



NSRWA
www.nsrwa.org

July 2012

RiverWatch

THE NORTH AND SOUTH RIVERS WATERSHED ASSOCIATION, INC.
Protecting And Restoring The Rivers Since 1970



Students from Scituate's Inly School participate in counting herring at the Old Oaken Bucket Fish Ladder

Herring Return to First Herring Brook!

Streamflow management collaboration with Scituate hits important milestone

Late this April, after decades of work, our volunteers counted the first river herring to enter First Herring Brook (1HB) past Scituate's lower reservoir dam in memory. This event is a major milestone in our efforts to restore natural flows and fish passage to North and South River tributaries, and a validation of NSRWA's patient, collaborative, and science-based approach to preserving and protecting the watershed.

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River Restoration Moves Ahead on Third Herring Brook and Other Streams

Restoring natural streamflow to enable fish passage in a stream is partly a function of the volume of water in the stream, the amount flowing in spring and fall during migration seasons, but it is also a matter of removing or overcoming impediments which fragment habitat and block fish passage. Herring are not the only species that can benefit from restoring the river or reconnecting it. Brook trout, eels, sea run brook trout (salters), sea lamprey, shad, white suckers to name a few are all depleted in their populations because of river habitat fragmentation.

Dams and Culverts Fragment River Habitat

Augmenting flow volume has been the primary issue with First Herring Brook and our work with Scituate. Managing impediments, either by removing them or providing alternative passage for fish, is the primary issue on multiple other fronts

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Joe Danubio with shad caught flyfishing on the Indian Head River downstream of Luddam's Ford dam. This fish was released!

THE NORTH AND SOUTH RIVERS WATERSHED ASSOCIATION

The mission of the North & South Rivers Watershed Association is to preserve, restore, maintain and conserve in their natural state, the waters and related natural resources within the watershed.

Our goals are to:

- Restore the water quality of the rivers by identifying and correcting adverse impacts;*
- Encourage stewardship of the watershed through public education, outreach and recreation programs; and*
- Promote responsible growth by working in partnerships to preserve open space, scenic vistas and sensitive natural resources.*

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Letter from the President

Following our oddly open and almost snow free winter, we began the Spring of 2012 with drought conditions and record low stream flows -- in some cases the lowest since record keeping began in 1885. The situation looked grim for the herring returning to spawn. Could they obtain passage through existing impediments given the low water levels?

NSRWA's committed group of over 70 volunteers participated in herring counts throughout the watershed this spring, yielding valuable data on the health of our waterways. For the first time since these volunteer counts began in 1996, river herring were counted in the First Herring Brook beyond its lower dam. This wonderful achievement is the culmination of many years of dedicated involvement on the part of our members and volunteers. This is the source of our organization's vitality and it is critical to our mission of employing sound science to identify threats to our water resources.

The restoration of fish passage, like the reopening of shellfish beds on the South River, has been years in the making. Celebrating these successes requires years of collaboration between the NSRWA, municipalities, scientists, politicians, educators, and local and state agencies. Regardless of the cooperation forged between us and our partners, we could not enjoy any of our successes without the strong and steady support of our membership.

During these beautiful and all too fleeting summer months, we are offering opportunities to paddle, walk, and camp along our beautiful rivers. We are committed to increasing opportunities for public access and use; experiencing the beauty we are so fortunate to have so close is a privilege we can all enjoy.



We look forward to the opening this summer of the South River Park, with the South River Greenway and River Path to follow in the not too distant future. If you can't join us on a river adventure this season I hope you have some of your own!

Thank you for your continuing support - you make us the success that we are. See you on the rivers!

Sincerely,
Craig Hannafin

SAVE THE DATES

Harvest Moon Feast

Monday, September 24 • Mill Wharf Restaurant Scituate • Tickets \$60 per person

Join us for a wonderful evening of celebrating our local harvest by tasting local food, wine and beer from some of the best restaurants and food purveyors on the South Shore. You don't want to miss this event – tickets can be purchased online or by calling the NSRWA office at 781-659-8168. Hope to see you there!

First Annual Run for the Rivers: South River 5k

Sunday October 14, 2012 at 9 am • Starts at Rexhame Beach, Marshfield

Get out your running shoes and join us for the first ever **Run for the Rivers – South River 5k!** Enjoy the beauty of the South River and help raise funds for the NSRWA to continue our mission to protect and restore our river resources. This 5k loop will traverse up and down the beautiful South River, going over two bridges and starting and ending at Rexhame Beach. Families and walkers also welcome! Registration will be online – stay tuned to your email.

