

WOLFEBORO WATERS COMMITTEE [WWC]

August 14, 2023, at 1:00 pm

Great Hall, 9 Union Street

DRAFT-1 MINUTES

1) Call to order:

Members Present: Linda Murray (Chair), Abigail Adams, Kathy Barnard, Julie Brown (Wentworth Watershed Association), Brad Harriman (Board of Selectmen Representative), Richard Masse, Warren Muir, Libby Peard, Art Slocum

Associates Present: Andra Dekkers (WWC Assessment Working Group), Bree Rossiter (Lake Winnepesaukee Association)

Excused Absence: Mary DeVries

2) Approval of Minutes:

Julie Brown made a motion to Approve the 7/11/2023 Minutes. Seconded by Linda Murray. The motion passed by a Unanimous Vote (9-0-0).

3) Town of Wolfeboro Public Safety Building - Proposed Stormwater Control System:

Paul Blanc of Norway Plains Associates presented a set of Civil Engineering Drawings and Equipment Specifications to the Wolfeboro Waters Committee [WWC] for the proposed Stormwater Management Plan. A discussion of alternate equipment to treat the stormwater runoff also took place; however, there would be a difference in the up-front cost, which is not in the current construction budget. It might be possible to design and build out a Stormwater Control System that allows for a future upgrade, to allow more time to plan for additional funds.

Design parameters for proposed Stormwater Control System:

- a) Existing soil quality:** Soil quality is very poor, almost no infiltration of stormwater on-site.
- b) Existing On-Site drainage pipes work with those on an Adjacent Dite:** Shown in the Civil Engineering drawings are existing shared drainage pipes with the Wolfeboro Public Library.
- c) Limited amount of open space on-site:** 1) The final footprint of the Public Safety Building, 2) The surface paving for Fire-Rescue-Police vehicles, 3) The need for on-site visitor and employee parking. These are all factors that have reduced the available site area for stormwater detention and treatment.
- d) Shared parking with Wolfeboro Public Library might be possible:** worth considering if open space could be recovered for stormwater management on the Public Safety Building site.
- e) Crescent Lake Shoreline:** is located approximately 1200 feet northeast of the subject site.
- f) Current Construction Budget:** A change to Stormwater Control Equipment as currently proposed would require additional funds that are not in the current construction budget. Future sources of funding could be a combination of local fund-raising efforts, possible grants, a Warrant Article with approval by Town voters.
- g) Coordinate with Civil Engineer sooner than later:** Design coordination at this time could enable future equipment upgrades for the Stormwater Control System for this site.

Presentation and Discussion of On-Site Stormwater Control System for the Wolfeboro Public Safety Building:

Paul Blanc, Norway Plains Associates: Presenting the Civil Engineering drawings to WWC, showing the proposed Stormwater Management Plan for the Public Safety Building. Phase I Construction for the Public Safety Building is out to bid. Conneston Construction Inc [CCI] is the construction manager.

Art Slocum: What is the capacity of this system?

Paul Blanc: It's designed for a 50-Year Storm Event, which meets the State requirement. It's designed to capture the first flush of stormwater runoff: the first accumulated inch of rainwater flowing over the surface area of the site, which contains the most contaminants. A subsurface pipe system brings the runoff to catchment basins, after which a sump pump moves the detained water to a Vortechs treatment unit. That unit is big, it's the largest one Vortechs manufactures. It removes a percentage of Total Suspended Solids [TSS], phosphates and nitrogen: three contaminants of Crescent Lake. After treatment, the water exits the site and goes into the Town Sewer system.

Rich Masse: How closely does it meet Town requirements for Stormwater Control and Treatment?

Paul Blanc: The Vortechs unit will capture about 70% of Total Suspended Solids [TSS], some phosphorous, and some nitrogen. Also captured are smaller percentages of total copper, dissolved copper, and hydrocarbons.

Julie Brown: Given that 100-Year Storm Events are already occurring here, what happens to the overflow above and beyond the first flush of a 50-Year Storm Event? Because that's the overflow that will run directly into Crescent Lake. [Contaminants in stormwater runoff feed bad bacteria and bad algae that will bloom in Crescent Lake, especially during warm summer months].

Paul Blanc: Yes, after the first flush for a 100-Year Storm Event, the overflow would occur on a greater scale than a 50-Year Storm Event [overflow stormwater carries contaminants off-site before it can be captured and treated on-site]. Another system, a Jellyfish Filtration system, is manufactured by Conatech. It can capture almost all of the Total Suspended Solids [TSS]; however, it costs approximately three times what the Vortechs system costs.

