

MEMORANDUM

TO: Niantic River Watershed Committee

FROM: Fuss & O'Neill, Inc.

DATE: November 25, 2019

RE: Summary of Stakeholder Workshops of October 29, 2019
Update to the 2006 Niantic River Watershed Protection Plan

Two workshop meetings were held in the Niantic River watershed on October 29, 2019 to receive stakeholder input for the development of an update to the 2006 Niantic River Watershed Protection Plan (NRWPP). To encourage a broad representation of municipal staff and land use commissioners and other local community stakeholders, one workshop was held during the afternoon in the upper Niantic River watershed at the Chesterfield Fire Department in Montville, and the other workshop was held during the evening in the lower watershed at the Waterford Town Hall. Both workshops were open to the public and the second workshop was scheduled during evening hours so that the public could attend.

The stakeholder workshops were designed to facilitate discussion of:

1. Completed watershed plan goals and objectives
2. Uncompleted watershed plan goals and objectives
3. Barriers to uncompleted goals and objectives
4. Recommendations to address barriers and facilitate completion of uncompleted goals and objectives
5. Additional challenges not included in the 2006 NRWPP.

This memorandum summarizes the stakeholder workshops and associated outcomes and action items that will inform the preparation of the NRWPP update. The following workshop materials and documentation are attached:

- Attachment A: Stakeholder Invitation Letter (2 pages)
- Attachment B: NRW Workshop Flyer (1 page)
- Attachment C: Online Survey (1 page)
- Attachment D: Workshop Agenda (1 page)
- Attachment E: Workshop Sign-in Sheets (2 pages)
- Attachment F: Workshop Presentation (7 pages)
- Attachment G: Topic Discussion Handouts (4 pages)
- Attachment H: Completed Question Boards (8 pages)
- Attachment I: Photographs (2 pages)

Stakeholder Identification, Workshop Invitations, and Watershed Survey

Fuss & O'Neill drafted a list of potential stakeholders to invite to the workshops. The list was developed with input and review from the Niantic River Watershed Committee (NRWC) and the NRWC Coordinator, Judy Rondeau. It included municipal staff and officials from the four towns in the watershed, members of municipal and coastal management committees, representatives from the Connecticut Department of Energy & Environmental Protection (DEEP), the Southeastern Connecticut Council of Governments (SCCOG), local land trusts, business owners, and advocacy groups. These individuals were invited to workshops on October 29, 2019 via a letter sent by NRWC in September 2019 (Attachment A). In addition, the NRWC used social media and flyers (Attachment B) posted in the watershed to invite members of the public to attend. Both methods were successful, resulting in approximately 25 attendees at the afternoon workshop in Montville and approximately 35 attendees at the workshop the same evening in Waterford. The stakeholders had the opportunity to provide input on the watershed before the workshops through an online survey. The survey was created for this project to gain some understanding of stakeholders' perceptions and priorities prior to the workshops through a series of eight questions. The full survey is provided in Attachment C, and a summary of the survey responses to date were shared during the workshop presentations.

Workshop Preparation

Preparation for the workshops included a review of the watershed management recommendations contained in the 2006 NRWPP. The goal of the review was to evaluate the status of completion of the 2006 Plan recommendations, reasons why some recommendations were never completed, and identification of topics/challenges that were not addressed when the Plan was initially drafted. Fuss & O'Neill also reviewed the 2009 Guided Summary, which is a reorganization by the NRWC of the NRWPP's recommendations, and the framework for the committee's latest work plan. The review findings were shared at the workshops in abbreviated version (the full review will be included in the NRWPP Addendum).

In addition, Fuss & O'Neill produced a series of watershed maps to illustrate the natural resource qualities and anthropogenic factors that affect current water quality conditions in the watershed. For the workshops, GIS spatial analysis was utilized to highlight certain conditions, such as changes in land cover and high-priority areas for conversation/restoration. The watershed maps were displayed on poster boards at the workshop meetings.

Slide Presentation

The workshops began with brief introductions, followed by a slide presentation (Attachment F) that addressed the following topics:

1. Watershed Planning Process
2. Successes and Challenges of the 2006 NRWPP
3. Goals for Updating the 2006 NRWPP
4. Status of 2006 NRWPP Implementation
5. Summary of Conditions in the Niantic River Watershed

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Judy Rondeau, NRWC Coordinator, provided an overview of the committee's key accomplishments relative to on-the-ground implementation projects, water-quality monitoring programs, and education/outreach initiatives. The bulk of the presentation, given by Erik Mas and Michael Soares of Fuss & O'Neill, focused on a review of the 2006 NRWPP implementation status and a summary of current watershed conditions. To summarize current conditions and trends in the watershed, a series of maps and related analyses were presented and discussed along the following themes:

- Water Quality Impairments
- Land Use/Land Cover
- Impervious Cover
- Soils by Hydrologic Group
- Riparian Land Cover
- Forest, Wetlands, Critical Habitat
- Protected Open Space
- Wastewater & Permitted Discharges
- Watershed Management Priority Areas

Break-out Session

Following the presentation, a "break-out session" was held to provide a forum for smaller group discussions focused around the following topics as they relate to the Niantic River watershed:

- Stormwater Management & Water Quality
- Coastal/Estuarine Issues
- Land Use Policy & Planning
- Open Space & Conservation.

Stakeholders were organized into discussion groups based on their area of interest and/or expertise. Groups were pre-assigned prior to the workshops. Drop-ins were assigned groups randomly or according to their interest/expertise. To facilitate the discussions, each group received a 3'x4' watershed map and a handout for recording their conversations (Attachment G); in addition, NRWC members volunteered to moderate discussion groups. Fuss & O'Neill staff and the NRCW Coordinator floated among groups to answer questions and provide assistance as needed.

Stakeholders were given approximately 45 minutes to discuss their respective topics in order to complete two objectives: (1) identify the top five issues of concern for the Niantic River watershed, and (2) recommend actions, site-specific or watershed-wide, that may address those issues. At the end of the sessions, each list of prioritized issues or actions was recorded on a poster board, which each group used to share their lists of issues and actions to all workshop attendees (all boards were photographed – see Attachment H).

Break-out Session Outcomes

The following are common themes and frequently identified responses to the questions posed during the break-out sessions for both workshops.

Issues of Concern

- **Runoff and Nonpoint Sources of Pollution:** Regardless of the topic or workshop location, stakeholders repeatedly identified sources of runoff and non-point source (NPS) pollution as high priorities. Stakeholders documented issues stemming from existing sources throughout the watershed, such as: inadequate or failing stormwater infrastructure (e.g., directly discharging outfalls); illicit discharges; impervious surfaces, including roads; and chronic inputs from waterfowl, fertilizers, and on-site sewage disposal.
- **Watershed Development:** In addition, most discussion groups stated a high level of concern about new development in the watershed. New development was discussed from two perspectives. The first can be described as the potential increase in measurable impacts to water quality from increases in impervious surface, loss of open space and other buffers, and hydromodification. The second perspective targeted the need for new or improved land-use policy/planning and regulations. In general, stakeholders expressed that regulations are needed to require more sustainable development and better protections for inland and coastal waters. Similarly, strategic planning is wanted to effectively manage coastal areas restoration/resiliency and to conserve open space, particularly to discourage the development of sensitive areas (e.g., Oswegatchie Hills) and to conserve riparian buffers along freshwater streams and their headwaters. Development concerns were discussed in terms of both site-specific and watershed-wide issues. There was also concern about inconsistent land use regulations within the four watershed communities relative to development standards and water quality protection.
- **Degraded Coastal Systems & Habitats:** These concerns are related to the problems with development described previously, as nonpoint source pollution from developed areas is a major contributor to the diminishing health and vigor of local fisheries, including shellfishing. At the Waterford workshop, the group discussing Land Use Policy & Planning identified the need for more support for aquaculture via policy, regulation, and restoration projects (e.g., eelgrass beds). In both workshops, coastal issues related to climate change were listed as a high priority. Stakeholders stated that sea level rise has and will continue to cause coastal flooding and loss of tidal marshes, the latter providing valuable habitat and protection against coastal storm damage. Issues with coastal recreation were also noted, including opposing perspectives. There is concern that the quality of swimming and boating is decreasing; on the other hand, concerns were raised that some recreational activities, such as motorboats access and speed limits in the Niantic River, exacerbate siltation and are harmful to fisheries.
- **Education and Monitoring Programs:** Stakeholders expressed a need for expanded water-quality monitoring programs, which may even be standardized for better correlation and tracking of data among towns, NGOs, researchers, etc. throughout the watershed. Stakeholders also recognized the value of past and ongoing outreach initiatives by NRWC, DEEP, and local advocacy groups and want to expand upon them. Specifically, education and outreach were noted as essential to raising awareness on the issues and related resources for homeowners (septic system maintenance/evaluation, vegetated buffers, fertilizer use, adaptive coastal management strategies) and for developers (Low Impact Development, green infrastructure, LID, effective erosion/sedimentation control, and other Best Management Practices (BMPs)).

