

THE VOICE OF THE RIVER

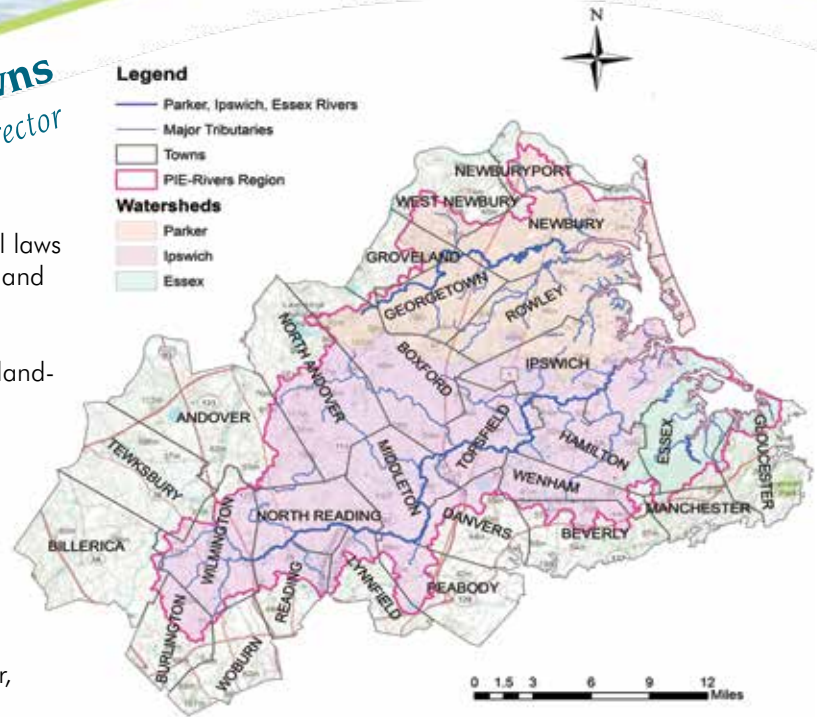


New Program Helps Cities and Towns *by Wayne Castonguay, Executive Director*

At no time since the landmark state and federal environmental laws of the 1970's and 80's have so many new water-related laws and regulations been passed. Just in the last two years, major new requirements have been enacted in the areas of wastewater, stormwater, water withdrawals, dams, road-stream crossings, land-use and many others. Most of these require new actions from our cities and towns at a time when municipal staffs and budgets are being stretched like never before. Fortunately, most of these new mandates have been coupled with sources of new funding to help towns comply with the new rules.

Thanks to funding from the Jesse B. Cox Foundation and the Hurricane Sandy Grants Program, we are pleased to announce a new initiative to provide technical and financial assistance to the 28 municipalities we work with in the Parker, Ipswich and Essex Rivers region. The primary purpose of this program is to provide towns with tools and services that help make compliance, infrastructure improvements and environmental stewardship cheaper and easier. To help lead this effort, we have hired our first ever full time Environmental Planner, Kristen Grubbs.

We've said for many years that the towns literally hold the fate of the river in their hands. We have long advocated for many of these regulatory changes to reduce the negative impacts of human activities on the river and are pleased that we have these new tools to help prompt action. Now, with the new rules and funding in place there are more opportunities than ever before to work together to secure clean and healthy rivers.



Our new Municipal Services Program will support the 28 cities and towns we work with in these watersheds. The Parker-Ipswich-Essex (PIE) Rivers region includes 3 watersheds and 28 towns that fall within all or in part within the 257 square mile area.

For more information on the Municipal Services Program please contact Kristen Grubbs (kgrubbs@ipswichriver.org, 978-412-8200) or visit www.pie-rivers.org/resources/municipal-services. We look forward to working with you and your town.



Welcome Kristen Grubbs, Our New Environmental Planner

Kristen has nearly 20 years of experience working for both non-profit and governmental organizations. She has a graduate degree in environmental studies from Antioch University New England and most recently worked for six years as the open space planner for the Town of Ipswich. She has also worked as the Conservation Projects Manager for the Southeast Land Trust of New Hampshire in Exeter, NH, as the Executive Director for the Seacoast Land Trust in Portsmouth, NH, and as a Land Protection Project Manager for the Monadnock Conservancy in Keene, NH. "We are extremely excited to welcome Kristen to our team," says Executive Director Wayne Castonguay. "Kristen's combination of skills and experience working with towns will be a real asset towards achieving our goal to protect and restore our rivers."



It's All About the Towns

For many years, the biggest problems facing our waterways were issues such as industrial pollution, raw sewage discharges, clear cutting of forests and wholesale harvesting of fish and wildlife. Thanks to environmental laws and the hard work of concerned citizens, these types of activities have largely been eliminated from our watershed. Unfortunately, these obvious issues have been replaced by more subtle problems created by the daily activities of all of us such as excessive water withdrawals, stormwater runoff, road salt application, failed septic systems and new development – all of which are controlled by our cities and towns.

Although there are federal and state laws governing the protection of water resources, virtually all activities which negatively impact our rivers are controlled by municipal staff and volunteers who serve on town boards. In other words, local Planning Boards, Conservation Commissions, Zoning Boards, Boards of Health, Select Boards, Water & Sewer Commissions, Highway Boards and their staff largely determine the health of our waterways.

The Parker, Ipswich and Essex River watersheds in which we work contain all or parts of 28 cities and towns, and each of them has the fate of the rivers in their hands. Unfortunately, municipalities often do not have the capacity or expertise to effectively manage society's collective impacts on our rivers, and with today's increasingly tight local budgets, this will be even more challenging going forward.

Our Municipal Services Program will provide an important new resource to cities and towns and through working together, we will restore and protect our rivers for our children and theirs.

WAYNE

Wayne Castonguay
Executive Director

New 20 Year Water Withdrawal Permits Up For Renewal in 2015

Anyone wishing to withdraw more than 100,000 gallons of water per day from the environment must obtain a permit under the Massachusetts Water Management Act (WMA) which was originally enacted in 1986. The permits are valid for a 20 year period and are reviewed every five years. This round, permittees will be required to meet new requirements resulting from the Sustainable Water Management Initiative (SWMI) which was enacted late last year. The renewal process for all permittees in the Ipswich River Basin will begin at an official kick off meeting for all interested parties on March 24 at Bradley Palmer State Park in Hamilton. At the meeting, the state will present the new permitting requirements and summarize the 9 month process. The renewal process is the primary opportunity for watershed organizations and others to weigh in and seek to ensure that the permit conditions are as protective of the environment as possible.

