



Thames River Basin Partnership Partners in Action Quarterly Report

Fall 2015

Volume 36

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 fall meeting on the Thames River Basin Partnership, then you missed a presentation on the Amos Lake Abbreviated Watershed Based Plan recently completed by the Eastern Connecticut Conservation District (ECCD). Amos Lake is located in Preston, CT. It is managed as a Trophy Bass and Trophy Trout lake, with multiple fishing tournaments there annually. The water quality in the lake is degraded and seasonal algae blooms are problematic. Judy Rondeau, ECCD's Natural Resource Specialist, overviewed what a watershed based plan is and why it was necessary to develop one for Amos Lake. She reviewed the outcomes of a water quality study that was completed with the assistance of The Last Green Valley Water Quality Monitoring Program and volunteers from the Amos Lake Association. This water quality data was used to develop recommended nutrient load reduction targets for the streams that drain into Amos Lake, and recommended implementation actions to achieve those load reductions. The final step in a watershed based plan is to develop a watershed management team that will work to implement the plan, which will be accomplished under the leadership of Amos Lake Association and Preston town staff. The complete Amos Lake Abbreviated Watershed Management Plan will be posted soon on the [DEEP Watershed Management Plan and Documents](#) webpage.

TRBP Updates

The Thames River Basin Partnership now has a [Facebook](#) page! While we continue to seek funding to update the Thames River Basin Partnership website (www.TRBP.org), our meeting announcements and calendar updates will be shared through this means.

The Thames River Basin Partnership has a significant role in a USDA Natural Resources Conservation Service (NRCS) funded Regional Conservation Partnership Project (RCPP) agreement. This effort is being led by The Last Green Valley. Additional RCPP partners include the Eastern Connecticut Conservation District and the Connecticut Resource and Development Council “AGvocate” program. Under this five year agreement, there is a goal to engage more agricultural producers to employ Healthy Soil strategies on their crop land. The TRBP will be assisting with project outreach through this newsletter and our new Facebook page. This makes one more good reason to “Like” the [Thames River Basin Partnership](#) on Facebook.

Partner Reports

The Thames River Basin Partnership congratulates Javier Cruz, former NRCS New London County District Conservationist, for his promotion to Assistant State Conservationist for Operations.

ECCD has been awarded funding from NRCS for a Conservation Innovation Grant to demonstrate and compare an innovative edge-of-field monitoring system and sampling protocol to be evaluated alongside NRCS’s Conservation Practice Codes 201 and 202 which govern edge-of-field monitoring on agricultural lands. The project objectives are to install and compare the effectiveness of two types of edge-of-field water quality monitoring systems, use alternative sampling and analytical protocols to determine if less expensive methods can be used and to conduct an economic evaluation of the alternative practices. For the project, ECCD is partnering with the University of Connecticut’s College of Agriculture and Natural Resources, as well as The Last Green Valley’s volunteer water quality monitoring program. Edge-of-field water quality monitoring will begin next spring on a farm in Woodstock, CT.

ECCD completed priority area mapping for the Mashamoquet Brook septic tank upgrades project with input from the CT DEEP. Homes on properties with frontage along Mashamoquet Brook, Abington Brook and White Brook in Pomfret and Brooklyn that predate 1940 were rated as the highest priority for septic tank repairs or replacements. Homes constructed between 1940 – 1980 were rated as medium priority. Homes built after 1980 when regulations were established were rated low priority. Failing septic systems were determined to be a potential source of fecal bacteria impacting water quality in Mashamoquet Brook. The diversion of Mashamoquet Brook is directed to an engineered public swimming area in Mashamoquet Brook State Park. Homeowners in the priority project areas are eligible for a \$2000 rebate if they voluntarily update or replace their septic system. Contact [Jean Pillo](#) at 860-928-4948 for more information. This project is funded in part by US EPA Clean Water Act § 319 funds through the CT DEEP and is a recommended implementation project included in the [2011 Mashamoquet Brook Watershed Based Plan](#).

Stormwater and the pollutants it carries is considered to be a major source of water quality degradation. ECCD recently completed two [stormwater retrofit projects](#) in eastern Connecticut, one in Groton and one in East Lyme. Seven tree filter units were installed at the Groton City Hall Complex, which will improve water quality in Birch Plain Creek. Birch Plain Creek drains

into Baker Cove, which is impaired for shellfish harvesting for direct consumption due to excess fecal bacteria. In East Lyme, four tree filters were installed along Pennsylvania Avenue in downtown Niantic, as part of a downtown street-scape improvement project. These tree filters will infiltrate stormwater that would otherwise discharge directly to the Niantic River. The Niantic River is impaired for aquatic habitat, shellfish harvesting and recreation due to pollutants associated with stormwater runoff, including fecal coliform bacteria and nutrients. These projects were funded in part by US EPA Clean Water Act § 319 funds through the CT DEEP.

