

# THE VOICE

## OF THE RIVER



## Removing River Roadblocks

by Brian Kelder, Restoration Program Manager

As paddlers and fishermen, swimmers and hikers, we experience the Ipswich River as a series of disconnected bodies of water, separated by dams that once served an important economic purpose, but no longer do. Few paddlers get to explore the section between the upper and middle stretches of the Ipswich River because there is no public access around the South Middleton Dam. Yet more than one-fourth of the Ipswich River watershed is located upstream of the Dam. This area includes Martin's Pond and Silver Lake, coastal headwater ponds that were once major spawning and nursery areas for ocean-going alewife.

South Middleton Dam is the furthest upstream of three dams on the main branch of the river, and the only one without a fish ladder. Removing this serious roadblock to river life, and especially to the historic alewife spawning runs, is a top priority for us and the Commonwealth. Removal will benefit people as well as fish, by greatly improving recreational access to 56 miles of the river and its tributaries in the beautiful upper watershed. Even more important, it will help restore natural river conditions in place of the half-mile-long artificial lake above the dam and open the upper river to a variety of fish species.

So it was no coincidence that we held our annual meeting on September 26 at the Bostik, Inc., plant at the site of the South Middleton Dam. Before the annual meeting began, guests were given a tour of the dam. Brian Kelder, our Restoration Manager, Dan Welch, Bostik's national Environment and Sustainability Manager, and Hunt Durey, Acting Director of the Massachusetts Department of Ecological Restoration, all spoke about the dam removal project, in which their organizations are the principal partners.

The project partners are actively studying the engineering and ecological issues necessary to proceed with removing the dam, and searching for project funding. The larger plan is to complement dam removal with other restoration projects in the watershed. Dams aren't the only impediment to human exploration and fish migration. This year, we have begun to survey the over 1,000 bridges and culverts in the watershed to identify those that represent the most serious environmental and recreational challenges. As Executive Director Wayne Castonguay points out, "We would like the upper river to be as open to recreation and wildlife as the downstream stretches."

Canoeists and kayakers take note: the South Middleton Dam is sited on the largest vertical drop in the entire watershed. Once the dam is removed, this section of river will offer the fastest-flowing water on the Ipswich – not serious whitewater, but a fun stretch to paddle nonetheless.

*South Middleton Dam is one of three dams on the main stem of the Ipswich River, and the only one without a fish ladder. Removing this serious roadblock to river life is a top priority for the Ipswich River Watershed Association.*



*The Ipswich River Watershed Association's Board of Directors visits the Ipswich Mills Dam on a cold November day as part of our multi-year investigation on the feasibility of restoring the river at its ecologically significant head of tide location.*

Downstream, we are actively managing preliminary studies at the Ipswich Mills Dam, investigating the feasibility of restoring the river through dam removal at that site as well. That dam, furthest downstream, is sited on a natural waterfall where the river meets the ocean tides. Its removal will help restore a naturally beautiful landscape, as well as a healthy habitat for a wide range of fish and wildlife. As Wayne Castonguay also notes, these projects take 5 to 10 years to complete and they don't affect most people's daily lives. "That's why organizations like the Ipswich River Watershed Association exist: to take the long view and champion projects that are incredibly important, but challenging to undertake." Please contact Brian at [bkelder@ipswichriver.org](mailto:bkelder@ipswichriver.org) for more information on dam removal and volunteer opportunities on this and other important projects.







## Connectivity.

*It's a word that increasingly describes much of our work these days. In the traditional sense, it describes our relationship with each other and the environment that sustains us. In terms of river ecology, connectivity is a technical term that describes a natural, free flowing river and is the focus of this issue.*

*In the not too distant past, all rivers and streams were relatively un-impacted by humans. To thrive in these highly variable systems, most river species have become specialized and need to be able to move freely to find the conditions they need to survive. Unfortunately, the more than a thousand dams and road crossings that have been built in our watershed have significantly limited the ability of animals to move and have altered the ecology of our river. For example, the percentage of river-dependent fish has declined by over 80% and the millions of river herring that used to return to our river each spring have been reduced to just a few hundred. Moreover, because many of these structures are improperly designed, they are often expensive to maintain and can lead to increased flood damage.*

*Fortunately, the solution is easy. Because most of our dams are no longer needed and road crossings can readily be designed to reduce maintenance costs while allowing for natural river conditions to occur, we have the ability to restore connectivity whenever it's time to repair or replace these structures. All we need is time and perseverance to achieve our vision of a healthy river that meets the needs of both people and nature. With your help, we'll get there!*

*WAYNE*

*Wayne Castonguay  
Executive Director*



## Celebrating John Bacon's Leadership

It is with great admiration that we wish to recognize John Bacon for his 15 years as head of the Middleton Stream Team. John has recently decided to step down from his leadership role. Through skilled leadership and management, John has overseen the growth of this all volunteer organization dedicated to environmental stewardship of the rivers, streams, wetlands and adjacent uplands in Middleton.

The Stream Team has achieved many accomplishments as the result of John's leadership and a dedicated team. Among these are the building of many public canoe landings, offering seasonal family Discovery hikes, hosting the town's annual Earth Day festival and guiding environmentally related service projects including four completed Eagle Scout projects. The Stream Team is also developing a historical display on the site of a former water-powered saw mill on Boston Brook. As a sign of the strength of their membership and core mission, the Stream Team will soon achieve recognition as a non-profit organization.

John has helped build a first-class organization that is a model for Stream Teams across the state. Thank you John Bacon and all members of the Middleton Stream Team for all you have done to make the watershed a better place to live, work and play!

## Interns Help Protect the River

Our organization draws its strength from a dedicated community of donors and volunteers who share a passion for our watershed and what it has to offer. Among the volunteers that make us a stronger organization are the college and high school interns who choose to spend time working with us to make the river healthier.

This fall we were fortunate to have Kristin Lydon, a senior at Endicott College, join our team as part of Endicott's Semester Internship Program. Over the past few months Kristin has helped us with a variety of important restoration and monitoring projects, including taking the lead on conducting and coordinating road stream crossing surveys. On her watch we have surveyed more than 110 crossings and have a much better organized data set.