During the last permit renewal cycle, the Ipswich River Watershed Association and local citizens officially appealed all municipal withdrawal permits since they did not include conditions that adequately protected the river. We won our appeals in every case which has since resulted in the Ipswich River having among the strongest permits in the state. We will certainly do everything in our power to ensure that the new permits are as strong as possible. Unfortunately, more than 85% of the water withdrawn from the Ipswich River Basin is exempt from any permit conditions since all withdrawals at the time that the WMA was passed in 1986 were grandfathered. This said, we are still very concerned about the remaining 15% since it consists of 100% groundwater withdrawals which have an inordinate level of impact to the areas of these withdrawals. For example, the towns of Wenham and Hamilton wells are located in the Idelwild Brook watershed which has the dubious distinction of being one of the most flow depleted sub-watershed in the state. This once highly productive trout stream and herring run has been eliminated because it is pumped dry for over 6 months during most years.

Educating 5th Graders to Keep Water Clean

Cynthia Ingelfinger, our Outreach Coordinator, runs a hands-on model explaining the concepts of stormwater runoff, groundwater pollution, water conservation and the water cycle to 5th graders at Atkinson Elementary in North Andover as part of our Greenscapes North Shore's "Keeping Water Clean" educational program. The Greenscapes program is a regional coalition with Ipswich River Watershed Association, Eight Towns and the Great Marsh and Salem Sound Coastwatch which educates towns, residents and landscapers on how to care for their yards and gardens using less water and chemicals. Encourage your local town officials to sign up for Greenscapes and help bring this educational program to your schools. www.greenscapes.org



Helping Ipswich Save Shellfish Beds

The shellfish industry is vital to the economy and culture of Ipswich and the region. With an annual harvest from the Ipswich River worth nearly \$1 million, the livelihoods of many families are at risk given declining trends in water quality due to bacterial contamination.

Ongoing sampling by the Mass. Division of Marine Fisheries (DMF) has indicated a source of bacterial contamination from downtown Ipswich that is threatening the shellfish beds in the river. Currently every time it rains one quarter of an inch, the shellfish beds have to be closed, due to unsafe levels of bacteria that can taint the shellfish. If the new source is not addressed, shellfishing will be closed at all times. This year, we will be working with the town to isolate the source so that it can be corrected and the shellfish beds can remain open.

Beginning in 2000, the shellfish beds in the Ipswich River Estuary were reopened for the first time in 100 years as a result of hard work by the town to eliminate sewage contamination. Sampling by DMF has discovered a new source in a restricted area of the downtown from between the point just above the Ipswich Mills dam to County Rd. The water quality of the river itself is excellent as it enters downtown, leaving a few small tributaries as likely sources. Farley Brook has historically been the main problem in this area, but recent testing has been inconclusive. Saltonstall Brook and Kimball Brook are other possible sources that will require investigation.

We will work with volunteers and the town over the coming months to isolate the exact source so corrective measures can take place. In the meantime, we can all do our part to minimize sources of bacterial contamination that affect the river. Dog owners should always clean up after their pets so the waste does not wash into catch basins and ultimately the river. Also, do not feed waterfowl. Ducks fed by humans congregate and produce large amounts of waste that is a known source of bacterial pollution.

Video Camera to Aid Herring Count

We are excited to announce that we are expanding our annual herring count with the addition of video monitoring equipment. A video camera will be placed underwater at the top of the fish ladder to record fish passage activity during the herring count (April 1 to early June). River herring were once abundant in many coastal rivers like the Ipswich, but have been driven to low numbers largely due to barriers blocking access to historic spawning grounds and overharvesting at sea by commercial fisheries. River herring are an important part of the food web, so restoration of this fishery is an important goal.

Since 1999, volunteers have performed over 5,000, ten minute visual counts at the Ipswich Mills dam fish ladder. Thanks to the outpouring of community support for this program we have good run size estimates, but there are still many unanswered questions. For example, visual counts take place during the day; are there any herring migrating at night? Could the population be larger than we think? Monitors are trained to recognize and count river herring, but what other species of fish are using the fish ladder?

This project was made possible by the Norcross Wildlife Foundation and the Quebec Labrador Foundation. Thank you to Ben Gahagan of the Division of Marine Fisheries for his technical assistance in choosing the equipment and designing the setup and to Dick Gilbert for allowing us to power the camera from a plug on his property near the dam.



Ryan O'Donnell places an optical brightener sampler in Saltonstall Brook. We will work with the town in coming months to identify a source of bacterial pollution that threatens the shellfish beds in Ipswich Bay.

The new camera at the Ipswich Mills fish ladder will merely aid the visual counts done by volunteers and does not replace the essential work of Christine Seibert (pictured at the fish ladder below) and other volunteer monitors.



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. **Thank you for your support!**



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Winter 2015 Calendar

Fish Count Training and River Herring Lecture

Tuesday March 10: 7 – 9 pm

143 County Road, Ipswich, MA

Training for current and new fish count volunteers. Ben Gahagan of the MA Division of Marine Fisheries will also be here talking about the status and management of river herring around the state. All are welcome and please bring friends! Please RSVP: fishcount@gmail.com

RiverWatch Trainings

Saturday March 7: 10 am – 12 pm

143 County Road, Ipswich

Saturday March 14: 10 am – 12 pm

Materra Cabin, 1481 Main St., Reading

Saturday March 21: 10 am – 12 pm

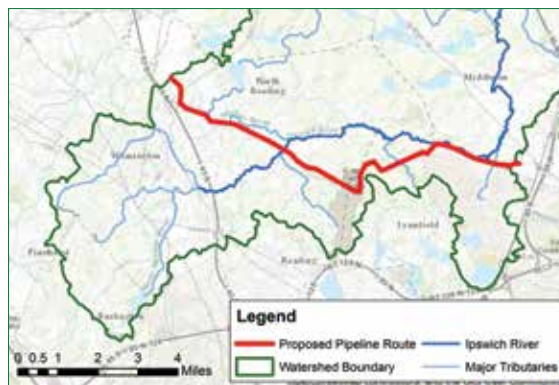
Lura Watkins Museum, 9 Pleasant St., Middleton

Join us for the annual training for water quality volunteers (choose the most convenient). Training is required for all returning volunteer monitors. RSVP to Ryan at rodonnell@ipswichriver.org or call 978-412-8200.

