

WATERSHED

A Newsletter of the Wood-Pawcatuck Watershed Association

Volume 22 No. 4

FALL 2005

WPWA to address non-point source pollution in Yawgoo and Barber Ponds

The Wood Pawcatuck Watershed Association is one of ten recipients of a grant from the state's Non-Point Source (NPS) grant program. The \$38,000 reward, which requires a 40% match, will be used to develop a non-point source watershed management plan for Yawgoo and Barber ponds and Chickasheen Brook, located in the towns of Exeter and South Kingstown. Most of the money comes from the US EPA, and a portion from the state's Clean Water Environmental Trust Fund.

The Total Phosphorus TMDL for Chickasheen Brook, Barber Pond, and Yawgoo Pond recommends that phosphorus from Arrow Swamp, Maple Swamp, and other sources needs to be controlled. Before any abatement procedures can be implemented, a thorough watershed management plan for the Barber Pond watershed

needs to be formulated. WPWA will use the grant funds to hire a consultant who will develop the management plan based on information from the TMDL, determine the need for further monitoring, conduct public hearings, and provide a final report with recommendations for water quality restoration programs. WPWA will be involved in the public outreach associated with the project.

Barber Pond is a highly visible and popular pond with a public access directly from Rte. 2 in South Kingstown. It is stocked with trout by the state. On any given day, a variety of activities can be observed at the pond, including fishing, swimming, and boating. This is a particularly popular site for ice fishing in the winter. Although relatively small in size, the easy public access of Barber Pond and its scenic location make it

an extremely important natural resource to the people of Rhode Island.

Barber Pond is fed by Chickasheen Brook and Yawgoo Pond. The watershed is contained in two towns, Exeter and South Kingstown. From 1999 to 2002, Yawgoo and Barber Ponds experienced algal blooms, noxious weed growth, and anoxia conditions. During this same period, samples from both ponds and the Chickasheen Brook contained high levels of phosphorus. A very similar situation was observed from 1989 to 1991. At that time it was determined that two shellfish processing plants were discharging large amounts of phosphorus into illegal disposal sites and permitted lagoons. Groundwater and overland flow from these areas drain into Maple Swamp and Arrow Swamp, the headwaters of the Chickasheen Brook. When the shellfish operations were closed over ten years ago, water quality in both ponds improved dramatically.

(Cont's on page 3)



Aerial view of Yawgoo Pond (top) and Barber Pond in South Kingstown. (Photo URI Watershed)

From the Executive Director

Some government agencies do get the job done

I'm just returning to my desk from a productive meeting with our friends and partners from USDA Natural Resource Conservation Service. Joe, Mike, and Kate came by to assist us in making decisions about final planting for our riverbank restoration project, which is a more technical term for what it actually is a really beautiful garden of native plants that bloom from spring to late fall. Joe oversees the WHIP program, or Wildlife Habitat Incentives Program. These funds paid 75% of the costs.

While here they asked about the Switch Road TEA-21 enhancement project, for which we received funding from RIDOT in 2002, and into which WHIP contributed funds. Through my evident frustration I try to explain why this very simple project has been stuck in "bureaucratic limbo" that has gone on for so long I have trouble remembering the reasons why. Kindly Mike takes a few names and promise to make a call or two.

Finally I mention another project in the works, the rehabilitation of the Bradford Fishway. "Why didn't you apply for WHIP funds for that?" offers Joe. He agrees to set aside time to take a look at the project and discuss ways NRCS can get involved.

Isn't it refreshing to hear about a government agency that can get the job done? We certainly appreciate it.



RI Climate Coalition works to stop global warming

Stop Global Warming: Clean up power plants

Governors of nine northeastern states are working on a plan to cut global warming pollution from power plants. The Regional Greenhouse Gas Initiative (RGGI or "Reggie"), is a cap-and-trade policy whereby states create a cap on pollution from power plants then allow power companies to buy and sell permits to pollute. The catch is every year the cap tightens so eventually power plants that are cleaned up come out ahead. Since carbon dioxide doesn't really affect local areas near the plants, there are no "hotspots" such as from toxic mercury or smog.

