium includes presentations, discussions, and workshops, and nighttime walks. Keynote speaker, microbial ecologist Dr. Peter MN. Groffman of the Cary Institute of Ecosystem Studies in Millbrook, NY, will discuss his research on the role of microorganisms in ecosystem function, particularly in regard to what urbanization does to soil and hydrology. [Dr. Groffman's talk might be **accessible online** as part of the USFWS's restoration webinar series.] Click here to view the conference program, and here or contact Nikki Dictson at n-dictson@tamu.edu for more info.

The **Society for Ecological Restoration** (SER) is now accepting abstracts for oral and poster presentations at its ***6th World Conference on Ecological Restoration***, to be held August 23-27, 2015 in Manchester, England. We welcome abstracts addressing any aspect of restoration science, practice or policy, especially those that directly relate to the conference theme, **Towards Resilient Ecosystems: Restoring the Urban, the Rural and the Wild**. The **deadline** for poster abstract submissions is **February 13, 2015**; click here or here for more info.

"As we observe increasing pressures and changes in the landscape, it is ever more critical for us to preserve and protect our resources and help sustain local ecosystems". "Sustaining the Living Landscape" is the theme of the ***2015 Conference and Eco-Marketplace of the Ecological Landscape Alliance***. The event takes place on **February 25-26, 2015** in Springfield, MA. Topics covered include Mimicking Forest Symbiosis, Designing within the Rating Systems, Coping with Water Extremes, and more as we look for ways to design, build, and maintain more resilient landscapes. One of the intensive workshop[s offered on February 25 is **New Strategies for Water Conservation and Protection**. Click here to download the 2015 ELA Conference brochure.

The **Massachusetts Association of Conservation Commissions (MACC)'s *Annual Environmental Conference*** (AEC) will take place on **Saturday, February 28, 2015** in Worcester. Detailed program and registration materials will be available soon. In the meantime, click here to learn about opportunities to sponsor, advertise or exhibit at the Conference.

"Each year millions are spent on designing, building, and maintaining landscapes that use too many unsustainable resources and rely on unsustainable practices. There is little thought given to water conservation in traditional landscape design, and the result is a continuing depletion of our water resources. As drought conditions become the norm in many parts of the country, the need for water-conscious landscape design becomes more critical." In the Ecological Landscape Alliance-sponsored webinar ***Water Conservation: Landscape Design Strategies***, scheduled to take place on **March 9, 2015** from 5:30 PM - 6:30 PM, presenter Gary Krause will address many water conservation techniques including plant choices, material selection, and irrigation options. "With careful planning, landscape designs can provide alternatives to our clients and create sustainable landscapes that are both beautiful and water-conscious." Click here to sign up or for more info.

Local Environmental Action 2015, the annual conference co-sponsored by the Toxics Action Center and the Mass. Climate Action Network, is scheduled to take place on **Sunday, March 15th, 2015** at **Northeastern University's Curry Student Center** in Boston. Click here for more info, including opportunities to suggest workshops, and contribute items to the silent auction.

The American Water Works Association is hosting a ***Sustainable Water Management Conference***, scheduled to take place from **March 15-18, 2015** in Portland, OR. Technical Sessions include: *Conservation Outreach and Managing Customer Water Demand*; *Can You Afford NOT to Protect your Watershed? The Economic Advantages of Watershed Protection*

and How to Get Started; *Key Stormwater Management Tactics for Resource Protection*; and *Reducing Nonpoint Source Pollution Trough Active Community Collaboration*. While the Call for Papers deadline has passed, clicking here will give you an idea of the full range of topics expected to be covered at the Conference. Click here for more info.

"Gaining Ground: Conserving Our Common Wealth" will be the theme for the ***25th Massachusetts Land Conservation Conference***, scheduled for **Saturday, March 21, 2015** in Worcester. Workshop tracks include: Conserving Our Common Wealth & Emerging Issues; Land Management & Stewardship; Land Protection Tools & Techniques; Legal, Tax & Compliance Matters; Organizational Management & Fundraising; and Urban Conservation & Greening. Registration materials and a full conference program will be available early next year. In the meantime, click here and here if you would like to be a Conference sponsor. Contact Kathy McGrath at kmcgrath@massland.org for more info.

Last but not least: the New England Wild Flower Society is actively seeking volunteers for its **Plant Conservation Volunteer Corps** (PCV). "Participants in this program collect data on the status of rare plant populations throughout New England, and assist with invasive and habitat management projects. Over 600 volunteers have been trained to document the current status of rare plant populations and identify potential threats to them. In return, PCVs are offered field trips, classes, and opportunities to interact with professional botanists to learn more about challenging species and the ecology of various habitats. The requirements are motivation, discretion, and a basic knowledge of native flora. It's a great way to learn more about plants, meet others with similar interests, and make an impact in conservation." **Training sessions will be held on a weekend in March in all New England states**. Click here to apply or for more info, or contact John Burns, PCV Administrative Coordinator, at jburns@newenglandWILD.org or (508) 877-7630, ext. 3204.