Recommended Actions

- **Coordinated and Strengthened Municipal Land Use Regulations & Policy:** Most commonly, stakeholders identified coordinated regulations and related watershed-wide policy/planning as the actions to address a range of issues. For example, the Stormwater Management & Water Quality groups at both workshops suggested coordinating zoning/regulations/policies in the four watershed towns in order to: 1) require new development and redevelopment projects to implement Low-Impact Development (LID) practices; 2) establish consistent inland-wetland protections; 3) develop climate resiliency plans, including vulnerability assessments of infrastructure; and, 4) evaluate existing stormwater systems for potential maintenance and retrofits. Other topic groups reinforced the desire for inter-town planning and project management with actions recommending a watershed-wide policy/planning strategy to conserve open space, protect/restore buffers, support and implement MS4 permit compliance activities, and identify locations for potential BMPs to reduce runoff. Similar to such coordination are recommendations to strengthen and expand existing coalitions to improve outreach, secure funding, and share resources.
- **Maintain & Improve Stormwater Management Systems:** Runoff and its appropriate management were highlighted as one of the top issues across all the topic groups. In response, stakeholders frequently recommended actions to establish or expand regulations requiring that development projects follow LID practices. In this respect, recommendations stressed again that municipalities coordinate applicable zoning and regulations to effectively manage stormwater and reduce runoff throughout the watershed; this coordinated approach included targeted outreach (e.g., reducing impervious surfaces, BMPs for active construction sites) and enforcement of required erosion & sedimentation control measures. For existing stormwater infrastructure, stakeholders' recommendations focused on local programs to develop and implement plans to evaluate existing infrastructure for (1) maintenance needs and (2) to determine the suitability of retrofitting stormwater infrastructure. It was noted that such evaluations must include the most recent data on precipitation and stream flows. Site-specific water-quality monitoring was recommended for these improved/maintained locations, as well as for areas with high percentages of impervious surface or impacted historically by runoff and NPS pollution.
- **Expand Outreach & Messaging Efforts:** Stakeholders repeatedly recommended the expanded use of educational programming and outreach initiatives to build strong branding that will effect a "culture change" among residents, developers, and business owners in the watershed. Targeted outreach programs were recommended to continue and/or increase initiatives on issues such as fertilizer use, septic system maintenance/evaluation, feeding waterfowl, recreational boating BMPs, open space conservation, the importance of local fisheries, and resiliency planning for climate change.

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- **Build Coalitions:** Many actions – securing funds, open space conservation, expanded monitoring, coordinating regulations, improving communication among stakeholder groups – included references to building new partnerships and cultivating new partners. Coalitions, like NRWC, were described as being critical to leveraging the support needed to achieve these goals and provide long-lasting momentum to projects and initiatives.

Prioritization: Reporting and Dot-voting

When the smaller discussion groups had completed their lists of prioritized issues and actions, a “reporter” from each group summarized their issues of concern and recommended actions. Following the report from each of the four groups, stakeholders were directed to use stickers to vote on the issues and actions most important to them to help prioritize the updated watershed plan recommendations. The issues of concern and recommended actions, in order of priority (1 being the highest priority in each category), for each of the four groups are summarized on the following two pages.

Workshop 1: Montville

Prioritized Issues of Concern

Stormwater & Water Quality

1. Regulation and enforcement
2. Implementation of water quality BMPs
3. Finding problem septic systems and illicit discharges
4. Surface area and SW runoff
5. Loss of riparian buffer (residential & agricultural)

Coastal/Estuarine

1. Health of eelgrass beds and increasing aquaculture
2. Increased temperature of coastal waters, partly due to climate change
3. Loss of fisheries species (winter flounder)
4. Residents feeding waterfowl
5. Coastal flooding and poor access in low flood zones

Land Use Policy & Planning

1. Local regulations for consistency regarding development and stormwater control. Evaluate sensitive areas.
2. Limiting or preventing development of Oswegatchie Hills and proposed solar installation
3. With respect to development, engage DEEP for better regulation oversight and to preserve water quality
4. Ensuring Latimer Brook gets adequate flow to meet goals
5. Alternatives and issues for aquaculture/shellfish

Open Space & Conservation

1. Stewardship – education (fertilizer, septic systems); forest management; resources and awareness for homeowners
2. Development pressure (including over paving)
3. Drinking water (surface/aquifer) – no method to prioritize properties with “higher value”
4. Climate change impacts
5. Lack of uniformity and connectivity

Prioritized Recommended Actions

Stormwater & Water Quality

1. Consistent regulations and enforcement within watershed
2. Promote disconnecting impervious surfaces
3. Add more BMPs to existing development, and infrastructure
4. Restore riparian buffers
5. Septic system awareness, education, inspections
6. Standardized WQ monitoring program
7. Access to expert analysis for monitoring results

Coastal/Estuarine

1. Habitat restoration (eelgrass & riparian buffers)
2. Vulnerability assessments – roads, neighborhoods, pump stations, marshes (e.g., Latimer Brook bridge)
3. Address upland sources of sediment and nutrients (maybe dredge)
4. More public outreach for waterfowl, septic systems
5. Bacteria identification/DNA of sources

Land Use Policy & Planning

1. Request watershed town to review regulations for consistency for conservation
2. Establish communication with DEEP regarding proposed development projects
3. Establish dialogue with stakeholders for landowners and businesses with potential impacts
4. Encourage towns to communicate land use concerns
5. Engage with DEEP and city when regulations are finalized

Open Space & Conservation

1. Evaluate land values, seek public-private partnerships for acquisitions
2. Work with landowner concerns – lawn fertilizer, septic, woodlots
3. Uniformity of long-range conservation (connectivity) among watershed towns
4. Prioritize existing preserved areas, including water supply areas
5. Explore uses of open lands for flooding and climate adaptability

Workshop 2: Waterford

Prioritized Issues of Concern

Stormwater & Water Quality

1. Runoff from impervious surfaces, particularly roads
2. Controlling NPS sources (nutrients, sediment/siltation)
3. Direct, untreated outfall discharges into the Niantic River
4. Maintaining existing stormwater infrastructure
5. Changes in surface water flow patterns from development

Coastal/Estuarine

1. Non-point sources of pollution
2. Climate change, and sea level rise
3. Development
4. Ecosystem services
5. Recreation

Land Use Policy & Planning

1. Unsustainable development
2. Sea level rise
3. Policy collaboration among towns
4. Impervious surfaces
5. Culture change among stakeholders

Open Space & Conservation

1. Put more funding to open space preservation
2. Lack of public awareness about issues
3. Large ground-mounted solar
4. Development pressures

Prioritized Recommended Actions

Stormwater & Water Quality

1. Prioritize highly impervious surface area for disconnections
2. Inspect infrastructure, develop and implement maintenance schedule. Retrofit infrastructure where needed.
3. Evaluate stormwater systems, update to manage increased flows
4. For direct-discharge outfalls, install/construct retrofits
5. Good housekeeping practices (E&S) and site-specific retrofits

