
NARROW RIVER NOTES

Newsletter of the Narrow River Preservation Association

Winter 2002

NARROW RIVER TMDL STUDY NEARS COMPLETION

In October, representatives of the Rhode Island Dept. of Environmental Management (RIDEM) held a public meeting at the URI Bay Campus to present the findings and recommendations of the Narrow River TMDL (total maximum daily loading) study. The draft report has been available for public review and comment and the final report is expected to be released soon. The following summary for the Narrow River Preservation Association (NRPA) membership was provided by Kevin Bartlett of RIDEM. The full report can be accessed on the RIDEM home page at <http://www.state.ri.us/dem/programs/benviron/water/quality/rest/index.htm>.

What is a TMDL? A TMDL is a restoration plan for an impaired (polluted) waterbody. It establishes the maximum loading of a pollutant that the waterbody can absorb and still meet water quality standards. It must also recommend the locations and magnitudes of pollution reductions required to restore water quality.

What triggers a TMDL? RIDEM reviews water quality data and evaluates the State's waters every two years. Results are compiled in the "State of the State's Waters" report. Any waterbody not meeting water quality standards for designated uses (e.g., swimming, shellfishing) is placed on the "303(d) List of Impaired Water Bodies." A TMDL must be accomplished for all listed impaired waters. A waterbody remains on the list until water quality is restored.

Steps in the TMDL process:

1. Define the problem:
 - What is the pollutant of concern?
 - Where do problems exist?
2. Identify pollutant source locations, estimate current pollutant loads, and determine water quality impacts.
3. Estimate the reduction in loadings needed to improve water quality from the present condition to its desired condition.
4. Define how reductions from identified sources may be achieved.

5. Implement pollution reduction measures.

6. Monitor water quality to ensure that water quality goals are met.

The Narrow River TMDL

Define the problem: Based on sampling data obtained through NRPA volunteers and RIDEM monitoring programs, Narrow River and its three largest tributaries — Gilbert Stuart Stream, Mumford Brook and Crooked Brook — exceed fecal coliform standards. Fecal coliform bacteria are used as an indicator of the potential presence of human pathogens (disease-causing bacteria and viruses) in sewage. As a result, the Narrow River is closed to shellfishing, and safe swimming in portions of the Watershed is threatened.

Identification of pollutant sources: The principal dry weather sources of fecal coliform to the Narrow River are its tributaries and, in the central portion of

(Continued on page 3)

NRPA WELCOMES NEW EXECUTIVE DIRECTOR

Richard Grant, president of NRPA, is very pleased to announce the appointment of Tony Lachowicz to the position of Executive Director of NRPA, effective November 5, 2001. Tony replaces Teresa McKinley, who left this position in June to move to Dana Point, CA.

Tony has been a long-standing friend of the River. He is a past president of NRPA and has been a member of the organization for many years. As Director of Planning for South Kingstown for fifteen years, his professional involvement encompassed many aspects of the Narrow River Watershed.

Tony's first assignments will include grasping the comprehensive nature of the organization, understanding the unique geography of the Watershed, and delineating the responsibilities for activities that occur within the twenty square miles of the estuary.

Tony joins NRPA at a vital time in its



*Tony Lachowicz, Executive Director
Narrow River Preservation Association*

thirty-one year history of protecting Narrow River. The important TMDL Study is nearing completion by DEM's Office of Water Resources. This study will encourage, and in some cases mandate, many of the activities and policies that NRPA has advocated for years.

The key role that Tony will fill as Executive Director will be subject to the direction of the NRPA Board of Directors. He will review all policies and work closely with the Board to implement those policies on a management level. He will also manage the funding sources for all of our Land, Water and Educational Programs.

Tony lives in Kingston with his wife Connie and their golden retriever, Fergie, who can sometimes be found visiting the NRPA office on Boston Neck Road. Our members are invited to call Tony at 783-6277 to discuss any issues affecting the Watershed.

The President's Cove

As we begin to build our calendar for the 2001-2002 NRPA year, I am looking forward to working with Tony Lachowicz, NRPA's new Executive Director, and Jeremy Doak, NRPA's Program Coordinator. If you have any interest in the Land, Water or Educational programs that NRPA conducts, please contact Tony and he will bring you up to speed so you can participate.



One of the items on which I will concentrate this year is the educational program. A great deal is being accomplished through our AWESome Program which works with teachers on disseminating information about the Narrow River watershed. I will attempt to expand this outreach lecture series into the elementary schools.

As part of the AWESome Program, NRPA supplies schools with a series of maps of the Watershed. I would like to augment this effort by creating a map that includes historical notes. We have a wealth of history within in the boundaries of our small Watershed and such a map will make this information available. This historical map will tie in nicely with the other educational aspects of our lectures.