Straight Pond Dam, a small (28 inch high by 29 foot long) concrete and stone State-owned dam across Indiantown Brook at the east (upstream) end of Hallville Pond (Preston, CT), was a barrier to fish getting upstream. ECCD obtained permission from the CT DEEP and funding from US Fish and Wildlife Service to remove a section of the Straight Pond Dam. Modifications to the dam completed in October 2015 resulted in flows that are closer to “free flowing” habitat, favored by many species of fish and will allow migratory fish access to an additional three miles of upstream habitat. This project is upstream of the Hallville Fishway installed at the Hallville Dam in 2013.

Under team leadership of ECCD staff, volunteers from The Last Green Valley Volunteer Water Quality Monitoring Program assisted with the collection of water samples from 23 location in the French River watershed as part of a bacteria trackdown survey in Thompson, CT. The data from this study will be used to develop a watershed based plan for the French River in CT. This project is being funded in part by US EPA Clean Water Act § 319 funds through the CT DEEP.

ECCD’s field work related to the Roseland Lake Nutrients Loads Modeling Project (Woodstock, CT) has been completed for this season, and will resume next spring. Water quality in Roseland Lake is impaired for recreation due to seasonal algae blooms. Downstream of Roseland Lake is a public drinking water supply intake. The study of Roseland Lake will be used to develop a lake and watershed management plan to reduce inputs of nutrients from the watershed above the lake and to manage existing nutrients in the lake sediments, both which impact water quality in the lake. This project is being funded in part by US EPA Clean Water Act § 319 funds through the CT DEEP and in partnership with the Putnam Water Pollution Control Authority, the CT Department of Public Health Drinking Water Division and the Town of Woodstock.

Also under project management of ECCD, the construction of an aerobic digester for composting dairy mortalities is underway in Woodstock. Properly composting the byproducts of dairy farming is a means to reduce nutrients and bacteria from contaminating nearby waterways. This project is being funded in part by US EPA Clean Water Act § 319 funds through the CT DEEP.

The Last Green Valley (TLGV), in partnership with ECCD and the Eastern Connecticut Conservation and Development Council, 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. By improving soil health, producers can reduce erosion and runoff, reduce pest and weed problems, reduce fertilizer use and fuel consumption with fewer tractor passes, and mitigate drought with soils that hold more moisture. Technical assistance is available to help producers navigate the system, calculate the economic benefits of different conservation practices, and implement new conservation practices in their fields. The new funds and technical

assistance are being provided by a Regional Conservation Partnership consisting of nonprofit organizations and government agencies working together throughout the Thames Rivers watershed in eastern Connecticut. This project is funded in part by the USDA NRCS.

Agricultural businesses 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 CTRCDAmanda@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
- Natural Resources Conservation Service (NRCS)
Danielson Field Office – 860-779-0557
Norwich Field Office - 860-887-3604

The year 2015 marks the 25th Anniversary of TLGV's Walktober Program. This year, over 200 choices of walks, hikes, historic tales, paddles, bike rides, farm visits with animals, vineyard visits & more were offered. A TLGV Members challenge was issued as well. TLGV members that participated in 15 or more Walktober events were able to earn a special commemorative tee shirt.

On the Water Trials front, TLGV has submitted an application to the National Park Service to designate the Shetucket River as National Recreational Trail. The proposed water trail would begin on the Natchaug River at Lauter Park and continue to Norwich Harbor. They have also applied to extend the existing Willimantic River National Recreational Trail from Columbia (Route 66) to a new take out installed by a newly completed section of the Airline Trail near the Rail Road Museum in Willimantic.

During the summer of 2015, TLGV water quality monitoring volunteers helped to assess the Quinebaug River for water quality that may impact recreational use by helping to collect water samples at nine boat launches along the Connecticut portion of the Quinebaug River. The Quinebaug River was designated a [National Recreation Trial](#) and the trail was extended to Aspinook Pond 2012. A report card of the results has been prepared and is available by emailing Lois@TLGV.org.

TLGV Water Quality Monitoring Program volunteers are actively involved with River Bioassessments. This program runs from September through November, and uses stream insects as water quality indicators. With the dry summer, many of the headwater streams typically assessed by this method have no or reduced flow. This data is also being shared with CT DEEP.