Save the Date: May 17: 12:30 – 3:30 pm

Annual Meeting & New River Landing Opening

Major New Gas Pipeline to Cross River



A portion of the Kinder Morgan gas pipeline proposed to convey gas from Pennsylvania to Massachusetts is planned to be built through the Ipswich River Watershed as early as 2017. The so-called “Lynnfield Lateral” between Dracut and Danvers will have devastating

short and long term impacts to the river. All in all, more than 11 miles of the pipeline will be built within the watershed, cross 10 tributary streams and stretch for nearly two miles through the riverfront area. We are very concerned about both the construction and long term impacts of the conversion of mostly natural areas to a new 50 foot permanently maintained swath through forest, wetlands and riverfront area. We are following this issue closely and working with municipalities, com roject and develop action plans. For more information on the project, go to ofrackedgasinmass.org. We will keep you posted on ways to participate at the appropriate time through our website, facebook page and e-news.

Spring 2015

THE VOICE

OF THE RIVER

& 2014 ANNUAL REPORT



IPSWICH RIVER
WATERSHED ASSOCIATION

Helping Everyone Enjoy Our Beautiful River
by Cynthia Ingelfinger, Outreach Coordinator

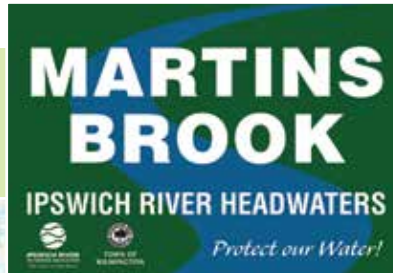
The Ipswich River is one of the region's favorite outdoor destinations. However, only a small percentage of the 350,000 people and businesses that depend on the river every day have ever paddled on it or fished its shores! In an effort to change this dynamic, we are working with our partners to implement several new outreach measures. Our goals are to improve the visitor experience, help build awareness, and engage as many new people as possible in river protection and stewardship.

Building on recent work to upgrade boat landings throughout the watershed, we are now establishing a network of educational kiosks at many public access points along the river. A 2011 community service project, led by Topsfield Eagle Scout Peter Sacco and the Middleton Stream Team, created six kiosks along the river in Middleton, Topsfield and Hamilton. Thanks to a recent grant from Essex National Heritage, we are redesigning the kiosks and are building more. A new kiosk in the Reading Town Forest will soon be installed with the help of the Town of Reading Trails Committee.



Ipswich River volunteers install the updated kiosk at Rowley Bridge Road Landing in Topsfield. This is the first of what we hope will be a network of educational kiosks at many public access points along the Ipswich River. Match names to these faces on our website blog. Photo: J. Chase

Visit the 8 interpretive kiosks along the river as well as the 7 new road stream crossing signs labeling the Ipswich River and its tributaries in Wilmington. The Martins Brook sign at right is an example of the educational signs we are installing at prominent road crossings in Wilmington.

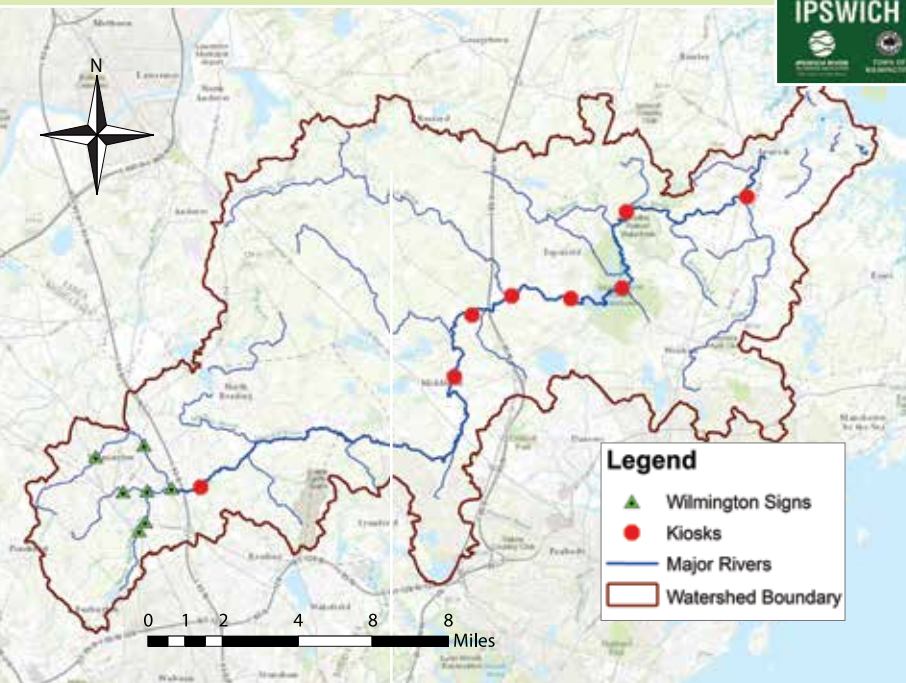


At our Riverbend headquarters in Ipswich, we are installing two new kiosks and three interpretative signs that describe our new public access road with parking area, new trails, and improved canoe landing. Our goal is

to make Riverbend, as well as the entire river, a more popular outdoor environmental educational destination for area youth groups and the general public.

Throughout the watershed, we are installing new educational signs at prominent road crossings to promote awareness of the Ipswich River. With seven new signs in Wilmington this year, this effort will move forward with the help of local communities, placing signs at road crossings in all 14 towns along the river.

It is our belief that the more that people are aware of the river, the more they will want to take care of it.





Partnerships

For such a small organization, we have a big impact. A big reason for our success is our corps of dedicated volunteers, and members like you.

Additionally, our many organizational partners are playing an increasingly important role in our work. While the statement “leveraging partnerships to multiply impact” is becoming almost cliché in our field, we are living proof that it works... and in a big way. By working together, we can collectively achieve much more than we could individually.