For the RGGI plan to be strong and effective, we need to:

1. Cut global warming pollution to 25% by 2020,
2. Protect consumers - Make polluters pay,
3. Keep dirty power out of the region.

Planting trees does not substitute for cleaning up power plants

Community Meeting: Cut global warming pollution from power plants!

Please join RICC for a community meeting to discuss ways to raise our voices about regional action to cut global warming pollution from power plants.

Thursday, October 6, 7- 8:30 p.m.
St. Teresa's Church, 18 Pope St.

Conference on Global Warming in Rhode Island: Warning Signs, Winning Solutions

Hear some of Rhode Island's suc-

cess stories and learn more about what our communities, institutions, and citizens can do to create a clean energy future.

Wed., November 9, 1:00-8:00 pm
Save The Bay

100 Bayview Dr., Providence
RSVP 401-331-6972

Suggested registration donation:
\$10-Full day; \$5-Evening only.

Sponsored by Environment Council of Rhode Island, Clean Water Action, RIPIRG, and Massachusetts Climate Action Network

TNC releases preliminary action plan for borderlands

The Nature Conservancy and RI Economic Policy Council have released a report, "Regional Land Use in the Pawcatuck Borderlands," Summary and Preliminary Action Plan. The report is based on discussions from a May 2005 Regional Collaboration Clinic, which included stakeholders from within the region, and participants from other regional management areas, academia, and government agencies. The report was prepared by the Lincoln Institute of Land Policy.

The purpose of the report is to summarize the results of the regional land use clinic, particularly the potential action items. The report and the convening report are a place to begin; they provide useful information about the priorities of people concerned for the region, and suggest several possible directions.

The report, all materials from the Clinic, an additional information on the Borderlands are available at www.ripolicy.org/pawcatuck.

New rules require notice to watershed councils

In an August 12 memorandum to Rhode Island Municipal Officials, Meg Kerr, chair of the RI Rivers Council, announced the promulgation of Rules and Regulations for Notification of Proposed Actions to Watershed Councils. These



Meg Kerr, Chair, RI Rivers Council

rules are authorized by RIGL 46-28 which states that watershed councils "shall receive notice, pursuant to rules adopted by the Rivers Council from state and city or town agencies regarding proposed actions pertaining to projects, developments and activities located wholly or partially within the watershed represented by the local watershed council". The regulations can also be viewed at the Secretary of State web site: www.rules.state.ri.us/rules.

The intent of this rule is to facilitate evaluation and comment by recognized watershed councils on proposed actions of interest at the earliest reasonable time, so that any resulting comments may be taken into account by the responsible agency. The procedure outlined in section 2.4 of the rule puts responsibility on the watershed council to file an official notice with the municipality or state agency, providing the name of the watershed council,

the date the council was recognized by the Rivers Council, contact information for the watershed council and a map of the council's jurisdiction. The Council then selects the proposed actions it wants to review (see section 2.5). The type of notice provided is established by applicable state or local regulations. Wherever the provisions of notice are not specified, notice can be given electronically.

The rules represent a big victory for the Rivers Council, and particularly for watershed councils, who, without notice, are often unaware of the development proposals under review in their towns until its too late to make comments or attend hearings. Now, just as an abutter is notified of a subdivision, so will WPWA, upon request to the towns. The request need only be made one time for all future proposals. The same requests can be made to state agencies for notification on changes in agency rules, applications for state permits involving wetland alterations and wastewater discharges, and other applicable submissions. This will allow WPWA and other watershed councils to get involved in the public review process in a more timely and effective manner.