To help us with this map, I am asking everyone on our membership to step up to the challenge of sending any historical information to the NRPA office. Some of the map's key words are: Littleneck, Base Rock, Cormorant Reef, Horse Shoe, Crying Bog, Kit Pond, Gooseberry Island, Cove, Brenton, Rodman, Hazard, Bull, Saunders, Gould, Mumfred, Brown, Nichols, Wilbro, Hicks, Eddy, Crandall and Glebe Farm. If you have anything to contribute about these names (who, what, when, where, why and that type of thing) or any other historical notes about the Training Lot, Old Quaker Burial Ground, Namcook, Gilbert Stuart Mill, McSparran Hill or the Cajoot Mine near Side Hill Farm, please send it to our office. NRPA will compile the information and produce this new historical map to add to the series of maps we provide to schools and other organizations.

As we begin 2002, I am also looking forward to working to improve the quality of the water in Narrow River. The TMDL article in this newsletter discusses some of the issues we're facing. As always, it's important to remember that by giving back to the River, we help maintain the value of the land we all call home.

—Richard Grant

PLEASE JOIN US OR RENEW!

We welcome your support
Narrow River Preservation Association

Name _____
Street _____
City _____ State _____
Zip _____ Phone _____

<input type="checkbox"/> Benefactor	\$500.00	<input type="checkbox"/> Family	\$ 30.00
<input type="checkbox"/> Life	\$100.00	<input type="checkbox"/> Individual	\$ 20.00
<input type="checkbox"/> Patron	\$ 50.00	<input type="checkbox"/> Student	\$ 10.00
		<input type="checkbox"/> Other	\$ _____

Mail to: NRPA - P.O. Box 8 - Saundertown, RI 02874

6239

NRPA is part of the United Way Workplace Campaign. This is our donor option number

If you plan to make a United Way donation, please consider designating a portion of your gift to NRPA.

NARROW RIVER PRESERVATION ASSOCIATION

Office: 750 Boston Neck Rd, Narragansett
Mail: P.O. Box 8 Saundertown, RI 02874
Phone/Fax: (401) 783-NARR
E-mail: NRPA@netsense.net
www.narrowriver.org

Narrow River Notes

Published quarterly by Narrow River Preservation Association (NRPA)

Editors

Jude Rittenhouse
Robert Kenney

Board of Directors

Richard Grant, President
Ken McShane, Treasurer
Jon Boothroyd, VP Science
Connie Alexander
Veronica Berounsky
Annette DeSilva
Skip French
John Gouveia
Stephen Hale
Melissa Hughes
Robert Kenney
Robert Leeson, Jr
John Maciel
Lesia Meng
Sharon Pavignano
Peter Scalora
Julia Randall Sharpe
Fraser Vaughn
Stephen Vincelette
Tom Warren

Staff

Tony Lachowicz, Executive Director
Jeremy Doak, Program Coordinator



The Narrow River Preservation Association is a non-profit 501(c)(3) organization.
The mission of NRPA is to preserve the quality of the communities and natural environment within the Narrow River Watershed.

NARROW RIVER TMDL STUDY

(Continued from page 1)

the River (between Lacey and Middle Bridges), waterfowl. During significant rainstorms, stormwater runoff entering the River from storm sewer outfalls, tributary streams, or overland as sheet flow is the dominant source. Fecal matter from birds, wild and domesticated animals, and failing septic systems is washed off the shoreline, docks, and surrounding neighborhoods into the River.

The largest sources to Gilbert Stuart Stream and Mumford Brook appear anthropogenic (related to human activity). The source at Gilbert Stuart Stream was isolated to the immediate vicinity of the Gilbert Stuart Birthplace Museum where an outhouse was still in use. The most likely source to Mumford Brook is a failing septic system or systems, localized to a small area in South Kingstown along the eastern end of Narragansett Avenue. Sources to Crooked Brook do not appear to be anthropogenic based on preliminary data, however, analysis is ongoing.

Estimation of pollutant reductions required to restore water quality: Current water quality in the Narrow River and its tributaries was determined through a comprehensive monitoring program. To simplify the water quality evaluation, the River was divided into six segments assumed to have relatively homogeneous physical properties. The reduction goal for each River segment and tributary was determined by comparing current fecal coliform conditions to the applicable water quality targets. Required reductions in Narrow River ranged from nearly 0% in portions of Lower Pond to 90% in the southern portion of Pettaquamscutt Cove. Required reductions in Gilbert Stuart Stream and Mumford Brook were 98.9% and 99.9%, respectively.

