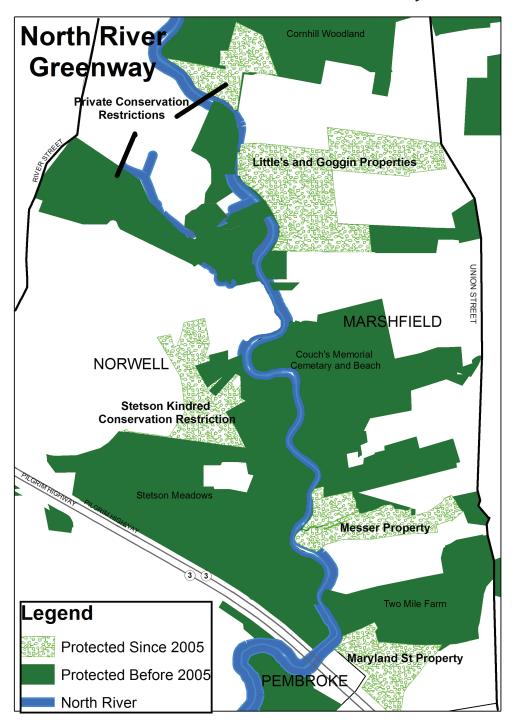


North River Greenway Takes Shape!



our Association's most fundamental goal is to assure a river system that is beautiful and healthy, and that provides many benefits for its residents, whether human or wildlife.

One of the most effective ways of achieving that goal is to protect the lands along our rivers' banks in as close to their natural state as possible, assuring their beauty for boaters, protecting the rivers from polluted runoff, and providing natural recharge for rainwater. And one of our proudest success stories is the extent to which land along the North River has been acquired for conservation purposes, or left in private ownership but with permanently restricted development.

One particular area of the river has seen the most concentrated activity – just downstream of Route 3, illustrated in large part on the adjacent map. This particular stretch of the river, roughly 2 miles from Route 3 downstream to the Cornhill Woodland owned by the Town of Marshfield, is one of the most pristine. Here, the scenery is mostly wooded with only a few docks (one of which is now public), and leaves one feeling like you are in a remote section of Maine – not 20 miles south of Boston.

continued, page 5

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.

OFFICERS

President: Russ Haskell Vice President: Craig Hannafin Treasurer: Richard Leach Secretary: Barbara Carney

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Marketing & Communications Director Debbie Cook

Address Correspondence to: NSRWA P.O. Box 43 Norwell, MA 02061 phone: 781-659-8168 www.nsrwa.org

Letter from the President

Ten years ago, Deb Lenahan approached the NSRWA with an idea: putting her GIS (geographic information system) analysis skills to work, she proposed a project to identify, map, and prioritize land parcels for potential protection in the North River basin.

That project, which spanned more than two years and two NSRWA executive directors, received support from the state, Wildands Trust, MassAudubon and The Trustees of Reservations and culminated in Protecting What Matters. That report has since become an invaluable toolkit to aid local officials, land trusts, government agencies and land owners in many success stories that conserve our natural resources through open space protection.

Attentive readers will notice throughout this issue of Riverwatch a connecting theme: the importance of smart growth to our area's quality of life and the many benefits that accrue to us by preserving open space. That is especially so when creating extended corridors of contiguous parcels along our rivers. Among the benefits: lessening the strain on municipal services by increasing the amount of undeveloped land; maintaining recreational access to our natural resources; preserving the scenic beauty of the watershed and enhancing property values; contributing to the quality and safety of our water supply through natural filtering effects.

A major reason to care about open space conservation is restoring wildlife habitat. When we protect land, we partially compensate for the impact of development - the fragmentation of an ecosystem - and its weakened ability to support diverse (but inter-connected) species. Some of those species - mammals, birds, reptiles, insects - are rare and endangered and depend upon extended undeveloped corridors to meet the migration and reproductive requirements.

