Thames River Basin Partnership

Partners in Action Quarterly Report

Spring 2019 Volume 50

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 Plan of Work 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 April 2019 meeting of the Thames River Basin Partnership, then you missed a presentation by Christian Fox of The Nature Conservancy and Emily Hall of CT DEEP on the draft Connecticut Blue Plan. The Blue Plan provides digital mapping of Significant Human Use Areas and Ecologically Significant Areas in the coastal areas of Long Island Sound. The area covered under the Blue Plan extends inland up to the first bridge crossing of the waterbody. The goal of the Blue Plan is for these maps to be consulted prior to developing a permit application with the intent of avoiding conflicts in advance rather than after time and money have been invested in developing plans that are not compatible with the Blue Plan. The draft Blue Plan is available at https://www.ct.gov/deep/cwp/view.asp?a=2705&q=574290&deepNav_GID=1635. Public comments on the Blue Plan were accepted through June 21, 2019.

TRBP Updates

The annual flagship event of the Thames River Basin Partnership, the TRBP Floating Workshop, was held on June 14, 2019 in Bozrah, CT. The workshop focus was the Yantic River, one of the 9 regional watersheds upstream of the Thames River main stem. Two optional morning events were offered: a paddle up the Yantic River from Norwich Harbor to Uncas Leap, and a walking tour of the River Walk. Both of these morning programs were initiated by Deanna Rhodes, the Norwich Planner. The paddle was led by Hunter Braddock (Harbor Commission member) and had five participants. The walk was led by Deanna Rhodes, City of Norwich's Director of

Planning & Neighborhood Services and Regan Minor, the Executive Director of the Norwich Historical Society. There were ten participants on the walking tour.

Keynote speaker for the Floating Workshop was Neal Hagstrom of CT DEEP fisheries. He presented at the Bozrah Town Hall about the Connecticut Trout Management Program. Following Neal's presentation, workshop participants toured a recently installed rain garden that collects and infiltrates runoff from the Bozrah Town Hall roof and parking lot before it drains into the Yantic River. The rain garden was installed by the Eastern Connecticut Conservation District with assistance from Trout Unlimited volunteers and the Town of Bozrah public works department.

At Bozrah River Park, workshop participants enjoyed a light lunch, followed by hands-on activities at 3 learning stations. The Thames Valley Chapter of Trout Unlimited set up an impressive display featuring different types of flies, a fly tying demonstration and they brought fly cast fishing rods for workshop participants to learn the art of fly casting. Dennis Latchum of the Lebanon Inland Wetlands Commission and a TLGV Water Quality Monitoring volunteer, demonstrated how to do a riffle bioassessment and interpret the results. He brought a sophisticated set up using a digital microscope and large flat-panel monitor to significantly enlarge the critters. Kyle Swan, a Project Oceanology educator, brought water chemistry equipment to assess water quality in the Yantic River.

All together 40 people and a few random onlookers were involved with this year's TRBP Floating Workshop, including 10 volunteers from the Thames Valley Chapter of Trout Unlimited.

The Thames River Basin Partnership Facebook page has finally topped 100 followers. The Facebook page is the best way to provide Partner updates and share workshop announcements. Please consider becoming a Friend or a Follower of the TRBP on Facebook and send updates to Jean.Pillo@Comcast.net to expand the number of people hearing about your good work.

Regional Conservation Partnership Program (RCPP) Project Summaries

The 2014 Farm Bill included new ways for the USDA Natural Resources Conservation Service (NRCS) to innovate, leverage additional contributions, offer impactful solutions and engage more participants. One such program was the Regional Conservation Partnership Program (RCPP). The purpose of the program is to promote coordination with partners to deliver conservation assistance to agricultural producers and landowners. This is done by providing technical assistance through agreements and direct funding for conservation practices. Through Thames River Basin Partnership meetings, partners meet to discuss ways to collaborate on projects like these. TRBP is partnering in all three of these projects by providing outreach support.