We’ve long partnered with a small group of like-minded organizations. Recently, the number of partners we work actively with has increased dramatically. Our Parker-Ipswich-Essex Rivers Partnership (PIE-Rivers), established in 2011, now formally includes 18 organizations, nearly every entity working to restore the Great Marsh and its watershed. This year we are focusing more of our efforts on partnering with municipalities—they largely have the fate of our rivers in their hands. We are fortunate to have several towns as formal partners. (See Boxford story on this page.) Our goal is to work on mutually beneficial projects joining with all 28 municipalities in our region. By offering support to the towns through our new Municipal Services Program, we are confident that river protection can be a worthy goal for all.

WAYNE

Wayne Castonguay
Executive Director



River Happenings in Boxford

The Town of Boxford is well known for its many high quality ponds and streams. Boxford has long valued the protection of these resources, and its top-notch Conservation Commission formed its own Lakes, Ponds, and Streams Committee to look after these valuable community assets. An active member of our Greenscapes coalition (Greenscapes.org), Boxford is also a founding municipal member of the Parker-Ipswich-Essex Rivers Partnership. The Department of Public Works leads the way in the region by proactively undertaking culvert and bridge replacements that meet the state’s new ecological stream crossing standards.

Along with its water resource protection success, Boxford also faces a challenge. Fish Brook, the largest stream in Boxford and one of the major tributaries to the Ipswich River, is under stress. Summertime flows appear to be in decline and the once popular trout fishery has nearly disappeared. In contrast to many other communities, where water usage is flat or even declining, local information suggests that water usage is increasing due to ongoing development and new irrigation wells. Boxford is the only town in the Ipswich River watershed that relies entirely upon private wells for their water supply. As a result, there has been minimal data available on water usage or trends.

This spring, a partnership of concerned river advocates worked together to install a streamflow monitoring gage in Fish Brook. The new gage will help us to answer this question of declining flows, and will provide the town the tools it needs to reverse this trend. By working together, we can secure a bright future for Fish Brook and all the water resources in the community.

Laila Parker and Michelle Craddock from Mass. Division of Ecological Restoration River Instream Flow Stewards (RIFLS) program install a new streamflow monitoring gage on Fish Brook in Boxford. Boxford is a model community in water resource protection.



From left to right, Laila Parker (MA DER), Sam Cleaves (Metropolitan Area Planning Council), Kristen Grubbs, Ross Povenmire (Town of Boxford), Jennifer Hughes (Town of North Andover), David Standley (Ipswich Conservation Commission), Wayne Castonguay, and George Comiskey (Parker River Clean Water Association) attend a meeting of the Pie-Rivers Municipal Engagement subcommittee at our headquarters in Ipswich. This group identifies opportunities and develops strategies to enhance communication with towns and encourage implementation of PIE-Rivers actions.



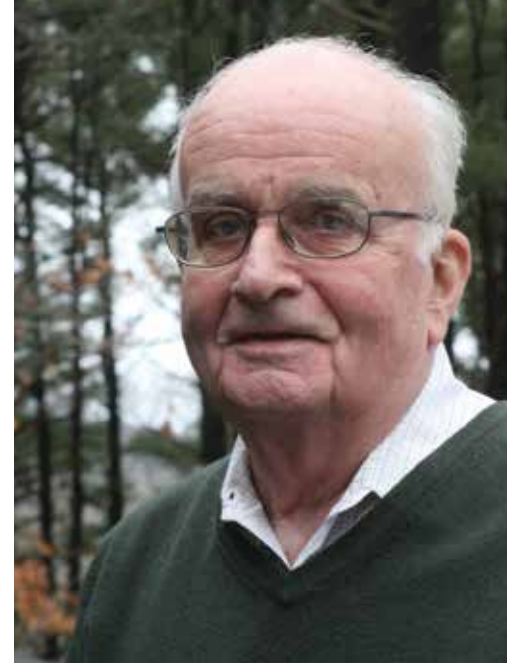
Cam Steward: A River Hero Retires

Cam Steward knows the Ipswich River in ways most of us cannot imagine. His family lived on its banks from 1926 onward. He was born beside it and his present home overlooks it. "It was always just there. We took it for granted. We didn't have special concerns or think about advocacy then. Lots of time was spent in canoes and with fishing rod in hand." Worrying about water pollution crept in years later, when "everybody dumped everything."

Cam became involved in the organization "managing the books" in 1994 and soon became Board Treasurer. It is from that very important role that he retires this spring, after 21 years of working to help the organization reach the stability it enjoys today. Kerry Mackin, our previous Executive Director, who worked with Cam for almost 20 years notes, "Cam has a great sense of the core issues. In regard to advocacy, he was the one who reminded us, 'If we don't do this, no one will.' He was a true partner who helped steer the organization through many challenges, and was always tremendously generous in every way."

As Treasurer, Cam helped guide the organization through major milestones, particularly the acquisition and renovation of our wonderful Riverbend property and simultaneous sale of a second piece of donated property. More recently, Cam has partnered with Executive Director Wayne Castonguay and a growing staff toward our leadership role in new partnerships: PIE-Rivers, stream continuity, dam removal and others. His steady hand and extensive knowledge of management and finance has helped keep the organization secure, and Cam's own unfailing philanthropy have been tremendously important throughout.

Cam attended the Fay School, Groton and Harvard. In 2012, he was thanked for his vision, guidance, and leadership during his 50 years of dedicated service to Fay School (including President of the Board). He is a founder of Kortec, a maker of equipment for producing beverage bottles, with its World Headquarters now located in Rowley, Mass. Says Executive Director Wayne Castonguay, "We remain ever grateful for his service as a lifelong champion of the river. This organization would not be the thriving organization it is today without Cam. The Ipswich River couldn't have a better friend."



Longtime Board Treasurer Cam Steward is retiring after 21 years of dedicated service and support. The Ipswich River couldn't have a better friend. Photo: M. Lasher



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New Membership

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In honor of _____

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WATERSHED ASSOCIATION**

The Voice of the River

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Catch a glimpse of the elusive green heron, and many
other resident and migrating wildlife, when you join one
of our Ipswich River outings! Photo: S. Sullivan



Calendar

From Container Gardens to Rain Gardens

Thursday May 28: 7 – 8 pm ~ Memorial Hall Library, 2 North Main Street, Andover

Want to save on water bills and have lush gorgeous gardens? Come explore how in this fun and lively talk with Demetra of “Gardens of Demetra.” You will leave inspired to expand your gardens beautifully and sustainably.