Since *Protecting What Matters* was first published in 2004, we can report 250 acres of open space that have been protected through purchase and/or conservation restrictions within the North River basin. Underlying that achievement are countless success stories involving the commitment of public and private individuals and organizations. Looking to the future, we will continue to be proactive in achieving open space protection goals: informing the process, advocating as required, and facilitating critical partnerships.

Sincerely yours, Russ Haskell, President, NSRWA

NSRWA's Annual Meeting

November 4, 2011 7 pm • South Shore Natural Science Center Wine and Cheese Reception Business Meeting to elect new board members

PRESENTATIONS

"Prioritizing the Restoration of River Habitat in Our Watershed" Volunteer of the Year Award – Sarah Frazar

Special Recognition Awards – To our Culvert Inventorying Volunteer Team Barbara Pearson Award – Michael DiMeo Marshfield Harbormaster

Blue Communities Campaign Progress

Working with Scituate to Restore Flows in the First Herring Brook:

Reducing water use:

This past summer we were fortunate to have a college intern, Kristen Conroy, help us to analyze Scituate's summer water consumption, following implementation of new limits on lawn watering. This July, for instance, was drier and hotter than normal. When compared to previous Julys with comparable weather, there was a definite decrease in water demand, and we are evaluating how much could be attributable to the new watering restrictions. August and September water demand data were not available at the time of the writing of this newsletter.

And increasing water flow:

The NSRWA recently completed a plan for the Scituate Water Department that details the timing and amount of water to release from its water supply reservoirs into First Herring Brook, both to protect stream habitat and to meet the water needs of the community. The Water Department began to implement these water releases starting in late summer/early fall-streamflow data as well as water demand data will continue to be monitored by volunteers and staff of the NSRWA to document the plan's effectiveness, and if needed to adapt the water management plan for the future.

New Strategy for Fixing Stream Impediments, Restoring Flows & Habitats:

Dams and blocked culverts are structural impediments to natural flows in the streams that feed the North and South Rivers. These impediments block fish passage and degrade natural habitat. We recently completed an inventory of these impediments, and concluded with a report on the best targets for restoration. The rankings were based on such criteria as the presence of

anadromous (migrating) or rare fish species, percent impervious surface within the watershed, the miles of stream that could be opened and the quality of the habitat that could be

The highest ranked areas were those with the greatest physical impediments in high-quality habitat. Although some priority projects would involve construction, there were also some "low-hanging fruit" where culverts could be unclogged or flashboards could be removed and have a positive impact on

stream health. The next steps will be to increase the number of culverts included in the ranking (only about 1/4 of the culverts in the watershed were surveyed) and to conduct biological sampling to update the natural resource scores of each stream segment.

This project was funded through the Massachusetts Bays program and represents a huge volunteer effort - more than 750 hours of volunteer time on Indian Head River, Hanover). Photo by NSRWA. was provided in the field surveys and data gathering for this report. We will be

A severe barrier in a system with otherwise good habitat (Cross St.

presenting the findings of this report at our Annual Meeting on November 4th at the South Shore Natural Science Center and honoring the work of the many volunteers who contributed to this effort. Please come and find out more!

South River Park Construction Begins!

On August 19, 2011 the South River Park construction groundbreaking ceremony was held! We are very excited for this project to be moving forward and hope to have construction end by July of 2012. Over the next few months and in the spring this now blighted area along the South River on Rt 139 will be transformed into green, attractive and useable open space and provide walking access to the South River. Stay tuned!

Construction and planning team at the groundbreaking ceremony at South River Park August 19, 2011. From left to right: Samantha Woods, ŃSRWA, Sue McCallum, MassAudubon, Charlie Swanson and Tom Reynolds, Marshfield DPW, Paul Halkiotis, Marshfield Planner, Sue Caron, Marshfield Open Space Chair, Peter Dowd, Chair of Veteran's Honor Roll Committee, Matt McDonough, Marshfield Selectmen, Bill Dodge, Veteran's Agent, Peter Clapsaddle, Owner's Representative, Raymond Delmonico, President NELM, Corp.





