



Thames River Basin Partnership Partners in Action Quarterly Report

Winter 2016

Volume 37

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 winter meeting of the Thames River Basin Partnership, then you missed a presentation by Mike LaLima of Norwich Public Utilities. Mike reviewed the history of the Norwich waste water disposal system. Waste water infrastructure was installed as early as the late 1800's at a time when horses were still a major source of transportation. Stormwater and human waste were combined into a single underground piping network. This is known as a combine sewer operation, or CSO. In the early days, the effluent was directly discharged into the river. This was an accepted practice at that time.

Norwich installed their first sewage treatment plant in 1936 to serve the downtown area. In the 1970's, the city installed an interceptor system to redirect their direct outfalls to the sewage treatment plant. During rainfall events of sufficient intensity and duration, the capacity of the collection system is overwhelmed and excess flows discharge to nearby rivers via built-in overflows in the collection system. The overflows were designed to prevent the combined sewer flows from backing up into basements and surcharging onto the streets.

The Norwich CSO Long Term Control Plan recommends complete separation of all remaining combined sewer areas in Norwich, with the separation projects to be implemented in a phased approach over a 20 year period. Currently there are 14 CSO outfalls in Norwich, down from 43 in 1976. The highest priority areas will be completed first, with the option to reevaluate the final phase of separation as the project progresses, based on environmental improvements, changes in regulations and new technological solutions that may emerge. The Environmental Impact

Evaluation (EIE) of this project can be found [here](#). More information on CSOs can be found on the DEEP [website](#).

TRBP Special Alert!!!

NEC FUTURE is the Federal Railroad Administration's (FRA) comprehensive plan for improvements to the Northeast Corridor (NEC) rail line from Washington, D.C., to Boston, Massachusetts. As part of this effort, the FRA released the Tier 1 Draft EIS for public comment on November 13, 2015 and held public hearings throughout the Northeast region. TRBP missed the opportunity to publicize these public hearings.

To view the draft Tier 1 Environmental Impact Statement (EIS), click [here](#). Appendix A of the EIS presents a possible high speed rail route through the upper Thames River watershed through Mansfield, Hampton, Pomfret and Killingly. State forest land will be fragmented if this corridor is selected.

The period to comment on this project has been extended through February 15, 2016. If you are interested in providing a comment on this plan, click [here](#).

TRBP Updates

The Thames River Basin Partnership welcomed Tom Morgart, Connecticut's new USDA Natural Resources Conservation Service State Conservationist, to our meeting. Tom is originally from Pennsylvania. He began his work in agriculture as a greenhouse worker. He worked for five years as a soil conservationist in New Jersey before transferring to Maryland, where he was an Assistant for Programs and the Chesapeake Bay Watershed Coordinator. Tom's focus in Connecticut will be targeting Best Management Practices (BMPs) to the impairment in the landscape, with a focus on reducing nutrient pollution flowing downstream to Long Island Sound.

Facebook users, please "Like" the Thames River Basin Partnership [Facebook](#) page! TRBP meeting announcements and calendar updates will be shared through this means while TRBP continues to look for funding to support a new website.

The TRBP annual Floating Workshop is under development for a late June program. The committee hopes to organize a program in the lower Thames River estuary focused on the Thames River Heritage Park concept, visiting multiple historic sites as part of the program. If you are interested in volunteering to assist with planning this event, please get in touch with Jean Pillo at 860-928-4948 ext. 605.

Partner Reports

The Eastern Connecticut Conservation District (ECCD) is preparing for the second phase of installation of a two zone tree filter project in Waterford at Mago Point. Tree filters are mini bioretention systems installed up gradient from existing stormwater drains. They are an effective

means to capture pollutants carried by stormwater. ECCD previously completed tree filter installations in East Lyme and Groton.

DEEP recently awarded ECCD with additional funds to install tree filters and rain gardens at the Colonial Townhouse Apartment complex that straddles the Windham/Mansfield town line. This implementation project was recommended in the [Lower Natchaug River Watershed Based Plan](#).

