

NSRWA 2012 Action Plan



Expanding Shellfish Bed Openings

This year we plan to clean up additional identified "hot spots" of pollution sources to the South River to work towards our goal of shellfish beds that are opened year-round. *Continued on page 4.*



Restoring Natural Flows and Fish Passage

We will be evaluating the success of water conservation efforts in Scituate to restore natural flows in the First Herring Brook, and working to fix the fish ladders to pass herring. On the Third Herring Brook we will be working with the owners of two dilapidated dams to restore fish passage to 9.1 miles of river habitat. *Continued on page 5.*



Expanding the 5th Grade Water All Around You Program

We are expanding the reach of our Water All Around You program to Hingham, Duxbury, Cohasset and Rockland in 2012 with funding from Whole Foods 5% day. *Continued on page 4*.



Celebrating the Opening of the South River Park

We anticipate celebrating the opening of the new South River Park, and continuing to work on our long term vision for a South River walking trail connecting this park to other existing open space. *Continued on 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: Craig Hannafin Treasurer: Richard Leach Secretary: Barbara Carney

BOARD OF DIRECTORS Susan Caron Jean Christensen Janet Fairbanks Peter Hainer Russ Haskell Debbie Lenahan Mark Moore Sally Moore Donald Nagle Margery Parker

STAFF Executive Director Samantha Woods

Assistant Director Paula Christie

Watershed Ecologist & Massachusetts Bays Program South Shore Regional Coordinator Sara Grady

Marketing & Communications Director Debbie Cook

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Letter from the President

Since 2007, it has been my privilege to serve as a Director of the NSRWA. At the Annual Meeting in November, it became my honor to be named as Board President. During my tenure I have witnessed many positive and exciting accomplishments by the organization, not the least of which was the celebration last year of 40 years of protecting and restoring our beautiful waterways.

While it is tempting to congratulate ourselves on our many achievements, much critical work remains. While we witnessed the seasonal opening of the South River shellfish beds (20 years in the making!) we have reason to be hopeful of an extended, even year round season in the near future. Our efforts to encourage unimpeded stream flow and the fish passage this allows are both critical and ongoing. The restoration of natural hydrologic cycles are essential to the health of our watershed. And we hope to continue and expand our 5th grade Water All Around You program as long as we have new 5th graders each year!

As we work to finalize our new 5 year strategic plan, we anticipate many challenges besides



those mentioned above. Our ambitious agenda comes at a time of fiscal difficulty for nonprofit organizations. We are increasingly reliant on the financial support of you, our members. As a very successful 2011 comes to a close, please take a moment to reflect on the beauty and importance of our rivers, and the importance of our mission in maintaining them. Your continued generosity is vital to the uniquely complex ecosystem we are all so fortunate to call home.

> Sincerely, Craig Hannafin, President

Scenes from Annual Meeting 2011



Students from Inly School in Scituate present



their First Herring Brook posters at the Annaul Meeting.

Annual Meeting 2011

We welcomed three new board members – Susan Caron and Mark and Sally Moore – to the board of directors.

Thank you to Mullaney's Seafood for the Clam Chowder and Curtis Liquors for beer and wine!







Special Recognition Awards were given to from left to right Brett Muirhead, Ralph Butler, Peter Clapsaddle, Sarah Frazar (Volunteer of the Year) and John Happel for their support in conducting the field surveys of culverts. This work is the foundation for future stream restoration projects.

North River Commission Funding Restored Until June 2012



The NSRWA (and North River Commissioners) hosted a boat tour on the North River for the Department of Conservation and Recreation Commissioner Ed Lambert and his staff in October 2011. The good news - the Commissioner reinstated full funding (\$30,000) for this fiscal year (until June 30, 2012) to the Commission for the North River Boat patrol and administration staff. The not so good news - we may have to fight again for the funding next fiscal year. Stay tuned.



Sarah Frazar was awarded the Volunteer of the Year Award for leading a team of volunteers collecting field data on 125 culverts in our watershed.



Mike DiMeo was awarded the Barbara Pearson Award for his support of opening the South River shellfish beds to the public after being closed for 20 years! In this photo, he is being interviewed by WATD.

Thank You to New or Renewing River Guardian Circle Members

River Guardian Circle members are our most generous, making donations greater than \$500. Their generosity is one of the foundations for making the NSRWA a strong and effective voice for the rivers.