North River Commission Funding Threatened

Budget cuts at the state and federal levels have hurt the North River. The North River Commission, which administers permits for projects within 300 feet of the banks of the North River, has recently had its state funding cut in half and is being threatened with complete elimination.

The North River Commission administers the Scenic Protective Order for the North River. The North River is the first and only river in the state with this distinction. This has its pros and cons. The pro is that it has quite literally preserved the river and its scenic qualities since it was enacted in 1978 from detrimental development. The con is that being the only one in the state makes it an anomaly.

The responsibility for the Protective Order lies within the state's Department of Conservation and Recreation. Like most agencies the Commissioner is appointed and they change often – thus the need for constant re-education on the importance of the Protective Order and the need to fund it.

The annual budget for the North River Commission is \$30,000 and supports a part-time administrator and a seasonal North River Patrol boat which patrols the river during the weekends in the summer. This allows the volunteer commissioners who are appointed by each of the six communities along the river and who review permits for development within the North River Corridor, to have professional staff who can answer questions for property owners, provide oversight of the permitting process, and enforce the permits and the Order itself. Some of the provisions of the Protective Order include the No Wake Speed Limit, No Jet Skiing or Water Skiing allowed, and the prohibition of cutting of vegetation within 100 feet of the banks of the North River amongst others. Having the North River Patrol boat and the part time administrator helps ensure these provisions are enforced to protect the river's health and other boaters safety.

\$30,000 is a small amount of money to ensure that the only Scenic



Protected River in the state stays protected! We are working with our legislative caucus to educate the Department of Conservation and Recreation and the Secretary of Energy and Environmental Affairs on the need to continue funding this critical program. We may need to

call on you to voice your support for this issue in the future.

Summer Interns

We had a great group of summer interns this year that we wish to say goodbye and thank you to. While gaining meaningful experience, they made significant contributions to our work and even earned some college credits!



Kristen Conroy, going into her junior year at Elon College in North Carolina, majoring in Environmental Science, hails from Pembroke, grew up near the North River and worked with us gathering and evaluating data on water demand and streamflow for our First Herring Brook streamflow restoration project.





Laura McPherson, will be a sophomore at UMass Amherst studying Environmental Science. The McPherson's involvement in the NSRWA is a family affair...they live on the North River in Norwell, her brother Doug was an intern and the family often does the Great River Race. Laura worked on several field projects including identifying invasive species in South Shore coastal waters to monitoring the progress of the Green Harbor River tide gate restoration project.

Corey Rhodes, a student at University of Rhode Island, majoring in Aquaculture worked with Laura in the field getting muddy and also did follow up field work on culverts found through our Stream Restoration Prioritization report.

Meeting the Bilezikian Foundation and Sylvester Fund Challenges

Using these uncertain and difficult financial times we have been incredibly fortunate to have the support of several individuals and foundations who help us meet our financial needs and build capacity by inspiring new donors and current donors. Our most recent matching challenge was provided by the Bilezikian Family Foundation and the Sylvester Fund. The Bilezikian Foundation offered to match dollar for dollar any new donations made between February 5, 2011 and July 5, 2011 up to \$10,000 when compared to last year. In addition, the Sylvester Fund offered a \$5,000 match on the same terms, so that qualified donations up to that amount would be tripled! We can't thank the Bilezikian Foundation and the Sylvester Fund enough as well as all those who helped us make these matches...Thank you!

North River Greenway, continued from page 1

Several of the protected properties have public access, including the Little's and Goggin properties, the Messer property and the Maryland St property abutting Two Mile Farm. What is gradually taking shape is a genuine greenway along the North River, the result of substantial efforts by many towns, non-profit conservation organizations, and private landowners working together. Your Association has been a leader in these efforts, and we hope you are proud of the work your support has enabled us to accomplish, particularly in recent years.

"Protecting What Matters," and 6 years of achievements

Recent initiatives began in 2004, when the NSRWA, in collaboration with our land trust partners The Wildlands Trust of Southeastern Massachusetts, MassAudubon, and The Trustees of the Reservations, published a report entitled "Protecting What Matters." The report was a blueprint prioritizing the properties along the North River in need of protection.