NPS Grant

(cont'd from page 1)

Phosphorus remains in the sediment of Arrow Swamp, and most likely in the sediment of both ponds. However, there is

no documentation of phosphorus measurements in the sediments of either pond. It is thought that Barber Pond may be experiencing internal cycling of phosphorus under certain conditions. Barber Pond may also have other land use factors contributing to excessive phosphorus loading, such as septic system effluent from nearby establishments and homes, and road runoff from the public fishing access. It is probable that a significant amount of phosphorus loading into Barber Pond is from Chickasheen Brook and Yawgoo Pond. Therefore, any NPS abatement program needs to include consideration of these upstream sources.

Yawgoo Pond, Barber Pond, and Chickasheen Brook have been listed as Group 1 Impaired Water Bodies in the State of Rhode Island's 303(d) list for 2002. A TMDL for these water bodies was approved by EPA in October of 2004. Yawgoo Pond is listed as impaired for excessive algal growth/chl-A, low DO, and phosphorus; Chickasheen Brook is listed as impaired for noxious (native) aquatic plants and phosphorus; and Barber is listed as impaired for low DO. The relatively small size of both these ponds make them amenable to lake restoration projects.



Raceway proposal at Exit 2 has residents on alert

Excerpted from The Westerly Sun
Chris Keegan, Sun Staff

Local residents unloaded myriad concerns over a developer's plan for an automobile raceway facility at Interstate 95's Exit 2.

During the project's first public presentation at the Lindbrook Golf Course meeting room, about 70 residents from Lindbrook Condominiums, Sweet Valley Estates and Pinewood Estates were on hand to protest a proposed industrial park and 1.7-mile race-track planned for 270 acres near the highway interchange.

Designs by GCP Investments Co., LLC call for the creation of 22 lots off Palmer Circle. Park owners plan to build-to-suit or lease buildings for automobile industry firms whose operations are tied to the adjacent course. The facility would also serve as the regional headquarters for the Sports Car Club of America's Northeast Division.

Open mid-April to mid-November, park President Louis W. Gingerella told residents that racing operations would be conducted between the hours of 8 a.m. to 6 p.m. Large weekend events will likely draw as many as 2,500 people, adding as many as 400 vehicles to Palmer Circle.

Though Gingerella said the course would employ trained fire and safety crews to contain spills and respond to auto accidents, Lindbrook Green Condominium Association board member Verne Johnson questioned the project's location over a groundwater recharge zone for a regional aquifer. "I'm deeply concerned about wa-

ter pollution," he said. "The Wood-Pawcatuck Watershed Association needs to be involved in this."

Lindbrook resident Liz Goor said the development could have an adverse effect on local property values. "It all comes down to quality of life," Goor added later. "It's why we live here. This motor park is going to take that away."

But Hopkinton Economic Development Commission member Kevin Hoyle said Gingerella's proposal is the kind of low-impact development project that the advisory board is looking to attract along the Interstate 95. "Compared to a big box (retail store), there's less traffic... and less impact," said Hoyle, a resident of nearby Brook Drive. "Here you have a minimum amount of cars at specific points in time."

In an interview earlier this summer, Gingerella said the industrial park will be built in phases over several years, though the motor course is expected to be completed by April 2007. The proposal requires a Town Council-approved zone change from special commercial to light industrial.

GCP representatives are scheduled to present project designs to the town's Planning Board later this fall. "We have specific information we need to present to the town, which we'll do at the proper meetings," Gingerella said. "But I can appreciate why residents want specific answers."

WPWA has reviewed the plans at Hopkinton Town Hall and looks forward to the developers presentation to the town, and the opportunity to comment on the potential environmental impacts of the proposal.

Clarks Falls residents organize to stop high-density housing

A group of concerned homeowners in Hopkinton have banded together and retained legal counsel in their fight to stop a proposed 60 unit condo style development on 73 acres on Clarks Falls Road. Citizens for Responsible Development (Hopkinton Chapter) has retained land use attorney J. William W. Harsch to represent them.

"We are not against all development of the Clarks Falls Road property, just anything beyond the well established 2 acre zoning requirements," says William Greenfield, Clarks Falls homeowner and Chair of the citizens' group. Citizens for Responsible Development (Hopkinton Chapter) expects the planning board to deny the application based on the applicant's failure to address the issues of safety, health and welfare.