Individuals

Mark & Joell Bianchi Susan Caron Paul Coolidge Mark DiRico Mary Eliot Craig & Daniel Hannafin Alan & Janet Holbrook James Hughes Peter & Julie Kelly-Detwiler Richard & Dorothy Krause Andrea Miller Karen Stone and Michael Waddell Samantha Woods & Lanny Day

Organizations and Businesses Bond Printing

Bilezikian Family Foundation Norwell Women's Club Patricia G. Cobb, P.C.

Priorities 2012 continued from page 1



Extending the Shellfish Season

When the shellfish beds on the South River were opened this past April for the first time in 20 years it affirmed that our efforts to clean up the rivers was indeed working! On December 1, 2011 both the North and South Rivers were opened to the public for shellfishing and will remain open until June 1, 2012. On a sunny unseasonably warm December 4th we took a dozen people out shellfishing on the South River. This was a momentous occasion for us and those who participated. Twenty years of being closed to the public – a whole generation without the opportunity to harvest clams in their own rivers. I can personally attest to the sweetness of those clams!

Seven months of shellfishing is a great achievement but our ultimate goal – water quality that supports year-round shellfishing – is getting closer. Initial sampling indicates that the water



quality in the South River is clean even earlier than December and that we may be able to have shellfishing open earlier. We will continue to advocate for the necessary sampling be completed by the state to confirm this. We also are working to remove additional sources of pollution to the South River. The town of Marshfield with our support applied for funding to fix a stormwater catch basin in the downtown that we identified through sampling is contributing pollution to the South River. If funded the project would be completed in 2012 and would be the first of three areas we have designs for upgrades to. Getting the first one completed would be definite progress towards an extended opening of the shellfish beds.



Expanding the 5th Grade "Water All Around You" Program

ducation is the foundation for change. This is why it is critical for us to expand our efforts to reach the next generation of river stewards. Our "Water All Around You Program" focuses on how watersheds work and how man impacts them – right here in our own backyard. Connecting children to where their drinking water comes from, how water becomes polluted, how it gets cleaned and how we can conserve it will pay dividends now and into the future.

Over the past several years we have had various towns come in and leave the program due to the uncertainties of budgets. This coming school year we have funding to provide the program in Norwell, Hanover, Weymouth, Pembroke and Kingston. We are expanding to Rockland, Hingham, Cohasset and Duxbury with funding from Whole Foods and local Rotary support. We hope that by providing this program free of charge this year that these communities will be able to support it into the future.

Priorities 2012 continued from page 1 Restoring Natural Flows and Fish Passage

n 2011 we helped to pass an irrigation restriction in Scituate that saved approximately 300,000 gallons per day of water in the summer months. At the same time we worked with Scituate to develop an operational plan for their water system that

allows for more natural streamflow releases downstream of the Reservoir and Old Oaken Bucket dams on the First Herring Brook. Streamflow releases began in October of 2011.

This coming year for the First Herring Brook we will continue to monitor and evaluate the operations to determine if any further management changes will be needed to maintain streamflows and protect the safety of the water supply. In addition to restoring streamflows, the fish ladder at the Reservoir will need evaluation and possibly upgrades or replacement. We will be working to assess the condition of the ladder and the improvements that will be needed for it to be functional.

On the Third Herring Brook we have

been providing technical assistance and grant writing support to two dam owners with breeched and unsafe dams. The second dam on the brook as one moves upstream is the YMCA dam. The Y hopes to move forward with removing this breeched dam and restoring the natural river habitat and fish passage. The first dam is owned by the Cardinal Cushing Center and is in failing condition. The Cardinal Cushing Center is conducting a feasibility study to determine what their options are for dealing with this failing infrastructure and improving the habitat at their site. The NSRWA will continue to support the efforts of these two dam owners to restore natural streamflows and fish passage on the Third Herring Brook.

Last year's efforts to document the culverts in our watershed that are fragmenting or deteriorating stream habitat laid the foundation for us to move forward with working with watershed

Celebrating the South River Park Opening

magine being able to walk or bike along the South River right in the heart of downtown Marshfield. The South River Park is a key part of that vision to connect existing parks along the river. The South River park when completed will have 1,000 feet of walking paths with potential to connect to a longer walking path along the South River in the future, parking for 8-14 cars (with rain gardens and permeable pavers to reduce any impacts to the river), restored native vegetation (the property is host to many invasive species) and access to the South River through an overlook and boardwalk. communities to restore stream continuity. This year we will go on the road with our report to educate conservation commissions and other relevant town committees about the need to restore stream continuity and upgrade culverts that are undersized or poorly

designed to allow for fish passage. Through our field work we identified some "low hanging" fruit opportunities for us to restore stream continuity either through culvert cleaning or removing unnecessary obstructions. Over the next year we will engage volunteers to aid us in restoring these areas.