FY14/15 (State level funding) The Last Green Valley is lead partner in this $400,000 NRCS RCPP project entitled **Improving Soil Health and Water Quality in the Thames River Watershed**. This project addresses two national priorities (soil health and water quality), and all five Connecticut state priorities (water quality degradation, soil erosion, soil quality degradation,

degraded plant conditions and livestock production limitations). Utilizing the RCPP, four collaborating partners will implement soil health conservation practices through EQIP on cropland in eastern Connecticut's Thames River Watershed. The long-term objective of this project is to show a measurable improvement of edge-of-field and in-stream water quality, including a decrease in nutrient and turbidity levels, thereby improving soil health and water quality in the area.

Project update: The EQIP funding for this project has been obligated. Water quality monitoring will begin on selected fields during the 2019 growing season.

FY15/16 (State level funding) The University of Connecticut is the recipient and lead partner in an RCPP project entitled **Path to Reduce Pathogens in CT Agricultural Runoff**. This $669,000 NRCS RCPP project is focused on unacceptably high bacteria levels in Connecticut's rivers and shellfish beds. This is, in part, caused by runoff from agricultural operations. To address water quality degradation, ten conservation partners are collaborating to achieve the objectives of the project: University of Connecticut, Eastern Connecticut Conservation District, The Last Green Valley, Inc., CT Department of Agriculture Bureau of Aquaculture, CT Department of Energy and Environmental Protection, CT Sea Grant, Stonington Shellfish Commission, CUSH, Inc. (Clean Up Sound & Harbors), the Thames River Basin Partnership, and UCONN Extension.

Project update - UCONN professor, Jack Clausen of UCONN was formerly the project lead, but Mike Dietz of UCONN CLEAR/CT Non-Point Education for Municipal Officials stepped into that role after Jack's retirement. The TRBP wishes Jack well in this next phase of his life.

FY16/17 (National level funding) The Last Green Valley (TLGV) was awarded $6,144,000 through the NRCS RCPP program for **Accelerating the Pace of Conservation in the Southern New England Heritage Forest**. The Southern New England Heritage Forest (SNEHF) is a uniquely-positioned forest corridor stretching north along the Connecticut and Rhode Island border to the Quabbin Reservoir in Massachusetts. A remarkable partnership of non-profit organizations and regional, state and municipal agencies are offering private woodland owners a suite of NRCS tools for sound management and forestry conservation practices through the Environmental Quality Incentives Program (EQIP). Permanent protection through easements under the Healthy Forests Reserve Program is also available. This project will serve as a "conservation pipeline" of forest and bird habitat plans, EQIP practices and HFRP easements on private forestlands in order to accelerate the pace of conservation in SNEHF.

Project update – The response to the easement opportunity through the Healthy Forests Reserve Program (30 landowners representing 2500 acres of forested land) has been overwhelming and not all applicants can be included under this project. The next step for this project phase will be to close on the easements after title work, hazmat due diligence and restoration plans are drafted. Phase 2 applications for forest management plans and bird habitat surveys were accepted through January 18, 2019. Dozens of properties were selected and the Audubon organizations in the 3 states are currently conducting bird surveys and foresters are assessing the properties in preparation for developing Forest Management Plans.

For more information about USDA NRCS RCPP opportunities, please visit the NRCS website at https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/rcpp.

Partner Reports

This year's National Association of Conservation Districts Northeast Regional Annual Meeting will be held at Foxwoods Resort Casino on August 25 – 28, 2019. The theme of the meeting is *Sound Practices: Conservation for the Future.* Connecticut's five Conservation Districts are actively involved in planning the event. Since the meeting is being held in the Eastern Connecticut Conservation District (ECCD) service area, ECCD staff have been asked to organize two field trips featuring projects in watersheds where ECCD has been very active: Little River in Woodstock and the Niantic River on the border of East Lyme and Waterford. The NACD Northeast Regional Annual Meeting is open to all. For more information about the annual meeting, daily agendas and registration information, visit https://www.conservect.org/connecticut-association-of-conservation-districts/.

Anguilla Brook is the main inland drainage source to Wequetequock Cove in Stonington, CT. The brook is not meeting CT Water Quality Standards for pathogens. The elevated level of pathogens in the cove causes the shellfish beds to be closed for direct consumption. ECCD was awarded funds from a US EPA Clean Water Act § 319 grant by the CT DEEP to trackdown the sources of pathogens impacting water quality in the brook draining into this cove and to develop a Watershed Based Plan to address those pathogen sources. Volunteers are currently assisting ECCD staff with collecting water quality data that will be used to bracket the contamination sources.