Coastal/Estuarine

1. Develop climate resiliency plans that contain natural solutions (living shorelines, marsh restoration, dunes, oyster beds)
2. Control development through inter-town coordination of zoning
3. Decrease NPS sources – LID, reduce inputs from fertilize, septic systems via ordinances or outreach
4. Increase land preservation
5. Support healthy aquatic ecosystems (eelgrass) through all actions.
6. Recreation - limit moorings/boat slips; BMPs for marinas and boaters; speed limits or encourage to move farther offshore

Land Use Policy & Planning

1. Towns need clear, creative solutions for sustainable development
2. Coalition building – quarterly “common meetings” for municipal committees; SCCOG and DEEP resources
3. Identify LID sites and retrofits to existing stormwater systems
4. Employ direct action: canvassing, outreach, resource sharing
5. Sea level rise – preserve properties landward of marshes; identify vulnerable areas; adopt CIRCA recommendations

Open Space & Conservation

1. Towns, land trusts, etc. work together to preserve land
2. Line items for open space
3. Towns monitor stormwater at large solar installations
4. Put a “higher value” on forests and open space
5. Outreach: aquaculture, open space, watershed signage
6. Towns need plans to preserve open space

Attachment A

Stakeholder Invitation Letter



Niantic River Watershed Committee, Inc.

www.nianticriverwatershed.org

September 30, 2019

RE: Niantic River Watershed Protection Plan Update Workshops

Dear Niantic River Watershed Resident/Stakeholder,

The Niantic River Watershed Committee (NRWC) would like to invite you to participate in the development of an updated watershed management plan for the Niantic River Watershed.

For the next 12 months, the project stakeholders will work collaboratively with NRWC and Fuss & O'Neill through participation in two workshops and the review of an update to the 2006 Niantic River Watershed Protection Plan. The purpose of the workshops is to draw upon stakeholders' experience and knowledge of the Niantic River and the surrounding watershed in order to identify, review, and prioritize updated recommendations and projects that will have a positive impact on the Niantic River.

The stakeholder workshops will be held on **Tuesday, October 29, 2019** to gather public input regarding the current state of the watershed and actions that can be incorporated into the plan to improve and/or protect water quality in the Niantic River and the watershed as a whole.

The schedule for the workshops is as follows:

- **Workshop #1: Tuesday Oct. 29, 2019, 2-4 pm, Chesterfield Fire Department - 1606 Route 85, Oakdale, CT.**
- **Workshop #2: Tuesday Oct. 29, 2019, 6:30-8:30 pm, Waterford Town Hall Auditorium - 15 Rope Ferry Road, Waterford, CT.**

Before the stakeholder workshops next month, **please take a moment to complete this short survey:** www.surveymonkey.com/r/LW3VLMY. Our goal is to better understand your concerns on water quality issues and conditions in the Niantic River and its watershed. Survey responses from stakeholders and the community will help to inform and prioritize workshop discussions. Your input makes a difference!

Developed in 2006, the Niantic Watershed Protection Plan (Plan) is a blueprint for the sound management of the Niantic River watershed and its resources. The Plan provides a detailed summary of the existing conditions throughout the watershed that may impact water quality in the Niantic River and its tributaries. The Plan provides key recommendations to address the sources of non-point source pollution that have impacted the Niantic River, based on the available data and analyses done in 2006. For over 12 years, the Plan has guided the successful implementation of many of these recommendations throughout the watershed. These include the installation of water quality improvement practices throughout the watershed, the establishment of a water quality monitoring program, and the development of an active education and outreach program.

This project is being led by the Niantic River Watershed Committee (NRWC) and consultant Fuss & O'Neill, Inc. with support through grants from the Community Foundation of Eastern Connecticut and the Connecticut Department of Energy and Environmental Protection via the US EPA Clean Water Act Section 319 Nonpoint Source program. The project participants will include representatives from NRWC, Fuss & O'Neill, CT DEEP, municipal leaders and staff from our watershed communities (East Lyme, Montville,

Salem, Waterford), government organizations, educational institutions, non-profit organizations, local businesses, and residents of the watershed.

The main objectives of this project are to:

- strengthen partnerships with and among key stakeholders, and use their local knowledge to effectively identify recommendations and prioritize project
- assess whether the 2006 Plan was useful in guiding local restoration and protection efforts, and recommend how the 2006 Plan can be improved for broader community involvement
- develop a focused update of the Plan that characterizes current causes and sources of water quality impairments in the watershed
- identify best management practices to reduce bacteria and nutrient loading at the sources, with an emphasis on green infrastructure

A Watershed Summit is planned for the late summer of 2020 to introduce the updated watershed plan to stakeholders and the general public.

If you would like to participate in the watershed plan update and attend one or both workshops, please contact me by email (judy.rondeau@comcast.net) or phone at (860) 774-9600 extension 13. I look forward to your participation as we plan for the continued protection of the Niantic River watershed.

Sincerely,



Judy Rondeau
NRWC Coordinator

Cc: Chris Tomichek, Chair, NRWC
Eric Thomas, Watershed Manager CT DEEP
Dan Stewart, First Selectman, Town of Waterford
Mark Nickerson, First Selectman, Town of East Lyme
Kevin Lyden First Selectman, Town of Salem
Ronald McDaniel, Mayor, Town of Montville

Our Mission:

“To restore and preserve the Niantic River Watershed through inter-municipal cooperation and the sound development of land use practices that mitigate pollution of the watershed, and that support all uses including shellfishing, fishing, swimming, boating, habitat, and drinking water supplies.”

Attachment B

NRWC Workshop Flyer

NIANTIC RIVER WATERSHED PROTECTION PLAN UPDATE WORKSHOPS



The Niantic River Watershed Committee invites you to participate in the Niantic River Watershed Protection Plan Update.

The stakeholder workshops will be held on **Tuesday, October 29, 2019** to gather public input regarding the current state of the watershed and actions that can be incorporated into the plan to improve and/or protect water quality in the Niantic River and the watershed as a whole.

Workshop #1: 2-4 pm, Chesterfield Fire Department - 1606 RT 85, Oakdale, CT.

Workshop #2: 6:30-8:30 pm, Waterford Town Hall Auditorium - 15 Rope Ferry Road, Waterford, CT.

Before the stakeholder workshops, please take a moment to complete this short survey: www.surveymonkey.com/r/LW3VLMY. Survey responses will help us to develop and prioritize workshop discussions. Your input makes a difference!

Please call or email Judy Rondeau at 860-774-9600 x13 or judy.rondeau@comcast.net to register. Please indicate which workshop you plan to attend.

Visit our website at www.nianticriverwatershed.org for more info.

This project is funded in part by the Connecticut Department of Energy and Environmental Protection and the Community Foundation of Eastern Connecticut.



Community Foundation
of Eastern Connecticut

Attachment C

Online Survey

Niantic River Watershed Protection Plan Update Stakeholder Survey September 2019

Thank you for participating in the Niantic River Watershed Protection Plan (NRWPP) update. Your input makes a difference! Please take a moment to complete this short survey so that we may understand what you value about the Niantic River, its watershed and the concerns you have about water quality.

* 1. How would you rate the water quality of the Niantic River?

Very poor Poor Average Good Very good

* 2. How would you rate the water quality of other waterbodies in the Niantic River watershed?

Very poor Poor Average Good Very good

* 3. How concerned are you about the effects of climate change and sea level rise on your local community?

Not concerned Slightly concerned Somewhat concerned Concerned Very concerned

* 4. What are your top five concerns regarding the Niantic River Watershed?

1.
2.
3.
4.
5.

5. Do you know of any work being done to address these concerns? If yes please describe, or share what else can be done to improve water quality:

6. What action or outcomes would you most like to see included in this update to the 2006 Niantic River Watershed Protection Plan?