Define how reductions from identified sources may be achieved: Reduction strategies vary substantially by source and location. Anthropogenic sources (failing septic systems, illicit discharges, etc.), once identified, must be eliminated. Bird-related sources can only be minimized by discouraging year-round residence of waterfowl (geese, ducks and swans) and decreasing the resident populations of other birds, especially gulls. Residents should not feed waterfowl or gulls. Additionally, tall vegetated buffers

or other waterfowl barriers should be maintained at the water edge to make the area less appealing to long-term waterfowl residence. Improved stormwater control is also vital to protect the River. Storm sewer systems discharge large quantities of pollutants directly to the River. Actions must be taken by residents to prevent the contamination of stormwater, including policing pet wastes, maintaining septic systems, and minimizing fertilizer applications. Additionally, municipalities must develop plans to minimize the quantity and maximize the quality of stormwater from storm sewers.

Implement pollution reduction: The identified anthropogenic source to Gilbert Stuart Stream has been eliminated with the cooperation of museum personnel. RIDEM's Office of Compliance and Inspection is conducting the investigation into the Mumford Brook source. Minimizing bird impacts can only be accomplished with the education and cooperation of Watershed residents. Stormwater mitigation is a daunting challenge that will take a substantial amount of time and ingenuity, however, efforts are underway. RIDEM has awarded the Southern Rhode Island Conservation District (SRICD) a grant to develop an education program to instruct residents how to minimize pollutant loadings to stormwater. The Town of Narragansett, in cooperation with the SRICD, is also actively pursuing stormwater improvement strategies, including the design and construction of stormwater control structures at Circuit Drive and at Mettatuxet Beach.

Monitor water quality to ensure that water quality goals are met: Data obtained by volunteers through the NRPA monitoring program were invaluable to the accomplishment of the Narrow River TMDL. Maintaining the current NRPA monitoring program is essential to gauge water quality trends as improvement measures are implemented, ensuring that water quality goals are realized.

If you'd like to help by becoming a volunteer water quality monitor, contact Annette DeSilva at 789-3407.

—Kevin Bartlett and Robert Kenney

RIVER WATCH MILESTONE

2001 marked the tenth anniversary of NRPA's River Watch program. This volunteer water quality monitoring program has helped provide a better understanding of the health of the River.

River Watch began in 1992 as a component of the Tri-town Narrow River Stormwater Management Project. RIDEM's Aqua Fund provided funding for the first few years. Since then, funding has come from a variety of sources including the State, NRPA, and the towns of Narragansett, North Kingstown, and South Kingstown. NRPA is responsible for fundraising, volunteer recruitment, and general coordination. Funds support the costs of training, materials, analysis, and data compilation, all of which are provided by the URI Watershed Watch Program.

The goals of the program are to:

- Promote citizen participation in water quality protections.
- Educate the public about the importance of water quality issues.
- Obtain multi-year water quality information in order to assess current conditions as well as trends.
- Encourage management programs based upon water quality information.

The monitoring season runs from early May to late October each year. Water temperature, salinity, and dissolved oxygen are measured and samples are collected for lab analysis of algae (chlorophyll) concentration. Five times during the season, water samples are collected and immediately delivered to the URI Watershed Watch lab for analysis of nutrients and bacteria. After ten years of monitoring this adds up to a large quantity of data which has helped us to better understand the River's water quality. Although there has been no clear pattern of improvement, there has been no overwhelming decline in water quality.

The success of the River Watch Program is attributed to the time and dedication of the volunteers. Since the program's start, a total of 97 volunteers have participated. NRPA thanks all of the 2001 monitors: Paula Bonzagni, Steve

(Continued on page 5)

2001 ANNUAL MEETING HIGHLIGHTS

NRPA held its 31st Annual Meeting on October 2nd at the Coastal Institute on the URI Bay Campus. The event offered an opportunity for the community to hear about NRPA's accomplishments and the important issues affecting the River and its Watershed.

The meeting opened with a welcome from NRPA's President, Richard Grant and a report on the "Year in Review." Some of our activities and projects over the year have included updating the *Narrow River Handbook*, developing an NRPA pamphlet, providing quarterly newsletters, continuing various education programs, holding the annual Road Race, developing a Narrow River bibliography and maintaining the River Watch Program. The organization went through a major personnel change with the departure of Executive Director Teresa McKinley in June. Teresa was honored for her dedicated service to NRPA by the presentation of the W.E.R. La Farge Memorial Award

Ken McShane, NRPA Treasurer, followed with a financial report and John Maciel introduced the NRPA Board of Directors for the 2001/2002 year. New members to the Board include John Gouveia, Sharon Pavignano, and Peter Scalora.