Progress on South River Park and Pollution Clean Up

NSRWA Volunteers Help with South River Park Boardwalk and Invasive Species Removal

Volunteers are making a big difference in building the South River Park on Rt 139 in Marshfield. John Zarella of North River Marine has been leading the volunteer effort to build a boardwalk which will enable the public to view the South River from the park. In addition, with our support, an Eagle Scout is working on removing the Japanese Knotweed from the banks the river with volunteers. If you would like to volunteer in either of these endeavors please let us know – work is ongoing and we will need your help in the future! Look for a grand opening of the South River Park later this summer!



Thank You To New or Renewing River Guardian Circle Members

River Guardian Circle members are our most generous, making donations of \$500 or more. Their generosity is a foundation for making the NSRWA a strong and effective voice.

Individuals

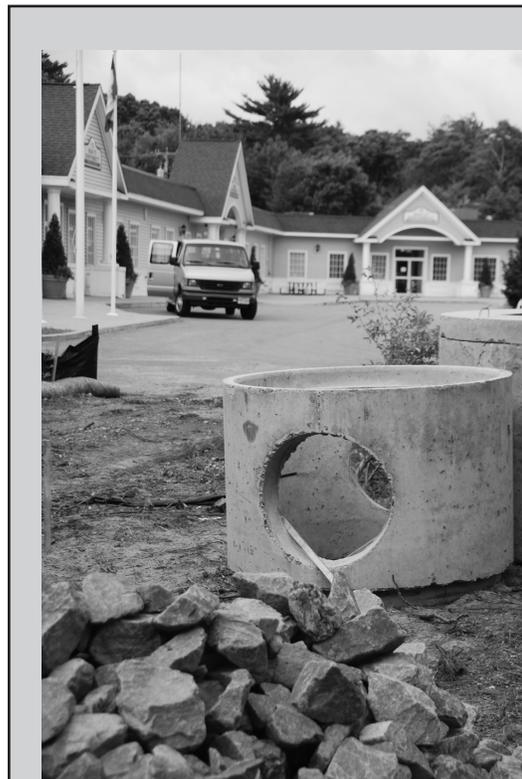
Susan & David Caron
Alex & Davis Clark
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Paul Coolidge
Robert & Betsey Detwiler
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Peter & Roberta Fairbanks
Ralph & Betsy Gordon
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Peter & Julie Kelly-Detwiler
Richard & Jackie Leach
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Patrick & Lee McCarthy
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Peter & Sandra Moll
Mark & Sally Moore
Marty & Adria Pitkow
Carol Sullivan
Andrew & Jamie Sullivan
Brian & Kathy Tedeschi
Gary & Cindy Lou Thomas
Paul & Netta Vercollone
Samantha Woods & Lanny Day

Companies

Covanta Energy
Horsley Witten Group
Scituate Federal Savings
Sylvester Fund



John Zarella and volunteers building boardwalk from park to South River



Marshfield Construction Moves Forward to Reduce Polluted Runoff into South River

Through a \$51,980 from the state's Coastal Zone Management program new stormwater treatment for discharges into the South River are under construction. This work is a direct consequence of water sampling conducted by the NSRWA in partnership with the Mass Bays program that identified three sites in the downtown area of Marshfield that were contributing bacteria to the South River. Phase I consists of upgrading drainage from the parking lot at the Road to Responsibility and finalizing plans for further stormwater improvements at the Marshfield library.

Construction of Phase I stormwater improvements to reduce polluted runoff into the South River will be completed by June 30, 2012.

Herring Return to First Herring Brook!

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History of Project

NSRWA volunteers have been monitoring flow levels, water quality, and fish counts in many tributaries for decades (our first count on IHB, in 1996, showed no herring at all!) The data we compiled for IHB led to a partnership with town, federal and state officials to restore streamflow and herring to the brook.

From 2007-2010 we met regularly with our partners to develop a dynamic model of the brook system and the impacts of Scituate's water supply withdrawals that allowed us to test restoration scenarios. In 2010 we presented our findings, which showed that with a combination of new fish ladders, new water supply sources, and water conservation we could restore streamflows in the brook to support herring and other aquatic creatures.

In 2011, new water use restrictions enabled a more natural pattern of flow releases over the IHB reservoir dams, and the herring responded!

Drought Almost Stops Fish Run

But nature herself almost prevented success. The extraordinarily dry winter and early spring experienced in New England left water flows in IHB (and throughout the watershed) at record low flows. Scituate was concerned that to provide adequate drinking water supplies it might have to reduce releases over the

dam and fish ladder to a level below what herring could pass.