Each year, the CT DEEP issues the five state Conservation Districts a block grant to support their efforts to provide site plan reviews for municipalities and technical assistance for Connecticut residents requesting information on how to reduce non-point source pollution. This funding is from the US EPA Clean Water Act § 319 Non-point Source fund. ECCD has set aside a portion of this funding to support coordination of a Little River Healthy Watershed Collaborative. The Collaborative, made up of representatives from ECCD, CT DEEP, CT Department of Public Healthy Drinking Water Division, Northeast District Department of Health, USDA Natural Resources Conservation Service, municipal officials from Putnam and Woodstock, and local residents, is focused on pollution prevention and remediation in the Little River watershed (Putnam and Woodstock). The watershed includes Roseland Lake, a 96 acre natural lake upstream of a surface water intake that provides drinking water to residents in Putnam. The Collaborative met in late March to listen to a presentation given by Certified Lake Manager, Hillary Kenyon of Northeast Aquatic Resources. Ms. Kenyon reviewed Roseland Lake and watershed data collected since 2015 by ECCD staff and The Last Green Valley (TLGV) water quality monitoring program volunteers. Ms. Kenyon concluded that the best in-lake management practice for controlling algae blooms in Roseland Lake would be an Alum treatment. Efforts to address upstream source reduction from this highly agricultural watershed were also recommended. The Towns of Woodstock and Putnam, and Roseland Lake supporters paid for this report.

Two major outcomes from the meeting include:

1. ECCD prepared a US EPA 319 grant application to support a holistic approach to nutrient management in Roseland Lake, including nutrient management practices on farms upstream from Roseland Lake and an Alum treatment in the lake. No final decision has been made regarding the funding request.

2. An all-volunteer Roseland Lake Water Quality Monitoring Team, supported by The Last Green Valley Water Quality Monitoring Program, was developed. Nutrient sample analysis is being supported by the Town of Putnam Water Pollution Control Authority. The lake is being sampled bi-monthly and mini updates on this project are being shared with all of the project partners and posted to the Roseland Lake Facebook page.

The formation of a Southeast Connecticut Stormwater Collaborative is being facilitated by ECCD, supported by an environmental grant from the Community Foundation of Eastern Connecticut. The Collaborative meets quarterly to discuss permit topics of interest to the municipalities required to comply with the Municipal Separate Stormwater Sewer System (MS4) permit. ECCD has received funding from the Community Foundation to expand the stormwater collaborative into Windham County.

In 2017, ECCD installed a Woodchip Bioreactor to intercept and treat tile drainage effluent at a farm in Woodstock, CT. Beginning in 2018, ECCD staff have been monitoring the inflow and outflow of the bioreactor for nutrients and pathogens to determine the changes in water quality after treatment. The monitoring phase of the project was completed in June 2019. The data is now under review, and a final report on the outcome of the project will be completed this summer.

Baker Cove, a tidal cove of Long Island Sound at the mouth of Birch Plain Creek, does not meet water quality standards for shellfish consumption. ECCD prepared a Watershed Based Plan for the cove in 2011. A recommendation to improve water quality in Baker Cove was to address the increasing resident Canada goose population as their waste is very likely contributing to the fecal contamination in the cove. With funding from a US EPA 319 grant through CT DEEP, ECCD has been evaluating the goose population of non-migratory geese and will recommend flock management measures to reduce the size of the flock. After a series of meetings with area stakeholders, a matrix of flock reduction strategies is being finalized.

The USDA Natural Resource Conservation Service (NRCS) is still in the process of evaluating the provisions in the 2018 Farm Bill. In general, Conservation Stewardship Program (CSP) funding was decreased, but Environmental Quality Incentive Program (EQIP) funding was increased, and important language changes allow more flexibility for farmers to implement a Comprehensive Nutrient Management Plan (CMNP) piecemeal rather than all at once, which was cost restrictive for many agriculture producers. There are also new provisions in the new Farm Bill for Sourcewater protection areas. State Conservationist, Tom Morgart, has been invited to give a presentation to the Thames River Basin Partnership on the 2018 Farm Bill at the summer TRBP meeting, scheduled for July 16th.