This next year our priority will be to recruit volunteers to help us with removing the invasive Japanese Knotweed from the banks of the river within the park and to shape a long term strategy for the greenway and walking trail along the river. Just recently we were fortunate to be the recipient of a generous donation from the Sheehan Family Foundation of \$10,000 to help build the boardwalk to the South River and manage invasive species at the park. We look forward to seeing you at the opening!

By Samantha Woods, Executive Director



2012 Water Watch Lecture Series

January 18 – March 21 Wednesdays at 7 pm at the South Shore Natural Science Center



The North & South Rivers Watershed Association, the South Shore Natural Science Center and Mass Audubon South Shore Regional Headquarters are pleased to announce their partnership in presenting a series of 10 free Wednesday evening lectures, January 18 – March 21, 2012.

This fascinating series offers something for everyone. All lectures will begin at 7pm and take place at the South Shore Natural Science Center, Jacobs Lane, Norwell. Members and the general public are encouraged to attend. Admission is free of charge!

For more information, or to be notified by email about this series and other NSRWA events via Rivernet, visit www.nsrwa.org or contact North & South Rivers Watershed Association 781-659-8168; South Shore Natural Science Center 781-659-2559; or Mass Audubon South Shore Regional Headquarters 781-837-9400.

JANUARY 18 - The Great Penguin Rescue: 40,000 Penguins, a Devastating Oil Spill, and the Inspiring Story of the World's Largest Animal Rescue

Dyan deNapoli, Author

When an iron-ore carrier sank off the coast of South Africa in June 2000, nearly half the entire world population of African penguins was threatened by the oil that spilled from the ship. It was the height of the best breeding season on record for this now-endangered species, and soon, nearly 20,000 penguins were covered with oil, and another 20,000 were in the path of the approaching oil slick. Would rescuers arrive in time? In this compelling presentation, penguin expert and award-winning author, Dyan deNapoli, shares her first-hand experiences working as a rehabilitation supervisor during the largest animal rescue ever undertaken.

JANUARY 25 - Sighting! Surveying Seabirds on Stellwagen Bank

Anne-Marie Runfola, Volunteer Coordinator, Stellwagen Bank National Marine Sanctuary

The Stellwagen Bank National Marine Sanctuary turns twenty in 2012. Since its inception, it has always been tied to the South Shore. First opened in Plymouth in 1992, the sanctuary headquarters has since migrated northwards to occupy the Coast Guard station on First Cliff in Scituate. During those 20 years, the sanctuary staff has conducted research that has changed the way we look at the 842 square mile sanctuary. In 2011, staff and volunteers jumpstarted what has become a nationally replicated system for surveying seabirds – in Stellwagen's case, gannets, storm-petrels, jaegers, and numerous species of shearwaters, among other species – offering otherwise landlubbing Massachusetts residents an opportunity to flex their citizen science muscles at sea.

FEBRUARY 1 - The Past, Present and Future of Earthquakes in New England

Dr. John Ebel, Director of Weston Observatory at Boston College

This past summer's earthquake reminded us that while we may not live in seismically-active California, the earth still can move under our feet! The New England region has experienced regular earthquake activity throughout its history, and a few of which were damaging. In this talk, Dr. Ebel, Director of the New England Seismic Network at Boston College, will explore where New England earthquakes have occurred, what caused them, and what the potential is for future damaging earthquakes in our region.

FEBRUARY 8 - The Search for and Discovery of Air France Flight 447

Dr. David Gallo, Director of Special Projects, Woods Hole Oceanographic Institution

On April 4, 2011, a team led by the Woods Hole Oceanographic Institution located the wreckage of Air France Flight 447 in the Atlantic Ocean off Brazil's northeastern coast in nearly 2.5 miles of water. Learn how the search team scoured some of the most rugged seafloor terrain using specialized vehicles to find the wreck, whose location remained a mystery for nearly two years. At the forefront of ocean exploration, Gallo was one of the first scientists to use a combination of robots and submarines to map deep-sea mountain ranges. Most recently he was co-expedition leader for mapping the Titanic and the successful search for the missing Air France 447.

FEBRUARY 15 - Sea Level Rising, The Chatham Story

Bill Sargent, Author

On April 6, 2007, an early spring storm broke through Cape Cod's barrier beach. Overnight the citizen's of Chatham had to contend with as much sea level rise as most communities will face in the next 50 years. A dozen homes were swept away in as many months and today a new inlet is aimed at the heart of the village. Another hundred houses and the third most lucrative fishing port in New England will be endangered in the coming years. Sea level rising is a clarion call for a coastal communities to prepare for the chronic effects of global warming. Join Bill Sargent, NOVA consultant, and author of the book "Sea Level Rise: the Chatham Story", for a captivating, illustrated program.