With careful coordination with the CT DEEP, nine locations were monitored using temperature data loggers as part of TLGV water quality monitoring program. Streams that have previously not been monitored are being evaluated for potential cold water fish habitat. Where possible, the same streams are also being monitored using the River Bioassessment method as well. The summer data has been downloaded from the loggers, but has not yet been interpreted. A letter of inquiry to request funding to expand this program into the Massachusetts portion of the watershed was submitted to the Massachusetts Environmental Trust.

A new TLGV volunteer water quality monitoring initiative will begin next spring. As a component of TLGV's Regional Conservation Partnership Project, modified edge of field water quality monitoring will be set up to capture the first flush of stormwater runoff using specially designed samplers. Water samples will be evaluated for nutrients and sediment using simple test strips and a colorimeter.

An angler survey coordinated by CT DEEP was conducted on the Quinebaug River starting on Opening Day of trout fishing season. This is the last, large river system in CT where the CT DEEP Inland Fishery Division formerly had very little information on angler usage. Shoreline access along much of this river's forty kilometer sample length is inaccessible to foot traffic, except by boat. TLGV has developed a well-planned canoe trail on the river. The popularity of canoeing and kayaking meant additional effort was required to quantify boating activity and to determine what portion of boaters were fishing. An initial review of the data showed less usage than expected by anglers. The data indicate that the primary users live close to the river and are very avid anglers. In early summer, anglers turned from fishing for trout to smallmouth bass and carp fishing. One interesting finding thus far is that the median age of anglers in most sections of this river was in the mid-30's, which is substantially lower than typically found. Usually Connecticut streams are dominated by older anglers with a median age in the late 40's. A complete analysis of angler effort, catch and demographics will be completed soon.

DEEP Inland Fisheries Division, Habitat Conservation Enhancement staff review all Connecticut Department of Transportation bridge and culvert replacement projects as well as many locally regulated projects. Staff ensure that projects are designed to allow the unrestricted movement of fish upstream and downstream and do not degrade aquatic and riparian habitats. In addition, in-stream habitat structures are often recommended for installation to restore/enhance in-stream habitat features or to mitigate unavoidable habitat losses. Onsite construction management services were provided for the following projects in recent months:

- Habitat enhancement - Hop River, Coventry (Pucker Street). Installation of 2 separate groups of large boulders upstream and downstream of the bridge crossing to provide velocity refugia and increase diversity of instream habitats.
- Habitat Enhancement - Quinebaug River, Putnam (Industrial Park Bridge). Large boulders were installed upstream and downstream as mitigation for a new bridge replacement project. Boulders were primarily installed to increase the diversity of instream habitats. This stretch of river had been channelized during the original construction of Route 395.

DEEP Inland Fisheries staff partnered with the DEEP Wildlife Division and Natural Resources Conservation Service (NRCS) to remove a small concrete dam located on an unnamed tributary of Merrick Brook (Scotland, CT) with the Talbot Wildlife Management Area. The dam's outlet structure would often become clogged with debris causing roadway flooding. This watercourse does support a seasonal native brook trout community. This dam removal restored stream connectivity for over 0.2 miles.

The long-collapsed concrete slabs constituting the Griswold Rubber Dam on the Moosup River in Plainfield were removed in September as part of the Millennium Power Partners Phase II Implementation Program. CT DEEP Inland Fisheries Division has partnered with NRCS, American Rivers and funding partner Millennium Power Partners to accomplish this project element. Discussions are now underway with the landowner for the removal of two additional unused dams along this river in the village of Moosup. The long term implementation program seeks to remove or partially breach a total of 6 fish passage barriers, installation of one engineered fishway at the Brunswick Dam #2, and open up migratory and resident fish passage and aquatic habitat restoration for nearly 7 miles of the Moosup River main stem by 2020. As a result, river connectivity will be provided to key tributary streams, including Snake Meadow Brook and Quanduck Brook, for a total of 17 miles of restored ecological connectivity in this river system.

DEEP Inland Fisheries Division received a grant through the Department of the Interior [Hurricane Sandy Recovery] and the North Atlantic Landscape Conservation Cooperative (NALCC) to survey culverts in Connecticut, as part of a regional effort by the NALCC). The most familiar stream barriers are dams. However, there is growing concern about road crossings – and especially culverts – in disrupting stream continuity. The NAACC is an effort to inventory and ultimately more effectively address barriers to fish movement and river and stream continuity. There are over 30,000 road and stream crossings across the state and to date approximately 2,500 have been surveyed. The grant allowed the Division to hire two seasonal resource assistants for the 2015 and 2016 summers to perform field surveys of road/stream crossings to add to the database. This information, once in the database will be used to assess priorities for towns or watersheds regarding aquatic organism passage or risk of failure and provide data for prioritizations for future mitigation projects.