Also in the lower Natchaug River watershed, ECCD received a third installment from the Rivers Alliance of Connecticut to support enhancements of the riparian buffer along the Natchaug River in Lauter Park. This funding was provided as the result of an environmental penalty issued in the watershed.

Further upstream, ECCD received an award letter for a grant to support the first EPA §319 funded healthy water initiative in Connecticut. The Natchaug River above the Mansfield Hollow Dam is the benchmark stream for water quality in eastern Connecticut. It is managed as a trophy trout stream. However, increasing water temperatures and flow alterations may impact the trout populations in the future. The watershed includes several of the thirty streams included in the DEEP report [Physical, Chemical, and Biological Attributes of Least Disturbed Watersheds in Connecticut](#). Rather than a reactive approach involving remediation, the project will involve the development of education programs and outreach materials focused on pollution prevention in this mostly undeveloped watershed. A second outcome of the project is to develop a pocket guide of Best Management Practices for Department of Public Works road maintenance staff. The project is a follow-up to the [Natchaug River Basin Conservation Action Plan](#) completed by The Nature Conservancy in 2011.

Also under project management of ECCD is the construction of an aerated compost facility for dairy mortalities in Woodstock. Properly composting these byproducts of the dairy industry is a means to reduce nutrients and bacteria from contaminating nearby waterways. The foundation of the structure was completed in late summer. The steel framing for the walls and roof are now completed. This project is being funded in part by US EPA Clean Water Act § 319 funds through the CT DEEP.

ECCD has completed its second year of streamflow monitoring in Latimer Brook (East Lyme) and Joe Clark Brook (Ledyard). This project was funded by an EPA CWA §604b grant in cooperation with the USGS. The project was requested by DEEP to provide data to support their streamflow regulations.

Under a Regional Conservation Partnership Project (RCPP) funded by the NRCS, The Last Green Valley (TLGV), in partnership with ECCD and the Eastern Connecticut Conservation and Development Area, is actively promoting funding assistance to farmers who are interested in saving money while building healthy soils and improving water quality in our rivers and streams. Several applications for Environmental Quality Incentives Program (EQIP) funding have been submitted to NRCS to support eligible conservation practices. The equipment required for the edge of field monitoring portion of this project is on backorder.

If you are an agricultural business interested in learning more about this project, you are encouraged to contact one of the project partners to learn more:

- Amanda Fargo-Johnson
CT Resource Conservation and Development Council (RC&D)
860-345-3977 or email CTRCDAminda@aol.com
- Dan Mullins
Eastern CT Conservation District (ECCD)
860- 887-4163 X 402 or email dan.mullins@comcast.net
- Lois Bruinooge
The Last Green Valley, Inc. (TLGV)
860-774-3300 or email lois@tlgv.org

The Last Green Valley (TLGV) is requesting land trusts and municipal open space/conservation commissions to sponsor a walk in late April or May during the first annual “Spring Outdoors” program. Spring Outdoors walk announcements will be web based only. Contact Lyann@TLGV.org for more information.

TLGV completed an application to the National Park Service to designate the Shetucket River as a National Recreation Trail. The final decision regarding this application will be announced in June. They had also requested the Willimantic River National Recreation Trail be extended from Columbia to the boat launch near the Connecticut Eastern Railroad Museum in downtown Willimantic.

On the second Saturday in January of each year, TLGV, in cooperation with CT DEEP, coordinates volunteers to participate in the mid-winter eagle survey. This year, on January 9 from 7 – 11 AM, fifty volunteers were stationed at 24 different strategic locations and counted a total of 20 eagles. This number was lower than previous years but warmer winter temperatures have made more open water feeding opportunities where spotters were not stationed. To read more about this program, click [here](#).

April 2016 will mark the ten year anniversary of the TLGV volunteer water quality monitoring program. The annual Volunteer Appreciation Event is in the planning stages. Volunteer teams are developing their monitoring plans for presentation at the February meeting of the Water Advisory Committee.

Plans for this year include a second year of monitoring along the Quinebaug River to determine water quality for recreational purposes. Volunteers will collect weekly water samples to be assessed for E. coli bacteria.