Next summer, we plan to offer a paid Apprenticeship program funded through the Alces Foundation and partnerships with college work-study programs. The Apprenticeship program will supplement our intern and other volunteer programs to create a full suite of service-learning opportunities at the Association for young professionals to gain critical real world experience in the conservation field. Keep your eye on our Volunteer page this spring for internship opportunities and for other ways to help the River.



*Kristin Lydon surveys a road stream crossing in the watershed. She joins our team as part of Endicott College's Semester Internship Program.*



# Improving Connections on Crooked Pond Brook in Boxford

Thanks to a tenacious group of river advocates Crooked Pond Brook in Boxford is now running more freely than it was just a few months ago. Until recently the stream was forced to flow through two undersized and improperly placed pipes near its outlet to Fish Brook. These culverts presented a migration barrier to fish and wildlife in the two streams and due to their small diameter were likely to fail during high flows.

The local Nor'East Chapter of Trout Unlimited spearheaded the effort to replace these culverts with a single, bridge-like culvert designed to meet engineering standards for fish and floods alike. The new, upgraded structure was installed in November and the stream bed that runs through it now resembles the natural stream as it should. This will greatly improve migration paths for fish and wildlife along the stream. It will also allow for natural downstream movement of water, debris and sediment during higher flows decreasing the chance of culvert failure in a flood.

This project is an excellent demonstration of the way more of the region's road-stream crossings will need to look if we want to protect our river resources and reduce risk of culvert failure. Kudos to the project team, including Greg Murrer, Mike O'Neill, Chett Walsh, Emily Sullivan, Ross Povenmire, John Dold and many more.

Very few road-stream crossings in our watershed were designed with the movement of fish and wildlife in mind and many present partial or complete barriers to migration for a variety of species. Additionally, many bridges and culverts are undersized, improperly placed or blocked such that they can pond water in much the same way dams do, especially on smaller tributaries. In 2006 we began working with partner organizations and volunteers to survey crossings as part of the UMass Extension regional River and Stream Continuity Project. With help from Massachusetts Environmental Trust funding, the project team plans to visit and score over 800 road-stream crossings in the region by summer 2014. The survey results will be analyzed and reports will be made available to municipalities and other groups interested in improving habitat conditions. This effort will rely on the effort of volunteer survey teams. We are half way to our target, but still need volunteers. If you are interested email Brian Kelder at [bkelder@ipswichriver.org](mailto:bkelder@ipswichriver.org).



Top: Before replacement these two undersized culverts have a drop at their outlet and contain no natural streambed material. This is a barrier to stream life and increases the risk of failure in a flood.

Bottom: The new crossing meets the state's Stream Crossing Standards and provides a stream bed that serves as a migration corridor for a variety of animals ranging from fish to turtles to mink. It allows water and debris downstream during floods rather than washing out the culvert.

Photos: J. LeJeune

## Volunteers Descend Upon Riverbend



Board member Chris Sandulli and Riverbend neighbor Sharon Grimes pick up brush at our fall Trails Work Day. Volunteers built a new trail and restored historic paths. We are extremely grateful to the Essex County Trails Association for organizing the event.

Photo: ECTA



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*The Voice of the River*

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**You Make a BIG SPLASH!**



*Just like Conor at Riverbend, 365 new members  
make a big splash for the river. Your generosity will  
be matched dollar for dollar by EnTrust. Thank you!*

## Welcome to our 365 new members!

Thank you for joining the river community. And thank you to 123 loyal members who increased their support this year. Your support will do twice as much good since each new or increased gift will be matched dollar for dollar by the EnTrust Fund.

You can help spread the word and make your river community even stronger. Each new member receives a FREE copy of our new Paddling Guide & Map to the Ipswich River. Together, we'll keep our local waters clean, safe and beautiful. Please help us spread the word.

In June 2013, aka River Month, we conducted the biggest membership drive in our history, mailing letters to 16,000 households asking them to help protect the river by becoming a member. The membership drive continues in 2014 to reach our goal of 500 new members.

**Thank you to the EnTrust Fund for your  
generous commitment to the river!**

## Calendar

**Towards a Free-flowing Ipswich River:** Friday, February 7: 7 pm Lincoln Hall, West Boxford, Route 133: Beth Lambert, MA Division of Ecological Restoration, discusses river ecology, how dams impact rivers and dam removal projects throughout the watershed and the state. Sponsored by BTA/BOLT, Inc.

**Visit [ipswichriver.org](http://ipswichriver.org) for more events.**



# THE VOICE OF THE RIVER



## Riverbend Management Plan Complete!

by Wayne Castonguay, Executive Director

We are pleased to report that our volunteer Riverbend Planning Committee has completed its work and is putting the finishing touches on our first ever Management Plan for our 23-acre headquarters, Riverbend. After an 8-month planning process, the 9-member committee met regularly to identify and address the property's needs and opportunities to make Riverbend an enjoyable and valued community asset. The planning effort was prompted by a growing list of issues, the need to incorporate recent new land acquisitions and to work out the details associated with the operation of the new roadway and boat landing on the river.



The Property Planning Committee meets to finalize the Riverbend Management Plan after a year's hard work. From left to right: Susie Winthrop, Sharon Grimes, Judy Schneider, Suzanne Sullivan, Martha Stevenson and David Comb. Missing from the photo: Maria Van Dusen, Georgia Flood, Chris Sandulli, John Wigglesworth. Huge thanks to this group for all their help.



The new Management Plan includes dozens of recommendations covering varied needs such as building maintenance, trail and road management, improving wildlife habitat, controlling invasive species, directional and interpretive signage, forestry management, educational features and of course, rules and regulations. The public will learn about the property and the organization at two beautiful new kiosks in each parking area, in the office and through a new brochure and map.

One of the more exciting aspects of the planning effort was to identify ways to make Riverbend an even better educational resource for the community. In addition to building upon the existing features to demonstrate sustainable water use (including ultra-efficient appliances, green roof, permeable pavement, zero-water landscaping and rain gardens), the committee is recommending that Riverbend be developed into an education center on River Ecology since there is no other place on the North Shore which focuses on rivers.