The group was formed to pool the resources of local residents to retain legal counsel. Michael Gingerella, Co-Chair of the group continued "The developers have a lawyer with an answer for everything, we have to fight back. This developer should follow the same laws that any other land owner would have to follow."

J. William W. Harsch, a land use attorney, has successfully argued many of these cases before planning boards and is currently representing a number of citizen's groups fighting high density, for-profit development in RI.

For more info write CFRD, P.O. Box 186 Hopkinton, RI 02833.

Beetles hard at work on the Pawcatuck

By Denise Poyer

In the last issue of *Watershed* we asked your help in locating stands of Purple Loosestrife, a highly invasive European plant, in our watershed. We asked because WPWA has become involved in the biological control of this plant by participating with URI Plant Science Department in the use of Galerucella beetles to control its spread.

Purple loosestrife (*Lythrum salicaria*) is a Eurasian ornamental plant that was introduced to America by the colonists, who may have used medicinally. More recently, it has been used in landscaping because it's hardy and has beautiful tall purple flowers.

Unfortunately, over the last century, purple loosestrife has invaded and degraded wetland habitats across the US and Canada. Often you see it along highway drainage swales and wetlands. Because it has no natural predators here, purple loosestrife completely takes over an area, successfully out-competing native plants. Moreover, because it offers little nutritional value to native animals, it effectively reduces or destroys their native habitats.

Chemical (herbicides) and mechanical (cutting, burning, flooding) methods of controlling purple loosestrife have been tried and have failed. One of the reasons is because a mature, 6-foot tall plant can produce more than 2 million seeds per year. Seeds that do not immediately germinate can stay in the soil, or "seed bank" for years until conditions are right. There also tend to be robust lateral

shoots from the roots that can survive cold, burning, cutting, and pesticides. In the spring, these new shoots emerge from the root stocks, ready to thrive.

Biological control of purple loosestrife, which has been studied around the country for over 10 years, shows a lot more promise. This method uses the plants indigenous natural predators. Since 1994,



Brian Allen releases beetles along the Pawcatuck River.

Dr. Richard Casagrande and Lisa Tewksbury from the University of RI Plant Science Department have done a project in Roger Williams Park wetlands, using Galerucella beetles from Europe. The beetles have been shown to effectively reduce the number and vitality of purple loosestrife, allowing native plants to flourish. Since the beetles depend on the chemical compounds found only in purple loosestrife to live, they do not pose a threat to other plants. Results of this project are published in the *Natural Areas Journal* in 2001.

Last year, Tewksbury approached WPWA about using the beetles on the Pawcatuck River, where the presence of loosestrife has increased rapidly in the last decade. Though not yet at a critical point, if left unchecked purple loosestrife will take over the wetlands. WPWA hopes a proactive approach to loosestrife control on the Pawcatuck will not only main-

tain but improve the wetlands' high quality.

Watershed steward and volunteer Brian Allen, and URI Coastal Fellow Michelle Hetu, took the lead on this project this past spring. With staff guidance, they established a study area in one of the riverbank wetlands from which the effectiveness of the beetles can be assessed. Lisa Gould from the RI Natural History Survey visited the site to identify plant species and check for the presence of any endangered or threatened plant species. The first beetle release in June was documented on NBC 10's *Watershed Report* segment. Over the summer 3000 beetles were released along 10 acres of Pawcatuck River wetlands.

The study area will be closely monitored for the next two to three years to document beetle feeding and survival. As the beetles reproduce and their feeding needs increase, we expect to see increased damage to the plants. New generations of Galerucella beetles will continue to emerge until they have effectively controlled the plant. Studies show that the beetles will not completely eradicate the plants, but will reduce their health and vigor to a point that native plants can effectively compete with them. This will allow us to enjoy not only the purple spikes of loosestrife in the watershed, but also the other native plants like boneset, Joe Pyeweed, cardinal flowers, swamp rose, cattails, and a host of others that provide food and shelter for the many birds, mammals, and amphibians that depend on them.