The General Permit for the DEEP LIS Nitrogen Credit Trading Program was renewed in June, 2015 with minor technical changes; more information is posted at the [CT DEEP Nitrogen Control Program for Long Island Sound](#) webpage.

CT Department of Public Health Water Utility Coordinating Committee (WUCC) Information Sessions were recently held for 3 newly consolidated regions. DEEP staff attended these meetings. DEEP will review the submitted WUCC Plans provided to DPH following consultant work. DEEP is not a member of a WUCC. Several Thames River basin towns and watershed stakeholders have participated in draft WUCC region setting proposals, and subsequent information sessions. A dedicated DPH webpage has been established for this process which readers can visit [here](#).

A series of multi-agency and NGO participatory Source Water Protection Collaborative meetings have begun in Connecticut. Kim Czapl is the DEEP representative to the Collaborative. Since

this topic is a listed item in the TRBP Plan of Work, Partners in Action report readers may want to familiarize themselves with the State Source Water Protection program factsheet at CT DPH [here](#).

Pursuant to Public Acts 12-152 and 14-169, DEEP is updating the [Green Plan](#) and prioritizing the Department's actions through 2019 to best achieve the State's changing open space acquisition goals and meet new plan component requirements. In order to develop a planning document that will be the highest value for the State of Connecticut, municipalities, land conservation organizations and the public, the Department needs to hear from all stakeholders. CT DEEP encourages everyone to learn about the State's efforts to protect open space and read the previous version (2007-2012) at www.ct.gov/deep/openspace. You can e-mail your comments on the Draft Green Plan Outline to Jamie Sydoriak, DEEP Land Acquisition Resource Assistant, at Jamie.Sydoriak@ct.gov.

DEEP held another public information meeting on 9/10/15 on modified small MS4 General Permit (GP). Information, including the Power Point presentation is posted on DEEP Stormwater Management webpage, at

http://www.ct.gov/deep/cwp/view.asp?a=2721&q=558562&DEEPNav_GID=1654

The current MS4 permit has been extended to 1/8/2016. Due to population increases documented in the US Census in 2010, 6 of the 8 municipalities added to the Tier 1 of this GP are within the Thames River Basin. DEEP has supplied [fact sheets](#) for all of the Tier 1 towns. Comment period was closed by DEEP on 10/9/2015. Next steps in the GP issuance are varied, with a hearing in November and then adjudicatory or render a decision, plus 15 months for the effective date for permit. DEEP is seeking assistance (including with watershed organizations and coalitions) for enhanced outreach to communities.

Connecticut's Department of Economic and Community Development (DECD) has grant funds to help encourage the remediation of brownfield sites. Cleaning up and redeveloping these contaminated properties protects human health and the environment and helps our state's economy to grow by transforming vacant or underutilized sites into community assets. A total of \$6.5 million will be earmarked for remediation projects and \$1 million will be for assessment projects. Eligible applicants (municipalities and economic development agencies) can request up to \$2 million for remediation projects and \$200,000 for assessment projects. Awards may be used for a range of brownfield assessment, remediation and redevelopment activities, including abatement, demolition, site investigation and assessment, groundwater monitoring, installation of institutional controls, and professional services fees associated with redevelopment. Funding of up to \$1 million is also available to develop a comprehensive implementation plan for the remediation and redevelopment of neighborhoods, districts, corridors, downtowns, waterfront zones or other areas with multiple brownfields. Eligible applicants for this funding include municipalities, economic development agencies and regional council of governments. Grant applicants can request funding of up to \$200,000. Further details on application criteria for both grant programs are available at www.ctbrownfields.gov. Applications must be submitted via email no later than 4 p.m. on November 16, 2015.

DEEP is required to review and update the Connecticut Endangered, Threatened, and Special Concern Species List every five years in accordance with the Endangered Species Act that was passed in

1989. The Act recognizes the importance of our state's plant and animal populations and the need to protect them from threats that could lead to their extinction. The last update was done in 2010, and the most current revision for 2015 revision is now complete and became effective on August 5, 2015. Visit [DEEP's Endangered Species webpage](#) to view the [2015 Endangered Species Brochure](#), a [summary of recent change](#), and other information about endangered species in Connecticut.