FEBRUARY 22 - Shucked

Erin Murray, Author

Let Erin Murray, author of *Shucked*, take you on a unique tour of the oyster business from an insider's perspective. In this engrossing and personal account, a young woman from Boston ditches her pampered city girl lifestyle and convinces the rowdy crew at Island Creek Oysters in Duxbury to let a completely unprepared, aquaculture-illiterate food and lifestyle writer work for them for 18 months to learn the business of oysters. This in-depth look at the work that goes into getting oysters from farm to table shows Erin's full-circle journey through the modern day oyster farming process. It also tells a dynamic story about the people who grow our food, and the cutting-edge community of New England oyster farmers who are defying convention and looking ahead.

FEBRUARY 29 - A Tail of Two Lobsters: Migration and Reproduction in American Lobsters

Jason Goldstein, University of New Hampshire

North American lobsters are iconic throughout New England and support a historically successful fishery unmatched by few even today. However there are still large unknowns concerning some of their most fundamental biological processes including growth, reproduction, egg development, and patterns of movement. Using creative technological solutions, scientists and fishermen alike hone in on patterns of lobster movement both in the Gulf of Maine and in the Great Bay Estuary and have been surprised by some of their findings. Other factors such as the impacts of fluctuating ocean temperatures provide insight into how coastal waters and estuaries may change at both regional and local scales, thus impacting the future health and distribution of lobster stocks.

MARCH 7 - The 100th Anniversary of the Sinking of the RMS Titanic

Coast Guard Ice Patrol

The 1912 sinking of the RMS Titanic was one of the largest peacetime maritime tragedies, resulting in the deaths of 1,517 people. After setting sail for New York City with 2,223 people on board, she hit an iceberg, and sank. The high casualty was due in part to the fact that, although complying with the regulations of the time, the ship carried lifeboats for only 1,178 people. A disproportionate number of men died due to the "women and children first" protocol that was enforced by the ship's crew. What was done to prevent future tragedies? The United States Revenue Cutter Service, later to become the United States Coast Guard, instituted the International Ice Patrol, an organization still operated within the Coast Guard today, from right here in New England. Their work of tracking icebergs continues to this day, a century after the most unthinkable disaster took down the world's "unsinkable" ship.

MARCH 14 - "New" Furry Friends to Our Area: Black Bears, Fishers & Beavers Jason Zimmer, Wildlife Biologist, Southeastern Massachusetts DFW

Wildlife biologist manager of the Southeastern Massachusetts Division of Fisheries and Wildlife, Zimmer will inform us of the latest science and management of our furry friends: black bears, fishers and beavers. These animals, once hunted either for their furs or out of fear, were significantly reduced in population or extirpated locally but are now making a comeback. Jason will tell us what the latest is on these creatures – where they are being found locally and more importantly what to do if you encounter one!

MARCH 21 - Ospreys and Eagles: They Have Returned

John Galluzzo

During Massachusetts' first Breeding Bird Atlas, compiled during the 1970s, ospreys bred in only one place: the Westport River. Today, they are synonymous with the South Shore coastline. Bald eagles, succumbing to the same pesticides that killed ospreys during the 1950s and 1960s, were so far gone they had to be reintroduced to nesting sites in the Quabbin Reservoir area; now, just three decades later, they nest in Plymouth County and winter along the North River and on the Plymouth coast. The resurgence of these two species came as a result of natural resiliency and human intervention in the lives of disappearing species.



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Annual New Year's Day Walk

Sunday, Jan 1, 2012 at 1:00 pm South Shore Natural Science Center

This year's Annual NSRWA "welcome in the New Year walk" is jointly sponsored with the South Shore Natural Science Center. Join the tradition and explore the perimeter of the Science Center property on the Peripheral Trail. Observe various habitats from the old pasture to the red maple swamp to woodlands on this leisurely hour walk. Afterwards, warm the soul with hearty refreshments. For more information visit www.nsrwa. org or contact the NSRWA 781-659-8168.

This family friendly walk is free and open to the public, but donations are welcome. Pre-registration is not required. No dogs are allowed on this property. Meet at the Entrance, South Shore Natural Science Center building located on 48 Jacobs Lane in Norwell www.ssnsc.org.



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.