7. If you represent a municipality, do you see ways for the update to complement your efforts to improve/protect water quality in the Niantic River and its watershed? Can you give specific examples?

8. Are you interested in becoming a member of the Steering Committee? Would you like to volunteer for watershed activities? *(If yes, please include your name and contact information.)*

Attachment D

Workshop Agenda

AGENDA
Stakeholder Workshop Meeting
Niantic River Watershed Protection Plan Update
October 29, 2019

1. Introduction **5 minutes**

- a. Niantic River Watershed Committee
- b. Fuss & O'Neill
- c. Stakeholders
- d. Funding

2. Presentation **35 minutes**

- a. Watershed Planning Process
- b. Successes and Challenges
- c. Goals for Updating the 2006 Plan
- d. Status of 2006 Plan Implementation
- e. Summary of Conditions in the Niantic River Watershed

3. Break-out Session: Prioritizing Issues & Actions **50 minutes**

- a. Focus-group discussions on the following topics:
 - i. Stormwater Management & Water Quality
 - ii. Coastal/Estuarine Issues
 - iii. Land Use Policy & Planning
 - iv. Open Space & Conservation

- b. Objectives for each group:
 - i. Determine the top 5 Issues of Concern
 - ii. Recommend Action(s) to address the Issues of Concern

4. Group Discussion Following Break-out Session **25 minutes**

- a. Brief summary from each group
- b. Prioritizing Issues & Actions
- c. Discussion

5. Next Steps and Closing Remarks **5 minutes**

Attachment E

Workshop Sign-in Sheets

Niantic River Watershed Protection Plan Update Workshop - 10/29/19 - Waterford Town Hall - 6:30-8:30 pm

| Name | Town | Organization (if any) | Email | Signature/Initials |
|-------------------|-----------|--|--|--------------------|
| Judy Rondeau | | NRWC | judy.rondeau@comcast.net | |
| Chris Tomichek | Waterford | NRWC | chris.tomichek@KleinschmidtUSA.com | |
| Don Danila | East Lyme | NRWC | abcfish@atlanticbb.net | |
| John Jasper | East Lyme | NRWC | JPJasper@NaturesFingerprint.com | |
| Don Landers | East Lyme | NRWC/ELHMSC | dflanders@atlanticbb.net | |
| Deb Moshier-Dunne | Waterford | Save the River- Save the Hills | debrm0727@sbcglobal.net | |
| Penny Heller | East Lyme | East Lyme Conservation Commission | pnheller@sbcglobal.net | |
| Ray Heller | East Lyme | | | |
| Laura Ashburn | East Lyme | East Lyme High School | laura.ashburn@elpsk12.org | |
| Jim Hamsher | Waterford | Waterford Harbor Management Commission | jhamsher@sbcglobal.net | |
| Philip Fine | Waterford | Waterford Harbor Management Commission | pjfine710@gmail.com | |
| Kelly Streich | | CT DEEP | kelly.streich@ct.gov | |
| Eric Thomas | | CT DEEP | eric.thomas@ct.gov | |
| Mary-beth Hart | | CT DEEP | marybeth.hart@ct.gov | |
| Tim Londregan | | Niantic Bay Shellfish Farm | | |
| Mike O'Connell | Waterford | WHS | moconnor@waterfordschools.org | |
| Wilmer Diaz | Waterford | WHS Student | | |
| Ruth Savalle | Salem | Salem P&ZC | ruth_savalle@yahoo.com | |
| Jim Foertch | Waterford | | jfoertch1@sbcglobal.net | |
| Michele Maitland | | Town of Groton | mmaitland@groton-ct.gov | |
| Dan Mullins | | ECCD | dan.mullins@comcast.net | |
| Doug Lawson | Waterford | NRWC/Wfd Shellfish Commission | douglawson85@yahoo.com | |
| Peter Harris | | NRWC/WELSCO | peterdharris1@yahoo.com | |
| Nick Gauthier | Waterford | | nickmgauthier@gmail.com | |
| FRED WISE | Waterford | WHHC | fwise45@yahoo.com | |
| NANCY KANE | Waterford | | | |
| MARCIA BEAVERS | W | WELSCO | marcia_ab@sbcglobal.net | |
| BOB DUTTON | WFD | HARBOR | SDUNDA11@gmail.com | |
| Bob DeRosa | WFD | Harbor | wdiazw@my.waterfordschools.org | |
| Willmar Diaz | WFD | | stevedaddona@sbcglobal.net | |
| Steve Dinsmore | East Lyme | ELHMSC | | |
| Bud Bray | WFD | SPHF | | |
| Steven Forchuck | Waterford | | | |
| JOEL STOCKARD | Waterford | | | |
| | | | | |
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Attachment F

Workshop Presentation




NRWC Stakeholder Workshop

Updating the 2006 Niantic River Watershed Protection Plan

October 29, 2019



Project Team






- Watershed Stakeholders
- Project Funding
 - CT DEEP through an EPA Clean Water Act Section 319 Nonpoint Source Grant
 - Eastern Connecticut Community Foundation
 - Kleinschmidt Foundation

Workshop Agenda

1. Watershed Planning Process
2. Goals for Updating the 2006 Plan
3. Status of 2006 Plan Implementation
4. Summary of Watershed Conditions
5. Break-out Session
6. Discussion: Prioritizing Issues & Actions
7. Next Steps/Closing


Purpose of the Workshop Meeting

- Describe the watershed plan update process
- Summarize watershed conditions and issues
- Provide a forum for stakeholder input and discussion
 - Issues of concern
 - Local priorities
 - Project ideas



Why Watersheds?

- Hydrologically defined
- Cross municipal boundaries
- Logical approach for managing water resources
- Watershed management = land use management
- Every-day activities



Watershed Management in the Niantic

- 2006** – Plan adopted (aka, “NRWPP”)
- 2008** – NRW Advisory Group formed
Watershed Coordinator hired
- 2009** – Guided Summary
- 2011** – Board of Directors
Watershed Compact endorsed
- 2015** – Incorporated, 501(c)3 non-profit
- 2017** – 2017-2018 Work Plan
- 2019** – RFP to update the 2006 Plan
2019-2020 Work Plan




Other Key Accomplishments

- Installation of water quality improvement practices

Colony Road Tree Fibers (2012)
 Clark Pond Riparian Buffer Restoration (2012)
 Mega Point Riparian Buffer (2014)
 Pennsylvania Ave Native Tree Fibers (2015)
 Mega Point Tree Fibers (2016)
 Pine Grove Riparian Buffer (2017)
 East Lyme High School Rain Garden (2018)
 Grand Street Tree Web (2017-2018)
 East Lyme High School Infiltration Project (2018)
 Clark Pond Rain Garden (2018)

Other Key Accomplishments

- Establishment of volunteer water quality monitoring program
 - Stream water quality monitoring (2012)
 - Riffle Bioassessments (RBV) (2012)
 - Stream Temperature Monitoring (2013)
 - Stream Corridor Assessments (2014)

Other Key Accomplishments

- Development of active education & outreach program

Landscaping for Water Quality
 Homeowner BMPs (2011)
 Teacher Water Quality Kit (2012)
 Celebrate East Lyme Day (2012)
 Hole in the Wall Outdoor Stormwater Classroom (2014)
 Rain Garden Initiative (2017)
 Rain Barrel Sales (2011 & 2018)
 Lawn Fertilizer Reduction Social Marketing Campaign Pilot Project (2018)

Challenges and Areas for Improvement

- Land-use policies
 - Coordinated regulations and initiatives, MS4 assistance
- Outreach to businesses and developers
- Communication platform for stakeholders
 - Track projects, share data, seek funding
- New issues
 - Climate change, sea level rise, coastal resiliency and adaptation, marsh migration
 - Inland flooding
 - Estuarine habitat restoration – eelgrass, shellfish
 - Hydromodification and in-stream flows, water withdrawals

Goals for Updating the NRWPP

- Strengthen stakeholder partnerships
- Assess the success of the 2006 Plan – how can it be improved?
 - Better guide local restoration and protection efforts
 - Broader community involvement?
- Focused Plan Update
 - Summarize current conditions – causes and sources of water quality issues
 - Update and prioritize recommendations
 - 10-year Planning Timeline

Watershed Plan Update Process

- Review 2006 Plan
- Review and Summarize Existing Watershed Conditions
- Conduct Stakeholder Workshops
- Visual Field Assessments
- Draft Plan Addendum
- Final Plan Addendum
- Watershed Summit

EPA Nine Elements

1. Impairment
2. Load Reduction
3. Management Measures
4. Technical & Financial Assistance
5. Public Information & Education Schedule
6. Milestones
7. Performance Criteria
8. Monitoring
- 9.