*Continued on page 2...*

Riverbend, our headquarters on the river in Ipswich, has a lot more to offer this year! This updated Riverbend trail map highlights the new trails, interesting property features, new road and parking area (opening by summer) which will make launching your own boat a lot easier! We even have a new dock!



## It's Show Time!

After more than a decade of hard work to convince the state to incorporate the ecological health of rivers into its water withdrawal regulations for the first time, the new proposed Water Management Act regulations were finally released for the 60-day public comment period on April 4. Unfortunately the new regulations essentially exempt the Ipswich River from the regulations. How can this be?

Led by the tireless efforts of our nationally-recognized River Hero and former leader Kerry Mackin with the support of all of you, our river received the dubious distinction of being recognized as one of the most endangered rivers in the country and in many ways become the poster child of the impact of excessive water withdrawals. While the new regulations should help prevent the problem from getting worse, they essentially grandfather existing withdrawal levels and thus eliminate the regulatory process as a tool to reduce these impacts. What a disappointment!

We fully agree with the state that providing ample supplies of clean water is perhaps our most critical human need. But, we have conclusively shown that we can have our cake and eat it too. We have demonstrated that it is relatively easy to minimize the most severe impacts of these withdrawals if only we had the added incentive of the state permitting process to help prompt water suppliers to work with us to implement these readily available and cost-effective solutions. Of course, this outcome is unacceptable for us. Our work isn't finished yet. We hope you will join us over the next 60 days while we make one last attempt to influence the regulatory process. Please stay tuned on how you can help.

*WAYNE*

Wayne Castonguay  
Executive Director

For the public process notice and a complete copy of the proposed regulations go to: [www.mass.gov/eea/agencies/massdep/news/comment](http://www.mass.gov/eea/agencies/massdep/news/comment)

## Help Protect the River

A big warm, wet welcome to 411 new members. Thanks to you, we've doubled our membership in the last year. New members, please connect with us. Subscribe to our monthly River E-News at [ipswichriver.org](http://ipswichriver.org), attend a spring event, volunteer, or visit us at our Riverbend headquarters and take a boat out. We'd love to say "Thank You" in person.

You can help us reach our goal of 500 new members: only 89 to go! Give this newsletter to a friend, give someone a membership for Father's Day, become a member yourself if you are a loyal volunteer but not currently a dues-paying member, or ask someone to join you in making the voice of the river stronger.

Each new member receives a FREE copy of our new Paddling Guide & Map to the Ipswich River and the great feeling that comes from knowing their gift will do twice as much good since it will be matched dollar for dollar by our friends at the EnTrust Fund.

*... continued from page 1*  
**Riverbend Management Planning Project Complete!**

As part of the planning effort, we partnered with several organizations to ensure that Riverbend will be a public resource in perpetuity. First, we will operate the new public boat landing jointly with the Town of Ipswich who will hold a permanent easement over the road and landing area. Second, the Essex County Trails Association has been granted a permanent easement over all of our trails and we will market Riverbend as a trailhead to access the wonderful trail network along the river beyond Riverbend. Finally, Essex County Greenbelt Association was granted a Conservation Restriction over the entire property which will ensure that Riverbend will remain in its natural state forever! We can't thank these partners enough for helping to achieve this shared vision for the property.

To learn more, please check out the Plan on our website. We couldn't have achieved this without the time and commitment of our volunteer committee and will be forever grateful for their insights, passion and hard work – thank you team!



Got Water? The Ipswich River is a big part of what makes this a great place to live, work, visit or explore with furry friends. Together, we'll keep it that way.



Don, Jack and Bruce, our dedicated Tuesday volunteers, help implement the Management Plan recommendations at Riverbend. Are you interested in hands-on-projects and helping to steward this great public resource? Drop in between 9 and noon on Tuesdays.



# PIE-Rivers Implementation Phase in Full Swing

As we emerge from a long, cold winter the Parker Ipswich Essex Rivers Restoration Partnership (PIE-Rivers) is looking ahead to a productive year. Just four years ago, our partner group of 18 organizations, governmental agencies and individuals formed PIE-Rivers as a tool to streamline important conservation efforts in our watersheds. Today we have a well-established, energized partnership that is already enhancing our individual organizations' work.

In 2013, we finished a report that outlines a common sense framework of priority restoration actions for the region and began getting the word out about it. As part of our outreach effort, we held a well-attended conference highlighting the link between municipal action and high priority issues including water conservation, stormwater management and bridge crossings. We also kicked off a region-wide survey to better understand where bridges and culverts pose the biggest problems for fish and wildlife.

With the critical planning phase complete, we are poised to implement a wide range of the recommendations that came out of that effort. PIE-Rivers is thinking bigger than we could have imagined four years ago. Over the past 6 months, partners have joined together to seek funding for projects that would satisfy a number of actions including prioritizing and removing aquatic migration and flow barriers, controlling invasive plants and restoring salt marshes. We are actively reorganizing the partnership to reflect a group that is implementing rather than planning. In addition, we are pleased to announce that the Ipswich River Watershed Association was recently awarded funding from the Jessie B. Cox Charitable Trust that will help support our leadership role in PIE-Rivers through 2016 with a special focus on providing assistance to municipalities that are working to comply with updated state and federal regulations. We are convinced that this will be the fun (and fruitful) part of our work when we hope to see large scale improvements in the environmental conditions in our region. For a list of PIE-Rivers partners and the Action Plan visit [pie-rivers.org](http://pie-rivers.org).



The PIE-Rivers steering committee meets at Riverbend, March 2014, to discuss implementing priority restoration actions. The PIE-Rivers Partnership is a unique, regional coalition, that brings together a diverse group of agencies and organizations for the common goal of improving conditions in the waterways of the North Shore.

## New This Spring: T-shirts and a New Dock!



No matter what you do, this is the shirt for you! Send your \$15 for an Ipswich River t-shirt or better yet visit our Riverbend headquarters at 143 County Road, Ipswich in person to make sure you get the right size. Staff are here 8 am-4 pm, Monday-Friday.