In late September, DEEP announced that a very highly invasive aquatic plant has been found in Coventry Lake (Wangumbaug Lake) in Coventry. An aquatic plant biology class at the University of Connecticut found several fragments near the boat launch that was confirmed as *Hydrilla*. This plant is not native to the United States, has become a major problem in southeastern states and is beginning to spread into the Northeast. *Hydrilla* spreads aggressively; forms dense mats of vegetation; easily outcompetes and displaces native plants; alters aquatic habitats; interferes with recreational activities; and is very difficult to control once established. The source of the plant fragments is unclear at this time and DEEP is currently arranging to have Coventry Lake surveyed to determine the extent of the *Hydrilla* infestation, as well as the most effective control method. Additionally, DEEP's Boating Division will increase staff presence at the boat launch to inspect boats and trailers and to provide information on invasive species and proper boat decontamination methods. Read the [full news release](#) for more information and precautions for boaters, anglers, and other recreational users to prevent the spread of invasive plants and animals, including *Hydrilla*.

A major Comprehensive Conservation and Management Plan (CCMP) for restoring and protecting the Long Island Sound update has been completed. The Long Island Sound Study (LISS) website has the update and other postings [here](#).

The Connecticut Long Island Sound Blue Plan legislation was passed earlier this year by the Connecticut General Assembly. Governor Dannel P. Malloy sponsored legislation for the Blue Plan that directs the DEEP and University of Connecticut to convene relevant state agencies, academic institutions, and stakeholders to compile an inventory of the natural resources and the human resources of the Long Island Sound, and to use that information to develop a plan to guide future uses of the Sound's waters and submerged lands. The legislation will enhance and expand the work of a bi-state Connecticut/New York working group that has been preparing for spatial planning in the Sound, and enable the resulting inventory to be incorporated into a plan that could ensure future or new uses of the Sound are compatible with traditional uses, minimize conflicts among users, and balance use with resource protection. The resulting final plan, developed over a multi-year period, will be submitted to the General Assembly for its final approval.

Two hydro projects, Cargill Falls Dam (Quinebaug River, Putnam), and Wyre Wynd Project (Aspinook Pond Dam, Quinebaug River, Griswold) are under various degrees of development/licensing by the Federal Energy Regulatory Commission (FERC). DEEP Inland Fisheries staff have spent time and effort ensuring that either the existing fish passage facilities will continue to function properly or that new and effective fish passage facilities will be built at these sites as a condition of their FERC license.

The Center for Landuse Education and Research (CLEAR) Land Use Academy will be conducting Basic Training & Fundamentals of Reading Plans on November 17, 2015. The Academy Basic Training is for land use commissioners who are new to their respective commissions or for

experienced commissioners who want a refresher. This training can be provided at the request of an RPO, a group of municipalities or an individual municipality. A minimum of 15 participants is required. There is no cost for this training. Please contact [Bruce Hyde](#), Land Use Academy Director for details.

Governor Dannel P. Malloy recently announced that \$5.9 million in state grants will assist 17 communities in purchasing 949 acres to be preserved as open space. The grants come through the [Open Space and Watershed Land Acquisition \(OSWA\) Grant Program](#), which is administered by the state Department of Energy and Environmental Protection (DEEP). This program provides financial support to municipalities, land trusts and water companies in purchasing open space, using state bonds and funding from the [Community Investment Act](#). Also receiving funding are four urban communities for projects under the [Urban Green and Community Garden Grant Program](#). Since the grant program was launched in 1998, more than \$125 million in state funding has been awarded to assist in the purchase of 32,237 acres of land in 135 cities and towns. Projects funded this grant round in the Thames River watershed include:

- Town: Hampton Project Title: Edwards Preserve Addition Sponsor: Town of Hampton Grant Award: \$22,750 Total Acres: 6.5 acres
Description: This is a 6.5 acre addition to the 50.8 acre Maurice and Rita Edwards Preserve that was purchased with a grant from this program in 2013. The parcel has over 1,000 feet of road frontage and is adjacent on three sides to the existing Edwards Preserve. Wooded with open fields, the parcel will provide opportunities for passive recreation and complement the James Goodwin State Forest.
- Town: Mansfield Project Title: Meadowbrook Lane Sponsor: Town of Mansfield Grant Award: \$243,750 Total Acres: 61 acres
Description: A mature woodland with two small knolls and several perched wetlands, this parcel is located on the north side of Puddin Land, has 390 feet of road frontage and will contribute to an existing greenway. This parcel connects to Mansfield's Sawmill Brook Preserve (a previous recipient of a grant from this program), together creating 223 protected acres. In addition, the property contains a segment of the Nipmuck Trail (CT Blue Trail State Greenway).
- Town: Windham Project Title: Philip Lauter Park Community Garden Sponsor: Town of Windham Grant Award: \$32,968
Description: Philip Lauter Park is located just outside of Willimantic off State Route 195 (across from the Stone Well House) and also abuts the Natchaug River. The Park's resources include basketball courts, beach, car-top boat launch, walking paths, baseball fields, soccer fields, skate park, playscape, splash pad, picnic areas, parking, and an existing community garden. This grant will be used to expand the existing garden and to establish at the Park an additional garden, a "Community Farm," and a production garden that will be used primarily by local youth groups coordinated by GROW Windham

The Fall 2015 Open Space and Watershed Lands Acquisition grant round – is currently open until 2/2/16. Information is provided online [here](#).