But in urgent discussions with Scituate water officials during April, NSRWA pressed the case that this was a critical time for the fish and we compromised with the town to lower the releases to save water in the system and at the same time allow for adequate flows for herring to pass. Having never experienced such low flows in the spring we wanted to be cautious with the water system. Thankfully, Mother Nature intervened and the rains came. Scituate agreed, flow releases continued, and we had a limited number of herring enter Old Oaken Bucket Pond.

The work with Scituate on IHB continues. Monitoring and adapting to conditions as they change and evaluating the second year of the irrigation restrictions this summer are ongoing. Existing fish ladders on IHB dams were poorly designed and have high flow requirements to operate. The town has agreed to pay for fish ladder assessment and preliminary designs, and once we determine how to rebuild them NSRWA will work with the town find the funds for final design and reconstruction.

Scituate Wins Gulf of Maine Award

In June our partnership with Scituate on streamflow restoration earned for the town the 2012 Sustainable Communities Award from the Gulf of Maine Council on the Marine Environment for their efforts to restore fish habitat and more natural streamflows in the First Herring Brook.

This award is given out annually to one community in the Gulf of Maine region which includes Maine, New Hampshire, Massachusetts, New Brunswick, and Nova Scotia. It recognizes work that contributes to the long-term environmental and economical viability of the community, improves the surrounding environment, and which makes a difference to the health of the Gulf of Maine. Congratulations Scituate! We are pleased for Scituate, proud of our own role, and looking forward to continuing the work.



Jim DeBarros and Rick Mosca, Scituate Water Department received Gulf of Maine Council Sustainable Communities Award for efforts to restore herring in First Herring Brook.

River Restoration Moves Ahead on Third Herring Brook and Other Streams ... continued from page 1

around the watershed.

NSRWA completed the first ever inventory of structural impediments on the North and South River systems in 2011, and has begun to take action:



Volunteer Russell Clark help improve Furnace Brook habitat by removing concrete.

- Last fall, with the help of volunteers, we were able to remove concrete debris from an old abutment on the Furnace Brook in Marshfield a tributary to the South River. This was preventing any small fish from being able to access the stream freely.

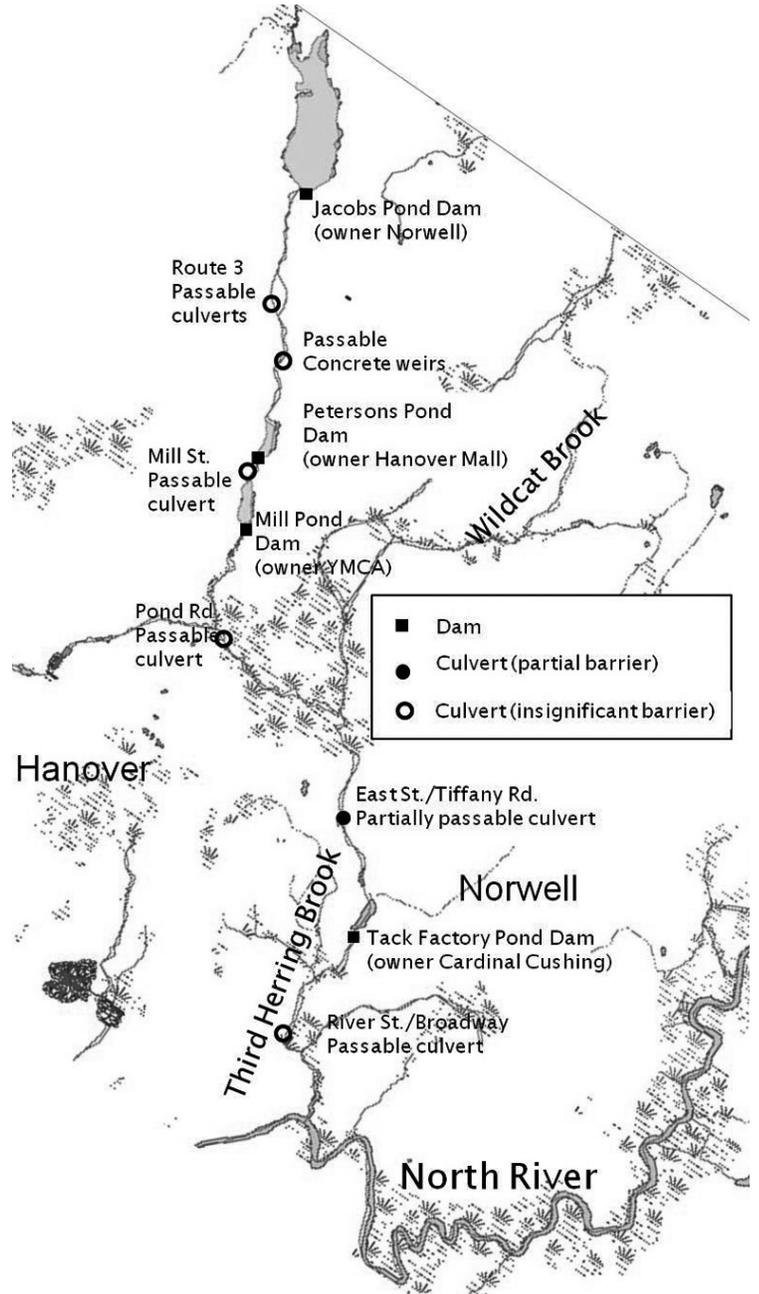
- We are also working to remove a culvert on the Iron Mine Brook on the Indian Head River to restore natural habitat. This will allow brook trout and other temperature sensitive species a thermal refuge upstream of the Indian Head River in the summertime when waters in the mainstem of the river downstream of the dam at Luddam's Ford pond become too hot for their survival.

