

# Thames River Basin Partnership Partners in Action Quarterly Report

Summer 2016

Volume 39

The Thames River watershed includes the Five Mile, French, Moosup, Natchaug, Pachaug, Quinebaug, Shetucket, Willimantic, and Yantic Rivers and all their tributaries. We're not just the "Thames main stem."

*Greetings from the [Thames River Basin Partnership](#). Once again this quarter our partners have proven their ability to work cooperatively on projects compatible with the [TRBP Workplan](#) and in support of our common mission statement to share organizational resources and to develop a regional approach to natural resource protection. I hope you enjoy reading about these activities as much as I enjoy sharing information about them with you. For more information on any of these updates, just click on the blue website hyperlinks in this e-publication, but be sure to come back to finish reading the rest of the report.*

*Jean Pillo, Watershed Conservation Project Manager  
Eastern Connecticut Conservation District  
And TRBP Coordinator*

## Special Presentation

If you missed the summer meeting of the Thames River Basin Partnership, then you missed a presentation given by Jacob Isleib of the USDA Natural Resources Conservation Service. Jacob has been involved with mapping subaqueous soils, or the soils that underlay nearshore areas in Rhode Island and Long Island Sound. These nearshore areas are where rooted plants can take hold. Coastal zone soil surveys include nearshore or subaqueous soils, along with adjacent terrestrial soils including upland tidal marshes or barrier beaches. The soil information is important for habitat assessments of near shore areas, determining the suitability for such areas for shellfish bed restoration, vulnerability to climate change, shoreline erodibility, potential for eelgrass restoration and many other uses. Existing data is available on the NRCS [Web Soil Survey](#). Future coastal zone soil survey work will be guided by critical area or project needs. Contact [Jacob Isleib](#) for more information or if your organization has need of this kind of data.

## TRBP Updates

The TRBP website is still static. The website is available, but the TRBP Coordinator has been unable to update the TRBP website since August 2015 after the software used to create the website became obsolete. Please be patient while we continue to look for funding to create a new website. The Last Green Valley is temporarily hosting a [TRBP page](#) on their website where recent meeting agendas, notes, newsletters and this year's Floating Workshop summary slide show can be downloaded. Or, go to [www.thelastgreenvalley.org](http://www.thelastgreenvalley.org) and look for watershed protection under the "learn and protect" tab. TRBP is an option under watershed protection.

TRBP has an active [Facebook](#) page. The number of followers is increasing, but slowly. The TRBP coordinator finds this outreach tool easier to provide upcoming event announcements than the previous web calendar linked to the TRBP website. If you use Facebook, please “like” the TRBP page and it will show up in your feed, and “share” stories with your friends to generate interest in our organization.

Wearing multiple “hats,” Jean Pillo, TRBP Coordinator, TLGV Water Quality Monitoring Coordinator and ECCD Watershed Conservation Project manager organized a tour of “success stories” in the upper Thames River watershed (French River in MA) at the request of the Worcester County Conservation District. WCCD is reorganizing and seeking partners with which to work on grant-funded projects in their area of Massachusetts. Represented at the meeting were staff and board of director members for the WCCD, representatives of the MA USDA Natural Resources Conservation Service, MA DEP, Webster Lake Association, French River Connection, Dudley Conservation Land Trust, TLGV and ECCD. The tour featured trail access locations along the French River, a downtown Webster urban park with a car top boat launch and green infrastructure, and a stormwater detention project that stops runoff from 395 from directly flowing into Webster Lake. A wish list of projects developed by the volunteer organizations were presented to the WCCD. ECCD overviewed their strategy of working in partnership with other organizations. Going forward, WCCD was invited to participate in TLGV Water Advisory Committee meetings as well as TRBP meetings when possible.

## **Partner Reports**

The USDA Natural Resources Conservation Service (NRCS) has promoted Garrett Timmons to serve as its new District Conservationist out of its New London County office. This office is located at 238 West Town Street, Norwich, CT. Congratulations, Garrett, on your new assignment.

