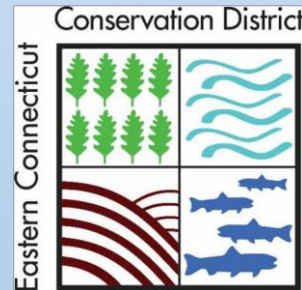
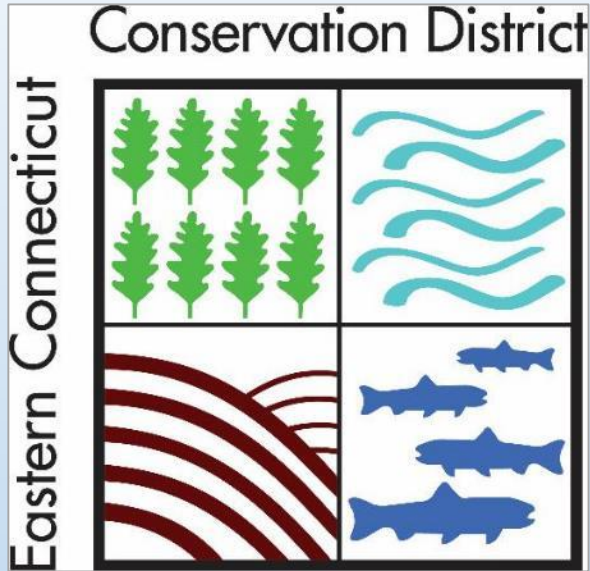


# Upper Natchaug River Healthy Watershed Implementation Plan

Jean Pillo, Watershed Conservation Project Manager  
Eastern Connecticut Conservation District



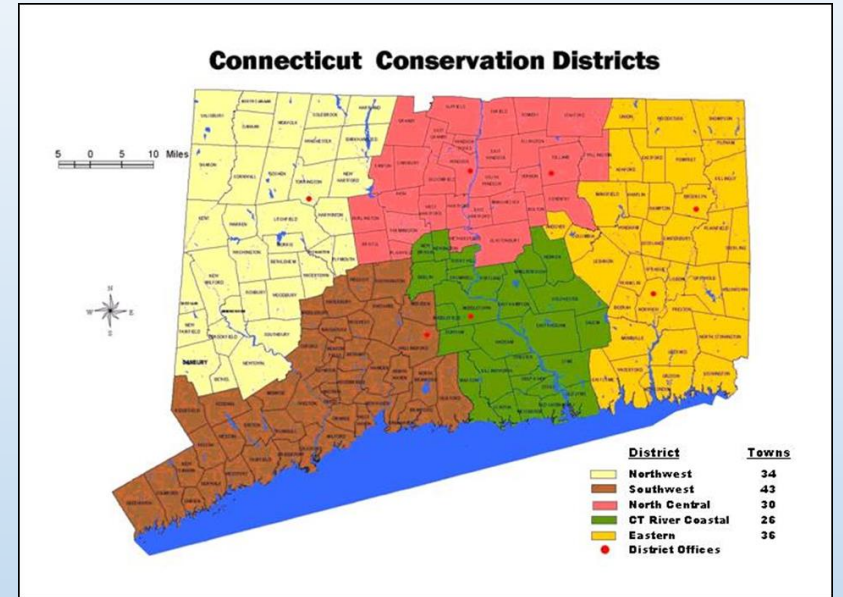
Project 15-03 is funded in part by a US EPA Clean Water Act § 319 NPS grant through the CT DEEP