The State of Connecticut 2016 Integrated Water Quality Assessment cycle is underway, utilizing data submitted from organizations such as The Last Green Valley Water Monitoring network. A draft document should be ready for public review in Spring, 2016, with a final approved documents expected by Fall, 2016.

DEEP has undertaken a process to prioritize watersheds for focusing water quality efforts of the Department for the next 6 years (2016-2022). The use of the Recovery Potential Screening Tool (RPS) from US EPA will help screen for watersheds that have potential for restoration of water quality goals as opposed to a list of watersheds with the most severe or largest number of water quality issues. Additional Department specific priorities will be included based on internal project work and knowledge of efforts already underway within a watershed. Once a draft list and report are complete a public comment and outreach period will be held to further refine the developed priorities list. The final deliverable of the project will be a report and list of waterbodies for CT DEEP to focus water quality efforts on for the next 6 years. The goal for each prioritized watershed or waterbody is to complete a plan to address identified water quality issues by 2022.

DEEP recently updated federal EPA involving this state agency's involvement in the State-NRCS partnership since the National Water Quality Initiative (NWQI) program was established in 2012. The Little River watershed, nested within the upper Quinebaug regional watershed, is the highlighted priority watershed where state agency and NRCS-CT focus has been made. An additional priority watershed - Broad Brook in the upper Connecticut River watershed was added as an NWQI priority watershed for 2015. DEEP has focused technical and financial assistance for targeted agricultural producers seeking enhanced conservation practices to support restoration of water quality standards in the Muddy Brook and Little River watershed. DEEP is also circulating a current NRCS notice to watershed stakeholders and partners for the Conservation Programs (EQIP and AMA) sign up period by agriculture producers, prior to the NRCS ranking period phase. Agricultural producers within the NWQI priority Little River watershed may be eligible for additional EQIP cost share assistance project ranking by NRCS.

The 27th Annual Nonpoint Source Pollution Conference for the New England states and New York will be held on April 20-21, 2016 at the Hilton in Hartford, Connecticut. This conference, which is coordinated by New England Interstate Water Pollution Control Commission (NEIWPCC) in partnership with its member states and EPA, has become the premier forum for sharing information about nonpoint source pollution (NPS) issues and projects in this region. In 2016, the conference sessions will reflect the following theme and topics:

Doing More with Less: Tools for More Effective NPS Management

- Cost-efficient stormwater management
- Cooperative management of NPS pollution
- Innovative collaborations
- Nutrient management
- Other topics of interest

For more information, please visit www.neiwpcc.org/npsconference. Please save the date on your calendar and stay tuned for early bird registration next year. If you are interested in presenting at the conference, please review the Call for Abstracts and submit an abstract online. The deadline for submissions is December 16, 2015.

Need to contact CT DEEP? Find the most up-to-date phone numbers for our program areas, a list of who to contact to report environmental concerns or problems, an A to Z subject directory, and other information about DEEP on the [Contact Us](#) webpage.

The Yale-Meyers Forest Quiet Corner Initiative is sponsoring a workshop on accessing conservation funding for forests and farmlands in Connecticut. This workshop will be held on Saturday, November 14, 2015 at the Union Town Hall from 10 AM – 1 PM. Representatives from the following organizations will present an overview of the programs they offer:

- The American Farmland Trust
- Connecticut Department of Energy and Environmental Protection
- USDA NRCS Environmental Quality Incentives Program

The workshop will be moderated by Lisa Hayden of the New England Forest Foundation. RSVP to Rebecca Terry at rebecca.terry@yale.edu if you are interested in attending this workshop.

The Atlantic States Rural Water and Wastewater Association presented a draft Source Water Protection Plan to the Source Water Subcommittee of the Brooklyn Conservation Commission on Monday, Nov 2nd. The SW Subcommittee includes representatives from Planning and Zoning, Inland Wetlands, Ag Commission, Select Board and Public Works. The plan described the current and future drinking water sources in Brooklyn and potential threats to those sources. The plan included recommendations to the Subcommittee to protect drinking water sources, such as:

- developing an overlay zone to protect gravel aquifers that have the potential to supply drinking water in the future;
- providing outreach and education to residents and businesses in town;
- assisting the Town with implementing the DEEP Aquifer Protection Program;
- assisting the Town with implementing MS4 requirements.