River Clean Up

Saturday June 6: 8 am – 12 pm ~ Ipswich River Park, Central Street, North Reading

Join us and the Reading/North Reading Stream Team for the annual Ipswich River Clean-up. Volunteers are needed to work on shore or by boat. Bring tools, gloves, and a boat if possible.

Source to Sea Birding Festival

Sunday June 7: 6 am – 2 pm

We are hosting a series of bird walks along the river, from source to sea, incorporating many different habitats! See our website for more details on walk time and locations.

Ipswich River Solstice Paddle

Saturday June 20: 10 am – 12 pm ~ Winthrop Street Bridge off Topsfield Road to Riverbend, 143 County Road, Ipswich

Join members of the Ipswich Stream Team for a paddle through one of the least developed sections of the river. Please bring your own boat, life jacket, and water and RSVP for details on shuttling boats.

Summer 2015

THE VOICE OF THE RIVER



IPSWICH RIVER
WATERSHED ASSOCIATION

River is a Hotbed of Summer Activity by Wayne Castonguay, Executive Director

Never before have so many researchers, students, staff and volunteers descended upon the river in support of this many active research and restoration projects. Thanks in large part to the myriad of projects funded by the National Fish and Wildlife Foundation as part of the Hurricane Sandy Grants Program, the Ipswich River is the focal point for an unprecedented field season.

Upriver, final design and pre-removal monitoring work is occurring at the South Middleton Dam. Nearby, students from the University of Massachusetts are working with area residents in Wilmington, North Reading, Middleton and Topsfield as part of a three-year study to reduce outdoor water use and stormwater contamination. Downriver, engineering contractors are beginning their field work in support of the feasibility study for removal of the Ipswich Mills Dam.

In the estuary, researchers from the Woods Hole Group, Virginia Institute of Marine Science and University of New Orleans are collecting field data in support of the sediment and salinity modeling to examine the impact of sea level rise on the river. Working alongside them are volunteers and local shellfishermen under the leadership of Mass Audubon, the Mass Bays Program and the Town of Ipswich to control three of the most impactful invasive exotic species in the estuary: phragmites, pepperweed and green crab. In the downtown area of Ipswich, staff and volunteers with the help of the Metropolitan Planning Commission are working with the town to scour the riverbank and tributaries to identify sources of sewage and stormwater contamination currently threatening to close the river's million dollar shellfish resource.



Armed with survey rod, machete and Tecnu (essential for washing off poison ivy), our skilled seasonal staff team (from left to right) Kelsey Davison, Aaron Hume and Kayla Dorey lead the charge for the river in the field. Look for them throughout the Ipswich, Parker and Essex River Watersheds as they survey nearly 1,000 road stream crossings this summer.

Led by our seasonal staff team (see photo), volunteers and students from the Student Conservation Association are working throughout the watershed to build upon last year's ecological survey of the region's culverts and bridges to analyze which are most vulnerable to flooding and failure during large storms to inform restoration decision-making. All of this is in addition to our annual long term monitoring projects such as the fish count, macroinvertebrates and Riverwatch, which celebrates its 19th year this summer. We are fortunate to have such an able and enthusiastic team working so hard to protect our river this year.



Ipswich River staff and Student Conservation Association Interns prepare to head out in the field as part of a Trout Unlimited barriers assessment training session at Riverbend. Crews collect measurements at road-stream crossings that helps us determine the structures that are most vulnerable to flooding and failure.



We're in the solutions business. Working with scientists and communities, we come up with solutions for the river's problems. We're in the joy business too. We help people connect with and enjoy the river.



200+ People: What a Team!

As a small organization with a big job, we must do everything in our power to leverage ourselves to have the biggest impact we can. By far the most powerful tool in our arsenal is partnering with volunteers and other like-minded organizations working together towards a common goal. This summer will exemplify the power of partnerships like never before. By my count, well over 200 people will be working out on the river this summer to secure a bright future for the River – wow! When we created the Parker-Ipswich-Essex Rivers Restoration Partnership (pie-rivers.org) four years ago with this vision in mind, we had no idea it could be such a powerful tool to bring people together to protect our local rivers. After this summer of action, there will be no doubt about the power of working together. Thank you to all our hard working volunteers and partners - we couldn't do it without you!

WAYNE

Wayne Castonguay
Executive Director



Looking for River Herring Habitat

A century ago the Ipswich River and its tributaries supported large spawning runs of migratory fish including river herring, two closely related species (alewife and blueback herring) that numbered in the millions as they entered the watershed from the sea in the spring. Those ecologically and culturally important fish runs have diminished to only a few hundred river herring in recent years.

This summer, with the help of the MA Division of Marine Fisheries (DMF), we are conducting a survey to assess habitat quality for spawning and young alewife in Hood Pond. Alewives in our watershed strongly prefer spawning in natural lakes and ponds, and Hood Pond was a historically important spawning area. We are using a protocol developed by DMF to measure a variety of water quality and habitat features at stations across the pond monthly from May to September when we would expect alewife eggs and young to be present. These measurements are compared to known habitat requirements for alewife in order to evaluate the ability of Hood Pond to support reproduction.

We hope to expand our efforts to other historically important lakes and ponds in the watershed in the future. This survey will help us to prioritize habitat connectivity projects including dam removals, road-stream crossing upgrades and fish ladders in the future. As we are able to confirm where the best habitat is, we can focus on how to get the fish back to it.



Summer staff Kayla and Kelsey collect measurements of water quality to assess habitat quality for spawning and young alewife.

Towns Tackle Community Resiliency Planning

Members of the Ipswich Task Force of the Coastal Community Resiliency Planning Project review maps of local resources and infrastructure at the kick off meeting in May. This two-year project is working to identify the most significant areas in our local communities that are at risk from coastal storms, sea level rise, inland flooding, erosion, and other associated threats. Funded by a grant from the Hurricane Sandy Restoration fund, staff from Ipswich River and the National Wildlife Federation are working with town officials, non-profit and community partners, students and other volunteers in Salisbury, Newburyport, Newbury, Rowley, Ipswich, and Essex. Two public workshops will engage the wider community, and the final product will be a comprehensive Resiliency and Adaptation Plan for Great Marsh, recommending strategies to reduce climate-driven risks to community infrastructure and natural resources. The project will place the communities in an excellent position to pursue implementation funding for adaptation projects.