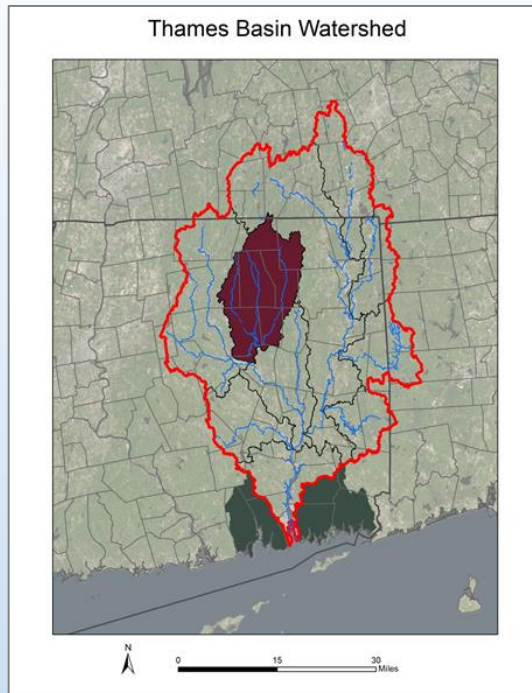
# The Eastern Connecticut Conservation District, Inc.

A Not-For-Profit  
Natural Resource Conservation Organization

<http://www.ConserveCT.org/eastern>

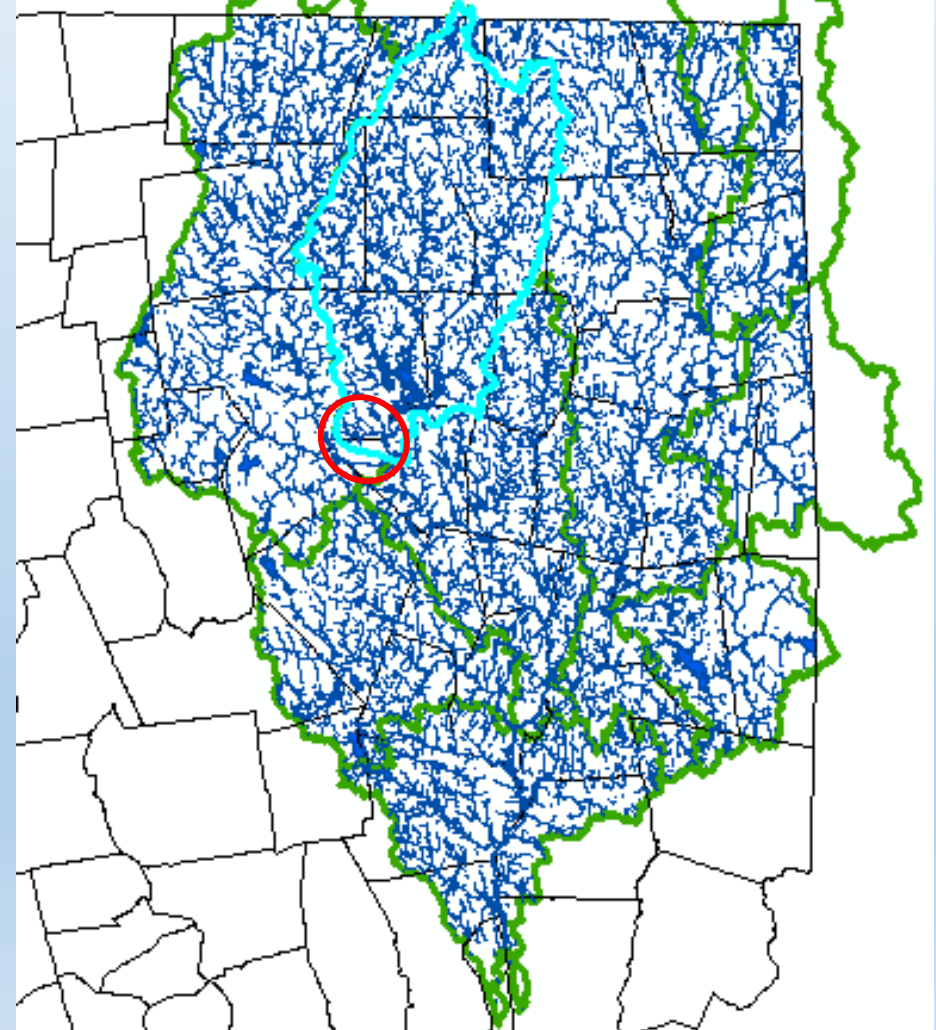


368 people already did



- The Natchaug Watershed is ~175 square miles.
- ECCD documented pollution sources and completed a watershed based plan for the lower 10 square miles Natchaug watershed in 2014.
- Previously, EPA Clean Water Act funds were only available to clean up pollution from non-point sources.
- Upper Natchaug Healthy Watershed Implementation Plan may allow federal funds to be used for pollution prevention in the future.