- We have begun discussions with the private dam owner and neighbors of Chandler's Pond on the South River in Marshfield. The private dam owner is no longer able to maintain the dam that currently exists there and which was built in 1918. If the dam owner and neighbors can no longer maintain the dam then dam removal may be an option.

But the most dramatic opportunities for river restoration are the dilapidated dams on Third Herring Brook which runs between Norwell and Hanover.

Third Herring Brook: four dams, four different situations

The map at right shows the location of the four dams on Third Herring Brook (3HB). Eventually, when solutions to fish passage have been identified and implemented for



all these dams, it will restore 9.7 miles including tributaries of unfragmented river habitat and access from the 59 acre Jacob's Pond to the North River and eventually the ocean.

The first dam upstream from the North River impounds Tack Factory Pond and is owned by the Cardinal Cushing Center (CCC). NSRWA has worked with CCC for several years to analyze the liability problems of this dilapidated structure, and to fund a feasibility study that analyzes CCC's options for dealing with it. CCC recently received funding and is conducting an engineering assessment of the dam and its options for the future, and will share that information with abutters of the pond and the public.

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River Restoration

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At the same time, the CCC is developing a master plan for the entire 200+acre property – much of which is undeveloped woodland with 1 mile of riverfront on the Hanover side along the Third Herring Brook and would be a highly valued conservation area. The opportunity at this location is made more interesting by the possibility that the Town of Hanover might consider purchasing much of CCC's land along the brook for conservation purposes if the liability issues around the dam can be resolved.

The next dam upstream is owned by the South Shore YMCA, and impounds Mill Pond. This dam has breached twice, and our Association has been working with the Y to identify funding sources for its removal.

The Peterson Pond Dam is owned by the Hanover Mall, which has committed funds and in-kind staff resources to studying the feasibility of its removal, but any decisions and action are further away.

Because of the importance of Jacobs Pond for local recreation, it is unlikely that removal of this dam will ever be considered, but construction of a fish ladder will enable anadromous fish passage along the entire 5.5 miles of 3HB, and will provide river herring with access to 59 acres of high quality spawning habitat.

25th Clean Up Day 2012 A BIG SUCCESS

Thanks to Volunteers, Whole Foods and Covanta!



Our North and South Rivers are relatively clean compared with some other more urban rivers, but we have our share of plastic bags and bottles, boat debris, and assorted other rubbish. Since most of our achievements require years of quiet, careful, patient work, it is a rare pleasure to join an army of volunteers coming from the Cape to Weymouth and remove five pickup truck loads of trash in a few hours (thanks to **Covanta Energy** for paying for its disposal!), and then enjoy a celebratory BBQ hosted by **Whole Foods**.



Bequests from our members and friends help make it possible to continue our efforts to speak out for the North and South Rivers Watershed and fight for the protection of our environment, just as we have done since 1970. Please consider making the NSRWA a beneficiary in your estate planning. The NSRWA has attorney advisors available, free of charge, to discuss with you different ways you can leave a lasting legacy to the organization. Please contact us at 781-659-8168 if you have any questions or would like to be put in touch with a legacy advisor.