Donna and Christine Seibert enjoy a quick early spring paddle off the new dock at Riverbend. Thanks to Dan Heiter and the crew at New England Biolabs for purchasing and installing the new dock. Come grab one of our boats and go!



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## Spring 2014 Calendar



This spring we partner with local groups including Essex County Trail Association, Ipswich Stream Team, Middleton Stream Team, Wilmington Public Library, Essex County Ornithological Society, and Essex National Heritage to bring you a diversity of fun river events and connect more people to the river. Join us!

**Explore the Trails from Riverbend to Julia Bird Reservation:** Saturday, May 10: 2-4 pm, Riverbend, 143 County Road, Ipswich. We are partnering with Essex County Trail Association for a walk from Riverbend to Greenbelt's Julia Bird Reservation and back. Joe Sandulli and Dan Mayer will lead this guided tree identification walk pointing out notable characteristics of significant riparian and upland trees. RSVP at [ectonline.org](http://ectonline.org) or to [cingelfinger@ipswichriver.org](mailto:cingelfinger@ipswichriver.org).

**Paddle from Winthrop Street to Riverbend:** Sunday, May 18: 1-3 pm. Join members of the Ipswich Stream Team for a paddle through one of the least developed sections of the river. The trip will end at our headquarters in time for the Annual Dock Opening Celebration! Please bring your own boat and pfd and RSVP to [cingelfinger@ipswichriver.org](mailto:cingelfinger@ipswichriver.org) for details on shuttling boats.

**Edible Plant Walk:** Tuesday, May 20: 6-8 pm, Hathaway Acres at the corner of Evans and Draper Drives, Wilmington. Join Russ Cohen, expert forager and author of "Wild Plants I Have Known... and Eaten", for a ramble through conservation land in Wilmington to learn about the comestible virtues of at least a dozen species of edible wild plants. Sponsored by Wilmington Public Library.

**The Ipswich River – Lifeblood of Our Communities:** Wednesday, May 21: 7-8 pm, Hamilton-Wenhan Library, 14 Union St., South Hamilton. Wayne Castonguay, our Executive Director, will discuss the importance of the river to Hamilton, Wenham and surrounding communities with a focus on history, ecology and our drinking water supply, and lead a discussion about the major issues facing the river today.

**Ipswich River Birding Festival:** Saturday and Sunday, May 31 and June 1. Celebrate the Ipswich River and the start of Rivers Month with a series of bird walks happening up and down the Ipswich River this weekend. Learn about the amazing bird diversity in the watershed from local bird experts and visit birding hotspots. Please see our website for walk times and locations.

**Essex National Heritage Photo Safari:** Saturday, June 7: 8 am-12 pm Riverbend, 143 County Road, Ipswich. Equipped with all the latest camera gear from Tamron, provided by Hunt's Photo & Video, and personally coached by Hunt's technical experts and professional photographers, capture the gardens, trails and wildlife along the Ipswich River at Riverbend! Reservations required. Essex Heritage & Ipswich River Watershed Association Members \$35; Non-Members \$45. Tickets available at [essexheritage.org](http://essexheritage.org).

**Paddle the River in Middleton:** Saturday, June 14: 8:30 am-12:30 pm. Join local paddling experts from the Middleton Stream Team for a river adventure from Farnsworth Landing at Route 114 to Peabody St. Please bring your own boat, pfd, lunch and water. RSVP to [cingelfinger@ipswichriver.org](mailto:cingelfinger@ipswichriver.org).



# THE VOICE

OF THE RIVER



## & 2013 ANNUAL REPORT

### Free Our Rivers by Brian Kelder, Restoration Program Manager



*Ipswich River staff and Summer Intern Shannon Gentile gather at the South Middleton Dam on the Ipswich River. The 9-foot dam, which has blocked migration movement of many fish species for over a century, is now slated for removal.*

This has been a monumental year for our burgeoning river restoration program. Thanks to our members and partners, we have reached a major milestone towards our long standing goal to free our rivers from the damaging impacts of dams and road-stream crossings. We are thrilled to report that we recently received several sources of funding for this work, including our biggest grant ever. When coupled with funding provided by our partners, we will collectively invest nearly two million dollars to improve habitat conditions over the next three years through dam removal and ecologically safe bridge and culvert designs.

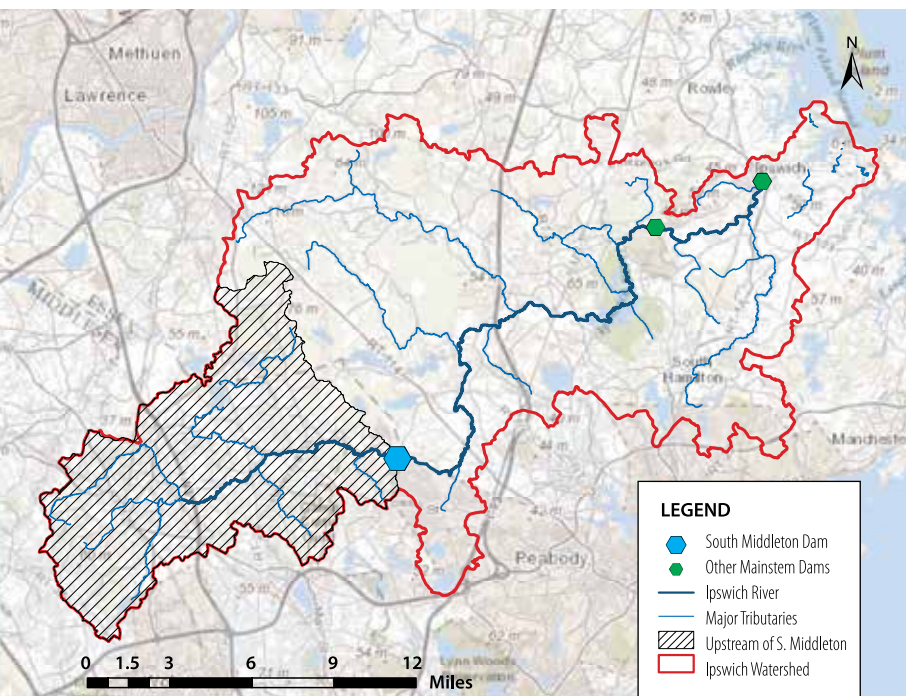
The centerpiece of this effort is the removal of the South Middleton Dam on the Ipswich River, the first ever main-stem dam removal in the region. It will restore migratory fish access to over one quarter of the watershed and provide boating access through this currently inaccessible stretch of the river. Thanks to generous funding from Bostik, Inc, the MA Division of Ecological Restoration (DER), National Fish and Wildlife Foundation, US Department of the Interior, Sheehan Family Foundation, American Rivers and the Cabot Family Trust, engineering and design has begun and the river may be flowing freely here as early as 2016.