Cold water habitat monitoring with HOBO temperature data loggers and River Bioassessments will be coordinated to complement the Upper Natchaug Healthy Watershed initiative. Using existing TLGV equipment, the volunteers will focus on previously unmonitored sites with higher probability of being cold water habitat.

A letter of intent submitted by TLGV to the Massachusetts Environmental Trust to request funds in support of unifying the types of volunteer water quality monitoring protocols in CT and MA was submitted last fall. Currently, TLGV volunteers are approved to conduct stream temperature monitoring using a HOBO temperature data logger and modified river bioassessments in Connecticut. TLGV was authorized to submit a full project proposal, with a decision on funding expected in July 2016.

The AGvocate Program is currently in transition and would like to thank John Guskowski for his contributions and dedication as the former AGvocate program coordinator for the past 2 years. Welcome Amanda Fargo-Johnson as the new AGvocate program coordinator who is also staff to the CT RC&D Area, Inc. as their Agricultural Programs Manager. Please feel free to contact Amanda at ctrdamanda@aol.com and add her contact information to your address book.

The Willimantic River Festival will be on May 14, 2016. Look for updates on this event at the [Willimantic Whitewater Partnership](#) website.

The [USDA Natural Resources Conservation Service](#) has received 220 EQIP applications statewide during their latest funding round. Nine of the applications were from Windham County. The Environmental Quality Incentives Program (EQIP) is a voluntary program that provides financial and technical assistance to agricultural producers in order to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation or improved or created wildlife habitat. There was \$4.6 million available and \$6.6 million worth of requests during the most recent ranking period.

The NRCS will be presenting a soil health workshop on March 23, 2016 in East Windsor at Scout Hall. The Connecticut Resource Conservation and Development Area will be sponsoring the workshop. The workshop will focus on techniques to improve soil health and function on a wide variety of land uses, from organic vegetable farms to row crops to orchards to urban agriculture, etc. They will cover how to design cover crops for varying resource concerns, pest pressures and termination methods.

NRCS is planning an early June workshop on assessing farm soil for soil health. This workshop will be an in-field workshop, with hands-on demonstrations on how you can assess soil health on your farm, or your client's farm, or basically anywhere. It will include a full soil description pit, with soil scientists on site to describe what you're seeing, and again, local and regional experts on hand to help. They will measure infiltration on varying crop types, have a demonstration of terminating cover crops with a roller/crimper, as well as (hopefully!) have a no-till seedling transplant demonstration.

NRCS, in cooperation with North East Sustainable Agriculture Research and Education (NE SARE) is planning a workshop focused on cover crops, including a tour of demonstration plots on local farms.

TRBP will post further developments on these workshops on its [Facebook](#) page as the information becomes available.

The CT Department of Energy and Environmental Protection has announced a request for proposals for the FY2016 EPA Clean Water Act § [319 Non-Point Source grant](#). Applications are due February 29, 2016. Contact Eric.Thomas@CT.gov for more information.

CT DEEP is developing a prioritization document for funding water quality projects in the future. The new approach includes two main categories. Category 1 is impaired water. Category 2 is protection oriented but threatened. Once the document is finalized, it will be distributed for public comment. TRBP partners will be asked to review this document and comment on it once it becomes available.

The New England Interstate Water Pollution Control Commission (NEIWPCC) annual Non-Point Source Conference will be held at the Hartford Hilton on April 20 – 21, 2016. DEEP has organized an afternoon field trip to the University of Connecticut Storrs Campus to tour the green infrastructure installed on the campus in response to the Eagleville Brook Impervious Cover TMDL. Look for registration information and the conference agenda to be posted on the [NEIWPCC](#) website.

The [CT DEEP Open Space and Watershed Land Acquisition Grant Program](#) is taking new applications for open space purchase support through February 2, 2016. For information on recent open space purchases supported with state funding, click [here](#).