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Online Resources

(Descriptive text provided is obtained from the web pages themselves.)

The U.S. EPA created the **Healthy Watersheds Program** to **proactively protect aquatic ecosystems as dynamic systems** across landscapes in order to maintain the natural structure and function of ecosystems as intended by Congress in the 1972 Federal Water Pollution Control Act amendments. This systems approach protects aquatic biota and their habitat as well as watershed characteristics and processes that support them, such as vegetative riparian corridors and headwaters, hydrology, geomorphology, and natural disturbance regimes. The holistic protection approach provided by the Healthy Watersheds Program is essential for addressing the pervasive threats to healthy watersheds, including loss and fragmentation of habitat, hydrologic alteration, invasive species, and climate change. EPA's recently-established **Healthy Watersheds website** offers many resources intended to help identify, protect and maintain healthy watersheds, including pages on the Benefits of Healthy Watersheds, Identifying Healthy Watersheds, Integrated Assessments, Protecting Healthy Watersheds, Climate Change and Watershed Health, Outreach Tools, and the Healthy Watersheds Online Forum.

An archived version of a recent EPA-sponsored webinar, ***Winter Roadway Deicing/Anti-icing Operations: Approaches to Help Keep Roads Clear and Waters Clean***, has recently been posted online. Also available is a 2013 webinar, ***EPA's Stormwater Pollution Prevention Webinar Series: Road Salt Pollution Prevention Strategies***. Click here to read recent USGS press release: Urban Stream Contamination Increasing Rapidly Due to Road Salt. [Related info: Click here, here and here for info from the Cary Institute of Ecosystem Studies about the adverse impacts of road salt; here to listen to "***Icy Roads Prescribed a Low-Sodium Diet***", which recently aired on the Living on Earth radio show; and click here to read a recent press release from New Hampshire about a training and awards program recognizing professionals who reduce salt application safely: The **Salt Shaker Awards** feature the "Salt of the Earth" Award, the "Shaken Not Stirred" Award, and the "Salt-n-Peppa" Award.]

Federal, State, and local governmental entities are struggling with how to **"operationalize" ecosystem services** in a meaningful way (i.e., positively impact human well-being). Academic research and private sector recognition has outpaced the adoption by the greater natural resource management community. However, a handful of focusing events during the last ten years (hurricanes Katrina, Ike, and Sandy; Deepwater Horizon) has provided the impetus to move forward with policy and programs that account for ecosystem services in natural resource management. Much of this work is being done under the 'coastal community resilience' umbrella where the benefits of natural infrastructure are understood but not measured in a robust and defensible manner. The evolution of ecosystem services research is at the point where a stronger link between the bio-physical structure and function of our ecosystems and the socio-economic impacts is required as demand from policy makers and resource managers grows. This is the abstract for a 10/30/14 presentation by Dr. David Yoskowitz of NOAA entitled ***Moving Ecosystem Services from Practice to Policy: Bridging the Great Divide***, the archived version of which is now available online. Click here to view it.

Researchers from the Marine Biological Laboratory at Woods Hole, as part of the Plum Island Ecosystems Long Term Ecological Research Project (PIE-LTER), are studying how the **salt marshes in the Plum Island Estuary in northern Massachusetts** are holding up as the climate warms, sea level rises, and coastal development stresses its ecological integrity. One recent product from this National Science Foundation funded-project is ***Salt Marshes in the Plum Island Estuary***, a video and supporting narrative web page, which is posted online on the NSF's **Science Nation** website. Click here to view the video or for related info.

The Fall 2014 edition of *News From the Bays*, the electronic newsletter of the Mass. Bays National Estuary Program, includes several items of interest, including articles on Phragmites control in the Great Marsh, the removal of a dam on Third Herring Brook in Hanover, and evaluating alternative nutrient treatments on Cape Cod. The newsletter also reports on MassBays' recent announcement of the **online availability of more than 500 planning and research documents** relating to MassBays' Planning Area **through an online interactive map**. As part of MassBays' update of its Comprehensive Conservation & Management Plan (CCMP), UMass Boston's Urban Harbors Institute identified and categorized more than 500 documents produced around the region since 1996 according to five categories: **water quality, estuarine habitat protection, invasive species, climate change, and continuity of estuarine habitat**. This online database will be updated regularly as research about MassBays' estuaries continues.

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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. Descriptive text provided is obtained from the web pages themselves.)

American Society of Landscape Architects (ASLA)'s Green Infrastructure Page
http://www.asla.org/greeninfrastructure.aspx
The ASLA recently launched an online resource intended to extol the many virtues of "green infrastructure": designed systems that harness nature to create proven benefits for communities and the environment. Green infrastructure includes park systems, urban forests, wildlife habitat and corridors, constructed wetlands, and green roofs and green walls. These infrastructure systems protect communities against flooding or excessive heat, or help to improve air and water quality, which underpin human and environmental health. Researchers are amassing a body of evidence to prove that green infrastructure actually works: these systems are often more cost-effective than outmoded models of grey infrastructure. Resources at this web page include links to many organizations engaged in green infrastructure projects and research papers demonstrating its ecological and economic values.

