

Steering Committee Meeting: Notes

July 24, 2007 ~ Kittery Town Hall

Recap

- Held Community Forum in November 2006
 - First Steering Committee meeting June 4, 2007
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Goals & Objectives

These were established by the Steering Committee on June 4, 2007.

1. Protect and restore vegetated buffers / control invasive plants
 - Forrest would like to be sure we include watershed tributary and/or boundary signage (cost less than \$100/ea)
 2. Reduce bacteria loads / open shellfish beds
 - Discussed septic socials – based on Washington Sea Grant model (<http://www.djc.com/special/environment2000/septic.html>)
 - Will have to do agricultural work due to TMDL and EPA requirements
 - Forrest proposed the Steering Committee might want to incorporate a visit to the UNH Stormwater Center as part of a meeting
 3. Treat impervious surfaces / minimize stormwater impacts
 4. Increase conservation lands within Spruce Creek Watershed
 5. Water Quality assessment and evaluation
 - This will include any additional studies that are done, such as the potential flora and fauna study, etc.
 - Forrest mentioned using a field fluorometer to study for optic brighteners (which come from laundry detergents and whose presence in the water could indicate poor or failing septic systems). He's currently going to use the meter owned by the Healthy Beaches Program to do a study on the Kennebunk River where they travel by boat with the meter, noting spots where there are spikes and their GPS locations. Tin Smith says the Wells Reserve has similar equipment/capabilities. This might be something we could look to do in Spruce Creek, too. Don Kale suggested that they could try to get one of their AmeriCorps volunteers trained in using the meter (and calibrating it).
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Comments & Ideas

Forrest suggests we should start to gather any photos we can – and be sure to incorporate them into the final plan document where possible. Forrest's wife is a professional photographer and has taken quite a few of the watershed. Sue Emery has some photos from when the Comprehensive Plan work was being done. Phyllis Ford will gather any photos to be digitized and archived.

Bill Bailey wanted to be sure there was an aspect of the plan around enforcement.

Don Kale commented that the State has a fund (SEP) that is funded through fines collected and therefore put back in the watersheds. There are similar funds available from the EPA.

The plan will also include a glossary of terms and acronyms.

Rick Rossiter is concerned about some of the larger properties and companies in town – and not just the smaller, individual homeowners. He talked about a proposed commercial project in Town (Howell's Truck Stop Expansion) and how they are outside the watershed, yet their stormwater comes through swales and pipes into Gerry Creek and ultimately into Spruce Creek. They're expanding their site with 4 acres of new pavement and impervious surface. Rick is concerned about the stormwater impacts and has suggested to the Planning Board and the applicant that they instead send their stormwater through the closed-drainage system that exists heading towards the Piscataqua. The closed-drainage system would provide for better cooling. And maybe the Piscataqua (a bigger water body) is better 'built' to handle this input?

Tin Smith would like to suggest that the Town consider changing the design standards used on plans from a 25-year storm to a 100-year storm standard. We've experienced 5 "100 year" events in the past 11 years. Rick commented that at UNH they've shown that it is really the first inch of rain that carries most of the bad stuff and you don't need these large events to feel a rain event's impact. Tin says that increasing the standard to the 100-year limits would help with all of those events. Sandra Mowery says that the Town is also looking at smaller basins for standards.

Forrest says that University of New Hampshire global climate change specialist Cameron Wake (also a Kittery resident) has predicted that in the Northeast we will likely be getting less frequent but higher intensity rainfalls. We'll have the same amount of rain per year, but it will fall primarily in the winter and we may experience a "dry season" in the summer.

Dick Loehr notes that in section 3 of the goals ("Treat impervious surfaces / minimize stormwater impacts") we should be sure to include recommendations for design and development of new projects. Sandra says there are ordinances to address water quality.

Bill Bailey takes us back to the fact that Rick was talking about a particular project. Jon Carter says the applicant has not yet picked up on Rick's requests.

