Eastern Connecticut Conservation District
Upper Natchaug Healthy Watershed Initiative Meeting Notes
August 29, 2019 at Camp Woodstock

Meeting attendance: Jean Pillo, Dan Mullins, Eastern Connecticut Conservation District; Holly Drinkuth, The Nature Conservancy; Eric Thomas, Mike Beuchene, Andrew Gardiner, Windham Water; Emily Perkins, Town of Willington; Ruby Senkowski, Woodstock Conservation Commission; Michael Dietz, UCONN CLEAR; Deborah Lee, Mary Ellen Ellsworth, Eastford Conservation Commission; State Representative Doug Dubitsky, Chaplin Planning and Zoning Commission; Bill and Stephanie Dubitsky, Loretta Wrobel, Ashford Conservation Commission; James Morrow, Mansfield Park and Natural Resources; Meg Reich, Mansfield Hollow Lake abutter; Gary Lussier, Thames Valley Trout Unlimited; John Meyer, Chaplin resident; Frank Olah, Woodstock Selectman; Tom Hawkin, Crystal Pond Association; Steve Broderick, Eastford CHPC and Wolf Den Land Trust; Jean DeSmet, Naubesatuck Watershed Council; Bill Reid, The Last Green Valley, Johanna Shapiro, North Central Conservation District; Lindsay Beutler, ECCD volunteer and Windham Inland Wetlands; Kevin Johns, Camp Woodstock YMCA Facilities Manager.

The stakeholders were welcomed to the meeting by Jean Pillo, ECCD Watershed Conservation Project Manager (and member of the Woodstock Conservation Commission) The meeting began with an Intro to the Upper Natchaug Healthy Watershed Project.

- Natchaug River watershed refers to the land that drains into Mansfield Hollow Lake.
- The watershed includes the Natchaug River, Mount Hope River, Fenton River and all their tributaries.

Holly Drinkuth of TNC Re-capped the Natchaug Conservation Action Plan process and outcomes that followed that effort. The Natchaug CAP document and Natchaug CAP ReCap presentation have been uploaded to the ECCD website https://www.conservect.org/eastern/current-projects/ under topic heading Water Quality Investigations then Upper Natchaug River Healthy Watershed Implementation Plan.

1. Process led to 8 town intermunicipal compact to preserve the watershed health
2. Several individuals followed up by learning about forest stewardship
3. Educational video and curriculum developed
4. Land use regulations were reviewed and recommendations for better watershed health were made.
5. $1 million grant and $3.5 million leveraged match to protect 1123 acres of forest and wetlands through a US Fish and Wildlife Service North American Wetlands Conservation Act grant.

Eric Thomas, Watershed Manager for CT DEEP gave an oral presentation on Why the Upper Natchaug was selected for the first Healthy Watershed Plan in CT.

- Upon review of state watersheds, the Natchaug River watershed stands out as an intact watershed, one of 9 areas in the state when reviewed looking at staked resources.
- Natchaug watershed stands out as a priority area for open space protection.
- Natchaug River is used as a reference stream for water quality
- There is a lot of volunteer water quality data in the watershed due to The Last Green Valley Volunteer Water Quality Monitoring
- US EPA has been pushing to increase action planning for protecting healthy watersheds.
- In the center of the watershed, the Mount Hope River watershed was in the top 5 priority watersheds in Connecticut. The project was expanded to the Natchaug and Fenton Rivers because together they drain to a surface water drinking water intake that serves Windham and parts of Mansfield.
- Within DEEP, water quality data is focused on nutrients. The condition currently are good but some external pressure is needed to prevent backsliding.
- Within the Natchaug River watershed, there are several streams that are included in a report compiled by DEEP Physical, Chemical, and Biological Attributes of Least Disturbed Watersheds in Connecticut.
    - 30 watersheds chosen
    - Branch Brook (Eastford) Bebbington, Knowlton and Gardner Brooks (Ashford) and Stonehouse Brook (Chaplin) were included in the study
- Incorporating the Biological Condition Gradient (BCG) into Assessments for better definition and identification of healthy waters in Connecticut, including much of the greater Natchaug River watershed.
- DEEP use of a conceptual mod for two of CT's aquatic life communities (fish and macroinvertebrates); to describe changes in aquatic communities.
- Increased Biological Monitoring Effort in Least Disturbed Streams (2012-16+):
    - The miles of monitored healthy rivers and streams has been increasing due to targeting of monitoring on healthy waters from 2012 – 2016. This is attributed to using DEEP landscape models of stream health to direct DEEP programs monitoring effort as well as the effort of the Volunteer Stream Monitoring Program.
    - Riffle Bioassessment by Volunteers (RBV) Program; current ArcGIS StoryMap online.
    - Identification of Cold Water Habitat
        - Metrics development to describe water temperature classes in CT streams using fish community and water temperature paired data.
        - Useful for planning for anticipated effects of climate change, and to identify cold water habitat in CT.