Dollar Per Month™ Charitable Foundation (DPM)
https://dollarpermonth.org

A "charity crowdfunding" platform, DPM "educates and empowers its members to create positive charitable impact through the use of an engaging platform that removes traditional constraints to philanthropic giving". Each month, DPM members choose where the crowd-funded donations go by voting on one of three charities. "No charity loses! The winning charity receives 50%, the second charity receives 30% and the third 20%! Individual Dollar Per Month™ members only need to contribute a small amount each month; our strength is in our numbers. By pooling our resources we can make a positive impact on the world. You can donate with confidence knowing that DPM™ carefully investigates and evaluates all charities; Dollar Per Month™ only selects reputable charities where the vast majority of our combined donations will go directly to the cause. You can invite friends and family to join, donate, and vote, increasing the chance that your chosen charity will win. As new people join because you referred them to DPM™, your Social Impact Score™ will increase, and you will see how YOU are personally impacting the world for the better." Groups selected to receive DPM donations include Seacology, The Ocean Foundation, Trees, Water and People and the Earth Island Institute. Click here to see a short video explaining how DPM works..

GeoNode
http://geonode.org

Still under development, GeoNode is a geospatial content management system: a platform for the management and publication of geospatial data. It brings together mature and stable open-source software projects under a consistent and easy-to-use interface **allowing non-specialized users to share data and create interactive maps**. Data management tools built into GeoNode allow for integrated creation of data, metadata, and map visualizations. GeoNode is being used to support **Conservation Design**, the **Appalachian Landscape Conservation Cooperative** (LCC) and the **Eastern Brook Trout Joint Venture** (EBTJV)'s open-source mapping platform. Conservation Design is designed to support the conservation community and their diverse needs to view, create, and analyze spatial data and maps. Click here for related info on this initiative, and here to access tutorials for using GeoNode. [See also the LCC's related Riparian Restoration Decision Support Tool.]

GiveCorps
http://givecorps.networkforgood.com

Recently launched by Network for Good, GiveCorps, a "peer to peer" fundraising platform for nonprofits, is an "easy-to-use peer fundraising software that helps you expand your community and get more donations by turning donors into fundraisers. With GiveCorps you can reach new donors and inspire them to have impact in their communities in new ways. Help young donors understand your organization better than ever with powerful visual storytelling and built-in social sharing – that looks beautiful on any device. With GiveCorps, you can deepen supporter relationships with real-time stewardship. Donors can see the impact of their support and feel empowered to do more good for your community. Reach donors with timely project updates and stay connected with newsletters that show impact and alert donors to community giving needs. Nonprofits across the country are using GiveCorps to grow online giving and launch peer-to-peer fundraisers, organize team fundraisers, and manage giving day campaigns." Click here to view a short video explaining how GiveCorps works.

iNaturalist
http://www.inaturalist.org/pages/about

"From hikers to hunters, birders to beach-combers, the world is filled with naturalists, and many of us record what we find." Originally established in 2008 as a UC/Berkeley Masters project, iNaturalist **is an online social network of people sharing biodiversity information to help each other learn about nature**. It's also a crowdsourced species identification system and an organism occurrence recording tool. You can use it to record your own observations, get help with identifications, collaborate with others to collect this kind of information for a common purpose, or access the observational data collected by iNaturalist users. Click here for info on how to use

iNaturalists' online tools, including the ***Bioblitz Guide***. **The River's Calendar**, a Massachusetts-based project now utilizing the iNaturalist platform, aims to track emergence dates for aquatic insects of North America, with a particular focus on mayflies, stoneflies, and caddis flies (aka *Ephemeroptera*, *Plecoptera* and *Trichoptera*). Over time, this data may prove valuable in detecting climate change and other environmental impacts to the phenology of these insects and the ecosystems in which they live. [Click here to download ***A Field Guide to Common Aquatic Insect Hatches in Massachusetts***, by Mike Cole, a recent product from The River's Calendar project.]

Land Trust Alliance (LTA) **Rally 2014 Presentations**
http://tlc.lta.org/library/conferences/rally/year/2014

Many of the presentations made and/or handouts distributed at workshop sessions at the LTA's ***Rally 2014***, held in Providence RI this past September, are online and available for free download (until **January 31**). These include: *Community Conservation: Tools for Reaching, Engaging & Working with Diverse Communities*; *Engaging the Next Generation of Conservation Supporters*; *Conserving Culture and Nature at a Landscape Scale* (which focused on Essex County, Mass.); *When Things Go Wrong: How to Communicate in a Crisis* (presented by the New England Forestry Foundation); *The Surprising Secrets of Direct Mail Success*; *Getting Heard in the Digital Age* (by Hilary Truslow of Mass. Audubon); and *Train Your Board (and everyone else) to Raise Money*.