We documented each property that lies between the river and the first parallel road from the mouth to the headwaters of the North River, and found that 35% of the abutting properties were already in some form of permanently protected open space. That protection could be in the form of a private conservation restriction (no public access) or owned outright by the town or a conservation organization (allows for public access). Our main focus with the study was to identify where to concentrate efforts for future land protection along the river.

Armed with our report, in 2005 we partnered with the Wildlands Trust and requested financial support from the Sheehan Family Foundation to pursue protection of the properties identified in the report. Since then, we have collaborated with several towns, private organizations, and committed landowners to protect almost 250 acres within the North River watershed for a total acquisition cost of almost \$6 million.

176 of those 250 acres are in six properties along the stretch of the North River that is illustrated on the front page map. These have now been acquired or had a private conservation restriction placed on them by their owners to limit future development. These property owners all decided that protecting their land for the future was important to them, and we can't thank them enough for their generosity and forethoughtfulness as well as all of our conservation partners.

Important information about each of these six properties is offered in the chart below, including public access.

"Protecting What Matters " documented a total of 746 acres that we considered to be potentially high priority based on their size, proximity to existing open space, endangered species habitats and abutting the river. We are proud to have played a prominent role in protecting a quarter of those properties in just 6 years! Your Association will continue to be vigilant in seeking opportunities to protect the remaining priority properties and build on our success.

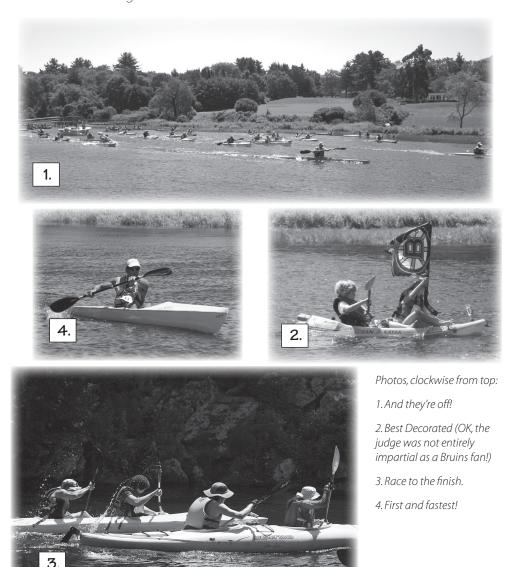
To download and read the original "Protecting What Matters" report visit our website and navigate to the dropdown menu under Programs/Protecting Land Critical to the Watershed.

by Samantha Woods, Executive Director

| Lands Conserved Directly Abutting North River Downstream of Route 3 Since 2005 | | | | | | | | |
|--|------|----------------|--|--|--|--|--|--|
| Property name Acres | | Year Protected | Cost | Public Access | | | | |
| Adjacent to Cornhill Woodland | 24 | 2005 | \$500,000 owner donated | No, private conservation restriction | | | | |
| Messer Property | 24 | 2006 | \$970,000 Total. Owner donated \$200,000, state grant \$250,000, Marshfield Community Preservation Funds \$520,000 | Yes, from river only | | | | |
| Stetson Kindred | 36 | 2008 | \$100,000 owner donated | No, private conservation restriction | | | | |
| Maryland Street | 17 | 2009 | \$850,000 Marshfield Community Preservation Funds | Yes, access through Two Mile Farm | | | | |
| Little's Conservation Area | 25 | 2009 | \$720,000, Marshfield Community Preservation Funds | Yes, parking on Union Street | | | | |
| Goggin | 49.8 | 2010 | \$1.1 million Marshfield Community Preservation Funds | Yes, access from N. River dock or via Little's Conservation Area on Union St. | | | | |
| Total | 176 | 5 years | \$4.24 million | | | | | |

Great River Race 2011

Thanks to all who participated in the 21st running of the Great River Race!