Several NRPA awards were presented next. Melissa Hughes presented



Richard Grant and Tony Lachowicz stand with Julie Tracy the proud winner of NRPA's Annual Kayak Raffle. A special thanks to the Kayak Center of Wickford who donated this years kayak.

this year's Environmental Recognition Award to Susan Emerson for her efforts devoting numerous hours to developing the Narrow River bibliography. Annette DeSilva thanked the 2001 River Watch volunteers and made special presentations to the "10-year" monitors for the program. Ve-

ronica Berounsky announced the 2001 scholarship recipients and science fair winners. These awards had been presented earlier in the year.

Reports on "What's happening in the Narrow River Watershed" included Veronica Berounsky's update on the status of the Narrow River bibliography which includes scientific, historical and cultural literature pertaining to the River. It contains over 160 citations with the oldest record dating back to 1935. The bibliography was available for viewing at the meeting and can also be accessed at the NRPA Office.

Jon Boothroyd followed by reading a report from Julia Sharpe on Narrow River Land Trust (NRLT) activities. In 2000, the NRLT added 31.5 acres to the total number of acres under its protection. By the end of 2001, the Land Trust was contracted to close on two properties, 55 acres and 13 acres, bringing the total protected land in the Watershed to 537 acres.

Jon Boothroyd continued with a slide presentation which updated everyone on important issues affecting the Narrow River. These included the Middle Bridge replacement status, habitat restoration/dredging and water quality improvement projects. He showed a picture of the existing Middle Bridge as well as a drawing of the replacement bridge. Jon's presentation

(Continued on page 5)

ANNUAL NARROW RIVER 10K RUN/5K Run & 5K WALK

NRPA proudly presents its 15th annual Narrow River Run which includes a 10K Run/5K Run and 5K Walk. This year the race will be held on Saturday, May 11, 2002. Our presenting sponsor will be Citizen's Bank and we thank them for their commitment and their support as a valued friend of the River.

Prizes will be offered for first place finishers in each age category for the runs and for first place overall for the walk. All junior entrants will receive a prize. After the race, a raffle will be held and refreshments will be served.

Registration will take place at Mosby's on the URI Bay Campus. Mosby's is approximately 500 yards east

of the main entrance to the Bay Campus on the north side of South Ferry Road. Registration will begin at 8:00 AM. The events for the 5K runners and walkers will begin at 9:30 AM and the 10 K race at 10:00 AM. 5K participants should report to the Bay Campus no later 8:45 AM to catch the bus to the start. The first 400 registered entrants will receive a 2002 Narrow River Run T-shirt.

The 5K runners and walkers will be bused to their starting point at Pettaquamscutt Park. 10K runners will start at the Bay Campus main parking lot. All walkers and runners will finish at the Narragansett Town Beach, North

Pavilion Parking Lot. A vehicle will be available to carry light clothing and gear to the finish line. There will be a bus available at the completion of each phase of the Narrow River Run to transport race participants back to the Bay Campus.

REGISTER NOW! Fill out the registration form on the back of this newsletter. Race applications are also available at all Citizen's Bank locations and at www.narrowriver.org. For further information, or to volunteer to help at the Race, please call NRPA's office at 783-NARR. Whether you like to run or walk, come and enjoy the scenic beauty of the Narrow River. —Lesia Meng

SCHOLARSHIPS AVAILABLE

For the ninth year, NRPA announces that it will take applications for its 2002 scholarships. One senior from each high school in the Watershed—South Kingstown High School, North Kingstown High School, Narragansett High School and The Prout School—is eligible to receive a \$500.00 scholarship.

Scholarship applicants are judged on four criteria: their participation in environmentally-oriented activities throughout their high school career, a science teacher recommendation, the relevancy of an original essay about the impact of human activity on the Watershed and their academic achievement in science courses. Applications can be obtained from high school guidance offices, the NRPA office, or at www.narrowriver.org after the February 2002 break. **Application deadline is April 1, 2002.**

College Scholarships are a component of NRPA's Environmental Youth Achievement Program. The program was created to: 1) recognize environmentally-oriented activities conducted in the Watershed by young people from kindergarten through high school and 2) promote academic achievement of young people in the sciences.

—Melissa Hughes

ANNUAL MEETING HIGHLIGHTS

(Continued from page 4)

included photos and maps of the River. He showed aerial photos of the River between Sprague Bridge and Middle Bridge. The pictures depict the River channel and the areas being considered for dredging. He also reviewed DEM's TMDL Program (see article on page 1).