Landscape Performance Series
http://landscapeperformance.org

"Landscape performance" can be defined as a measure of the effectiveness with which landscape solutions fulfill their intended purpose and contribute to sustainability. No matter how sustainability is defined – zero carbon, net zero water, biodiversity, quality of life – it cannot be achieved without considering landscape. Set up by the Landscape Architecture Foundation, the Landscape Performance Series is an online set of resources to help designers, agencies, and advocates evaluate performance, show value and make the case for sustainable landscape solutions. Case studies are indexed by various performance parameters, such as water management or biodiversity. [Click here for an article about the Landscape Performance Series in the Ecological Landscape Alliance newsletter.]

Legacy Connect
http://www.legacyconnect.com/home

Founded by Mark Rockefeller, Legacy Connect is a new social philanthropy website which hopes to merge the fun of online social sharing and games with causes that need support, like **Trout Unlimited**, the **East Coast Greenway** and the **Waterkeeper Alliance**. Click here to learn how Legacy Connect works, and for info on how to nominate a nonprofit for participation in the program. Many of the videos posted here (such as Trout Unlimited's video on the proposed "Waters of the U.S" rule) are worth watching even if you don't sign up to be a player and earn points.

Nature Works Everywhere
https://www.natureworkseverywhere.org

Because Nature "is the fantastic factory that makes the building blocks of all our lives—food, drinking water, the stuff we own, and the air we breathe", The Nature Conservancy (TNC) created the Nature Works Everywhere website "to help students learn the science behind how nature works for us—and how we can help keep it running strong". The website "gives teachers, students and families everything they need to start exploring and understanding nature around the globe alongside TNC scientists—interactive games, and interactive lesson plans that align to standards and can be customized for each classroom." The Resources page, for example, provides videos and lesson plans on many topics, including How Natural Areas Filter Water, and profiles on TNC scientists like Bill Toomey. The website also offers extensive guidance on establishing and maintaining environmentally-friendly school, community and other ardens.

Nonprofit Match Career Center
http://nonprofittalentmatch.com

"Whether you are looking for your next career move or looking to hire your next star employee, the Nonprofit Jobs Career Center is your source". Recently established and operated by *The NonProfit Times*, the Center utilizes Real-Time Job Matching™ technology to help match qualified candidates with potential employers. For job seekers, the Center's service enables them to stop sifting through irrelevant job postings, get job match alerts delivered to your inbox or your mobile device, and get noticed by employers who are interested in your skills and work experience. Click here for more info.

Outdoors Alliance for Kids (OAK)
http://www.outdoorsallianceforkids.org

OAK is a national strategic partnership of organizations from diverse sectors with a common interest in connecting children, youth and families with the outdoors. The members of OAK are brought together by the belief that **the wellness of current and future generations, the health of our planet and communities and the economy of the future depend on humans having a personal, direct and life-long relationship with nature and the outdoors**. OAK brings together more than seventy businesses and organizations, including the American Heart Association, Children & Nature Network, Izaak Walton League of America, National Recreation and Park Association, National Wildlife Federation, The North Face, REI, Sierra Club, The Wilderness Society and the YMCA of the USA, to address the growing divide between children, youth and the natural world. Resources at the OAK website include the Every Child Healthy Outdoors (ECHO) Across America toolkit, blogs and a monthly newsletter. OAK also has a Facebook page and is involved with the Urban Waters Federal Partnership (click here for more info).

River Network's River Voices Newsletter
http://www.rivernetwork.org/river-voices-welcome

The inaugural issue of ***River Voices***, River Network's new quarterly electronic newsletter, "introduces you to an easy way to stay up to date regarding the three most important topics for healthy rivers: strong champions, clean water, and ample water. These three topics will focus all of our work moving forward, as explained further by our new strategic plan. Also included in all *River Voices* issues will be announcements about upcoming events and trainings", such as the new training series, ***A Recipe for Effective River and Watershed Organizations***: six webinars to help executive directors and board leaders implement best practices in six essential areas of nonprofit management. Click here to subscribe. [N.B.: River Network is seeking nominations (until **February 12**) for **River Heroes**. "The selected Heroes will receive a full scholarship to River Rally 2015 (May 1-4 in New Mexico), along with other yet-to-be-determined prizes of honor and prestige". Click here to nominate or for more info.]

RiverSmart Communities
https://extension.umass.edu/riversmart

RiverSmart Communities is an integrated research (both river science and social science) and extension project sponsored by the UMass/Amherst's Center for Agriculture, Food and the Environment. "In the aftermath of Hurricane Irene, we recognized that a greater understanding of challenges surrounding ecologically supportive and community resilient management of rivers and the lands surrounding them would help us address flooding more effectively." This website is now the home for three projects: RiverSmart (the original project); Farms, Floods and Fluvial Geomorphology; and RiverSmart and Federal Collaborators. **RiverSmart is currently conducting a survey on rivers and flooding** intended to help support ecologically restorative flood prevention and remediation in New England, and is seeking the participation of a wide range of residents, landowners, town officials/staff, members of watershed groups, students, business owners, hunters and anglers, and others. Click here to take the 15-minute survey, or, if you have any questions, contact researchers Nicole Gillett, Eve Vogel or Christine Hatch.