NRCS is continuing with their Healthy Soils outreach initiative. In partnership with the Connecticut Resource Conservation and Development Area, two well-attended workshops were held in March and June this year. A fall 2016 workshop focused on cover crops is in the planning stages. Healthy soil with a continuous healthy root system in it is less erodible, requires less nutrients and is rich in biological organisms.

In Windham County, several farms that have been involved with implementing healthy soil practices for several years are forgoing additional nitrogen supplements this year. At \$450/ton of urea normally applied at 80 lbs/acre, this is significant savings.

The Last Green Valley (TLGV) is continuing their effort to highlight the main river networks in the TLGV National Heritage Corridor by the creation and promotion of water trails. This year, at their request, the Shetucket River was granted National Recreation Trail status. They are in the process of updating their paddle guides and completing installation of kiosks at all of the boat launches.

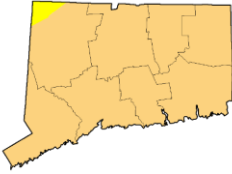
In response to a request for assistance from the US Army Corp of Engineers, TLGV assisted with recruiting volunteers and by providing staff to participate in an invasive water chestnut control effort at West Thompson Lake in Thompson, CT in July 2016. The plants were hand pulled from the lake by volunteers in canoes and kayaks. Two large impacted areas were weeded before the seed pods on the plants were fully formed, preventing more areas from being impacted in the future. The Army Corp of Engineers first became aware of water chestnut in the lake in 2011.

The 2016 TLGV [Walktober Guides](#) will feature more than 250 activities this year. TLGV also initiated a new program earlier this year known as [Spring Outdoors](#) to connect people with the landscape. More than 20 hikes were featured during that initiative.

The Last Green Valley Volunteer Water Quality Monitoring Program has many ongoing projects.

- A second year of Quinebaug River bacteria monitoring is ongoing. Results are similar to 2015 – higher than allowable background levels of *E. coli* bacteria at most sites and spikes in bacteria after rain events. Water levels have been noticeably lower than normal in the river this year. The impacts of the gypsy moth outbreak in Canterbury was evident.
- New baseline monitoring for bacteria levels was initiated in Lebanon in Ten Mile River, Susquetonscut Brook, Bartlett Brook and Pease Brook.
- Follow up monitoring in Backwater Brook in Thompson (French River watershed) shows that the brook is not meeting water quality standards for recreational contact. Volunteers report there is a high concentration of domesticated water fowl upstream of the monitoring station with the highest values.
- Temperature data loggers were put in place in 9 locations in the upper Natchaug River watershed. The team completed a summer inspection of the logger sites to assure they were still submerged and monitored the water quality for temperature, DO, pH, conductivity and turbidity using a multi-parameter probe as part of a QC check on the loggers.
- Amos Lake moved to monitoring their lake to twice per year. Spring monitoring is complete. Summer monitoring is scheduled for the first week of August.
- The Massachusetts water quality monitoring groups are on schedule with their submitted monitoring plans.
- The monitoring protocols for TLGV's RCPP Edge-of-Field Monitoring have been developed. A partial order of GKY FirstFlush Samplers has been delivered and will be ready to deploy once management plans and EQIP applications are submitted to NRCS and fields are selected for monitoring.
- An application to the Massachusetts Environmental Trust for Cold Water Fisheries Habitat Assessment Grant was not funded. This project was an attempt to unify water quality monitoring programs in MA and CT.
- The next TLGV Water Advisory Committee meeting is scheduled for August 9 beginning at 9 AM at the USACE Hodges Village Dam Conference room in Oxford, MA. A tour of the dam will follow the meeting. All are welcome.

U.S. Drought Monitor  
Connecticut



This [U.S. Drought Monitor map](#) for July 26, 2016 puts 98% of Connecticut in the yellow-orange category that indicates Moderate Drought. The pale yellow fragment in the NW Corner is "Abnormally Dry". This report (July 28) is the latest available and does not include rain of the past 24 hours. For more information on Connecticut conditions, click here to see [Rivers Alliance's Know Your Flow webpage](#) for more data on water levels and climate, including a list of low-flow rivers.