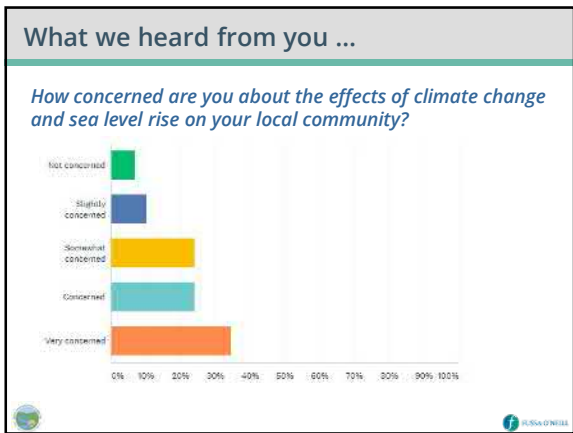
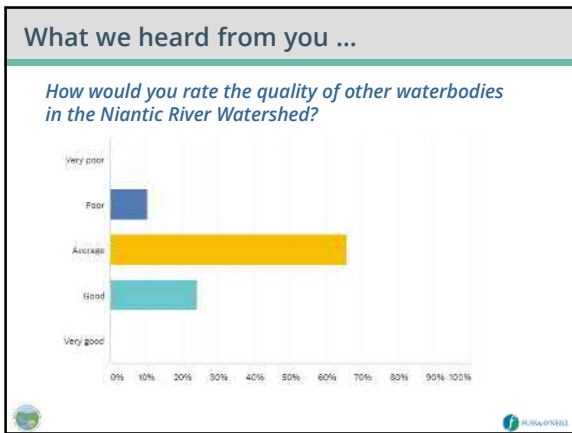
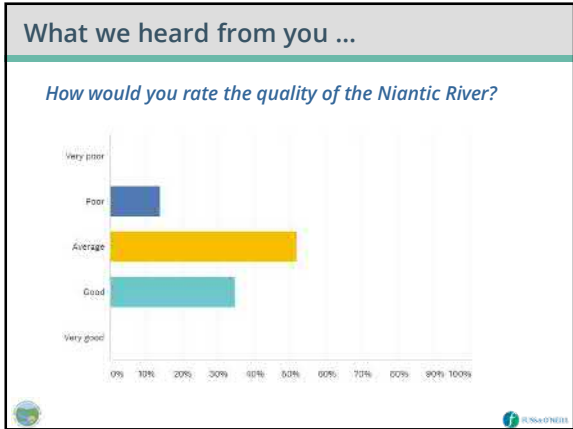
NRWPP Update Stakeholder Survey

Niantic River Watershed Protection Plan Update Stakeholder Survey
 September 2019

Thank you for participating in the Niantic River Watershed Protection Plan (NRWPP) update. Your input makes a difference. Please take a moment to complete this short survey so that we may understand what you value about the Niantic River, its watershed and the concerns you have about water quality.

→

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What we heard from you ...

What are your top five concerns in the watershed?

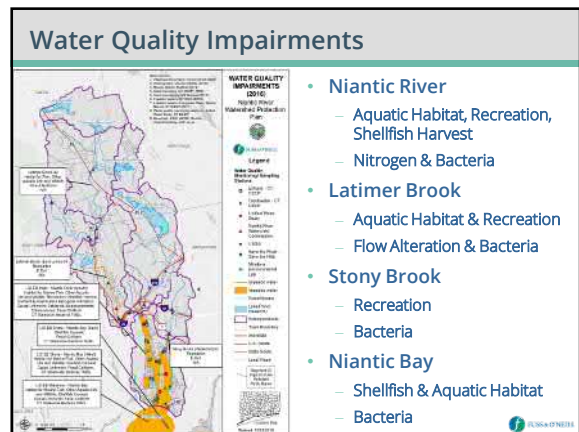
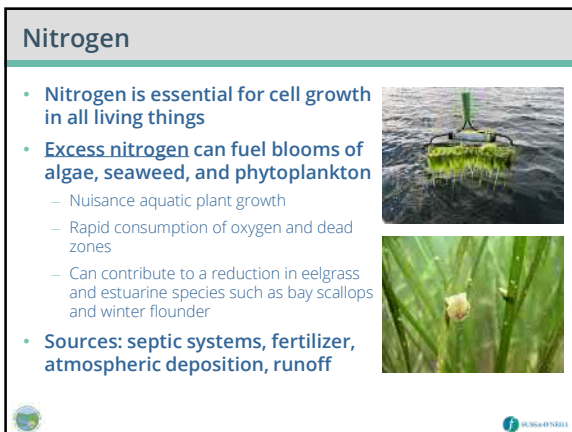
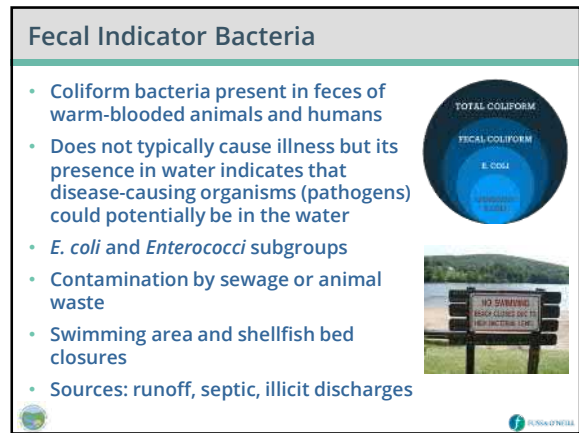
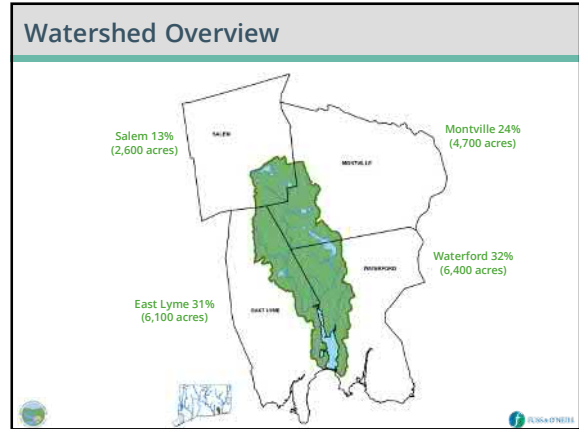
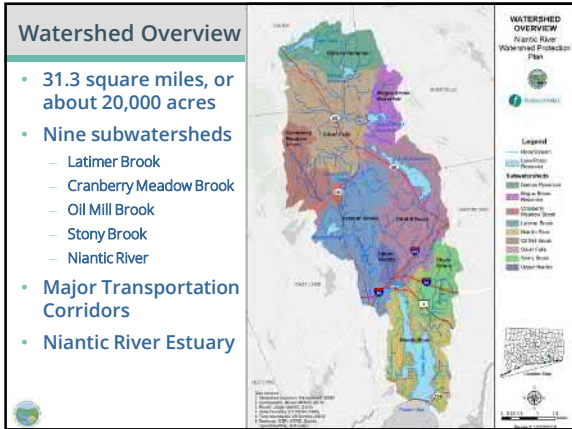
| Most Frequent Response | 2nd Most Frequent Response | 3rd Most Frequent Response |
|-----------------------------|---|-------------------------------|
| 1. NPS pollution (runoff) | Development/conservation | Shellfishing/fisheries |
| 2. Development/conservation | Loss of natural systems (eelgrass, forest, wetland) | Shellfishing |
| 3. Development/conservation | NPS pollution | Planning/zoning coordination |
| 4. Development/conservation | More projects & programs needed | NPS pollution, Climate change |
| 5. Development/conservation | Watershed planning, BMPs, regulation | Expand outreach |