Sea Run Brook Trout Coalition (SRBTC)
http://www.searunbrookie.org

How many people know that there are wild brook trout in southeastern Massachusetts, or know that they may be passing over a brook trout stream on their way to and from work? Most people from the South Shore suburbs of Boston, Cape Cod, or the South Coast cities of Fall River and New Bedford would be surprised to learn that southeastern Massachusetts was once a popular trout fishing destination. Before the Industrial Revolution, there were hundreds of rivers and streams from Long Island to Maine with populations of sea-run brook trout. Prized for their flavor, size and strength, "salter" brook trout became the focus of America's first sport fishery. By the turn of the (20th) century, however, dam building and habitat degradation precipitated the decline of the fishery, and salter populations were reduced to a remnant of their former abundance. Today's salter populations are hanging on in a relatively few tidal creeks and rivers, for the most part unnoticed. Yet, given a chance, with stream habitat restoration and the removal of dams and other barriers, salter populations can rebound quickly. That is the primary mission of the SRBTC, "a science-based, grassroots alliance of academics, fishery biologists, ecologists, non-governmental organizations (NGO's), and private citizens whose goal is the preservation and restoration of wild, native coastal brook trout in their historic range". Resources at this page include the **current (Fall 2014)** and past editions of ***The Salter***, the SRBTC's newsletter, all well worth reading.

StreetFilms
http://www.streetfilms.org

Founded in 2006 and produced by OpenPlans, a §501c3 non-profit, Streetfilms produces short films showing how smart transportation design and policy can result in better places to live, work and play. Individuals, public agencies, non-profit organizations, schools, and transportation advocacy groups use Streetfilms to educate decision makers and make change for livable streets in their communities. Streetfilms are freely distributed online, and its nearly 500 videos (searchable and sortable by category) are viewed on the Streetfilms website, through embeds on hundreds of other sites, social media, digital files and DVDs, film festivals, and community screenings. Here's a small sampling of what's available: *The Magnificent Bioswales & Stormwater Treatment Along the Indy Cultural Trail*; *Depaving Day*; *Hike the Heights*; and *Building Greenways and Community in the Bronx*

Wildlife Habitat Council
http://www.wildlifehc.org

The WHC is "a nonprofit, non-lobbying 501(c)(3) group of corporations, conservation organizations, and individuals dedicated to restoring and enhancing wildlife habitat". The WHC works with corporations and other landowners to create tailored voluntary wildlife habitat enhancement and conservation education programs on corporate facilities and in the communities where they operate. Resources at WHC's website include a downloadable, 10-page *Learn to Plant a Pollinator Garden Workbook* as well as presentations made at the **WHC's *2014 Annual Symposium***, including: *Innovative Remediation and Habitat Restoration Approaches on Corporate Lands: A Case Study of Wetland Mitigation in a Heavily Industrialized Waterfront*; *Wetland and Stream Restoration in the Chicago Wilderness Region: Partnerships and Connections*; *Amphibians Crossing! A Community Approach to Solving Road-Wildlife Conflicts*; and *Tech Tools for Habitat Management and Community Engagement*.

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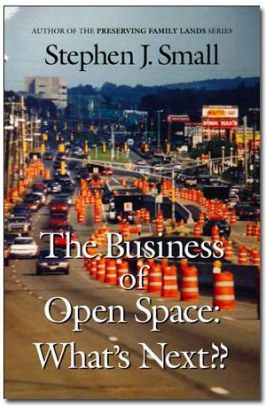
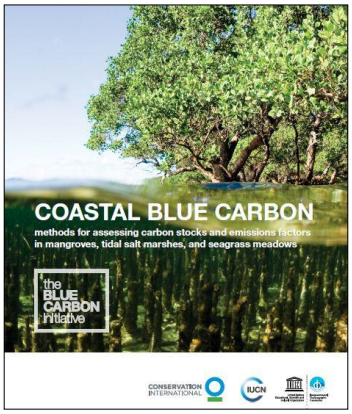
Publications, Videos, etc.

(the following are offered for information purposes only and are not an endorsement of the items listed below. Descriptive text provided is obtained from the web pages themselves.)



Boston-based tax attorney Steve Small, one of the nation's leading authorities on private land protection options and strategies, has served as counsel to landowners and easement holders in more than 400 transactions around the country, and has been involved in the protection of more than 1.5 million acres of land. His "***Preserving Family Lands***" series of books are among the most important resources for promoting land conservation throughout the US. In ***The Business of Open Space: What's Next***?, Small's latest book, he argues that we need to expand beyond conventional sources driving and fueling open space protection, philanthropy and government funding. "Land has historically has been valued by how much development it could support. It is time to move beyond the traditional methods for valuing and protecting open space. We need to value land in new and dynamic ways." Small advocates the creation of new marketplaces that set values on environmental commodities, reaching out to non-traditional landowners, such as corporations and educational institutions, to create new pools of funding and leverage acquisition dollars. One of the examples cited is real estate company LandVest's Natural Capital Assessment, created to consider non-traditional assets that contribute to property values. LandVest has employed this tool to work with landowners and conservation interests to value environmental assets, including wind, solar, and carbon credits. Click here to order and for more info on any of Small's books, and here to read a posting about *The Business of Open Space* in the "Notes from Steve Small" series.