As part of the same effort, we will lead a full feasibility study on behalf of the Town of Ipswich and DER at the Ipswich Mills Dam. The study will investigate the complex technical and social issues associated with the

site to inform decision-making and permitting. At the Willowdale Dam, a state of the art fishway is being designed by the US Fish and Wildlife Service and MA Division of Marine Fisheries. Collectively, these projects could restore access to the entire Ipswich River to ocean going diadromous fish for the first time in hundreds of years!

With the National Wildlife Federation and Trout Unlimited, we will dramatically expand our current inventory of the 1500 road-stream crossings and dams to assess each structure's physical condition and vulnerability to failure risk throughout the Parker, Ipswich and Essex River Watersheds. Preliminary designs will be made of the 100 highest priority structures on behalf of the region's 28 communities in an effort to implement the most important restoration opportunities.

River restoration can be a slow process as proponents work to navigate the complexities of each project. The good news is that once projects are implemented, the rivers often heal very quickly. We saw this with our first ever dam removal project two years ago at Curtis Pond. With your continued support and engagement, we will see dramatic improvement in our rivers soon!



*As the hatched area shows, approximately 28% of the Ipswich River watershed is upstream of the South Middleton Dam. Removal of the dam is expected to restore 56 miles of river and tributary habitat, one of the largest river connectivity opportunities in the state.*





## What a Year!

As I look back over the last year, all I can say is wow! As outlined in this issue, the successes and milestones we've achieved, together is nothing short of amazing, and this year will undoubtedly go down as one of our most significant years in our organization's 37-year history. Since just last spring, we've more than doubled our membership, initiated projects at all three mainstem dams on the River, received the three largest grants in our history, added more land to our Riverbend headquarters, increased the assets of our organization by nearly a half million dollars and culminated a 20-year long effort to improve the state's water withdrawal regulations – wow!

Even more importantly, more of you rolled up your sleeves to protect the river than ever before. Together, we significantly increased the number of volunteers, provided many more events, partnered with more groups and expanded our intern and apprenticeship program. All of this was made possible by people like you who care deeply about our river and communities. With your continued support and involvement, next year will be even better than this year!

*WAYNE*

Wayne Castonguay  
Executive Director

## Voice of the River Swells by 580!

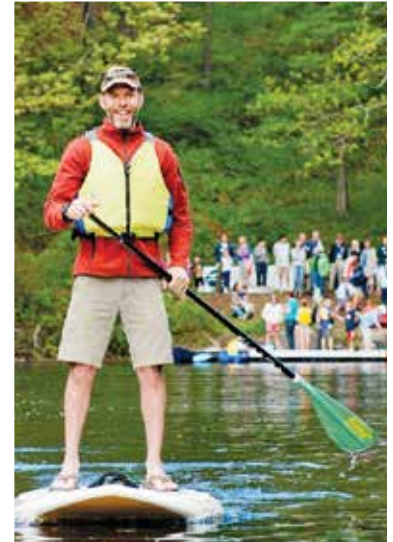
"We are long-time paddlers on the Ipswich River and just never got around to joining before last year, when we heard there was a major membership challenge going on. It was time to show our interest and support to this fabulous local environmental organization." "I was voting in favor of Wayne when I joined; he's great!" "Becoming a member helps me get out on the river, connect with nature and refresh my spirit. It's the best!"

Welcome to these 3 new members and the other 577 people who became members of Ipswich River Watershed in the last 12 months. Thank you so much!

Members are the backbone of this organization. You provide invaluable financial and moral support, and clout with public officials. Now the voice of the river is 580 voices stronger!

It's not too late! If you are not currently a member, please join us at [ipswichriver.org](http://ipswichriver.org). Encourage a friend, neighbor or fellow river enthusiast to join you in being a member. Members receive tips on how to save time, money and water; invitations to special events, river trips and workshops; quarterly newsletters, free members-only use of our canoes and kayaks, and the great feeling that comes from keeping our local waters clean and safe. The more, the merrier!

In June 2013, aka River Month, we began the biggest membership drive in our history. In 12 months, we reached out to 20,000 households asking them to become members and help protect the river. We are forever grateful to the EnTrust Fund for matching each new membership gift dollar for dollar and funding the most successful membership drive in our history.



More than 580 people join Geoff in standing up for clean, safe water and becoming members of Ipswich River Watershed in our biggest membership drive ever. Thank you so much!  
Photo: N. Whitten

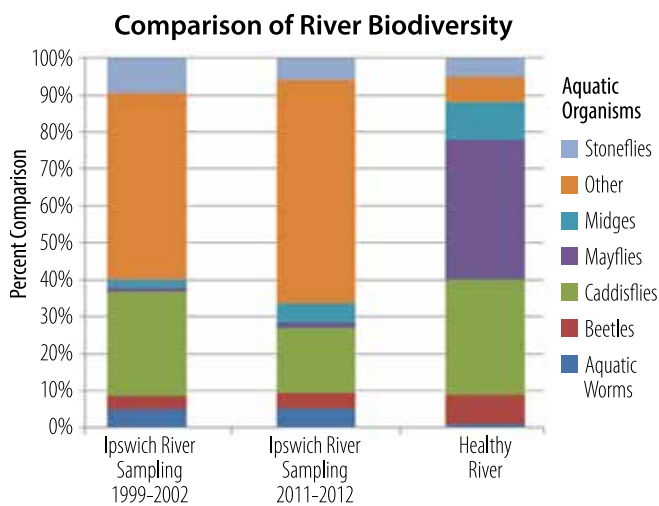


Mike Deleo, Wayne Castonguay, Bob and Cathy Gravino, Umesh Bhujji (left to right), Martha Campbell, David Little and Deb Logan all donated to the Kayak Fund, and we bought a Zydeco Dagger kayak to add to our growing fleet. Mike says, "It's a win-win. I get to go for a paddle on my lunch hour, and other people get to enjoy the river too." Thanks, Mike, for kickstarting the fund!