Learn worthwhile skills and enjoy the outdoors this fall

Become a Watershed Steward

The second Rhode Island Watershed Stewardship program begins Tuesday September 27 starting at 6:30 PM at the Neighborhood Guild, 325 Columbia Street in Peace Dale. Watershed stewards learn about their environment and environmental stewardship and then conduct land and water restoration projects in partnership with watershed organizations, land trusts, towns and other conservation organizations. This program is open to the public and requires no prior experience, only an interest in preserving and protecting our environment.

The program consists of six Tuesday evening classes and two Saturday workshops. All of the Tuesday classes will be taught at the Neighborhood Guild from 6:30 to 9:00 pm on the nights of September 27, October 4, 11, 18, 25 and November 1. The Saturday October 15 workshop will be held at the South Kingstown Nature Center on Asa Pond Road in Wakefield and the Saturday October 22 workshop will be held at the Trustom Pond National Wildlife Refuge in Charlestown. Both workshops will run from 9:30 am to 3:00 pm.

To register, call South Kingstown Parks and Recreation at 789-9301. The course fee is \$45 and includes a course notebook, a field notebook, water testing kits, snacks, and lunches.

Become a Master Composter

The University of Rhode Island

and the Rhode Island Resource Recovery Corp. will launch a training program for local residents interested in becoming experts at composting and recycling.

Modeled after the URI Master Gardener program and similar programs around the country, the eight-week Master Composter/Recycler program will begin October 3 and run on 4 consecutive Monday evenings at the URI Kingston campus. One Saturday session will be scheduled to visit the state landfill in Johnston and one Saturday session will include visits to composting operations.

"Most people don't realize that over 30 percent of what is sent to the state landfill is organic material that could be composted in our own backyards or at a centralized facility," said Marion Gold, director of the URI Cooperative Extension Education Center. "Composting is cheaper for society and better for the environment. So we're looking to train interested individuals to help us spread the word and get the job done."

In addition to the general public, Gold said that municipal recycling coordinators, public works staff, conservation commission members and others would benefit from the training.

The weekly sessions will discuss such topics as the economic benefits of composting and recycling, the importance of reducing the quantity of material sent to the landfill, how to create a home composting process, the benefits of composting to gardeners, and which communities in Rhode Island have composting practices.

Like the Master Gardener program, the Master Composter/

Recycler program will combine classroom instruction with a volunteer commitment. Those completing the program will be required to complete 30 hours of volunteer time educating the public about composting and recycling practices.

A course fee of \$50 will be charged to each registrant to cover classroom materials. For more information or to register for the course, call the URI Cooperative Extension Education Center at 401-874-2900 or email Caitlin Chaffee at cchaffee@mail.uri.edu.

Join WPWA for a Saturday Walk in the Watershed

WPWA, along with noted geologist and hiking-guide author Charlie Hickox, will lead some fabulous watershed hikes this fall and winter. Blaze Orange safety vest and/or hat (200 sq.in.) is required*, as well as proper footwear. \$4 WPWA member / \$6 non-members.

October 22

Yawgoog Pond Trail

10 am to 2 pm. Moderate

November 19

Bullet & High Ledges Trail

10 am to 3 pm. Strenuous

December 31

New Years Eve Family Hike - Tefft Hill

10 am to 1 pm. Gentle

January 21

Carolina Management Area

10am to 1pm. Gentle

February 11

Burlingame Management Area

10 am to 1pm. Gentle

WPWA CANOE AND HIKING GUIDES

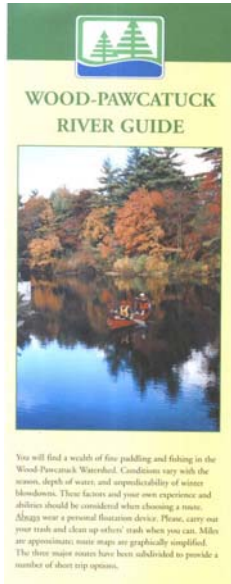
Order Form

Wood-Pawcatuck River Guide (2nd edition)

By Charlie Hickox and Elly Heyder

\$3.50 members (\$4.50 non-members)

Navigate the Wood and Pawcatuck Rivers from source to sea with this colorful folded map.