The Source Water Protection Program is a joint project with the USDA and the National Rural Water Association. The town will incur no costs to participate in this program.

The Central Massachusetts Regional Planning Commission (CMRPC) was awarded a 604(b) grant in late June 2015. CMRPC is partnering with Mass Audubon, Horsley Witten Group, and Nobis Engineering. The Project was anticipated to begin in September 2015. The Project timeframe is 2 years. Green Infrastructure and Low Impact Development (LID) techniques reduce stormwater runoff from residential and commercial development and mimic natural site hydrology by storing, infiltrating and recharging stormwater on site. Currently the Town of Sturbridge does not have a LID Bylaw, which is identified as a need in the Town's Master Plan. Specific activities to be conducted during this project include:

1. Develop an LID Bylaw for implementation by the Town of Sturbridge;
2. Conduct a LID based education program.
3. Prepare LID Conceptual designs for OSV parking area.

The Nature Conservancy (TNC) is seeking to fill a position as The Nature Conservancy Community Resilience Program Associate – New London County. The Community Resilience Associate will work directly with the Director of Science to help build a regional framework for resilience within and

across coastal and inland municipalities through planning, policy, and projects that reduces risks from natural hazards and climate change. The position will require extensive community-based engagement, partnership building, land use policy reviews, green/natural infrastructure project design, and on-call support for municipalities and regional organizations within New London County, Connecticut. This position is a key addition to a highly effective team engaged with coastal resilience on local, state, national, and international platforms since 2007. This is a one-year term position commencing upon hire date. The Community Resilience Associate will work directly with the Director of Science to help build a regional framework for resilience within and across municipalities and regional organizations within New London County, Connecticut. More information can be received by contacting TNC's New Haven office.

News from the Municipalities

The Town of Griswold Economic Development Commission is partnering with the Norwich Community Development Corporation (NCDC) to develop town and borough property along the Quinebaug River into a hiking trail. The goal is to link the Slater Mill in Jewett City to the back of Griswold High School. As part of the long term strategy, Griswold is working with NCDC to prepare an application to have the area designated a State of Connecticut Greenway.

Norwich is a combined sewer overflow (CSO) community, where both sanitary sewage and stormwater are carried in a single pipe. 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 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. The highest priority areas would be done 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 proposed sewer separation project will be conducted according to a "Five-Phase Implementation Plan." The separation plan is structured to give the highest environmental benefits at the beginning of the program. As the separation projects proceed, opportunities to provide an enhanced environmental outcome with the strategic placement of green infrastructure will be considered. It should be noted, however, that the great majority of project areas where separation work will be done are underlain by bedrock ledge and other geologic formations that generally are not conducive to the application of green infrastructure technologies. You can view more project details at two online locations: Table outlining [the Five-Phase Implementation Plan](#) and [Figure depicting the Five-Phase Implementation Plan](#). The EIE can be found online [here](#). The EIE and project information is also available at DEEP offices in Hartford and at Norwich City Hall. Written comments on this EIE are welcomed and will be accepted until the close of business on December 4, 2015.

The City of Norwich has been awarded funding to purchase land along the Yantic River at 31 New London Turnpike & 31 New London Turnpike Rear. These parcels are a critical link in the creation of the Yantic River Greenway, a recreational trail linking downtown Norwich to Yantic, the Norwich Business Park and other open space. The site is presently developed with a

building and 13,000 square feet of impervious parking area, causing runoff that negatively impacts water quality. This grant will place a small but highly-sensitive parcel on the Yantic River into conservation and provide access to the area for many anglers who come for stocked fresh water fishing. The City received another grant from the FEMA Hazard Mitigation Program for building demolition and site restoration, which will include new topsoil, native vegetation and grasses.

City of Groton Mayor Marian Galbraith presented the Mayor's City Pride Award to the Fairview Odd Fellows Home of Connecticut. The award was presented for Fairview's work in the City of Groton to help beautify the Thames River Landing Park located on Thames Street. Twice a year, volunteers from Fairview come together to weed the garden, trim bushes and distribute mulch to beautify the area.

Other news

The Connecticut Invasive Plant Working Group convenes 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).