## How is the River Doing?

First the good news. Thanks largely due to the closing of wells in Reading in 2006, the mainstem of the River has not dried up since and water withdrawals overall continue to trend downward. Water quality continues to improve in the River's lower reaches as exemplified by the million dollars' worth of clams harvested from the estuary over the last two years. However, excessive withdrawals still cause several tributaries to go dry most years and the heavily developed headwaters of the river in Wilmington and North Reading show more signs of impairment compared to the rest of the watershed. In 2013, our RiverWatch monitoring volunteers found oxygen levels below EPA standards at 20 out of 32 sites along the mainstem and tributaries including all ten sites from Wilmington through North Reading.



*Mayflies should be 40% of the aquatic organisms in a healthy river (purple, right column), but they are just a tad in the Ipswich, as the thin purple lines show.*

Our biodiversity study also shows that our river is impaired and that we are still losing species diversity. The number and types of aquatic insects within the entire watershed are below what should be expected in our river. Our macroinvertebrate samples show an increase in the abundance of other organisms that can tolerate changes in water quality and low abundance of aquatic insects, such as Stoneflies and Mayflies, which are particularly sensitive to changes in water quality. Our goal is to reverse these downward trends and with your continued help and support, we will! Many thanks to our RiverWatch volunteers for tracking river health in snow, sleet, rain, heat and drought! Visit [ipswichriver.org/riverwatch](http://ipswichriver.org/riverwatch) for more.

*Hadley, Stella and Abby are all smiles on our dock. We are in the solutions business; we doggedly come up with solutions for the river's problems. Take heart, we are in the joy business, too! Photo: N Whitten*

## Still Working Hard to Protect Our River From Going Dry

The Ipswich River Watershed Association was founded in 1977 primarily to serve as an advocacy organization to protect our river from overuse. At that time, we were already seeing the negative effects of excessive water withdrawals which have been exacerbated due to the explosive growth in suburban development since that time. The end result was the dubious recognition of being declared one of the most endangered rivers in the country by American Rivers in 2003. Within this backdrop and by necessity, our small organization played a major role advocating for new statewide water withdrawal regulations which culminated in the proposed Massachusetts Sustainable Water Initiative (SWMI), expected to be finalized by the end of the year.

As most of you are aware, we are extremely disappointed in the SWMI Framework and its draft regulations because it essentially continues the exemption for most withdrawals in the Ipswich River from any regulation and grandfathers existing levels of use before the new regulations even kick in. Since we know that the river cannot even accommodate existing levels of withdrawals without severe damage to the river, how can this be considered sustainable water management? Thanks to all of you who helped in this fight and testified at the public hearings and submitted comments for the July 10 deadline. We sincerely hope that the state will take one final look and improve the regulations by addressing these exemptions before they are finalized.

With or without SWMI, we are doing everything in our power to reduce the amount of water withdrawn from our river, particularly in summer. As one of the 3 environmental representatives on the Governor's Water Management Act Advisory Committee and the State's Water Conservation Standards Working Group, we are working to strengthen all other aspects of the way the State manages our water resources. We continue to use all the tools available including working directly with cities and towns to reduce water consumption through conservation, leak repair and exploring less harmful alternative supplies which are readily available to all of our communities. And, we continue to explore legal avenues if they become necessary to protect our river.

We have conclusively demonstrated that we have enough water for both people and nature if managed wisely. All we want is for the State regulations to encourage sustainable water management in all of our communities and not just a few. Is that too much to ask?



## Volunteer Power Protects Our River

Whatever your special talent, we've got a way for you to protect your hometown river.

Volunteers monitor water quality, pull invasive plants, plant native shrubs, build trails, count fish, enter data, prepare mailings, replace culverts, guide paddles and clean-up the river – to give just a few examples. In 2013, over 60 RiverWatch volunteers contributed more than 300 hours monitoring the river. Fish count volunteers contributed more than 100 hours tracking the status of the river herring population. Altogether 246 people volunteered this year – wow!

Together with our small staff (the equivalent of 4 full-time employees), volunteers are the strength of the organization and the only way we can have the impact we do.

We are continually inspired by the dedication and commitment of the many volunteers who choose to help the river. Please contact us to find out how you can make a difference. We consider each inquiry to find out how best to match the skill and talents of an interested individual with available needs. By working together, we increase our power and build an effective watershed community!



Ryan O'Donnell, Ed Crowley and other volunteers clear tires, crates and other debris from nearly 3 miles of river during the 24th annual river cleanup in North Reading. Photo: G. Snyder

## Ipswich River Intern & Apprenticeship Program Shapes Future Leaders

Each year, we eagerly anticipate the arrival of summer when student interns join us to assist with projects and learn new skills. We welcome their enthusiasm and value the many contributions made by these outstanding individuals. This year, we are excited to create a new Environmental Apprenticeship Program which employs Field Crew Leaders to plan and direct summer projects.

We created a transformational Environmental Apprenticeship Program for college students to support the next generation of environmental stewards. There are limited opportunities for young adults to gain the hands on technical and management experience to supplement their college degrees and prepare them to enter the field as a professional and/or environmental advocate. The paid Apprenticeship Program provides opportunities for students to gain real world experience and increases the number of young leaders in our field.

We are grateful for the funding we received to make this program possible. The ALCES Foundation provided a generous grant and many people made donations to support this program in honor of Kerry Mackin as part of her retirement celebration. Please let us know if you would like to provide financial support or know of candidates for this exciting new program!



We are training the next generation of environmental stewards. Emily Korman and Cassie Tragert (middle and right) are directing field work as part of our new Environmental Apprentices Program. Shannon Gentile (left) is assisting the team as a volunteer intern. All are gaining valuable on-the-ground experience.