Steve Tapley says he drives that section of Route 1 quite often and at least once a month he sees a trucker driving off from re-fueling without having replaced the tank cap. Often times he can follow the "diesel trail" all the way to the I-95 on-ramp. Wondering if this is the responsibility of the truck stop?

Forrest says that it is important to educate the Planning Board members on this and have professionals explain these things. Jon Carter states that the Kittery board has had Nonpoint Education for Municipal Officers (NEMO) training and presentations and that Sandra, the new planner, has professional engineering education background.

Phyllis Ford says that we also need to remember that our 319 Nonpoint Source Pollution (NPSP) survey found that the watershed does have such a large number of these smaller residential issues that they equal "a death by a 1,000 cuts" and their impact should not be forgotten or minimized.

Sue Emery would like to be sure the Town adopts regulations that are stricter than the State recommends.

Forrest gave a bit more background on the TMDL (total maximum daily load) status and procedure, including that being on the 303(d) list means that the State will have to conduct a study of the bacterial loads and that our work on this plan is helping the State get some of the estimation and modeling done that will be required by the EPA. There is a Statewide bacteria TMDL that is currently being reviewed that can be used as a basis for the Spruce Creek WBP calculations.

Don Kale adds that the State of Maine is also pushing the EPA to let them work in such a way on these TMDLs so that communities like ours have a chance to help out and have input from the start, rather than the state coming in with it's standards and models, which sometimes are too generic to be effective in the community.

Proposed Plan Outline Discussion

The group reviewed Forrest's draft of the Watershed-Based Management Plan outline. Those items noted in red (number 5 through 9) are elements of the plan required per EPA guidelines for those waterbodies on the 305(b) list with a TMDL. Our listing is due to excessive bacterial loading and thus the primary focus of this plan will be to lower that impact.

ACKNOWLEDGEMENTS

1. EXECUTIVE SUMMARY

- 1.1. Project Background
- 1.2. Project Goals and Objectives (priority issues in the watershed)
 - *Forrest says the basic intent is that we need to reduce by some certain percentage the bacterial count in our TMDL. We'll need to keep this part of the management plan clear and concise.*
- 1.3. Description of Watershed
- 1.4. Existing Conditions
- 1.5. Threats to Water Quality (factors that contribute to water resource degradation in the watershed)
- 1.6. Water Quality Goals (water quality "targets" for the watershed)
- 1.7. Recommended Management Strategies
- 1.8. Implementation, Projected Costs and Funding

2. INTRODUCTION

- 2.1. Why is this plan needed?
- 2.2. How was the plan developed?
- 2.3. Who was involved? (project partners, stakeholder involvement)
- 2.4. Who should read this plan?
- 2.5. How is this plan organized? (also required list EPA required elements)

3. DESCRIPTION OF THE WATERSHED

- 3.1. Location (and watershed map)

- *We will have to, as a group, decide on the level/granularity of sub-watersheds to be included in the study. We should break the whole of the watershed down into sub-watersheds that will allow better actions and analysis per neighborhood and tributary, etc.*

3.2. Population and Demographics

3.3. Land Use and Land Cover (forested areas; agricultural lands; recreation; developed areas; state, tribal, and local lands; wetlands, etc.)

- *Paula Ledgett says someone (likely LaMarr Cannon from NEMO) did create an impervious surface study of the watershed or the Town and that it included some build-out predictions as well. Forrest says there is new data available from the State that may be more accurate (it is only 1 to 1.5 years old) and he'll work to include it in the plan.*
- *Add "endangered species"*

3.4. Physical Features (topography/elevation, geology & soils)

3.5. Land Resources (vegetation, wildlife, sensitive areas, open space, wetlands, etc)

- *Forrest says there is likely data on the various fish species from Inland Fish & Wildlife and the Department of Marine Resources (DMR). We'll have to gather that information for notation in the plan.*