2012 Outdoor Fun in the Watershed

June 23 - September 15

Yoga at the River's Edge

Every Saturday morning at different locations along the rivers June 23 – September 15, 8:30 – 10 a.m. For locations visit nsrwa.org or find us on Facebook. \$10 per person for NSRWA members, \$15 non-members. No registration is required.

Paddling and Camping Opportunities for Members!

To find out the time, place and more details about each of these fun paddles or other outdoor activities go to our website, www.nsrwa.org or call 781-659-8168 or email: paula@nsrwa.org. Registration required in advance for every paddle through our website and space is limited.

All paddles require membership in the NSRWA – individual membership is \$25 and family membership is \$35. Pay once to paddle as a member all season long! Kayaks and equipment are provided. Children 8-14 are welcome when accompanied by an adult. All paddles are in partnership with Coastal Kayak Educators.

Learn How to Stand Up Paddle on the South River

Monday evenings at 6 pm • July 9 and July 23

The cost per person is \$35 for NSRWA members and \$60 for non-member (includes NSRWA membership). Stand-Up Paddle Instruction will be offered by Luminare Skate & Surf. The 1 1/2 hour course includes full instruction on technique and safety. All equipment is provided, including wetsuits, if needed.

Kayak Paddling Instruction on the North River

The cost per person for each session is \$35 for members and \$60 for non-member individual/\$70 for non-member family (includes NSRWA membership).

Intro to Kayaking – Learn How to Kayak on the North River!

Saturday, July 21 at 2:15 pm

Whether you want to learn how to kayak or brush up on your kayaking skills, this 2.5 hour course is for you. Participants will receive on-land and in-water instruction in basic kayaking techniques and safety.

Intermediate Paddling Skills Training on the North River

Saturday, August 4 at 2:15 pm

This 2.5 hour session is designed for paddlers with some experience who want to improve and learn new skills including advanced paddling strokes, bracing, wet exits and rescues. This is an interactive session on the water with instructors.

Scenic River Tours

Saturday, July 7 at 1:30 pm

Historic Tour of the North River from Marshfield to Hanover

Cost per person is \$70 for NSRWA and Mass Audubon members and \$95 for non-member (includes NSRWA membership).

Join Mass Audubon's, John Galluzzo and NSRWA Director, Samantha Woods for an 8-mile paddle on the scenic and historically rich, North River. This will be a leisurely excursion featuring the North River's role in our local history and examine how its ecology has changed throughout time. This trip will take approximately 4 hours.

Sunday, July 22 at 3:15 pm

Scenic Tour of the North River

\$35 for members and \$60 for non-members (includes NSRWA membership).

Enjoy a 2 hour kayak tour of the only Scenic Protected river in the state of Massachusetts - the North River!

Sunday, August 19 at 1:45 pm

Explore the Hidden South River Paddle

\$35 for members and \$60 for non-member individual (includes NSRWA membership).

Explore the hidden hideaways for 2 hours on the upper reaches of the South River.

Paddling and Overnight Camping at Couch Beach, North River

Saturday, August 11 Depart 5 pm

Sunday August 12 – Return 11 am

Saturday, August 25 Depart 5 pm -

Sunday August 26 – Return 11 am

Enjoy a night on the North River! Participants will paddle from the Union St. (Marshfield) canoe launch to the campsite at Couch beach on the scenic North River. Dinner and light breakfast will be provided. Participants must provide their own camping equipment. Coastal Kayak Educators will lead the expedition, supply the food and kayaking gear and transport your camping gear to the campsite. Children 8-14 years are welcome with parents.

The cost per person is \$80 for members and \$105 for non-member individual/\$115 for non member family (includes NSRWA membership) plus \$80 per family member.



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Inside This Issue:

- **Herring Return to First Herring Brook for first time in decades!**
- **Gulf of Maine Sustainable Community Award for work on First Herring Brook**
- **Paddling, camping, yoga, racing and more ...**



Connect with us on Facebook

22nd Annual Great River Race Registration is Open!

Saturday August 18

Race starts at 12:30 pm

If you can paddle it you can race it in our Great River Race ... this event is fun for the whole family! From novice to racer, this race is for all non-motorized vessels including canoes, kayaks, rowboats and even stand up paddle boards.

Join us for this annual 7-mile paddling event on the North River. Race starts at 12:30 pm. Pre-registration is strongly encouraged. Registration forms are available online at nsrwa.org



Photo Credit – Mike Moyer, 2011 Photo Contest Entry

After the race, join us for an awards celebration at McGreal's Tavern in Norwell Center!