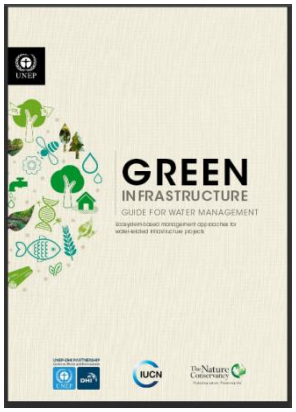
Between 2009 and 2013, conservation impact investments totaled approximately $23 billion, with private investments accounting for almost $2 billion of the total, an amount that is expected to grow at an average annual rate of 26 percent to more than $5.6 billion by 2018, according to ***Investing in Conservation: A Landscape Assessment of an Emerging Market***, a study conducted by EKO Asset Management Partners and the NatureVest division of The Nature Conservancy. The report found that the funds committed to conservation impact investing over the five-year period were invested primarily in **water projects, including watershed protection, water conservation and storm water management, and trading in credits related to watershed management**; sustainable food and fiber production, including investments in sustainable agriculture, timber production, aquaculture, and wild-caught fisheries; and **habitat conservation**, including investments in the protection of shorelines to reduce coastal erosion, projects to reduce emissions from deforestation, land easements, and mitigation banking. Click here to download the report, here to read a press release, and here to read an article about the report appearing on the *Philanthropy News Digest*'s website.



"Coastal ecosystems are some of the most productive on Earth. They provide us with essential ecosystem services, such as coastal protection from storms and nursery grounds for fish. We also know that they provide another integral service – sequestering and storing "blue" carbon from the atmosphere and oceans and hence are an essential piece of the solution to global climate change." The International Blue Carbon Initiative, a coordinated, global program focused on mitigating climate change through the conservation and restoration of coastal and marine ecosystems, recently released ***Coastal Blue Carbon: Methods for Assessing Carbon Stocks and Emissions Factors in Mangroves, Tidal Salt Marshes, and Seagrass Meadows***, a manual produced with the goal to standardize protocols for sampling methods, laboratory measurements, and analysis of blue carbon stocks and fluxes. Click here to download the manual or for more info.

The ***Narragansett Bay Journal***, put out by the Narragansett Bay Estuary Program, presents information on all aspects of Narragansett Bay and its watershed (60 % of which is in Massachusetts): ecological, economic, scientific, historical, and cultural – and acts as a forum for Bay stakeholders. The recently published 28th edition of the *Journal* has a **special focus on salt marshes and sea level rise**. Articles include: *What's Going on with Our Salt Marshes? And Why Should We Care?*; *Vulnerability of Rhode Island Salt Marshes to Sea Level Rise and Poor Water Quality*; *Can Tidal Marsh Birds Persist in the Face of Climate Change?*; and *Developing a Salt Marsh Assessment Focused on the Impacts of Rapid Sea Level Rise*. Click here to access the current issue of the *Journal*, or here to access archived version of previous *Journals*. [Click here to access presentations made at ***The Effects of Sea Level Rise on RI's Salt Marshes***, a conference that took place this past April.]

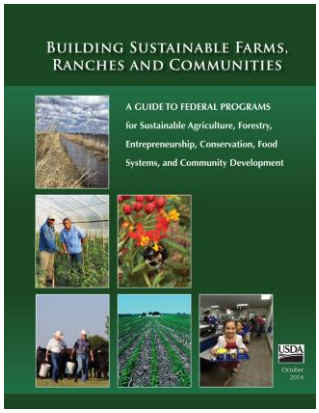
In 2009, Congress recognized the need for a government-wide climate adaptation strategy for fish, wildlife, plants, and ecosystems, and asked the Council on Environmental Quality (CEQ) and the Department of the Interior to develop a strategy to "**assist fish, wildlife, plants, and related ecological processes in becoming more resilient, adapting to, and surviving the impacts of climate change**". The result was the ***National Fish, Wildlife, and Plants Climate Adaptation Strategy***, developed by a partnership of federal, state, and tribal plant, fish, and wildlife conservation agencies, and released in March 2013. ***Taking Action: A Progress Report***, put out in September, documents fifty case studies, many highly collaborative, which demonstrate implementation of the many actions recommended in the Strategy. Click here to download the Progress Report and here for more info on the Strategy.



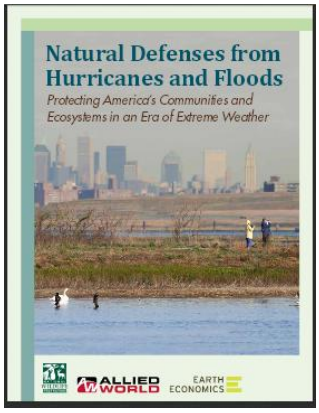
Green Infrastructure Guide for Water Management: Ecosystem-based Management Approaches for Water-Related Infrastructure Projects, recently published by the United Nations Environment Program (UNEP) DHI Partnership - Centre on Water and Environment, the International Union for Conservation of Nature (IUCN), The Nature Conservancy and the World Resources Institute, responds to the increasing recognition that green infrastructure represents an important opportunity to address the complex challenges of water management. The Guide makes clear that increased efforts to work with green infrastructure solutions in water management can result in viable and cost-effective alternatives to greywater infrastructure, as well as support goals across multiple policy areas, including adaptation to climate change. Click here to read the press release and here for more background info.