# What do we mean by "upper" Natchaug?





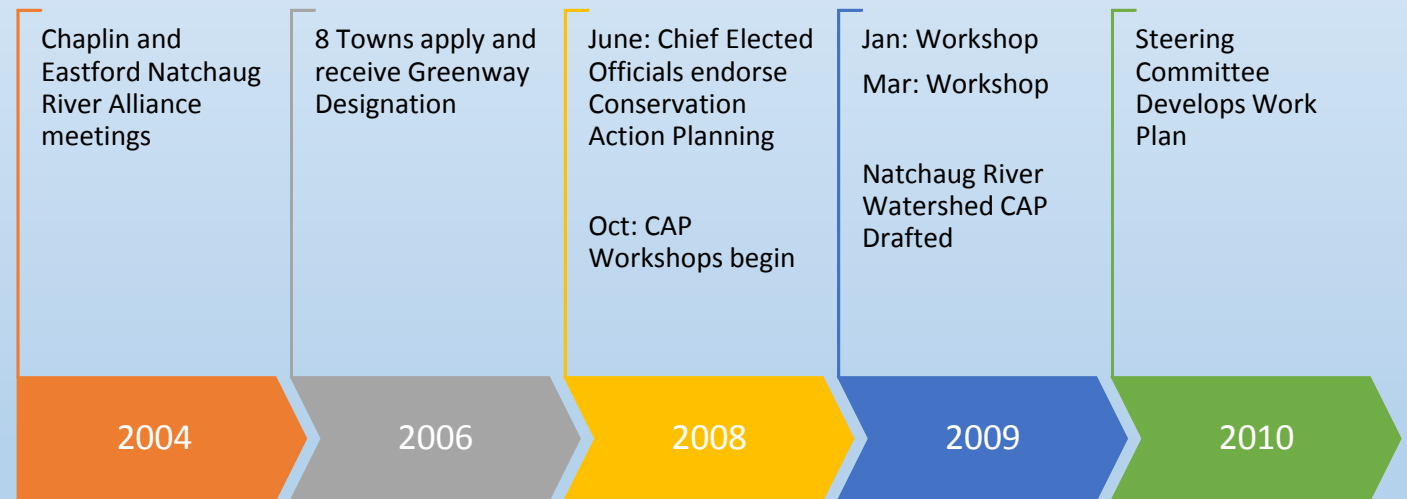
## Natchaug River Watershed Conservation Action Plan – ReCAP August 2019

Holly Drinkuth, Director of Outreach and Watersheds  
The Nature Conservancy in Connecticut