[Project Oceanology](#) has made adjustments to their programming as a result of a reduction in grant funding for schools to participate in their educational programming. Several summer camp programs are currently in session. They also offer [public cruises](#) on the Envirolab.

Mickey Weiss's blue crab research project is in its 6<sup>th</sup> year. He is working on a publication on crab, shrimp and lobster larvae that will be funded by CT Sea Grant.

The Eastern Connecticut Conservation District (ECCD), along with Connecticut's four other Conservation Districts and the Connecticut Council on Soil and Water Conservation are quasi-government organizations with specified duties under the [Connecticut General Statutes](#). Due to the State's budget woes, as of July 1, 2016, the five Districts and the Council are no longer receiving State funds to perform these duties. ECCD is reviewing their ability to respond to requests for technical assistance from municipalities and residents.

ECCD has multiple ongoing grant funded projects:

- [Roseland Lake Nutrient Modeling Project \(Woodstock\)](#) ECCD is nearing completion of the water quality monitoring in Roseland Lake and its watershed. This data, along with data from sediment sampling from the bottom of the lake, will be used to develop a mathematical model of how nutrients enter and leave Roseland Lake, a lake upstream of a drinking water surface water intake that has chronic issues with algae blooms. A Lake Management Plan will be developed based on the outcomes of the nutrient study.
- [French River Watershed Based Plan \(Thompson\)](#) ECCD is developing a watershed based plan for degraded streams within the French River. TLGV water quality monitoring volunteers are in the process of collecting additional water samples in Backwater Brook. A pollution reduction project in that watershed is in the early planning stages.
- [Ekonk Brook Watershed Based Plan \(Plainfield\)](#) An *E. coli* trackdown survey in Ekonk Brook in 2015 demonstrated the source of contamination to be near the mouth of the brook. A field investigation noted an apartment complex with multiple dumpsters close to storm drains that drain into the brook. Working with the building managers, ECCD was able to suggest better locations for the dumpsters and planted six rain gardens in those areas to intercept any future contaminated runoff. The final watershed based plan is in the draft stage and is expected to be completed this summer.
- [Lower Natchaug River Bioretention \(Windham/Mansfield\)](#) The stormwater conveyance system of an apartment complex spanning the town line between Windham and Mansfield drains into the Natchaug River in Lauter Park. ECCD worked with the apartment complex owners to identify areas where stormwater can be infiltrated to reduce the runoff going into the storm drain system. With assistance from the Town of Mansfield and youth volunteers from an EASTCONN program, six rain gardens were

installed in July 2016. In addition to the rain gardens, three tree filter units will be installed upgradient of storm drains to pre-filter the runoff entering them. It is anticipated the tree filters will be installed by mid-August.

- Tree Filter Two Zone Project (East Lyme/Waterford) In a continuing effort to reduce soluble nitrogen from impacting water quality in the Niantic River estuary, ECCD has been installing tree filter bioretention units to intercept and pre-treat stormwater before it flows into the river. Phase one of this project in East Lyme was completed in April, 2015. Phase two of this project involves the installation of 4 tree filter units on land owned by CT DEEP at Mago Point in Waterford. The expected completion date for the installation of these units is by mid-August 2016.
- Edge of Field Monitoring, NRCS Conservation Innovation Grant (Woodstock). ECCD, partnering with the University of Connecticut, has installed stormwater monitoring equipment at a farm in Woodstock. This project will compare data collected using standard edge-of-field monitoring following NRCS protocols to a simplified version using GKY FirstFlush Stormwater Samplers. The equipment has been installed, and the Quality Assurance Project Plan is under review by NRCS.
- Upcoming projects
  - An upper Natchaug River Healthy Watershed Initiative project has been approved and is in the contract development stage.
  - An award letter has been received for the funding of a subsurface drainage and manure transfer project at a dairy farm in Woodstock.
  - Verbal confirmation of approval for a Woodchip Bioreactor project in Woodstock has been provided.
  - ECCD has been awarded \$50,000 to provide technical assistance to community garden associations in eastern CT. The goals of the project are to protect water quality, improve soil health and increase productivity.