In 2011 and 2012, intense rainfall and flooding from Tropical Irene and Superstorm Sandy washed out roads, bridges, and property in a number of towns across Massachusetts. Many culverts and bridges that carry rivers and streams under roads were not designed to handle the immense floods. Unable to carry the flood water and debris, many of these undersized and misaligned stream crossing structures failed catastrophically, resulting in road failures and closures that isolated residents, businesses, and emergency services. Following the storms, many of the failed culverts were replaced with structures of the same size. Consequently, nearly five years later, undersized culverts and bridges remain one of the most vulnerable links in transportation and municipal infrastructure in Massachusetts.

In addition to causing hazards for communities, undersized culverts and bridges also affect river health by disrupting natural stream processes and creating barriers for the movement of fish and wildlife. Despite improved Massachusetts regulatory standards calling for larger and better designed culverts and a desire by many towns to upgrade culverts, few culvert replacement projects have been completed that meet updated standards. DER's Stream Continuity Program recently set out to explore this situation, by conducting a needs assessment study. The needs assessment, which gathered input from local road managers across Massachusetts, revealed that municipalities face barriers at all steps in the culvert replacement process, including a lack of in-house expertise with design of culverts; inability to identify which culverts are most vulnerable to washouts; lack of funds for engineering and design; difficulty with the permitting process; and a lack of funds for construction.

On the heels of the state-wide needs assessment, DER Stream Continuity Specialist, Tim Chorey, has been meeting with municipal Department of Public Works directors from around the Commonwealth who participated in the study. Tim has observed ongoing projects, toured

problem culvert sites, and learned in depth about the problems municipalities face when attempting to upgrade culverts. Based on identified needs, Tim plans to develop tools, approaches, and funding streams that will help towns replace at-risk, vulnerable road-stream crossings with larger, safer structures. Long-term, DER seeks to build statewide capacity for towns to increase the pace and scale at which improved road-stream crossings are replaced, in order to meet the dual goals of building community resilience to flooding and improving ecosystem health. Massachusetts towns interested in seeking technical assistance for culvert replacement projects can reach the DER Stream Continuity Program and Tim Chorey at 617-626-1541 or by email at Timothy.Chorey@state.ma.us.

The Environmental Protection Agency (EPA) solicits public input and information on existing public and private sector programs that address stormwater discharges from forest roads. This information will assist EPA in responding to the remand in *Environmental Defense Center, Inc. v. U.S. EPA*, 344 F.2d 832 (9th Cir. 2003) that requires EPA to consider whether the Clean Water Act requires the Agency to regulate forest roads. This notice does not imply that EPA has made any decision to do so. EPA is considering the implementation, effectiveness, and scope of existing programs in addressing water quality impacts attributable to stormwater discharges from forest roads prior to making any decision. The Agency plans to assess a variety of existing programs, including federal, state, local, tribal, third party certifications, and combinations of these approaches, as well as voluntary best management practices (BMP)-based approaches. In preparing its response to the remand, EPA is coordinating with other federal agencies, and will assess whether any additional stormwater controls are called for, consistent with federal law, including the recent 2014 amendments to the Clean Water Act. Comments must be received on or before January 11, 2016. Submit your comments, identified by Docket ID No. EPA-HQ-OW-2015-0668, to the Federal eRulemaking Portal: <http://www.regulations.gov>.

The National Wetland Condition Assessment (NWCA) is a collaborative survey of our Nation's wetlands. The NWCA examines the chemical, physical and biological integrity of wetlands through a set of commonly used and widely accepted indicators. The NWCA is designed to answer basic questions about the extent to which our nation's wetlands support healthy ecological conditions and the prevalence of key stressors at the national and regional scale. It is intended to complement and build upon the achievements of the U.S. Fish and Wildlife Service Wetland Status and Trends Program, which characterizes changes in wetland acreage across the conterminous United States. Paired together, these two efforts provide government agencies, wetland scientists, and the public with comparable, scientifically-defensible information documenting the current status and, ultimately, trends in both wetland quantity (i.e., area) and quality (i.e., ecological condition). The EPA's draft report on the National Wetland Condition Assessment (NWCA 2011) is available for a public review and comment period ending on December 7, 2015. You may view the entire federal register announcement at <https://www.federalregister.gov/articles/2015/11/05/2015-28266/national-wetland-condition-assessment-2011-draft-report>.

There is a post-Environmental Review Team report focus on some identified Atlantic White Cedar Swamp critical habitat, with ongoing discussions about further water quality and habitat assessment and management protection options. The Bolton Lakes Watershed Alliance is seeking funding for a resource study.

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 meet quarterly on the 3rd Tuesday of the month

The next meeting of the Thames River Basin Partnership will be held January 19, 2016 beginning at 9:30 AM. Location for this meeting is to be determined.

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 most current version 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 15 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.