Tracking the River's Road to Recovery

The removal of the South Middleton dam will be an important river restoration project for the watershed. As the region's first mainstem dam removal, it is a tremendous opportunity to study changes to the river. We are coordinating our efforts with those of researchers from the University of Massachusetts, University of New Hampshire, MA Division of Ecological Restoration and MA Division of Fisheries and Wildlife to investigate changes in water quality, nutrient cycling, macroinvertebrate and fish communities, and the river channel.

When the dam is removed next summer, the river will flow freely through the site for the first time since the 17th century, opening up access to more than 50 miles of upstream habitat for migratory fish and restoring stream-like conditions preferred by many of the watershed's native fishes. We also expect to see changes in water quality and resident plant and animal communities. Some of these changes will happen immediately and some will take time. Since we are dealing with a complex natural system, we expect to see some things that we don't expect!

In order to gauge response to restoration activities it is important to understand the current conditions. With this in mind, many of the studies are beginning this summer. Over the next few years we anticipate some very interesting results from this work as this is sure to be one of the best-studied dam removal projects around.



Marty McHugh from the National Fish and Wildlife Foundation (NFWF) visits the South Middleton dam in June to discuss the project including pre-removal monitoring efforts. This dam is scheduled to be removed in 2016 with the help of a NFWF grant. Photo: Beth Lambert

Trout Unlimited Volunteers Help Fish Move Upstream

Dams act as barriers to fish movement. Fish ladders are sometimes added to dams to help migrating fish swim upstream past the dam. While never a perfect solution to the problems caused by dams, well-designed and well-maintained ladders can provide big benefits allowing certain species to access important habitats and thrive.

The Willowdale fish ladder in Ipswich was not well-designed and is now old, deteriorating and in need of replacement. The MA Division of Marine Fisheries has been working on designs for a replacement ladder, but until it is replaced the current ladder is what we have to work with.

Volunteers from the local Nor'East Chapter of Trout Unlimited, a national conservation organization, recently made valuable improvements to this fish ladder to help bridge the gap until something more permanent can be done. TU member Chet Walsh made a set of specially designed boards to place in between the chambers of the fish ladder. The boards allow separate pools to form and enough water to flow over them so fish can easily move from one to the other. After the system was installed, several TU members reported seeing a small fish successfully move from one chamber to another! Chet, his son Alex and other TU members are inspecting the fish ladder regularly to clear debris and adjust the boards as needed.



Alex Walsh, a Trout Unlimited volunteer, maintains the new board system at the Willowdale fish ladder which allows fish to more easily swim up the ladder. Photo: Chett Walsh

We thank Trout Unlimited for their work on behalf of the river and fish migration. Their efforts are making a difference in restoring the river to health.

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 Town/City _____ Zip _____
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ACTION ALERT!

ACTION ALERT!

We need to raise \$7,000 to cover our share of the legal fees for our partnership fighting to stop the proposed Gas Pipeline which will devastate the River. **WE NEED YOUR HELP BY JULY 31.** Please go to ipswichriver.org or reply to our recent ENEWS on ways to help. **THANK YOU.**

Calendar

Summer Beginner Paddle Series

Mondays, July 13 & 27 and August 10 & 24: 5:30 – 7:00 pm
143 County Road, Ipswich

Paddle the Ipswich River from Riverbend, our headquarters. This biweekly summer event is a beginner paddle on pond-like conditions open to all ages and abilities. Our route will depend on water levels but plan on at least an hour of paddling. We have a limited number of kayaks and canoes for use. Please let us know if you need a boat or if you prefer to bring your own. RSVP to Cynthia at cingelfinger@ipswichriver.org or call 978-412-8200.

A Canoe Waits For You!

Membership in Ipswich River Watershed Association opens a world of new experiences, gives easy access to your favorite river, and lets you give back and get involved. Our Riverbend headquarters is a great place to paddle and explore the river. Members use canoes and kayaks for free anytime (dawn to dusk, 7 days per week). We supply the paddles and life jackets, too.

Riverbend is now a destination for recreation and the study of river life. Come visit soon to check out what's new including: access road to the dock, three parking spaces for paddlers bringing their own boats, property brochures, trail map and interpretive signs along the trails. We recently hosted two school groups and a scout group for educational outings, fitness, team-building and outdoor fun. We look forward to connecting more people with the river and building the river community. If you've been meaning to visit Riverbend, just do it – today!