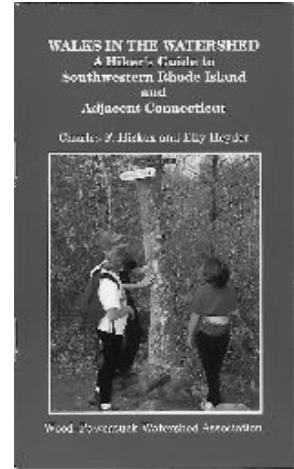


Walks in the Watershed

By Charlie Hickox and Elly Heyder

\$3.50 members (\$4.50 non-members)

Sixteen of the watershed's best loop hikes contained in a handy pocket-sized guide



Quantity:

_____ *Wood-Pawcatuck River Routes Map*

_____ *Walks in the Watershed*

_____ *Pawcatuck Watershed Report (free)*

Add \$1.50 postage and handling per item.

Name _____

Address _____

Mail form and payment to:

WPWA
203 Arcadia Road
Hope Valley, RI 02832

WPWA thanks volunteers from Koch Eye Associates

The statewide medical corporation Koch Eye Associates, headquartered in Warwick, Rhode Island, designated July 29th a "community memorial" to their late founder, Dr. Peter Koch, by coordinating several public service projects throughout the state with the loyal and friendly assistance of Koch employees.



Koch employees Mike and Robin Cichy, and Robin Kerstetter, spent a full day at WPWA, in the hot sun, applying a water seal treatment to our handicapped-accessible ramp and deck of our conference center. This will

help preserve the structure, and the volunteer labor certainly saved WPWA the costs of doing the job. Our sincere thanks to the volunteers, Koch Eye Associates, and the Volunteer Center of Rhode Island.

Beautiful conference room needs nice set of chairs

WPWA has a great new conference center, with a beautiful antique conference table that was donated by our executive director. What it lacks is a comparable set of chairs to go with it. The pot pourri of folding chairs at WPWA is neither attractive nor comfortable. Is there a member or friend out there with 6 to 10 matching conference chairs they might donate? If so please call us, or email. We can arrange pick up. The value of the chairs will be tax de-

ductible at the end of the year.

**Last of the Leaves Paddle
Saturday, October 15
3pm to 5pm.**

Join resident river trail expert and paddle instructor Danielle Aube for an easy paddle that begins and ends at WPWA campus on the Wood River at Barberville Dam. We'll paddle up river through Frying Pan Pond to get a last look at the river foliage, and its reflection. This is a very colorful time of year on the rivers.

Meet at the campus with your boat. If you don't have one we'll have a few kayaks to rent here on site. PFDs must be worn. Fee for paddle is \$5 for WPWA members, \$7 non-member. Call 539-9017 or email Danielle@wpwa.org.

Application for Membership

Name _____

Street _____

City _____ State ____ Zip _____

Phone _____ Email _____

- _____ Individual \$25
- _____ Family \$40
- _____ Contributor \$50
- _____ Corporate \$100
- _____ Supporter \$100
- _____ Sponsor \$250
- _____ Patron \$500
- _____ Benefactor \$1000

In addition to my dues, I am enclosing an additional contribution of \$_____

All but \$5.00 of your dues is tax deductible within the limits of the law.

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Wood-Pawcatuck Watershed Association

Please come to our

Open House

Wed., October 5th

5:30 – 7:30pm

**203 Arcadia Road
 At Barberville Dam
 Hope Valley**

Bring a Friend!

Opinions expressed in *Watershed* are not necessarily those of WPWA, its Board of Trustees, or staff.

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