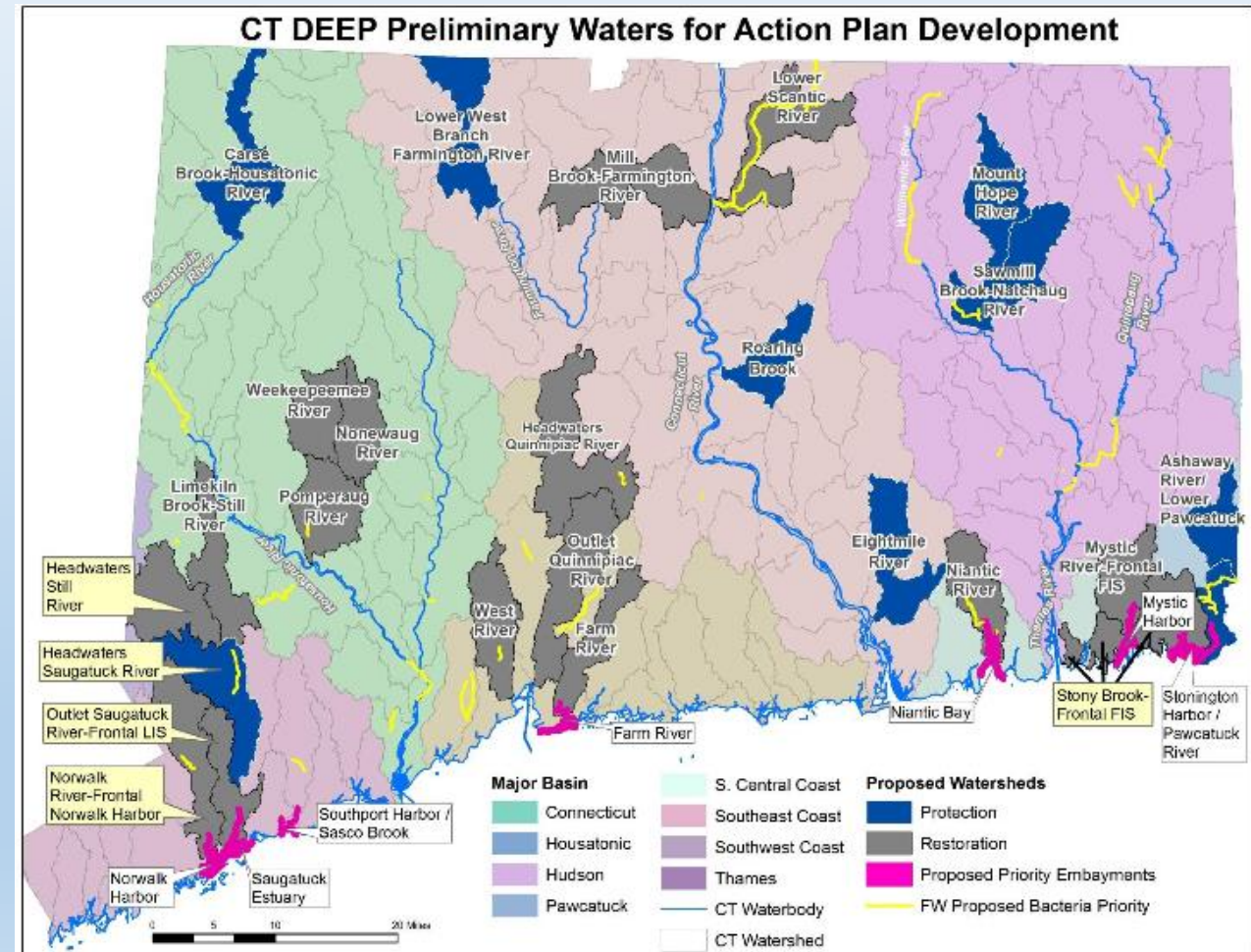
Intermunicipal compact signed April 2011

# Timeline



# Why the Upper Natchaug was selected for the first Healthy Watershed Plan in CT

- Largest Class A drinking water watershed in Connecticut.
- Mostly intact watershed (75% forested)
- Windham Water Works ranks the threats to their drinking water as **HIGH** due to unprotected, undeveloped land.
- DEEP screening tool detected Mount Hope River as one of the top 5 high priority watersheds for protection in all of CT. (Natchaug and Fenton Rivers included in the project.)
- Natchaug River used as a reference stream for water quality in eastern CT.
- Conservation Action Plan/Inter-Municipal Agreement shows interest in preserving water quality.