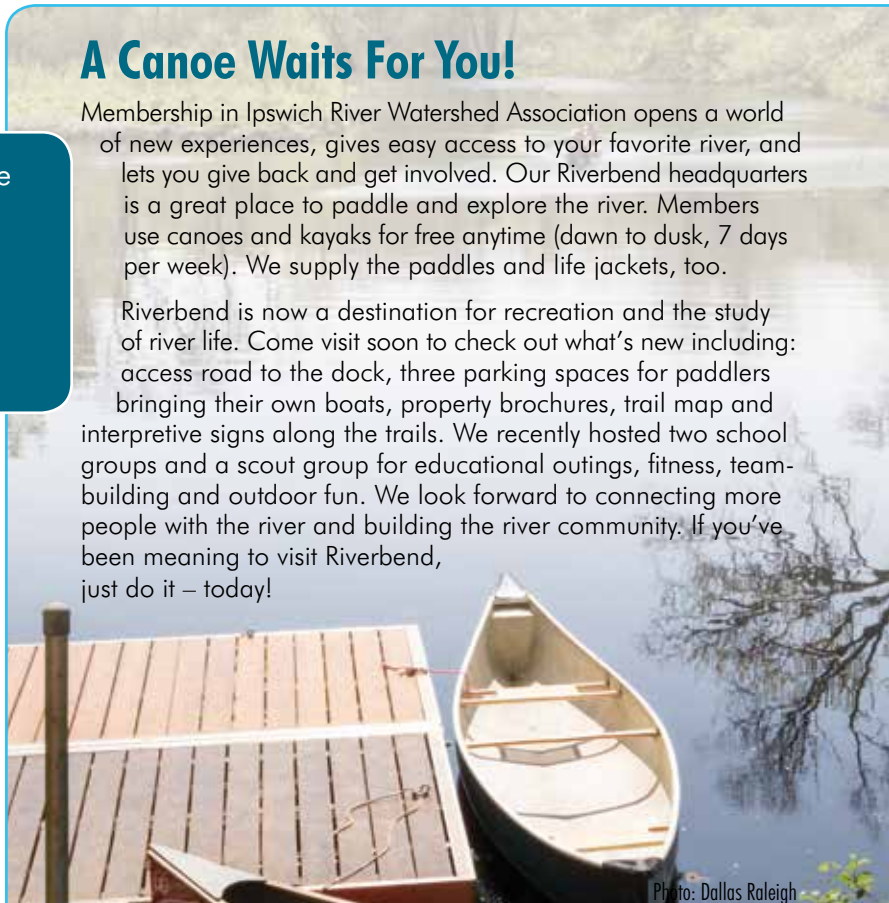


Photo: Dallas Raleigh

Fall 2015

THE VOICE

OF THE RIVER



IPSWICH RIVER
WATERSHED ASSOCIATION

Gas Pipeline Opposition Movement Grows

by Wayne Castonguay, Executive Director

The Kinder Morgan Northeast Energy Direct (KM NED) project has generated the largest and most well organized gas pipeline opposition movement in the nation's history. Compared to its predecessors and contemporary competing projects, the proposed 250+ mile project between Pennsylvania and Danvers, MA is unique due to its unprecedented scope and environmental impact. It has become the region's poster child for the clean energy movement. If built, the pipeline will be by far the largest development project ever in our watershed. It will parallel the river for over 11 miles, cross the river and dozens of tributaries, be constructed through miles of wetlands and directly threaten the public water supplies of seven communities. It will require a 100-foot wide construction zone and a permanently maintained 50-foot wide swath along its entire length. Because there simply is no feasible way to adequately mitigate the environmental and social impacts of this project, we have joined virtually every organization and municipality along its route in opposition.

To strengthen our capacity to lead the effort in our watershed and support the legal work of our two coalitions working to stop this project, Pipeline Awareness Network for the Northeast (plan-ne.org) and the Conservation Law Foundation (clf.org), we raised over \$30,000 from 135 of you in June -- the most successful advocacy campaign in our history. We couldn't be more thankful and proud of our members and feel that by working together, we can accomplish anything!

The first skirmish in the battle is winding down. Because interstate utility projects such as this are exempt from local and state regulations and are given eminent domain authority to seize public and private land if the Federal Energy Regulatory Commission (FERC) determines that it is the "public convenience and necessity" or need, the focus of the legal challenge to date has been on preventing the demonstration of need. Until now, our organization has focused our advocacy strategy on the environmental impacts of the proposal. It is now evident that answering this question of "need" is unavoidable. We are convinced that there is absolutely no local need for this project because the existing gas pipelines serving our area are only running at 60% of capacity, and there will be no local connections to the proposed pipeline. Moreover, because the proposed pipeline will connect to the existing



Meghan and Rio stand in the river alongside the Peabody Rail Trail at the Peabody/Middleton town line where the riverbank would be permanently cleared by the pipeline construction. Together we are river watchdogs. Photo: S. Sullivan

Maritimes & Northeast pipeline in Danvers, which recently applied to reverse its direction to flow into Canada, it is speculated that the project is really meant to supply gas to the new gas export terminals being built in New Brunswick and Nova Scotia, not to serve our local area.

KM is expected to file their formal application to build the project to FERC in October, which will begin the formal federal review process. During this phase, our coalition strategy will focus on demonstrating the devastating environmental impact of the project, working on political opposition through our representatives and attempting to stop the project via the provisions of the State Constitution, which protect conservation lands from development. Although KM is not subject to state law, a pipeline project has never been tested against a state constitutional issue such as this. As our coalition continues to strengthen, there is real hope that we can prevent this project from being built in our watershed.



Advocating for Our River!

Since our founding in 1977, we have been an advocate for our river. While we have expanded our work to include river restoration, outreach, education, outdoor recreation and bringing people together to protect our river, advocacy remains our most important job. Advocacy is defined as the act or process of supporting a cause. And our cause simply is to protect the river – after all if we don't, then who will?

Unfortunately, society places huge demands on our small river. It is the region's source of drinking water; we use it as a receptacle for contaminated wastewater and stormwater; development continues to reduce its ability to naturally cleanse itself and eliminates habitat for fish and wildlife; and now our changing climate is a new and uncertain threat. All of these activities are controlled by municipal, state or federal governments, and the only way to affect decision making by these entities is through advocacy.

This issue highlights some of the current advocacy projects we're working on with many of you. While we often focus on other aspects of our job, advocating for our river will always be the foundation of our work together.

WAYNE

Wayne Castonguay
Executive Director



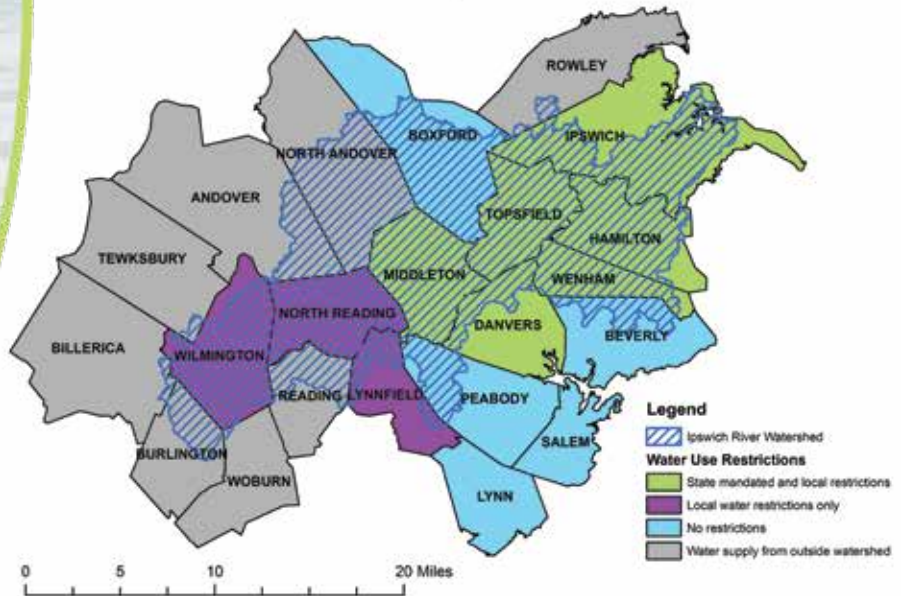
New Water Withdrawal Permits Delayed

As reported in our winter issue, the state Department of Environmental Protection recently initiated the 20 year water withdrawal permit renewal process under the newly enacted Sustainable Water Management Initiative (SWMI). To give the new administration and the towns more time to comply with the new regulations, the state recently announced that it has extended the permitting process into 2016.