Communities across the country want to protect their water quality while also getting the greatest possible benefit from every investment they make. Many are conserving, restoring, or enhancing natural areas while incorporating trees, rain gardens, vegetated roofs, and other practices that mimic natural systems into developed areas to manage rainwater where it falls. These types of approaches, known as "green infrastructure," are an integral component of sustainable communities because they can help communities protect the environment and human health while providing other social and economic benefits, allowing communities to achieve more for their money. ***Enhancing Sustainable Communities With Green Infrastructure: A guide to help communities better manage stormwater while achieving other environmental, public health, social, and economic benefits***, recently published by the EPA, aims to help local governments, water utilities, nonprofit organizations, neighborhood groups, and other stakeholders integrate green infrastructure strategies into plans that can transform their communities.

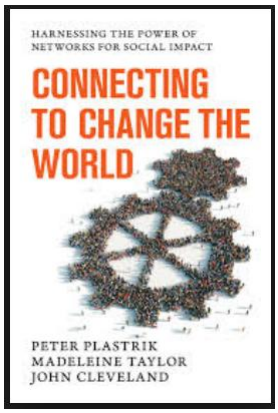
Click here to download the report; here to read a related blog posting; here to go to the EPA's Green Infrastructure Flickr page; and here to (once it is posted) access an archived version of a 11/18/14 webinar entitled *Creating a Green Infrastructure Plan to Transform Your Community*. To order a hard copy of the report, email nscep@bps-lmit.com or call (800) 490-9198 and request EPA 100-R-14-006.



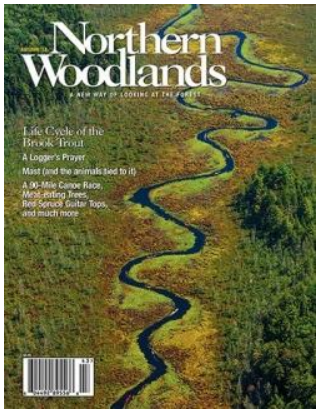
If you're looking for **federal grants or low-interest loans** to kick-start sustainable agriculture, forestry, entrepreneurship, conservation, food systems or community development programs, a newly revised guide published by the U.S. Department of Agriculture might help. The 86-page guide, entitled ***Building Sustainable Farms, Ranches and Communities: A Guide to Federal Programs***, describes 63 programs intended to assist local governments, private businesses and individual producers in a wide range of sustainability, economic development and conservation efforts. While it contains all the farm and ranch assistance programs you'd expect from the long overdue farm bill approved by Congress this year, the available funding isn't just for big ag producers. Small towns and city folks will find programs that support **urban agriculture and forestry, local foods, farmers' markets, farm to school initiatives, biofuel development, and a variety of grassland, wetland and woodland conservation grants**. The *Guide* provides information on eligibility, uses and restrictions applicable to each funding opportunity. Hard copies of the *Guide* are available for $3/each; the free downloadable .pdf version of the Guide contains clickable links to online applications and other resources. Click here for more info. [N.B.: The Michael Fields Agricultural Institute offers workshops to help use the *Guide*. The workshops cover how to envision and design sound projects; how to identify programs offering resources; and how to maximize your chances of submitting successful proposals.]



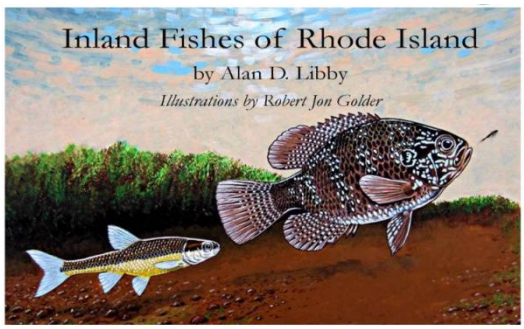
Climate impacts are hitting home faster than governments are adapting, but it's not too late to protect our communities with cost-effective, nature-based approaches for risk reduction, according to ***Natural Defenses from Hurricanes and Floods: Protecting America's Communities and Ecosystems in an Era of Extreme Weather***, a recently-published report from the National Wildlife Federation, Allied World Assurance Company Holdings, LG, and Earth Economics. The report takes an in-depth look at the growing risks we face from these potentially-catastrophic natural hazards, the policy solutions that can safeguard people, property and wildlife habitats, and local case studies that point the way forward. It calls on America to substantially increase our investments in proactive risk reduction measures at a "Marshall Plan" scale that takes into consideration the growing risks from more intense storms, flooding and sea level rise. Click here to download the report and here for more info.