First Place Finishers: 2011 Great River Race

for a complete listing visit www.nsrwa.org

Kayak RacingFrancisco Urena*0:51:181st and Fastest Overall Time

Rowing Sliding Seat Double Craig & Chad Wolfe 0:56:58

<u>Canoe Mixed</u> Kevin & Brenda Boss 0:58:32

Canoe Men Pete Olson & Ed Halpin 0:58:33 *1st Senior Division

| <u>Kayak Single Men</u> | |
|-------------------------|---------|
| Bev Barnard | 1:01:15 |
| Jack LaMarre | 1:03:36 |
| 1st Senior Division | |

Rowing Fixed Seat DoubleJohn & Molly Struzziery1:05:42David & Jeff Roderick SR1:09:05Ist Senior Division1:09:05Kayak Double1:09:05Samantha Jones1:06:21Kayak Single Women1:08:53Nancy Whipple1:08:53Nanci LaMarre1:14:07

1st Senior Division

Many thanks to our Great River Race Sponsors!

A.W. Perry Inc. Andrew G. Gordon Inc. Bayside Marine Corp. Black Pond Veterinary Service, Inc Bond Printing Company, Inc. Charles River Canoe & Kayak Goodwin Graphics Hubbard Plumbing and Heating Image Resolutions J.E. Fitzgerald - Housesmith, Inc. Jack Conway Co.& Company, Inc. Joe Jones' Sun & Ski Sports Joseph's Garage Kethro & Thomas, P.C. L Knife & Sons Mass Irrigation Services, Inc. McGreal's Tavern Monahan's Marine, Inc. Morrell Associates Norfolk Ram Group, LLC Organic Plant Majic, LLC P.F. Spencer Jr. Inc. Patricia G. Cobb, P.C. Protectowire Co., Inc Rand-Handy Oil Co Riverside Landscaping Rockland Federal Credit Union Rockland Trust Company Scituate Federal Savings Spit Dudes Outerwear The Barker Tavern

2011 Riverwatch Results – How Clean Are Your Rivers?

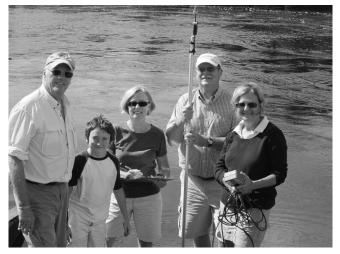
Thank you to our 2011 RiverWatch volunteers! Our summer monitoring program, now in its 15th year, provides us with long term baseline information on the health of our river's water quality and teaches a new group of volunteers to be citizen scientists. While helpful in determining the general areas of contamination it is not meant to be a pollution abatement program but rather to provide education and identify overall water quality trends in our rivers.

In 2007 we began taking enterococci bacteria samples in the saltwater areas of our rivers because research indicates that this kind of bacteria is longer lived in saltwater. Both fecal coliform and enterococci bacteria are found in the guts of mammals and are used as an indicator of mammalian waste. Swimming standards in saltwater rely on enterocci while shellfishing and swimming standards in

freshwater rely on fecal coliform, thus the need to take both in some areas.

With the exception of samples from the Willow St. Bridge area on the South River, which consistently has higher bacteria levels than the state swimming standards the remaining areas we sampled were swimmable the majority of the time. The exceptions were at Driftway Park on the Herring River, and the Washington Street Bridge on the North River and the Julian St Bridge on the South River on June 23rd and again on July 7th at the Driftway Park and August 8th at Washington Street Bridge. These dates coincided with rain events and we believe the pollution to be stormwater related.

The continued persistently high bacteria counts at the Willow St Bridge site on the South River even under no rain conditions leads us to believe these may not solely stormwater related. We have requested MassDEP provide assistance to further investigate the South River bacteria through genetic testing which can help us determine if the bacteria are human or animal based. We should have those results this fall and will report them to you in our next newsletter.