3.6. Water Resources (surface and groundwater)

3.7. Fish Assemblage

4. BASELINE AD FUTURE CONDITIONS ASSESSMENT

4.1. Applicable Water Quality Standards (designated and desired uses; numeric and narrative

4.2. criteria; antidegradation policies)

4.3. Summary of Available Data (flow data, biological data)

- *Need to identify and gather any existing flow data.*

4.4. Summary of Spruce Creek Water Quality (impaired uses)

4.5. Water Quality Goals and Objectives

- *Dick would like to be sure we include some measurement of knowledge and behavior before and after the plan and/or projects. Forrest says that Doug McKenzie-Mohr (www.cbsm.com/ and www.ecospeakers.com/speakers/mckenziemohrd.html) has done considerable work on community-based social marketing and developed ways to try to measure behaviors. Don Kale says that the DEP is required to incorporate surveys into work before and after to measure changes. One great 'polling' spot is the grocery store. There was recently a workshop up at the DEP on these methods.*
- *Sue Emery would like to suggest a repeat of the original Spruce Creek Steering Committee's "education day" which was successful. Phyllis says that a "Creek Day" celebration is planned as part of the 319 project.*
- *Tin says that educating is important for homeowner, but also for condo boards, developers, workers and contractors in the watershed.*
- *Forrest adds that water quality is hard to measure, but measuring behavior change might be possible.*

5. THREATS TO WATER QUALITY

5.1. Nonpoint Sources (agriculture, wildlife, septic systems, urban/suburban runoff, stream

bank erosion, etc.)

5.2. Point Sources (NPDES Permits, Phase I and II stormwater permits, CAFO Permit, etc.)

- *“CAFO” is a certified feedlot animal operation and does not exist in our watershed.*

5.3. Other Potential Pollution Sources

- *Jon Carter would like to suggest including something in the plan about working with the Kittery Port Authority on reducing impacts from water use (docks, jet skis, etc.). Forrest Bell says there are studies about bad sediment impacts from propellers.*
- *Atmospheric deposition (air pollution and things falling from the air) may be included in this plan.*
- *Sue Emery would like to suggest working with the Outlet owners to cut down on the amount of litter.*
- *Carolyn is wondering about potential impacts from the Shipyard. Carolyn agrees that this might be the “elephant in the room”. Tin Smith says this issue is extremely complex and potentially problematic. Jon Carter has many reports, serves on the committee, and suggests they have many assets and team members at the Shipyard who might be able to help us. Tin says that if we can show we’re impacted, they have to help us. Jon believes the Navy’s studies have shown no known issues. Tin suggests further clam and benthic organism sampling. Jon Carter says that we can contact Ken Plaisted who is the environmental director and we could meet with him to discuss.*

6. LINKING POLLUTANT SOURCES TO WATER QUALITY

6.1. Estimation of Pollutant Loads

- *Forrest will work to take the data that exists on the bacteria (most from the DMR) and identify areas where the loads are high. This will be an inexact number at this point, but only needs to be “estimated” for this plan.*
- *Don Kale says the EPA is still figuring out how to do this kind of modeling on bacterial loads in an estuarine resource. There is an environmental firm in Massachusetts (ENSR) that is developing one for the Presumpscot River and that is on the “fast track” for approval by the DEP. Once that is available, Forrest may be using it for our modeling.*
- *Phyllis asked about the budgeting for this work, in that this modeling was not part of the original estimate given by Forrest and funded by the Town Council. Forrest will work to let us know if we’ll need to seek more funds to complete this part of the plan. Leaving it out is not an option as the DEP and EPA require these “reduction estimates” since we’re on their TMDL list. Forrest is hopeful the models will be approved and as they are relatively simple to use we should be fine. If they’re not approved, the other ones available are a bit more difficult to work with.*

6.2. Identification of Critical Areas

- *Forrest says that the Route 1 commercial area is a known critical spot. The unknown septic system issues and potential overboard discharge sites (OBDs) are also important.*

7. WATERSHED GOALS AND OBJECTIVES

7.1. Management Objectives

- *A lot of this work has been done in our Community Forum and first Steering*

Committee meeting.