# Physical, Chemical, and Biological Attributes of Least Disturbed Watersheds in Connecticut

## Physical, Chemical, and Biological Attributes of Least Disturbed Watersheds in Connecticut



Chris Bellucci, Mike Beauchene, and Mary Becker

Connecticut Department of Environmental Protection  
Bureau of Water Protection and Land Reuse  
Planning and Standards Division

33 pages with 17 Tables, 38 Figures, and 4 Appendices  
Last Revised 2/9/2009

- A total of 30 least disturbed watersheds in CT were selected for this study, including:
  - Bebbington Brook - Ashford
  - Branch Brook - Eastford
  - Gardner Brook - Ashford
  - Knowlton Brook - Ashford
  - Stonehouse Brook - Chaplin
- Considered but rejected
  - Buell Brook- Eastford -Sampled Branch Bk instead
  - Lead Mine Brook - Ashford - Ph D study site
  - Stones Brook - Eastford - Too small
  - East Branch Stonehouse Brook - Chaplin - Low gradient
  - East Branch Mount Hope River - Ashford - Poor access

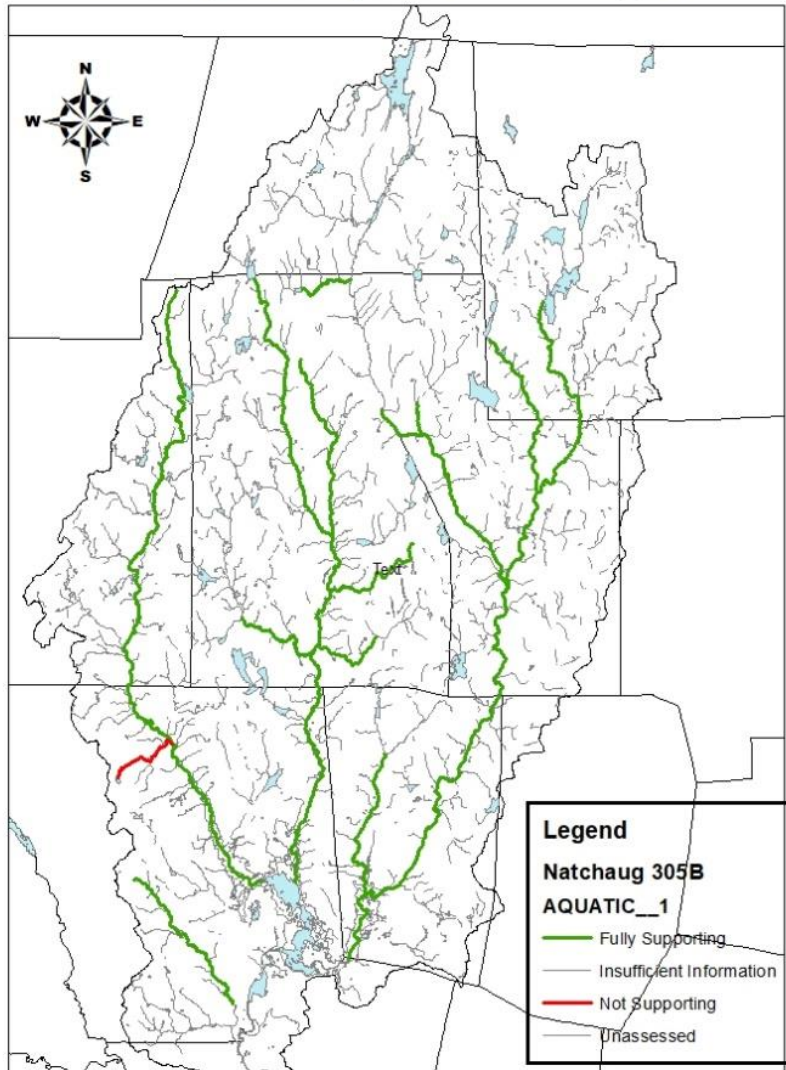
# What are we trying to accomplish

- Identify (map) where the streams, lakes and ponds are not polluted and share this information with the municipalities.
- Identify and recommend cost-effective methods to protect those high quality waters and watershed services they provide to the local communities.
- Develop and conduct a community outreach campaign to build an increased awareness regarding the natural ecosystem services and long-term benefits of healthy watersheds for resilient communities.
- Develop a Natchaug River Healthy Watershed Implementation Plan to enhance the capacity (Towns, health districts, COGs and others) to support the healthy watershed planning process (including reduced drinking water treatment and infrastructure costs).
  - Identify where strategic protection and anti-degradation measures are needed.
  - Develop an implementation roadmap that will include a schedule of watershed action projects and milestones for guidance.