IPSWICH RIVER WATERSHED ASSOCIATION  
*The Voice of the River*

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You may make check payable to IRWA and mail to: **IRWA, PO Box 576, Ipswich, MA 01938-0576** or click "Donate Now" at [www.ipswichriver.org](http://www.ipswichriver.org). **Thank you for your support!**





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*The Voice of the River*

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## Calendar

RSVP for all events to [cingelfinger@ipswichriver.org](mailto:cingelfinger@ipswichriver.org) or call 978-412-8200

### **Ipswich River Paddle at Riverbend: Partner event with Essex County Greenbelt**

Sunday, August 24: 1 - 3 pm, 143 County Road, Ipswich

This is a beginner paddle on pond like conditions open to all ages and abilities. We will visit a historic dam and mill buildings, the fish ladder and discuss restoration plans. Boats supplied as needed.

### **Ipswich River Party & Annual Meeting**

**Save the Date:** Saturday, September 6. Stay tuned for details.

### **Trails and Sails Event: Wenham Canal Walk**

Sunday, September 21: 2 -4 pm

Meet at the parking lot at the end of a dirt road just east of Old Town Way off Cherry St in Wenham. Discover a local hidden gem - the 2 mile long Grand Wenham Canal, or Salem-Beverly Canal, was built in 1917 and at that time was one of America's largest water works projects. Learn about this incredible recreational resource (for hikers and paddlers) and the largest water supply system in our region.

### **Estuary Paddle** Sunday, September 28: 1:30 - 3:30 pm, Pavilion Beach, Little Neck Road, Ipswich

Join us for an exploration of the Ipswich River Estuary. We begin and end at Pavilion Beach, riding the tide in and out of the mouth of the river. Please bring your own boat.

Please join us at our River Party & Annual Meeting to welcome new members and celebrate the river together at a remarkable private estate on the Ipswich River. Details to come.

Fall 2014

# THE VOICE OF THE RIVER



## New Water Regulations a Major Disappointment by Wayne Castonguay, Executive Director

After many years of work to modernize the State's water withdrawal regulations, the long-awaited final regulations as a result of Sustainable Water Management Initiative (SWMI) were issued on October 9, 2014. Unfortunately, despite several legal victories and repeated assurances from state officials that SWMI would improve the situation for the Ipswich River, the final regulations exempt over 85% of the withdrawals from any regulation at all despite the devastating well-documented impacts these withdrawals are having on our river. How can this be?

When the SWMI process began nearly 5 years ago, we asked for a few simple things which the state originally agreed to: that the definition of Safe Yield (the underlying legal principal in the Water Management Act) include environmental considerations, that all withdrawals comply with the state's basic Water Conservation Standards and that water suppliers be required to consider less damaging alternatives where feasible. Unfortunately, none of this happened. Why? Simply put, politics.

Despite being one of the most well documented flow-depleted rivers in the state, most of our communities that rely on the river don't have any conservation measures at all! Even today, we still have towns that lose over 40% of the water they take out of the river through leaky pipes and towns that use more than double the amount of water as the statewide average. Ultimately, all we are asking for is for our communities to waste less water and for everyone to conserve during dry weather. These measures, if enacted, would go a long way to improving our river. Is that too much to ask?



*The new regulations will continue to allow Martin's Brook and other major tributaries to be pumped dry so they can be used by ATVs as shown in this photo taken in early October in North Reading. Photo: S. Sullivan*

This outcome is a shame since several communities have shown us how easy it is to reduce water consumption, and we have the science to conclusively demonstrate that we have enough water for both people and nature well into the future if managed wisely. Now that we won't have regulations to help us, it's time to dramatically increase the use of the non-regulatory tools in our tool box to reduce waste and lower water consumption. To view the new regulations, responses to comments and supporting materials visit: <http://www.mass.gov/eea/agencies/massdep/water/regulations/wma-swmi-reg-reform-documents.html>



## Confused Beavers in North Reading

This photo of a new beaver dam (looking upstream) was taken in early October on Martin's Brook in North Reading. It looks just like a normal beaver dam doesn't it (backed up water on one side and much less water on the other)? However, the backed up water is on the downstream side and the dry river bed is on the upstream side of the dam. What could explain that? This summer and fall were very dry and as a result, Martin's Brook was especially hard hit from water withdrawals from North Reading and Wilmington town wells and other activities in the watershed. These wells collectively withdraw over 2 million gallons a day from the Martin's Brook aquifer, which normally would sustain the Brook's flow during dry periods. As a result, when combined with other land uses upstream, the Brook flowed backwards during this dry spell due to these withdrawals apparently confusing the beavers whose instinct is to trap water based on flow.





## Survey Work Moves Dam Projects Ahead

This summer, a survey crew measured water and sediment depths upstream of the Ipswich Mills Dam to develop a detailed map of the river bottom and get a preliminary understanding of how much sediment is caught behind the dam. This work is the final task under the preliminary dam removal feasibility study (<http://www.ipswichriver.org/projects-2/ipswich-mills-dam/>) that the Town of Ipswich began conducting in 2011.

### Time For A Plan B!

After nearly 5 years, dozens of meetings, multiple strategy sessions, reams of comment letters and an uncountable number of hours, the SWMI process is finally over. Although we got virtually nothing of what we wanted, the fight has just begun. Although we invested a tremendous amount in the SWMI process and had high hopes for a better outcome, we still have many tools available to us to reduce the amount of water removed from the river: we can appeal more directly to the water suppliers and their constituents, better mobilize our committed and growing network of supporters, use our outreach tools more effectively, utilize other regulations to reduce impacts, better educate the public and, if necessary, pursue legal action.

After all, we are on the right side of the issue: how can anyone continue to argue in favor of needlessly wasting water at the expense of all the other things that the river provides to society – particularly when there are less-damaging alternative sources of water readily available to all of our communities? We have been incredibly buoyed by your support throughout the process. Our small river community was actively engaged in the SWMI process and provided more public input than any other watershed in the state. I cannot thank all of you enough for your ongoing commitment. Despite our disappointment, your demonstrated support has re-energized the effort and it gives us great hope for the future. Let's continue to roll up our sleeves as we enter the next phase in the battle to protect our river. Together, we'll get there!