As most readers are aware, water withdrawals are by far the biggest threat to the river. Currently, over 32 million gallons are approved to be withdrawn from our river every day, which is more than can be sustained based on several scientific studies. As such, the river is considered “over-allocated,” and because this volume exceeds the newly defined Safe Yield for the river under the new SWMI regulations, this will be a challenging new permitting issue for our communities.

There is still room for many improvements without significantly impacting the towns: most withdrawals in the basin are still exempt from any regulation; many communities lack any conservation measures at all; outdoor water use is still too high in many towns; and there are less damaging alternative sources of water readily available to many communities. The current renewal process provides us with a rare opportunity to address some of these challenges. We've proven that there is enough water to meet the needs of both people and nature if managed wisely. We are in the process of meeting with all the permitted communities and other stakeholders in the hopes that we will place the river on a more sustainable path. After our 30-year struggle to reduce the impact of water withdrawals on our river, the time has come to address this problem once and for all so that the river can continue to serve as the lifeblood of our region well into the future.

Town Water Restrictions in the Ipswich River Watershed



Although some towns have enacted strong water conservation measures, the majority of water withdrawn from the basin is still exempt from state water conservation standards. We can save a lot more water if every community implemented basic conservation practices, especially during dry periods.

Ipswich River staff sit on the dry river bed at the Willowdale Dam in Ipswich in late September. The Ipswich River flow was below normal for the majority of 2015, due in part to water withdrawals.

Ipswich River Joins Clean Energy Coalitions

Did you know that the pumping and treating of water is the third largest user of energy in the US behind buildings and transportation? Did you know that power plants are the second biggest user of water in the country just behind agriculture? Did you know that climate change caused by the burning of fossil fuels is becoming the biggest threat to our river? Water and energy are linked more than ever – what’s known as the “Water-Energy Nexus.”

Because energy use and climate change are increasingly important issues for our organization, we have joined two new advocacy coalitions this year. Mass Power Forward is a new energy coalition that has formed in Massachusetts and includes more than 90 environmental organizations, community groups, educators, small businesses and religious congregations advocating for clean, renewable energy across the Commonwealth.

The Massachusetts Climate Change Adaptation Coalition is a coalition comprised of engineers, architects, planners, and conservation and environmental organizations working to reduce the Commonwealth’s vulnerability to the impacts of climate change.



Wayne Castonguay attends the launch of the Mass Power Forward Coalition, North Shore Node, at the West Peabody Trailhead. Several groups spoke out to stop the building of the gas pipeline planned to be built beneath the trail along the Ipswich River, the water source for 350,000 people and businesses.

Great Marsh Community Resiliency Planning Project

The Community Resiliency Planning Project, which is a component of the overall Great Marsh Resiliency Project, is funded through a federal Hurricane Sandy restoration grant to help the communities of Salisbury, Newburyport, Newbury, Rowley, Ipswich and Essex. The goal of this project is to identify and prioritize municipal assets that are at risk from coastal storms, sea level rise, inland flooding, erosion, and other associated threats and to develop community-based adaptation strategies to reduce those risks. A regional task force has met twice, and we are gearing up to present the results of our vulnerability analysis to a broader audience at community workshops in November.

This effort was recently given a big boost by a grant received by the MA Office of Coastal Zone Management’s Coastal Community Resiliency Grant Program. The new grant was spearheaded by the Town of Essex in partnership with other Great Marsh coastal communities, the National Wildlife Federation and the Ipswich River Watershed Association and will focus on expanded outreach and community engagement. The project includes enhanced websites, monthly e-news, blogs, mapping, workshops and print materials in support of the primary goal to increase public awareness of these issues. Join us to discuss the results of the towns’ vulnerability analysis at one of the two upcoming workshops (visit www.ipswichriver.org for more details):

- **Great Marsh Symposium**
Nov 12, 8:30 am, Woodman’s, Essex
- **Community Workshop**
Nov 19, 6:30 pm, Salisbury Public Library, Salisbury

Wayne Castonguay and MVPC Planner Joe Cosgrove join Salisbury Task Force members Michelle Rowden and Lance Wisniewski in prioritizing community assets vulnerable to climate change.



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For: <input type="checkbox"/> Where needed most	<input type="checkbox"/> Advocating for the River	<input type="checkbox"/> New Membership
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The Annual Fall Appeal is our biggest and single most important fund-drive of the year. Please remember the Ipswich River in your year-end giving. Thank you.

VICTORY:
You Did It!

1000

More than 1,000 people stood up for clean, ample water, nature and wildlife. Thanks to you, we met our long-held goal of 1,000 members. What an encouraging milestone – thank you! Since 350,000 people and businesses get their drinking water from the river, we’ve got 349,000 to go! If you are not a member, please consider joining. The river needs you.

What’s Your Reason?

“There are several reasons why my wife and I decided to become members,” says Ben Wildrick, our 1,000th member. “I’ve subscribed to your newsletter for over a year now and love its feel and informative nature. I’m a regular traveler in the watershed, on my mountain bike, cross-country skis or on foot, so it’s in my best interest to support you. My wife and I have realigned our modest charitable giving budget. Shifting our scope towards environmental sustainability feels like the right move. When a wetland or riparian region is destroyed, it is rarely restored! A buddy of mine from mountain biking has spoken passionately of the association for years and his endorsement motivated me. And lastly, I am an elementary science teacher and I’ve imbued my teaching with a love and appreciation for “wild” places in our backyards. So it was simply time and we are happy to join.”

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