The Atlantic State Rural Water and Wastewater Association is continuing their public outreach in Brooklyn after developing a proposed zoning overlay for a potentially high-yielding aquifer area in town. ASRWVA will be working on developing a draft proposed zoning overlay area for a sand and gravel aquifer associated with Little River in Woodstock this fiscal year.

Connecticut Sea Grant is in its 33<sup>rd</sup> year locally but the national organization is celebrating its 50 years of Science Serving America's Coasts.

- CT Sea Grant is co-leading a shellfish initiative for commercial and recreational shellfishing. A [vision plan](#) has been developed and was open for public comment through July 29. The process was a four year effort.
- Seaweed aquaculture (kelp) processing options are being investigated to meet the market demands.
- [UCONN Climate Change Academy](#) has been hosting charrettes focused on coastal conservation and climate change topics. The next charrette is scheduled for September 15, 2016 at Harkness Memorial State Park.
- Working with The Nature Conservancy, Sea Grant is drafting the [Long Island Sound Blue Plan](#). The target completion date for this plan is 2019.

Avalonia Land Conservancy is in the early planning stages for restoration work on South Dumpling Island off of Stonington, CT. Trees on the island have been negatively impacted by cormorant manure. Their representative expressed an interest in learning more about subaqueous soil testing on the island through the NRCS and follow up contact is planned.

The Connecticut College Rowing Team appreciates the efforts of the many organizations that work to protect water quality in the Thames River. Their team members are willing to offer volunteer assistance with projects in their geographic area. Contact Coach Eva Kovach at [edkov@conncoll.edu](mailto:edkov@conncoll.edu) for more information.

Blue-green algae, also known as cyanobacteria, occur naturally in lakes and ponds throughout Connecticut. These microscopic organisms often go unnoticed and cause no harm. However, when nutrient loading exceeds certain levels, a water body can experience nuisance blue-green algae blooms that may produce and release toxins. When blue-green algae blooms release toxins, people and animals using the water body for recreation can be affected. It is important to note that not all algae blooms are harmful blooms but it is not possible to determine the type of algae within the bloom without a more detailed evaluation.

The Connecticut Department of Public Health and DEEP, in collaboration with the Connecticut Association of Directors of Health, have produced [guidance for local health officials](#) regarding blue-green algae blooms. This document outlines the rationale for a response and presents a plan for surveillance and intervention designed to protect the public's health at lakes or ponds used for recreation. Visit the DEEP website for additional information on [blue-green algae blooms](#).

The Connecticut Invasive Plant Working Group (CIPWG) Symposium will take place on October 11, 2016 in Storrs, CT. Visit [www.cipwg.uconn.edu](http://www.cipwg.uconn.edu) or click [here](#) to register online.

### **News from the Municipalities**

The Eastford Conservation Commission has been involved with an effort to control invasive water chestnut in a local private pond. Each year for the past 15 years, it has organized an annual volunteer “water chestnut pulling party” to hand pull the invasive aquatic plant. This year, volunteers were only able to find a very small amount of the invaders, which were pulled before they could set seeds.

The Woodstock Conservation Commission sponsored a meeting of many organizations focused on water quality in the Little River watershed. Represented at the meeting were the CT Department of Public Health Drinking Water Division, Northeast District Department of Public Health, Eastern Connecticut Conservation District, CT DEEP, Atlantic States Rural Water and Wastewater Association, Woodstock Planner, Northeast Connecticut Council of Governments, Putnam Water Pollution Control Authority and Suez, the contractor hired by Putnam to manage their water and sewer plants. The meeting focused on the current status of water quality in the river, streams and Roseland Lake; an overview of planning documents that made

recommendations to restore water quality where it was impaired or anti-degradation practices where it is not; and, accomplishments made since the planning documents were prepared. Follow up action items for several organizations at the meeting were assigned.