Review of the Natchaug River Values Survey (see https://www.conservect.org/wp-content/uploads/2019/08/Natchaug-River-Values-Survey-with-return-address.pdf)

Group discussion - what qualities define a healthy watershed?
Public comment section:
Prompt: What is important about a healthy watershed?

- One that supports ecosystem and drinking water

- recreational activities (Diana's pool)
- Natural water "cleansing" vs water treatment plants.
- Educating land owners
- Urban areas, like Hartford, affect watershed quality because asphalt heats up +rain = hot storm water run off into Connecticut's rivers. Warmer rivers affect health of rivers' inhabitants.
- Roseland Lake in Woodstock: massive nutrient issues causing damaging algae blooms during summer.
- Natchaug River is already starting to warm up.
- Culvert design is important because a poorly designed culvert impacts continuity.
- Fenton River stream flow has being restored after conflicts with ground water use were mitigated.
- Eastbrook mall runoff is putting sand into waterways, causing sand bars to form. The construction of the mall predates regulations but can be used as an example of poor land planning/management.
- Patchaug pond has cows in it, causing nutrient issues and shoreline degradation *this is an important topic to cover when educating land/farm owners in upcoming workshops.
- Black Pond Brook: high density of sensitive macro invertebrates. Important to protect this pond from nutrients in stormwater runoff.

Group discussion - Upper Natchaug HWP Goals

- Responsible growth
- Preserve/restore riparian cover
- BMPs for Stormwater Management
- Ag BMPs/residential turf BMPs
- Well-designed road culverts
- Adequate flow through the year
  - Protect Class 1 free flow streams
- Septic system management (inventory, possible pumpout & inspection ordinances)
- Road system planning and management
- Maintaining natural cover where possible
- Forestry BMPs
- Continued community outreach
- Enhance stream connectivity throughout the system
- Inventory and prioritize barrier removals

Possible topics for a concurrent workshop series (minimum of 3)

Review surveys completed by the public and send out to community to rank importance of topics to understand which topics need to be in workshops.

Education for:

- farmers, forest owners, land owners along waterways – include general awareness not assuming they know the delicate balance of the natural system

- public works
- students –Trout Unlimited Trout in the Classroom program
- lawn care industry NOFA & UCONN
- targeted outreach to land use decision makers (planning and zoning and wetland officials and conservation commissions)
- behavioral change workshops – ID problem points, educate and target change
- property owner resource planning services thru ECCD technical services and others.

Discuss best means to communicate within the municipalities

- Mansfield Recreation Department has a newsletter send to Mansfield, Willington and Ashford
- Eastford Communicator
- Woodstock Villager

Next steps

- (whole group) Review actions list and prioritize them
- DEEP to deliver nutrient Based Action Plan to ECCD (note: this has been delayed until early December)
- Spread the word about the project through press releases and other means
  - Get more people to participate in the survey
  - Use social media
  - Communicate with the Council of Governments for regional awareness
  - Attend events to promote the project (CT watershed IWRM Fair, CDLF Conference
  - Monthly email blasts to keep up project interest.
- Continue to grow the list of stakeholders involved in this initiative.

Follow up meetings (scheduling approximate)

- November - DEEP will present a Nutrients-based Watershed Plan for the watershed

- February/March – Working meeting to Review first draft Healthy Watershed Implementation Plan and draft a model checklist for guidance to for conservation and development of local projects for compatibility with the Healthy Watershed Implementation Plan

- June/July – Presentation of the Final Healthy Watershed Implementation Plan, implementation timeline and checklist