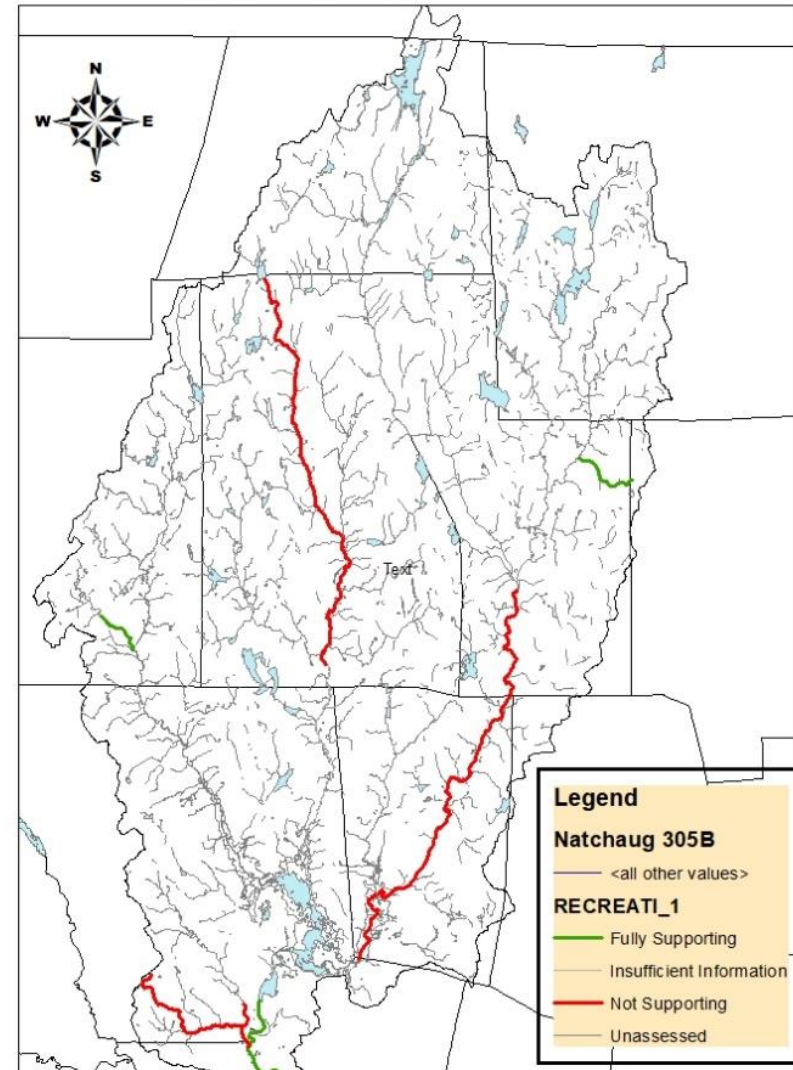


# DEEP 2016 Watershed Assessment

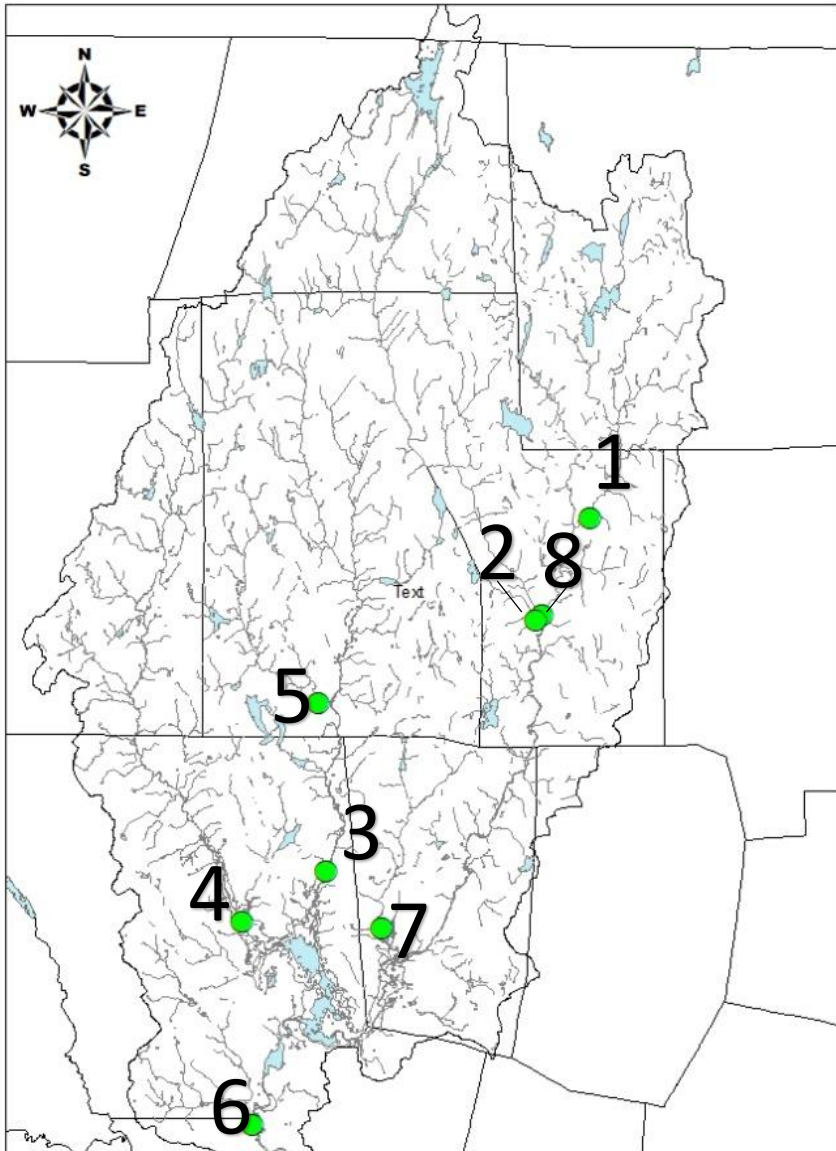
Natchaug River Aquatic Life Use Support



Natchaug River Recreation



2018 Natchaug River Nutrients



# 2018 Natchaug Watershed Nutrients

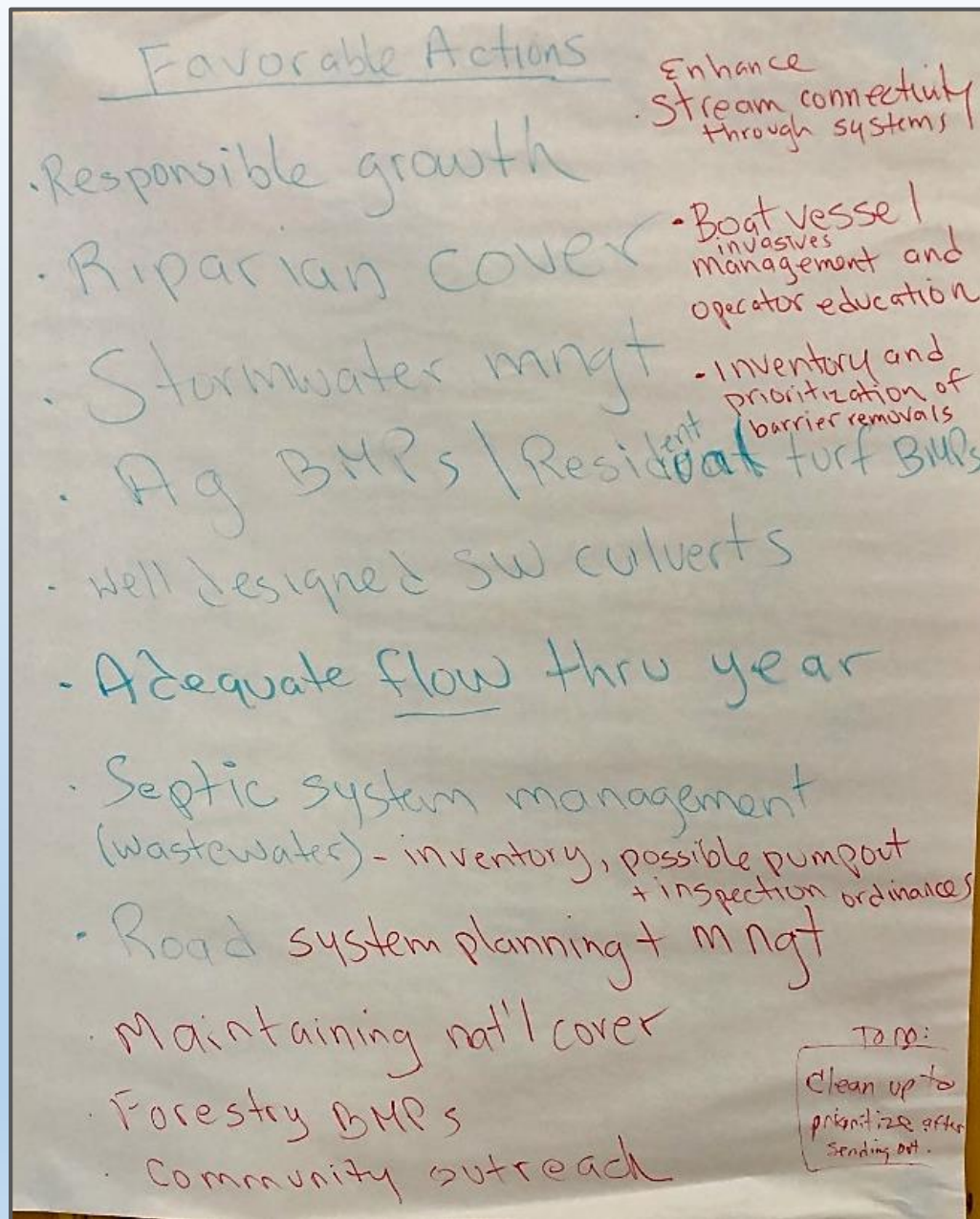
	Station Name	Total Nitrogen mg/l	Total Phosphorus mg/l
1	Bungee Brook	0.438	0.057
2	Bigelow Brook	0.038	0.034
3	Mount Hope River	0.170	0.042
4	Fenton River	0.348	0.019
5	Knowlton Brook	0.266	0.031
6	Natchaug River	0.108	0.028
7	Stonehouse Brook	0.036	0.026
8	Still River	0.488	0.113



# The Last Green Valley Volunteer Water Quality Monitoring Program

- E. coli monitoring (Mount Hope River)
- Riffle Bioassessments
- Temperature Data Loggers
- Cyanobacteria Monitoring





# Working with Stakeholders to Define what is a healthy watershed

- Natchaug River “values survey” is being used to get public participation
- First Stakeholders meeting involved soliciting ideas from the participants.
- NaturallyNatchaug facebook page developed for social marketing and communications.

# Follow up meetings (scheduling approximate)

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

February/March - Working meeting

- review first draft Healthy Watershed Implementation Plan
- 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 final checklist

Questions?