### **Other news**

American Rivers has been awarded a \$38,750 grant through the Massachusetts Environmental Trust in support of removing three relic dams on Hamant Brook and the replacement of a culvert. Removal of the obsolete dams will restore natural river flows and habitat connectivity and support restoration of cold water stream habitat. Hamant Brook restoration was the subject of a presentation given at the 2015 Thames River Basin Partnership Floating Workshop.

The Community Foundation of Eastern Connecticut announced the recipients of its 2016 Environmental Grants. Several TRBP Partners benefitted from this latest grant round.

- Project Oceanology was awarded \$22,000 to fund a program analysis, strategic plan development and financial review for Project Oceanology to determine feasibility and help direct the future plans for the program.
- The Nature Conservancy was awarded \$36,000 to convene Eastern Connecticut coastal community and environmental leaders to share new nitrogen pollution research, solicit feedback and identify priority actions needed to develop a comprehensive approach to protecting and improving ecological conditions of harbors and bays.
- The New England Forestry Foundation was awarded funding to partner with the State of CT in the acquisition and protection of an ecologically significant property in East Lyme. The property, consisting of 200 acres of forestland, protects a significant portion of the Niantic River watershed. The lands will be open to the public for passive recreation and will be managed to maintain forest health and a diversity of wildlife habitats.
- Friends of the Shetucket River Valley was awarded \$20,000 to assist the Town of Sprague in acquiring the 125 acre 'Robinson Property' for conservation. The property would become part of an existing Preserve and an emerging wildlife and recreational corridor, of nearly 3,000 acres.
- Clean Up Sound and Harbors (CUSH) was awarded \$3584 to support the work of a local water quality monitoring group to improve their outcomes and consistency. Part of the initiative is headed by CFE.
- The Connecticut Fund for the Environment was awarded \$15,000 to support Year Two of a five-year monitoring/habitat restoration project at the site of the Hyde Pond Dam Removal on [Whitford Brook](#).
- The Connecticut Audubon Society was awarded \$15,000 to establish and implement a science-based environmental program in New London county public schools with the curriculum adapted to the unique environmental aspect of our coastal communities and meet the specific requirements of each school system. Two prototypes in 2 school systems: (a) Lyme/Old Lyme (Region 18) and (b) a New London elementary school.

The Climate Ready Estuaries program (CRE) works with the National Estuary Programs and the coastal management community to assess climate change vulnerabilities, develop and implement adaptation strategies, and engage and educate stakeholders. Recently added resources to the CRE

website address how much the sea has risen, how much it might rise, and what the impacts might be. Resources for overall climate change adaptation planning, including resources for adaptation options, planning frameworks and more, can be found on the [Coastal Adaptation Toolkit](#) page on the website.

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If you would like your organization's efforts included in the next edition of the TRBP Partners in Action Report, consider attending one of our quarterly meetings. It includes a [TRBP Plan of Work](#) activity reporting session, which is an informal "round the table" discussion of Partner activities. It is a great time to network with like-focused organizations. All meetings begin at 9:30 AM. Generally, the TRBP meets quarterly on the 3<sup>rd</sup> Tuesday of the month.

The next TRBP meeting is scheduled for October 18, 2016 at the Hampton Community Center. The guest presenter will be Min Huang of CT DEEP Wildlife Division, speaking on the updated CT Wildlife Action Plan and the 2016 commemoration of 150 years of conservation in CT.

Contact [Jean Pillo](#) at (860) 928-4948 for more information or to be added to the TRBP distribution list.

If you are not already on the e-distribution list for this publication, contact [Jean Pillo](#) by email and request to be added, or you can download the past versions of this quarterly publication from the [TRBP website](#).

The Thames River Basin Partnership is a voluntary, cooperative effort to share resources, and strives to develop a regional approach to resource protection. The Partnership is made up of a variety of agencies, organizations, municipalities, educational institutions, companies, and individuals interested in the environmental health of the greater Thames River basin. Partial funding support for FY 16 for TRBP Coordinator time has been provided by The Last Green Valley. Additional sources of funding are being sought to continue the TRBP Coordinator position. Please consider making a donation to the Eastern Connecticut Conservation District and designate it to support the Thames River Basin Partnership Coordinator position.