Themes

- Top concern is existing sources of NPS (nutrients, bacteria, warm water) harming the watershed, and the increase in sources from new development (i.e., loss of buffer systems)
- Desire to coordinate planning & regulation throughout watershed
- More outreach to residents, contractors/developers, Town officials

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- ### What we heard from you ...
- What are outcomes you would most like to see in the Update to the 2006 Plan?*
- "Watershed-wide" land use policy & planning
 - Planning/Zoning coordination
 - Dedicated process to track/share data and projects' status
 - Reduce and disconnect impervious surfaces
 - Buffer systems
 - Protect via "focused land conservation initiatives"
 - Green infrastructure and living shorelines (benefits climate resiliency)
 - On the Ground
 - Continue & "enhance WQ monitoring and assessment"
 - Specific "high-impact projects"
 - Shellfish/Fisheries
 - More support
 - Specific recommendations for the Niantic River (eelgrass restoration)
 - Outreach
 - Report Card, BMPs (fertilizer, geese, upper ↔ lower watershed)
- © Fuss & O'Neill

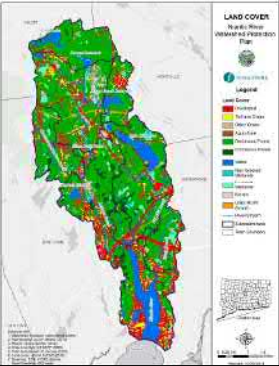


Water Quality Monitoring

- NRWV Volunteer Monitoring Program
- CTDEEP Ambient Water Quality Monitoring
- USGS Water Quality Monitoring
- Dominion Millstone Environmental Lab
- UConn Department of Marine Sciences (Dr. Vaudrey)
- CFE/Save the Sound Unified Water Study
- Save the River - Save the Hills

Land Use/Cover (UConn CLEAR)

- 60% Forested
- 25% Developed, Turf & Grass
- 12% Wetlands/Water
- Highest development in Niantic River, Stony Brook, and Latimer Brook subwatersheds



Land Use/Cover - Change Since 2006

- Modest changes in land cover between 2006 and 2015
 - Developed (+50 to 60 acres)
 - Grass (+20 acres)
 - Forest (+12 acres)
 - Barren (-83 acres)

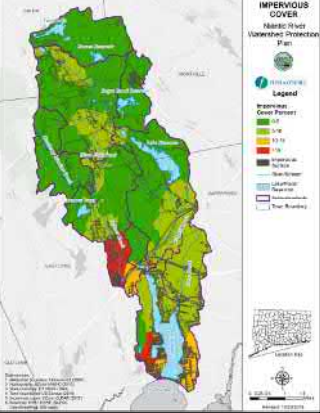
| Land Cover | 2015 % Cover | 2015 Area (sq mi) | 2006 Area (sq mi) | Change (sq mi) |
|-----------------------|--------------|-------------------|-------------------|----------------|
| Developed | 13.56 | 4.19 | 4.10 | 0.09 |
| Turf and Grass | 4.62 | 1.43 | 1.44 | -0.01 |
| Other Grass | 2.67 | 0.82 | 0.78 | 0.04 |
| Agriculture | 3.31 | 1.02 | 1.02 | 0.00 |
| Deciduous Forest | 57.34 | 17.70 | 17.67 | 0.03 |
| Coniferous Forest | 4.32 | 1.33 | 1.34 | -0.01 |
| Water | 7.34 | 2.27 | 2.27 | 0.00 |
| Non-Forested Wetlands | 0.33 | 0.10 | 0.10 | 0.00 |
| Forested Wetlands | 4.47 | 1.38 | 1.38 | 0.00 |
| Barren | 1.42 | 0.44 | 0.57 | -0.13 |
| Utility ROW (forest) | 0.62 | 0.19 | 0.19 | 0.00 |
| Total | 100.00 | 30.87 | 30.87 | |

Impervious Cover

- 1-foot resolution data
- CTDEEP Local Basins

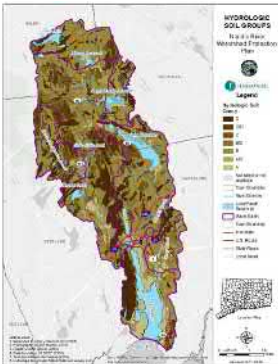
| Subwatershed | Impervious Cover (%) |
|------------------------|----------------------|
| Silver Falls | 4.38 |
| Upper Niantic | 3.30 |
| Bogue Brook Reservoir | 3.81 |
| Cranberry Meadow Brook | 2.91 |
| Stony Brook | 7.44 |
| Niantic River | 10.11 |
| Latimer Brook | 6.83 |
| Oil Mill | 3.85 |
| Barnes Reservoir | 1.62 |
| Watershed | 6.3 |

- Local basins >10-15%
- Niantic River subwatershed >10%



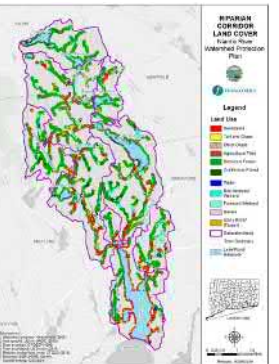
Soils

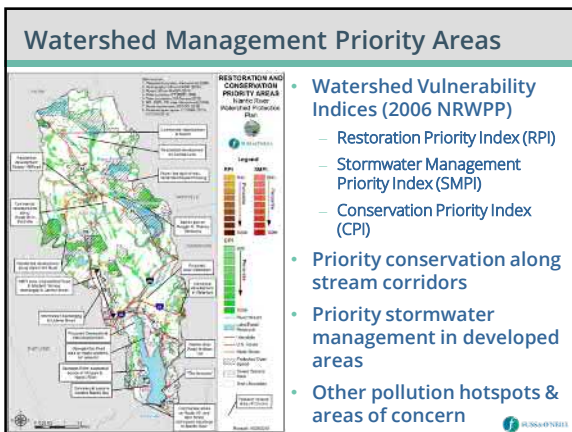
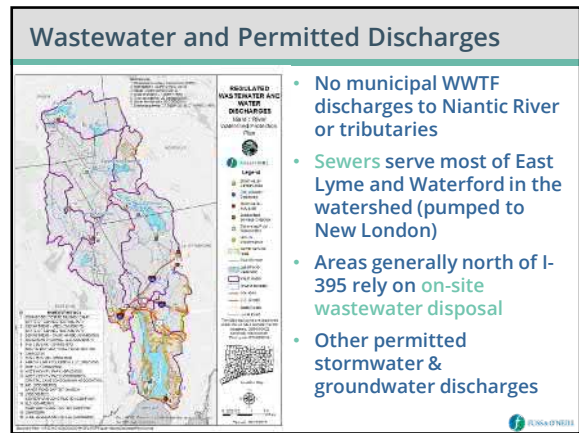
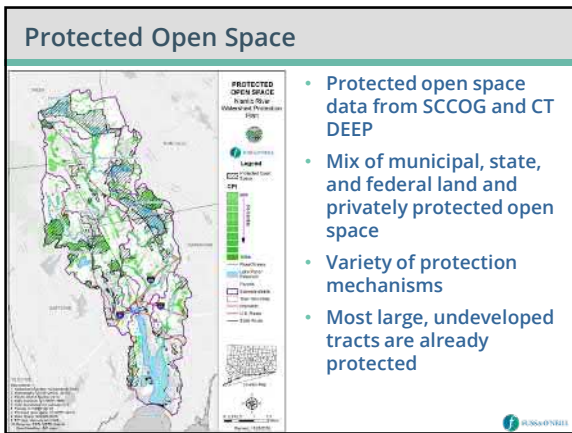
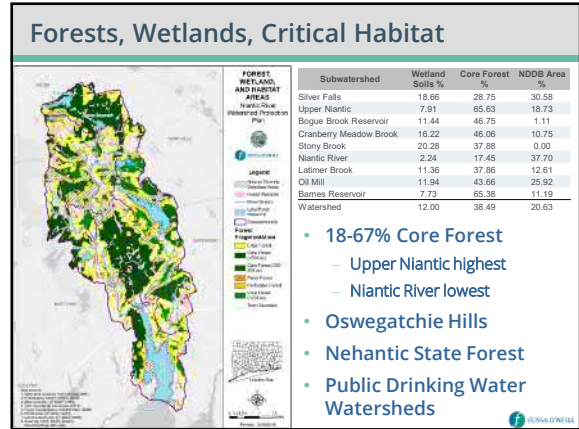
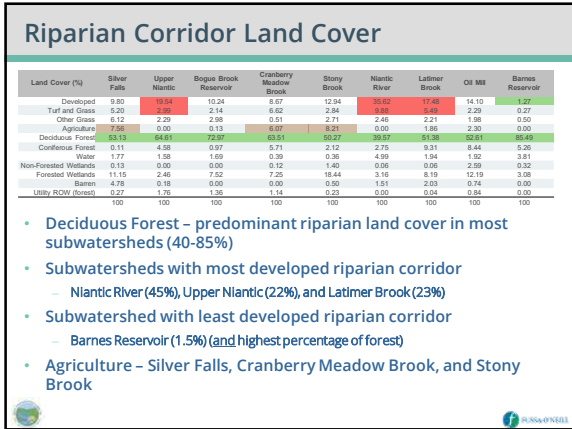
- Soils data from USDA NRCS
- Runoff & infiltration potential
- Infiltration capacity higher in A&B soils
- Impacts the feasibility and design of infiltration-based GI/LID and septic systems
- Mostly B soils in the watershed, followed by D soils