The New England Forestry Foundation (NEFF), in cooperation with the Mass-Conn Sustainable Forest Partnership and the American Forestry Foundation, has produced and distributed handbooks for forest landowners. The title of this publication is [“The Place You Call Home: a Guide to Caring for Your Land.”](#)

With a new 2-year grant from the Wildlife Conservation Society (WCS) Climate Adaptation Fund (supported by a grant from the Doris Duke Charitable Foundation), the American Forest Foundation along with partners – the New England Forestry Foundation (NEFF), the Norcross Wildlife Sanctuary, the MassConn Sustainable Forest Partnership (MassConn), and the Northern Institute of Applied Climate Science (NIACS) – will begin a two-phased project. Phase One includes implementing a set of practices at the Norcross Wildlife Sanctuary to diversify tree and plant species through climate-informed silviculture and to improve water flow and stream crossings. Phase Two will include engaging private and family landowners in the region, using the Norcross demonstration site to help educate and support them in adopting similar management practices on their land.

The Avalonia Land Conservancy (ALC) is preparing for land trust accreditation. To achieve this status, a stewardship focus for each preserve, marked boundaries and management plans are a requirement.

The Wood-Pawcatuck Watershed Association has applied to the National Park Service to designate the Wood and Pawcatuck Rivers as Wild and Scenic. The Pawcatuck River forms part of the CT-RI border. A [study](#) is underway to “identify the Outstandingly Remarkable Values that make the Beaver, Chipuxet, Queen, Wood, and Pawcatuck Rivers so special”. In

Connecticut, ALC manages properties with one mile of frontage along the Shunock River in North Stonington. The Shunock River is a tributary to the Pawcatuck River.

The Atlantic States Rural Water and Wastewater Association (ASRWWA) is funded by the USDA to assist small towns with developing drinking water protection plans. ASRWWA recently completed an aquifer protection plan for a stratified drift aquifer area in the Town of Brooklyn and is developing outreach materials for public education regarding this plan. ASRWWA will potentially be working with the towns of Pomfret and Woodstock on similar projects.

The CT Office of Policy and Management (OPM) under public act 14-163 is undergoing a statewide water planning process. A new website about the process www.ct.gov/water has been developed for public outreach and education.

The 10th Connecticut Conference on Natural Resources will be held on March 14, 2016 at UConn Storrs. If you are a vendor interested in exhibiting at or sponsoring the conference, please contact Call Jason Vokoun at 860-486-0141. Watch for conference registration information updates on the TRBP Facebook page.

News from the Municipalities

The Towns of Mansfield and Coventry jointly applied for a second round of funding through the Aquatic Invasive Species Control grant through the CT DEEP. Eagleville Lake, an impoundment of the Willimantic River, was discovered to have the highly invasive plant, fanwort, in it. The first round of herbicide treatment reduced the infestation. More treatments will be necessary to bring this plant invader under control.

Other news

The Connecticut Wetland In Lieu Fee (ILF) Program established in 2013 has accrued sufficient funds that will be soon made available for the preservation, restoration and protection of wetland and watercourse resources and associated upland buffers in the State of Connecticut. The ILF Program was created to help compensate for unavoidable impacts to protected aquatic and estuarine resources in the state by funding the restoration, enhancement, preservation, and creation of similar resources in order to replace or maintain ecological benefits compromised by various activities. The National Audubon Society, Inc., through its Connecticut program (Audubon Connecticut) is the sponsor of an In- Lieu Fee Program for aquatic resource compensatory mitigation required by Department of the Army authorizations.

This program was approved by the New England District, Corps of Engineers and Audubon Connecticut on Aug. 21, 2013. The program provides an alternative to Corps permittees who are required to compensate for their impacts to wetlands and waters of the U.S. in the state of Connecticut. Funds are collected and held in public trust by Audubon Connecticut through the Connecticut In-Lieu Fee Program. This is a voluntary program that allows entities impacting natural resources – primarily wetlands – to make a payment directly to the fund as an alternative to the traditional mitigation process. These monies will subsequently be made available to fund

restoration, creation, preservation, and enhancement activities protective of wetlands and their associated functions and values. A request for Letters of Interest for funding through this program is anticipated to be released by February 1st, 2016.