Nonprofit and philanthropic organizations are under increasing pressure to do more and to do better to increase and improve productivity with fewer resources. Social entrepreneurs, community-minded leaders, nonprofit organizations, and philanthropists now recognize that to achieve greater impact they must adopt a network-centric approach to solving difficult problems. Building networks of like-minded organizations and people offers them a way to weave together and create strong alliances that get better leverage, performance, and results than any single organization is able to do. Easily understandable and full of actionable advice, ***Connecting to Change the World: Harnessing the Power of Networks for Social Impact*** is an informative guide to creating collaborative solutions to tackle the most difficult challenges society faces. Drawn from the authors' deep experience with more than thirty successful network projects, the book provides the frameworks, practical advice, case studies, and expert knowledge needed to build better performing networks. With dozens of encouraging stories, *Connecting to Change the World* inspires hope that change is possible when people work together.



Northern Woodlands Magazine is published quarterly by the Center for Northern Woodlands Education, whose mission is "to advance a culture of forest stewardship in the Northeast and to increase understanding of and appreciation for the natural wonders, economic productivity and ecological integrity of the region's forests". Among the articles covered in the Fall 2014 issue (and available online) include an article about the annual Adirondack Canoe Classic Race and ***The Life Cycle of a Brook Trout***, which recounts the story of Massachusetts-based photographer Robert Michelson's fall field trip several years ago to northern New Hampshire to capture images of brook trout spawning, and the wonderful underwater photos he captured despite the hypothermic conditions. The Center also publishes *The Outside Story*, a weekly column on forestry subjects, natural history, and ecology syndicated in dozens of newspapers (click here to see a recent column on how beavers survive the winter).



Published a year ago by the Rhode Island Division of Fish and Wildlife, ***Inland Fishes of Rhode Island*** describes more than 70 fishes found in the fresh and brackish waters of Rhode Island. Filled with beautiful color and black and white scientific illustrations, each fish is addressed with a detailed description and color location map. Included are the variety of freshwater habitats found in Rhode Island, along with the methodology used to carry out the field work that led to this publication. The book's author, Alan D. Libby, is a Principal Freshwater Biologist and has worked for the RI Division of Fish and Wildlife for over 26 years. This definitive work is the culmination of 15 years of surveying the inland fishes of the state. Alan surveyed over 377 pond and stream locations throughout Rhode Island, many sampled multiple times over the years. Click here to order the book, here to read the press release, here to read an article about the book appearing in the *Providence Journal*, and here for more info.

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Massachusetts Watershed Coalition
building a network of watershed partners

NOTE: The **Mass. Watershed Coalition (MWC)'s "mwc-list" listserv**, formerly a great source of time-sensitive and other info on river- and watershed-related funding and job opportunities, upcoming events, recent articles and more, is **still on hiatus** due to changes at its host, topica.com. Past messages posted to the "mwc-list" listserv **are** still accessible, however, and readable by anyone by clicking here. The MWC is currently researching replacements to the listserv platform and should have something in place soon, and when that happens we will let you know. In the meantime, you might want to check out the **MWC's Runoff Remedies blog**.

Coordinated by the Mass. Executive Office of Energy and Environmental Affairs (EEA), ***The Great Outdoors Blog*** is dedicated to Massachusetts outdoor activities, events, wildlife, state parks and local agriculture that features a **calendar of Massachusetts outdoor events**. Learn about native marsh species, guides for the state's best paddling adventures and learn about wetlands restoration projects that protect recreational and commercial fisheries.

Last but not least :

The **Massachusetts Environmental Trust** (MET) provides funding to many river, wetland and other water resources protection and restoration projects throughout the Commonwealth. A major source of MET's funding comes from the sale of **environmental license plates**. Besides the "Right Whale and Roseate Tern" plate (click here, see p. 13), sales of the "Fish and Wildlife" plate (click here, see p.12), depicting a Brook Trout, and the Blackstone Valley plates (click here, see p.10) help fund MET's grant-making programs. (By the way, these three are he only Mass. specialty license plates that exclusively fund environmental programs). Getting an environmental plate is easy and can be done on-line by clicking here, or in person at your local Registry of Motor Vehicles office.

Does your car have an environmental license plate?

Division of Ecological Restoration Staff:
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Hunt Durey, *Deputy Director*
Carrie Banks, *Stream Team and Westfield River Wild and Scenic Committee Coordinator*
Tim Chorey, *Stream Continuity Specialist*
Russell Cohen, *Rivers Advocate*
Michelle Craddock, *Flow Restoration Specialist*
Cindy Delpapa, *Stream Ecologist*
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Eileen Goldberg, *Assistant Director*
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Georgeann Keer, *Wetland Scientist and Project Manager*
Beth Lambert, *River Restoration Program Manager*
Laila Parker, *Flow Restoration Program Manager*
Megan Sampson, *Program Administrator*
Nick Wildman, *Priority Projects Coordinator*
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Maeve Vallely Bartlett, Secretary, Executive Office of Energy and Environmental Affairs
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