Riparian Corridor Land Cover

- UConn CLEAR, 2015 Land Cover Statewide Analysis
- 300-foot buffer on either side of a stream centerline or waterbody shoreline
- Mapped perennial and intermittent streams





Breakout Session

Prioritizing Issues & Actions

Breakout Session – Instructions

- Organize into groups of 4 to 6 people based on your pre-assigned group number
 - Group 1: Stormwater Management & Water Quality
 - Group 2: Coastal/Estuarine Issues
 - Group 3: Land Use Policy & Planning
 - Group 4: Open Space & Conservation
- Designate a note-taker and spokesperson for your group. The spokesperson for each group will report back to the rest of the workshop participants when we reconvene.

Breakout Session – Instructions

- Respond to two questions as they relate to your assigned topic. As a group, discuss possible responses to the questions and select the top 5 responses to both questions to share with the other workshop participants when we reconvene.
- Write your top 5 responses on the large sheets provided.
- Also use the maps provided to mark the locations of site-specific issues of concern or recommended actions, as applicable.

Breakout Session – Questions (50 minutes)

Question 1. What are the **top 5 issues of concern** for the Niantic River watershed relative to your assigned topic?

Question 2. What are **5 recommended actions** that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Reconvene and Group Discussion (25 minutes)

- Present your group's responses to each question (spokesperson)
- Hand in your sheets with your group's top 5 responses to both questions (not ranked in any order), which will be posted for voting by the workshop participants
- Each person will vote for their top 4 responses to Question 1 and top 4 responses to Question 2 using dot stickers
- Group discussion

Next Steps

| | |
|---------------------------------|----------------|
| • Report of Workshop Outcomes | November 2019 |
| • Visual Field Assessments | December 2019 |
| • Draft Watershed Plan Addendum | February 2020 |
| • Final Watershed Plan Addendum | April/May 2020 |
| • Watershed Summit | June 2020 |

Additional Comments or Questions:

Judy Rondeau
Niantic River Watershed Coordinator
860-774-9600 x13
judy.rondeau@comcast.net

Thank you for your time and input!

Attachment G

Topic Discussion Handouts

STORMWATER MANAGEMENT & WATER QUALITY

1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: municipal stormwater permit compliance, impervious surfaces, non-point source pollution, development impacts, homeowner or business impacts, etc.

2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: specific on-the-ground projects, water quality monitoring, Low Impact Development (LID) & green infrastructure, education & outreach, dedicated stormwater funding mechanism (utility fee), etc.

COASTAL/ESTUARINE ISSUES

1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: shellfish/fishing, eelgrass decline, climate change and sea level rise, non-point source pollution, marinas/boating, septic systems, etc.

2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: monitoring, education and outreach, climate adaptation measures, living shorelines, nature-based measures, habitat restoration, programs to address inadequate septic systems, etc.



LAND USE POLICY & PLANNING

1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: ineffective or outdated municipal regulations/policies, regulatory barriers to LID, impervious surfaces (i.e., development), inconsistent municipal policy and regulations across the watershed, etc.

2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: strengthening municipal land use regulations, strengthening local regulations to require Low Impact Development (LID) and green infrastructure, conservation planning, integrating watershed planning with POCDs updates, etc.

OPEN SPACE & CONSERVATION

1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: loss of buffer systems, development pressure, protection of headwaters, funding mechanisms, prioritizing open space parcels for conservation

2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: priority sites/areas, strategic planning (for towns and the watershed), partnerships, funding, etc.

Attachment H

Completed Question Boards

Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019



STORMWATER MANAGEMENT & WATER QUALITY

Question 1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: municipal stormwater permit compliance, impervious surfaces, non-point source pollution, development impacts, homeowner or business impacts, etc.

1. SURFACE AREA & STORM WATER RUNOFF ●
2. REGULATIONS & ENFORCEMENT ●●●●●
3. FINDING PROBLEM SEPTIC SYSTEMS AND ILLICIT DISCHARGES ●●●●
4. IMPLEMENTATION OF WATER QUALITY BMP'S ●●●●●
5. LOSS OF RIPARIAN BUFFER (Residential & Agricultural) ●●●●●

How do we know if par. ^{W.Q.} Δ is accomplished?

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Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019



STORMWATER MANAGEMENT & WATER QUALITY

Question 2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: specific on-the-ground projects, water quality monitoring, Low Impact Development (LID) & green infrastructure, education & outreach, dedicated stormwater funding mechanism (utility fee), etc.

1. Promote disconnecting Imp. Svcs. ●●●●●
(LID development/green infrastructure)
2. Consistent Regs + Enforcement w/in the watershed (ALL 34 TOWNS SAME REGS) ●●●●●
3. Septic System Awareness, Education, + Inspections ●●●●●
4. Add more BMPs to existing development + Infrastructure (grants) ●●●●●
5. Restore riparian buffer ●●●●●

3. Watershed Wide Water Quality Monitoring Program. ●●●●●
Access to expert analysis of results

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Chesterfield Fire Department, October 29, 2019, 2-4pm

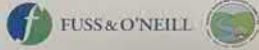
Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

COASTAL/ESTUARINE ISSUES

Question 1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: shellfish/fishing, eelgrass decline, climate change and sea level rise, non-point source pollution, marinas/boating, septic systems, etc.

1. Coastal Flooding & poor access to areas in low flood zones
2. Health of eelgrass beds & increasing aquaculture (oysters, scallops)
3. Residents feeding waterfowl
(Increases bacteria & death through aggression)
4. Loss of fisheries species
ie Winter flounder
5. Increased temperature partly due to climate change.



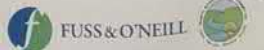
Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

COASTAL/ESTUARINE ISSUES

Question 2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: monitoring, education and outreach, climate adaptation measures, living shorelines, nature-based measures, habitat restoration, programs to address inadequate septic systems, etc.