Riverwatch volunteers sampling at Norwell boat ramp. From left to right: Ralph Butler, Thomas Gillis, Kathy Harrington, Jim Lathrop, and Andrea Miller. Volunteers not shown: Jenny Levine, Ed Dilorio, Janis Stevenson, Rebecaa Stevenson, Nola Waterman, Kenaey Waterman

| | RiverWatch Water Quality Results 2011 | | | | | | | | | | | |
|---------|---------------------------------------|--------------------------------|----------------------|----------------------------|------------------|-------------------|--------------------------|------------------|-------------------------|----------------------------|----------------------------|-------------------------------|
| | | North River and Tributaries | | | | | | | South River | | | |
| Date | Type of Bacteria | Washington Street Bridge | Corn Hill Lane | M'field Canoe Launch | Scituate WWTP | Driftway Park | North River Marine | Damon's Point | North River Mouth | Julian Street Bridge | Willow Street Bridge | Rainfall in last 48 hrs |
| 6/9/11 | FC Entero | 190 | 39 | 38 | 0 | 22 36 | 53 | 20 12 | 0 | 98 30 | 1200 | 0 |
| 6/23/11 | FC Entero | 1200 | 75 | 73 | 34 | 600 600 | 64 | 76 85 | 7 | 250 260 | 2000 | 1.70 |
| 7/7/11 | FC Entero | 120 | 23 | 11 | 0 | 110 120 | 12 | 19 24 | 0 | 36 26 | 1900 | 0.05 |
| 7/21/11 | FC Entero | 230 | 37 | 5 | 0 | 7 4 | 3 | 10 2 | 0 | 18 2 | 800 | 0 |
| 8/8/11 | FC Entero | 1000 | 19 | 45 | 22 | 37 23 | 8 | 9 6 | 13 | 38 28 | 1100 | 0.63 |
| 8/22/11 | FC Entero | 280 | 88 | 43 | 1 | 52 11 | 29 | 38 12 | 0 | 33 6 | 700 | 0.32 |

Numbers indicate colonies of fecal coliform and enterococcus bacteria per 100 mL of water.

Numbers in boldface exceed Massachusetts single sample threshold for swimming (400+/100mL fecal coliform, and 104+/100mL entero).

Massachusetts threshold for shellfish is 14+ per ML and for drinking is 0 per 100 mL.

Precipitation data from Scituate Wastewater Treatment Plant.



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In This Issue:

- North River Greenway Takes Shape
- North River Commission Funding
 Threatened
- Annual Meeting November 4

Special Mailing

To All North River Abuttors:

This is the first of four issues of the NSRWA's RiverWatch Newsletter being sent to all North River property owners. We hope you find this North River focused issue informative, inspiring & illuminating.

Upcoming Events

NSRWA's Annual Meeting

November 4, 2011 7 pm • South Shore Natural Science Center

Wine and Cheese Reception Business Meeting to elect new

board members

PRESENTATIONS "Prioritizing the Restoration of River Habitat in Our Watershed"

Volunteer of the Year Award Sarah Frazar

Special Recognition Awards To our Culvert Inventorying Volunteer Team

Barbara Pearson Award Michael DiMeo Mfld. Harbormaster

Willow Brook Farm Preserve, Pembroke

Sunday, October 2, 2011 1:00- 4:00pm (Meet at Herring Brook Park to park and we'll shuttle to WillowBrook Farm)

Walk co-sponsored by NSRWA and the South Shore Natural Science Center, Norwell. **Pre-registration required.** Sign-up early online. Children 8 or older welcome. Cost: \$10 Members/ \$15 Non members.

The South Shore is home to over 100 species of edible wild plants, many of which are more nutritious and/or flavorful than their cultivated counterparts.

Expert forager and author of the book Wild Plants I Have Known...and Eaten, Russ Cohen will identify over 30 edible species found at Willow Brook Preserve, Pembroke. Wet weather before the walk may trigger a mushroom fruiting too. Willow Brook is home to many diverse habitats such as woodlands, wetlands, and meadows. In addition to foraging for edible species, we will see local flora and fauna found in each distinct habitat.



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