*WAYNE*

Wayne Castonguay  
Executive Director



*The survey crew from Norde-East Survey wades across the Ipswich Mills Dam spillway to make final depth and sediment measurements at the crest of the dam. They also recorded depth soundings in the human-made pond upstream of the Ipswich Mills Dam in Ipswich.*

The study provides important information to help identify the next steps as the Town considers whether to maintain or remove the dam. This work has been made possible by a grant from the Conservation Law Foundation and the NOAA Restoration Center as well as numerous contributions of time and services from a variety of partners. Thanks to a recent federal grant award to the Massachusetts Division of Ecological Restoration, funding will be available to begin a comprehensive dam removal feasibility study in 2015.

The river restoration project at the South Middleton Dam is on track as well. Thanks to funding from the Massachusetts Environmental Trust, American Rivers, Massachusetts Division of Ecological Restoration and others, engineering and design work is underway and the project will be ready to begin the permitting process in summer 2015 or earlier.

Once this work is done, we will be ready to ramp up for the South Middleton Dam to be removed in 2016 with the help of additional funds from Bostik, Inc. and the National Fish and Wildlife Foundation.



*Nick Nelson (Inter-Fluve, Inc.) wades into the Ipswich River upstream of the South Middleton Dam to inspect the aging dam. The inspection is part of a detailed survey of the dam and the river necessary to develop the construction plans for the dam's removal in 2016.*

# River Party: A Night to Remember!

Over 120 intrepid river lovers braved the elements to gather at Groton House, a truly remarkable private estate overlooking the Ipswich River, to celebrate the Ipswich River, our 580(!) new members and all we accomplish together. With an unbeatable location, ample food and drinks, great company, sheets of rain, high winds and bolts of lightning, this was a truly memorable party.

Special thanks to the Winthrop Family, our hosts for the evening. Fred Winthrop shared his thoughts about growing up at Groton House along the river. President Peter Phippen conducted a record-short Annual Meeting (5 minutes!). Executive Director Wayne Castonguay made brief remarks about recent successes and efforts to free our rivers and streams. Board President Peter Phippen auctioned off the first paddle down the free river, an Ipswich River logo birdbath and blocks of granite representing the Middleton Dam (which will be removed, perhaps as soon as 2016), freeing up 56 river miles. Thanks to your generous support, we raised over \$9,000 (net proceeds).

It's not too late to be a founding member of the Free our Rivers & Streams Campaign. Your gift of \$100 or more will be matched by a generous anonymous donor and you will receive one of only 50 Ipswich River granite blocks (20 left!), hand-painted by Susie Winthrop and River Party volunteers. To make a donation online now, click on the donate button at [ipswichriver.org](http://ipswichriver.org) and select River Party/Free our Rivers & Streams from the drop down menu, call, or send a check.

## Welcome to the Board!

The Ipswich River Watershed Association has elected three new members to its Board of Directors.

Erica Fuller is an attorney for Earthjustice, with a specialty in water-related issues. Since Erica joined Earthjustice, she has litigated to protect and rebuild river herring and shad populations and to restore over-fished ground fish populations. Before returning to law school to follow her passion for environmental law, Erica practiced veterinary medicine specializing in horses. She is a resident of Ipswich.

Dick Jacobson has had a long career in corporate counsel roles, specializing in such issues as corporate governance and regulatory compliance. Now retired, he plans to devote his considerable talents to the environment. He is an Ipswich resident.

Greg Murrer has been active in local water-related issues, chairing the Boxford Lakes, Ponds, and Stream Committee, and successfully preparing and submitting grants for stream restoration projects. He is a practicing attorney with Exemplar LLC in Boston, specializing in corporate law, including mergers and acquisitions, litigation management, and regulatory law. He is a Boxford resident.

*Please join us in welcoming three new Board members, Dick Jacobson, Erica Fuller and Greg Murrer (left to right).*



**IPSWICH RIVER WATERSHED ASSOCIATION**  
*The Voice of the River*

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*Wayne Castonguay auctions a granite block. Over 60 people became founding members of the Free our Rivers & Streams Campaign. Thank you!*



*New Board member Erica Fuller (left) gathers with Brad Clark and Phyllis Greene to celebrate the river, our 580(!) new members and all we accomplish together. See more River Party photos, kindly taken by volunteer John LeJeune, on our Facebook page.*








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## Jim MacDougall:

## Ultimate River Hero!

After almost 30 year's involvement in most every capacity, Jim MacDougall has decided to retire from the Ipswich River Watershed Association. It's impossible to measure what Jim has meant to the organization over the years but the Ipswich River watershed is without question a better place because of Jim.

Jim steered this organization through times of great change from our early days when he initiated our water quality monitoring program and recruited many dedicated volunteers to more recently when he helped establish and manage our new 23-acre headquarters on the river. He began the macroinvertebrate monitoring program and did much of the writing for several of our renowned publications such as "Bugs, Etc.," the first and only guide of its kind. He was a board member and more recently part of the staff team as our Special Projects Director.

We have been so fortunate to benefit from one of Massachusetts' most well-known naturalists and leading advocates for the Ipswich River. Jim's service as Essex County Greenbelt's Land Manager and participation in numerous local groups including the Essex County Ornithological Club, Topsfield Conservation Commission, Trout Unlimited and Topsfield Rail Trail Committee significantly increased our community and peer group connections.

According to former Executive Director Kerry Mackin who worked with Jim for more than 20 years, "Jim excels at everything he does and gladly accepted any task, large or small, to help the river." When we think of Jim, one word comes to mind: synergy. He excels at bringing people together and the teamwork he facilitates produces better results. It is a bittersweet moment, saying farewell to a friend and coworker who means so much. However, we are very happy that Jim now has more time to devote to farming his beloved Nutter Farm in Topsfield, nurturing his Biodiversity Consulting company and enjoying old and new interests. On behalf of the river, thank you Jim!

*Jim MacDougall tests new field equipment at Riverbend. A gifted naturalist with infectious enthusiasm, Jim excels at synergy. He brings people together and the teamwork he facilitates produces far better results and a lot more fun.*