The USDA NRCS SoilWeb Survey has been updated to include a new data layer showing which soil types are most susceptible to salt leachate. This data will help develop smart salt application

strategies. The SoilWeb app provides GPS-based, real-time access to USDA-NRCS soil survey data, formatted for mobile devices. The app retrieves graphical summaries of soil types associated with the user's current geographic location. Images are linked to detailed information on the named soils. The app is available for iPhone and Android platforms, and Google Maps and Google Earth also interface with the app. It was developed in a partnership between UC Davis California and NRCS.

Katie Dykes has been confirmed as the new Commissioner of the Department of Energy and Environmental Protection (DEEP). She was nominated by Governor Ned Lamont and was confirmed on February 20, 2019. Katie previously served as Chair of the Connecticut Public Utilities Regulatory Authority (PURA) from 2015-2018, and as Deputy Commissioner for Energy at Connecticut DEEP from 2012-2015. Katie also served as the Chair of the Board of Directors of the Regional Greenhouse Gas Initiative, Inc. (RGGI) from 2014 to 2017. RGGI is a multi-state effort focused on reducing carbon emissions from electric generating facilities. Katie joined CT DEEP in March 2012 after prior service as Deputy General Counsel for the White House Council on Environmental Quality and as a Legal Advisor to the General Counsel for the U.S. Department of Energy. She is a graduate of Yale College and the Yale Law School.

DEEP Water Planning and Land Reuse Watershed Management program is reviewing twenty-two applications submitted for the most recent US EPA Clean Water Act § 319 NPS Grant round. A million dollars is available this year, which is an increase from the previous grant round.

The CT DEEP's 2014 Nonpoint Source Management Program Plan is under review for a 5 year plan update. There will be no outside stakeholder involvement in the development of the plan.

The Connecticut Stream Flow Classification project is now complete. The final maps for the western part of Connecticut are available online on the CT DEEP website. With the completion of these maps, water companies have a 10 year period to meet the designated flow classification downstream of their intakes.

The draft 2018 Integrated Water Quality Report was released for comment by CT DEEP. Comments on the plan were accepted through June 26, 2019. Once all the comments are addressed, the plan will be submitted to the US EPA for final approval. To read a summary Reconciliation List of Impaired Waters (Delistings and Listings) from the 2016 use this link.

The Last Green Valley volunteer water quality monitoring program is actively collecting data this summer.

- A new Roseland Lake Monitoring Team has been recruited and trained. They will be sampling the lake bi-monthly from April – September. At each sampling event, they will conduct a depth profile of the lake using a multiparameter probe to determine the temperature, dissolved oxygen, pH, conductivity and turbidity of the water column in the middle of the lake. In addition, they will determine the secchi depth and collect samples for algae concentrations. Once a month they will also collect water samples to be evaluated for nutrients and alkalinity.

- Team HOBO have placed temperature data loggers in the Mount Hope River and some of its tributaries. This is the second year of the temperature survey, being conducted at the request of DEEP fisheries.
- The E. coli team is conducting a 10 week long baseline water quality survey of the Willimantic River, from Stafford to Windham. The Willimantic River is a National Recreational Trail.
- Two new ponds were added to the Cyanobacteria monitoring program in 2019; Ashford Lake in Ashford and Black Pond in Woodstock. Samples are being collected by trained volunteers every 2 weeks. These samples will be analyzed for their phycocyanin concentration. Phycocyanin is a pigment found almost exclusively in cyanobacteria, previously known as Blue Green Algae.
- Lake groups interested in participating in the annual North American Lake Management Secchi Dip-In should contact Jean.Pillo@Comcast.net if you need to borrow a secchi disc.

The French River Connection, Inc. (FRC) has been awarded a Commonwealth of Massachusetts Watershed Group Monitoring Grant. The grants were designed to support watershed groups working with MassDEP to more comprehensively asses the health and safety of Massachusetts' surface waters. For many years the French River Connection has been monitoring several sites in the southern section of the French River Watershed under a quality assurance plan developed by The Last Green Valley and approved by MassDEP. These findings are available on the FRC website: www.frenchriverconnection.org. This new grant will cover the cost of equipment that will allow the FRC to conduct bacteria monitoring and provide the results for entry into the State data portal. The FRC will collect and analyze for E. coli in 10 sites along the French River in Oxford and Webster, MA.