Jon also reported on the NRPA shore survey that was conducted in the spring by taking photo and video images of the shoreline while cruising the length of the River by boat. The survey, with planned follow-ups, will be useful in monitoring shoreline land use and showing how changes in land use can affect the River's edge and water quality. Regulations require that wetlands and the River's edge (buffer areas) be protected during development activity. Jon showed survey photos of properties that comply with the new regulations along with some that predate the regulations.

The Meeting was highlighted by a presentation from Mr. Jan Reitsma, Director of the Rhode Island Department of Environmental Management (RIDEM). Mr. Reitsma was asked to address the issue of water quality in

Narrow River. He began by explaining that in 1999 and 2000 RIDEM conducted a bacterial study of the River. The study looked at the entire Watershed and relied on the data provided by the NRPA River Watch program. The findings confirmed that the River is not meeting the SA standards (required for the harvesting of shellfish). Three locations along the River were determined to have unacceptable fecal coliform levels. Mr. Reitsma discussed the agency's ongoing and proposed follow-up activities for each of these areas (see TMDL article on page 1).

Mr. Reitsma was also asked to discuss boating regulations and enforcement, as they pertain to the Narrow River. He indicated the importance of legislation requiring marine safety education for users of Personal Water Craft (PWCs) and of town adoption of their own PWC ordinances. The towns of Westerly and Charlestown have had success in this area and should be contacted for guidance. During the discussion which followed, an audience member asked if DEM could provide increased patrols for the Narrow River to enforce existing boating regulations. Mr. Reitsma replied that additional funding required for increased enforcement patrols is not in the existing budget and it is unlikely that funding will be increased in the future.

Director Reitsma was pleased to hear of the land preservation efforts of the Narrow River Land Trust. He encouraged NRPA to develop a Watershed Action Plan to address issues such as water quality, watercraft, and land use. NRPA's advice to DEM would be valued. He also encouraged NRPA to consider becoming a "Watershed Council." Multi-town projects receive higher priority when reviewed and the Narrow River runs through three towns, so would fall into this category. He closed by indicating that the DEM/NRPA relationship is one that should grow in the future.

The meeting ended with the traditional Kayak raffle drawing. The winner was Julie Tracy from Connecticut.

—Annette DeSilva

RIVER WATCH TEN YEAR MILESTONE

(Continued from page 3)

Bonzagni, Jennifer Carey, Sandy Crevier, Abby Davis, Sue Davis, Earnest Flewwelin, Nancy Flewwelin, Melissa Hughes, Barry Martasian, Kevin McCarthy, Madge McCarthy, Harriet Powell, Harry Quan, Sarah Quan, Tom Roberts, Robert Schelleng, Barbara Smith, Bruce Smith, Heidi Travers, Peter Travers, Betty Vanderbilt, Peter Vanderbilt, Fraser Vaughn, Stephen Vincelette, and Julie West.

Special thanks to the volunteers who have been with River Watch since 1992: Melissa Hughes, Harriet Powell, Harry Quan, Sarah Quan, Tom Roberts,

Robert Schelleng, Barbara Smith, Bruce Smith, Betty Vanderbilt, Peter Vanderbilt, Fraser Vaughn, and Stephen Vincelette. NRPA was pleased to present each of them with a plaque at the annual meeting. Also honored were Linda Green and Elizabeth Herron of URI's Watershed Watch Office. Their guidance and support over the years has been greatly appreciated; they always seem to be available to answer our questions.

As coordinator of River Watch, it has been a pleasure to be able to work with all of the volunteers and the Watershed Watch Office. Their dedication is truly inspiring. I extend my thanks to all River Watchers.

—Annette DeSilva

NARROW RIVER 10K RUN/5K RUN/5K WALK APPLICATION

Check one: 10K Run
 5K Run
 5K Walk

I hereby for myself, my heirs, executors and administrators, waive and release any and all rights and claims for damages I may have against the sponsors, coordinating groups, and any individuals associated with the event, their representatives, successors and assigns, and will hold them harmless from any and all injuries suffered in connection with this event. I attest that I am physically fit to compete in this 10K/5K event.

Name _____

Sex _____ Age _____

Address _____

City _____

State _____ Zip Code _____

Phone _____

Entry Fee

\$12 postmarked by May 3

\$15 after May 3 and day of Race

**Please fill out all information, sign the form and mail it with your entry fee to:
 Narrow River Preservation Association, Box 8, Saunderstown, RI 02874**



Printed on Recycled Paper



028822+1004 14



NON PROFIT ORG.
 U.S. POSTAGE
 PAID
 SAUNDERSTOWN, RI
 02874
 PERMIT No. 3

Narrow River Preservation Association
 Box 8
 Saunderstown, RI 02874