All ILF agreements in New England are available for review and download on the Corps website at: <http://www.nae.usace.army.mil/Missions/Regulatory/Mitigation/InLieuFeePrograms.aspx>. For more information on the Audubon Connecticut In-Lieu Fee Agreement (File # NAE-2010-2215) contact the U.S. Army Corps of Engineers, New England District, Regulatory Division (ATTN: Barbara Newman), 696 Virginia Road, Concord, MA 01742-2751 or email barbara.h.newman@usace.army.mil.

The Community Foundation of Eastern Connecticut announced the recipients of the first round of Letz Environmental Grants. In total, they awarded \$144,654, made possible by the Peter Grayson Letz Fund for Animals and the Environment, to six nonprofit organizations that aim to foster understanding of the relationship between the health of the natural world and the well-being of residents in New London County.

- Connecticut Land Conservation Council (CLCC) - \$30,000 for the CT Land Trust Advancement Initiative designed to build the collective capacity, cooperation and collaboration among land trusts in New London County.
- New London Youth Affairs Early Childhood Family Center - \$12,300 for Aquatic Environmental Programs for preschoolers and their families through NLYA's Early Childhood Family Center in partnership with Denison Pequotsepos Nature Center, New England Science and Sailing (NESS), and Child & Family Agency of Southeastern CT.
- Niantic River Watershed Committee, Inc. - \$24,000 for the Niantic River Watershed Protection Plan which will bring together multiple towns and partners to foster a comprehensive effort to restore and preserve the Niantic River Watershed.
- Regional Multicultural Magnet School/LEARN - \$24,000 (over three years) to allow 160 students per year to participate in Nature's Classroom, a one-week program that immerses students in nature to educate and foster life-long stewardship.
- Science and Technology Magnet High School of Southeastern Connecticut - \$19,782 for AQUABOTS: Aquatically Based Opportunities To Sustain, multi-faceted, hands on learning experiences for regional high school students in partnership with FRESH New London, NESS, Thames Valley Sustainable Connections and Eastern Connecticut Community Gardens.
- Sea Research Foundation, Inc. (Mystic Aquarium) - \$34,572 to engage Norwich and New London students and teachers in the Long Island Sound Study and Stewardship program through a comprehensive approach of professional development for teachers and experiential education in the classroom and in the field for students.

Read more at www.cfect.org.

EPA recently released a new tool to assist small residential lot builders in developing their required stormwater pollution prevention plan, or SWPPP document, for EPA's Construction General Permit (CGP). The Small Residential Lot SWPPP Template is an optional, easy-to-complete document that streamlines SWPPP development and is fully compliant with SWPPP requirements in EPA's CGP. States can modify the template if they wish to use it for their CGPs.

The template is accompanied by an educational brochure that provides basic sediment and erosion control and stormwater pollution prevention guidance common to all small residential lot projects. Click [here](#) for more information on this template.

EPA is requesting public comment on draft water quality criteria for aquatic life for the metal cadmium. Chronic exposure to cadmium negatively impacts growth, development, behavior, reproduction, and immune and endocrine systems in aquatic life. Mining and urbanization are responsible for approximately 90 percent of the cadmium found in surface waters. The draft cadmium water quality criteria reflect the best available science, including the results of new laboratory aquatic toxicity tests. The draft criteria underwent an external peer review that was completed in 2015. EPA will accept public comments on the draft criteria for 60 days after publication in the Federal Register. Once finalized, EPA's criteria for cadmium will provide recommendations to states and tribes authorized to establish water quality standards under the Clean Water Act. More information [here](#).

The Connecticut Invasive Plant Working Group convenes for a biennial symposia, with the next symposium scheduled for the fall of 2016. If you want to be part of the 2016 CIPWG symposium planning committee, please contact Donna Ellis (email donna.ellis@uconn.edu; phone 860-486-6448) or CT Invasive Plant Coordinator Nicole Gabelman (email nicole.gabelman@uconn.edu; phone 860-486-0114).

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 3rd Tuesday of the month.

The next TRBP meeting will be on April 19, 2016. We will meet at the Atwood Farm located at 624 Wormwood Hill Road in Mansfield and owned by Joshua's Trust. A presentation led by Lois Bruinooge of TLGV will focus on the development of a regional conservation plan. A tour of the Atwood Farm facilities will follow the meeting.

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.