1. More public Outreach & behavior changes
Campaign for waterfowl, septic systems.
2. Vulnerability assessment for roads, bridges neighborhoods, pump stations, tidal wetlands
ie. Latimer brook bridge.
3. Habitat Restoration
(eelgrass & riparian buffers)
4. Bacteria Identification / DNA of sources
5. Address upland sources of sediment & nutrients (maybe dredge)





Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

LAND USE POLICY & PLANNING

Question 1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: ineffective or outdated municipal regulations/policies, regulatory barriers to LID, impervious surfaces (i.e., development), inconsistent municipal policy and regulations across the watershed, etc.

1. Stream flow - ensure Latimer Brook gets adequate stream flow to meet WQ goals.
2. Advocate for limited or NO development in Oswegatchie Hills / solar farm areas.
3. Try to engage DEEP for better regulatory oversight and preserve WQ for proposed developments.
4. Evaluate local regulations for consistency in land development and SW control. Evaluate sensitive areas.
5. Evaluate alternatives & issues for Aquaculture / shellfish in River & Bay.

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Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

LAND USE POLICY & PLANNING

Question 2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: strengthening municipal land use regulations, strengthening local regulations to require Low Impact Development (LID) and green infrastructure, conservation planning, integrating watershed planning with POCDs updates, etc.

1. Engage w DEEP and City when regs are finalized.
2. Request watershed towns to review regulations for consistency and conservation.
3. Establish communication w DEEP w regard to future development.
4. Establish Dis bus w stakeholders for aquaculture / land owners - businesses w potential impacts.
5. Encourage Towns to communicate land use concerns.

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Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

OPEN SPACE & CONSERVATION

Question 1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: loss of buffer systems, development pressure, protection of headwaters, funding mechanisms, prioritizing open space parcels for conservation, etc.

1. Concerns drinking water (surface water / aquifer).
No method to prioritize the property with higher value as resource. ●
2. Development Pressure including over paving ●●●●
3. Fertilizer Use, Septic Discharge, Lack of overall management of forestry, homeowners who want to engage in Stewardship but don't know how ●●●●●●●●
4. Lack of uniformity and connectivity
5. Climate change impacts ●




Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

OPEN SPACE & CONSERVATION

Question 2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: priority sites/areas, strategic planning (for towns and the watershed), partnerships, funding, etc.

1. Prioritize existing preserved areas, including water supply areas. ●●
2. Evaluate land value and seek public-private partnerships for acquisitions. ●●●●●
3. Work with landowner concerns — lawn fertilizer, septic systems and wood lots — ●●●●●
4. Uniformity of long-range conservation (connectivity) amongst the watershed towns. ●●●●●
5. Explore uses of open lands for flooding and climate adaptability. ●





Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

STORMWATER MANAGEMENT & WATER QUALITY

Question 1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: municipal stormwater permit compliance, impervious surfaces, non-point source pollution, development impacts, homeowner or business impacts, etc.

1. Controlling NPS Pollution sources.
• Nutrients, sediments/siltation
2. Maintaining existing stormwater infrastructure
3. Changes in surface water flow patterns from development.
4. Direct, untreated outfall discharges to the Niantic River.
5. Runoff from impervious surfaces, particularly from roads.

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Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

STORMWATER MANAGEMENT & WATER QUALITY

Question 2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: specific on-the-ground projects, water quality monitoring, Low Impact Development (LID) & green infrastructure, education & outreach, dedicated stormwater funding mechanism (utility fee), etc.

1. a. Prioritize highly impervious surface areas for disconnections.
b. Utilize best E+SC practices.
2. A. Inspect infrastructure and develop and implement maintenance schedule.
B. Retrofit infrastructure where needed.
3. Re-evaluate existing systems and update to manage increased stormwater volume + flow.
4. Install/construct retrofits to treat stormwater.
- For direct discharge outfalls -
Good housekeeping practices and ^{site-specific} retrofits.
- 5.

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Waterford Town Hall, October 29, 2019, 6:30-8:30pm

COASTAL/ESTUARINE ISSUES

Question 1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: shellfish/fishing, eelgrass decline, climate change and sea level rise, non-point source pollution, marinas/boating, septic systems, etc.

1. Recreation
2. Non-point sources of pollution
3. Ecosystem services
4. Climate change/sea level rise
5. Development



COASTAL/ESTUARINE ISSUES

Question 2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: monitoring, education and outreach, climate adaptation measures, living shorelines, nature-based measures, habitat restoration, programs to address inadequate septic systems, etc.

1. Limit # moorings / boat slips; marinas and boaters follow best practices; education; speed limits to encourage boaters to move offshore
2. Decrease sources thru LID; control lawn fertilizer use thru education and/or ordinances; remove nutrients thru increased shellfish populations; require proper septic use and/or increased sewerage; increase land preservation
3. Maintain good aquatic ecosystem thru all these actions including eelgrass; introduce shellfish to remove N; harvest seaweeds
4. Have resiliency plans; increase hardened engineering; much more natural solutions such as living shorelines, marsh restoration, dunes, oyster beds
5. Control thru zoning and other ordinances; more inter-town coordination and consistency




Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

LAND USE POLICY & PLANNING

Question 1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: ineffective or outdated municipal regulations/policies, regulatory barriers to LID, impervious surfaces (i.e., development), inconsistent municipal policy and regulations across the watershed, etc.

1. Unsustainable Development
(ie Solar Farm, DH, Dinosaur Park^{co})
2. DCA impervious surfaces / LID efforts
3. POLICY COLLABORATION amongst municipalities
4. SEA LEVEL RISE
5. Culture Change among segmented stakeholders



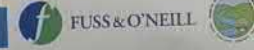
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Examples: strengthening municipal land use regulations, strengthening local regulations to require Low Impact Development (LID) and green infrastructure, conservation planning, integrating watershed planning with POCDs updates, etc.

1. Unsustainable development:
 - strong POCD parameters
 - town to be proactive + creative in offering alternatives
2. LID
 - identify retrofit opportunities for existing "old" infrastructure
 - support MS4 efforts goal to reduce increase permeable surfaces
3. Policy Collaboration
 - picking common meeting day/time for committees at least 4x/yr
 - USE SCCOG Southeastern CT Council of Government + DEEP resources to facilitate
4. Sea level rise
 - preserving properties landward of marshes
 - ID vulnerable communities
 - adopt CIRCA recommendations
5. Culture change
 - coalition building
 - employ direct action: canvassing, outreach, resource sharing



Waterford Town Hall, October 29, 2019, 6:30-8:30pm

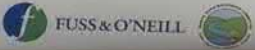
Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

OPEN SPACE & CONSERVATION

Question 1. What are the top 5 issues of concern for the Niantic River watershed relative to your assigned topic?

Examples: loss of buffer systems, development pressure, protection of headwaters, funding mechanisms, prioritizing open space parcels for conservation, etc.

1. Large Ground Mounted Solar Installations - storm water mitigation - town regulates water (motorist)
2. Working together as a Watershed to Preserve Land → Towns + Regional Land Trusts
(line items for open space in towns)
3. Watershed Signs to Educate people that they live in a Watershed
4. Putting "higher Value" on Forests + Open Space
5. ↑ outreach + Education - aquaculture - open space




Update to the 2006 Niantic River Watershed Protection Plan October 29, 2019

OPEN SPACE & CONSERVATION

Question 2. What are 5 recommended actions that should be taken to address the issues of concern that you identified in Question 1? Actions can be short- or long-term, site-specific or watershed-wide.

Examples: priority sites/areas, strategic planning (for towns and the watershed), partnerships, funding, etc.

1. Put more funding toward open space (need \$) + Preservation
2. Towns need plans to Preserve
3. Community Involvement - students - Dominion
4. Development Pressures
5. Lack of Public Awareness about issues



Attachment I

Photographs

Photographs of Stakeholder Workshop 1: Montville



Photographs of Stakeholder Workshop 2: Waterford