7.2. Load Reduction Targets

- *Forrest will be coming up with numbers and as a group we'll have identified the sub-watershed scale to which those numbers will be applied.*

8. MANAGEMENT STRATEGIES

- *These are basically the action items against the goals and objectives set forth in section 7 above.*
- 8.1. Existing Management Strategies
 - 8.2. Additional Strategies Needed to Achieve Goals
 - 8.3. Load Reduction Estimates

9. PLAN IMPLEMENTATION

- *This is the “meat of the plan” and will be an important part to review. Forrest says that if you only have time to review one section, this is it.*
 - *Jon Carter suggested incorporating the estimated costs (from Appendix C) into this section wherever possible. These will be budget ranges only and not precise estimates.*
 - *Tin Smith suggests that this section be treated as a “pull-out” and, along with the Executive Summary (section 1) be available as a printed piece. Forrest estimates this will be less than 20 pages. Jon Carter has offered to print out copies of this section for those people that need it.*
 - *Forrest will concentrate on writing this section first as the previous sections will more be a matter of gathering existing assets from Steering Committee members and others.*
- 9.1. Plan Oversight
 - 9.2. Action Plan (schedule for implementation)
 - 9.3. Indicators to Measure Progress (interim measurable milestones for determining whether management measures are being implemented)
 - 9.4. Estimated Costs and Technical Assistance Needed
 - 9.5. Educational Component
 - 9.6. Monitoring Plan
 - 9.7. Evaluation Plan (set of criteria to determine whether load reductions are being achieved over time)
 - *Forrest says he'll need help from us “locals” on estimating implementation timeframes.*

APPENDICES

- A. Glossary of Terms
- B. Watershed Maps
- C. Estimated Cost of Implementing the Management Plan
- D. Regulations

Additional Notes

- *Phyllis would like to be sure that while we've determined that invasive plant species, it could be argued, don't have an impact on the water quality, they are an issue that was identified by the community at the original project forum and by this group. It is suggested that this goal/project (and others like it that don't fit in this plan) be at least*

- acknowledged in an appendix or elsewhere and somehow captured in this document.
- Tin Smith would like to add Resources and contact information. Forrest says that he plans to put it on the back cover.
- FB Environmental will also provide all the GIS layers and metadata to the Town for incorporation into their database.

Next Steps

Forrest will wait for approval of the bacterial model from the Presumpscot River project before working on modeling.

Forrest will produce a draft of the document for review by stakeholders that should be available for review by October 1, 2007. Stakeholders will have two weeks for comments and reviews and the Steering Committee will meet to discuss only those points that require group consideration somewhere around October 14, 2007 (date TBD). At that time we will also discuss implementation.

A more final draft will be presented for review near mid-November (and should be reviewed by a larger audience at that point). A final feedback session will be held one month later.

Towards the end of December or in January the final plan will be presented to the Town.

Attendees

- Bill Bailey, Kittery Port Authority
- Carolyn Hanson, Steering Committee, Spruce Creek Association
- Dan Blanchette, Administrative Assistant to the Board of Selectmen, Town of Eliot
- Dick Loehr, Steering Committee, Spruce Creek Association
- Don Kale, Maine DEP
- Forrest Bell, FB Environmental/YCS&WCD
- Jack McArdle, Kittery Shellfish Conservation Commission
- Jonathan Carter, Town Manager, Town of Kittery
- Jude Battles, Plant Manager, Robert's Maine Grill & Bob's Clam Hut
- Paula Ledgett, Steering Committee, Spruce Creek Association
- Phyllis Ford, Steering Committee, Spruce Creek Association
- Rick Rossiter, Director of Public Works, Town of Kittery
- Sandra Mowery, Planner, Town of Kittery
- Susan Emery, resident, SCA member, and former "Spruce Creek Steering Committee" member
- Tin Smith, WNERR
- Will Brewster, Steering Committee, Spruce Creek Association