Near the Thames River watershed, the Wood-Pawcatuck River Wild and Scenic designation was signed into law in March 2019. A Rhode Island/Connecticut partnership had formed to apply for the designation of the Wood-Pawcatuck as a Wild and Scenic River. These rivers offer exceptional recreational opportunities for paddlers, birders, fishermen, and anyone who enjoys scenic waterways. They contain thousands of acres of wetlands providing habitat for a high diversity of fish, amphibians, reptiles, mammals and invertebrates. More rare and endangered species are found in the rivers of the Wood-Pawcatuck Watershed than anywhere else in the region. In addition, Native American archeological sites, historic mills, villages, and other structures can be found scattered along the shoreline. In Connecticut, parts of the Farmington River and Salmon Brook also were designated as Wild and Scenic Rivers.

The Center for Land-use Education and Research (CLEAR) at UConn is exploring the development of a green infrastructure certification program. CLEAR also organized a half day workshop as part of its MS4 municipal outreach program.

The Thames Valley Chapter of Trout Unlimited is assisting CT DEEP and NOAA as they are investigating the possibility of installing a fish ladder over a 28' high dam across the Little River located at the site of the former Federal Paperboard Company in Versailles. The Town of Sprague is in the process of planning bank to bank remediation of the contamination in the pond above the dam.

The Mohegan Tribe is preparing to open a Mohegan Historic Preservation & Cultural Building across from the Tantaquidgeon Museum on Route 32 in Uncasville. The new building is hooked up to storm water hydrodynamic separators and underground storm water detention systems so as not to overload the storm drainage system into which it is discharging.

The Niantic River is a coastal river that drains from land within Salem, Montville, East Lyme and Waterford, and outlets into Long Island Sound west of the Thames River. The Niantic River Watershed Committee has hired a consultant to guide the process of updating the Niantic River Watershed Based Plan. The committee continues its efforts to provide education to the general public about the ecological benefits of shellfish in the bay and are conducting a lawn care behavior change campaign with a goal of reducing or eliminating fertilizer use on lawns.

News from Municipalities

The Woodstock Recreation Department and Conservation Commission organized a successful first annual town-wide clean up on April 27. The cleanup was supported in part by The Last Green Valley through a cleanup grant.

Members of the Lebanon Inland Wetland Commission are interested in organizing freshwater mussel surveys in local streams. Many freshwater mussel species are rare due to habitat disruption and pollution.

Land Trust Updates

In early December of 2018, the Wyndham Land Trust added 152 acres, situated in both Thompson and Putnam, to expand the Lower Pond Preserve to 280 acres. The property was formerly owned by the Orr family. The land trust now protects the entire shoreline of Lower Pond. The new parcel contains an Atlantic white cedar swamp, white pine/oak upland forest, a grassy marshland, and a small stream. The property holds a high concentration of endangered plants and insects associated with Atlantic white cedar swamps. Ospreys nest in the dead trees that line the swamp.

WLT also acquired an additional 18 acres from the Orr family, which expands the Chafee Preserve in Putnam to 47 acres. The Chafee Preserve was donated to the land trust in 1977 by Joseph Chafee and was the first property protected by the land trust.

WLT also continues to work on the Bull Hill Project, and has added three properties totaling 70 acres. WLT now protects a total of 955 acres on Bull Hill on the Woodstock/Thompson town line.

At its annual meeting in April, Joshua's Trust presented the Wyndham Land Trust with a Land Conservation award for the work it has done protecting over 800 acres of land in the last two years.

Leo Antonino generously donated to Avalonia Land Conservancy a 41.48-acre property located between Interstate 95 and Gold Star Highway on Antonino Road. This new preserve will be called the "Leo Antonino Preserve" in honor of Mr. Antonino's tradition of giving back to his community. The land will be conserved in its natural state and open to the public for passive recreation. Workers from the adjacent office park and the many residents who live nearby already enjoy walking the land.

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.

Next meeting will be on July 16, 2019 at the CT Sea Grant Conference Room at the UConn Avery Point Campus.

If you are not already on the e-distribution list for this publication, sign on to our TRBP Distribution list http://thamesriverbasinpartnership.org/subscribe, or you can download previous versions of this quarterly publication from the TRBP website http://thamesriverbasinpartnership.org/newsletters.

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 19 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.