- **Does WWC have a "Crescent Lake Pollutants List" that you can send me?** Answer was yes. Please e-mail to PBlanc@NorwayPlains.com

Warren Muir: What is the timeline for this project?

Chair Linda Murray: About 18 months to finish construction of the facility, in three phases.

Warren Muir: The up-front cost of about \$100K for the Conatech Jellyfish Filtration System is worthwhile because fewer contaminants would flow directly into Crescent Lake. This is an urgent situation! [Contaminants feed cyanobacteria blooms, for example, which are occurring more frequently, especially in warmer temperatures].

Chair Linda Murray: We would need a Warrant Article.

Brad Harriman: Could we use the proposed Vortechs unit for the current construction budget and build in the possibility to upgrade to the Conatech Jellyfish Filtration System at a later date?

Abigail Adams: To clarify, for the first flush of a Storm Event, more of the Total Suspended Solids [TSS] could be captured using the Conatech Jellyfish Filters instead of the Vortechs System?

Paul Blanc: Yes, the Conatech Jellyfish Filters can capture almost all of the TSS.

Warren Muir: You also have dissolved phosphorous.

Paul Blanc: The Conatech System also captures dissolved phosphorous.

Compliance to NHDES Watershed Management Plan for Crescent Lake:

Paul Blanc, Norway Plains Associates: We've prepared a swift guide [reference binder] which outlines DES compliance factors for the Town, to protect Crescent Lake as a body of water.

Any violations can be very expensive! For example, catch basins must be equipped with sediment sacks which must be cleaned out when they are half-full. As you already know, on-site detention and filtration systems for stormwater require attention and timely maintenance.

4) Presentation of Guidelines for Wood Additions to First and Second Order Streams by Rick Van de Poll, Research Director, Tin Mountain Conservation Center [TMCC]:

- For our work we engage our staff, interns, citizen volunteers, and partner organizations such as: NH Fish and Game, various Land Trusts, the Nature Conservancy, and the Lakes Region Conservation Trust.
- We've worked on 37 streams, about 110 miles in total, to achieve three main goals:
 - 1) Reduce flood intensity.
 - 2) Improve water quality.
 - 3) Enhance fish habitat.
- When we drag a tree trunk to add woody material to a stream, many things can happen:
 - Capture sediment, TSS [Total Suspended Solids], and TDS [Total Dissolved Solids] in water.
 - Regulate temperature and pH of water [cyanobacteria downstream].
 - Slow down velocity of water [as stream width narrows the water velocity increases, flooding downstream].
 - Transformation of phosphorous and nitrogen.
 - Improve fish habitat [log jam can create trout pool, cascade, riffle, glide].
- The next possible year that we - Wolfeboro Waters Committee and Tin Mountain Conservation Center - can collaborate on any stream treatment work would be in 2025.
- For a project budget, estimate about \$21,500 per mile for assessment, treatment, monitoring, and a 3-year 'look-back' [follow-up visit]. Another organization that does similar work costs about \$14,500 per mile; however, they do not include monitoring or a 3-year 'look-back' as part of their services.
- If WWC can help us get the property owners on board, TMCC will lead the treatment work.
- The available grant packages cover work that is done in six geographic areas. WWC should list, in order of priority, those streams that: 1) Are in the worst condition in terms of flooding, 2) Have cooperation from Property Owners. National Fish and Wildlife Foundation [NFWF] oversees the grant money.

Questions and comments from WWC to Rick Van de Poll, and Discussion:

Abigail Adams: We would need a community forum to reach out to residents, including property owners who have streams running through their property.

Linda Dekkers: What would be a good way to encourage community involvement?

Rich Van de Poll on Community Involvement: Not all property owners are comfortable with any intervention into the streams on their property. I'd love to have an incentive for property owners to be involved.

Warren Muir: Are there good project candidates for stream treatment, such as: 1) Cross Brook, 2) _____, 3) Townsend Brook?

Rick Van de Poll on Project Candidates: If you would like to partner with NH Fish and Game, they would be more likely to support any stream that is eroding and has trout running.

Bree Rossiter: We [Lake Winnepesaukee Association] are doing a Hydrological Assessment of the Melvin River, we're looking at four sections of that river, in Tuftonboro. We're also doing work south of Sodom Road.

Libby Peard: How does the stream treatment work with beaver colonies?

Rick Van de Poll on Beaver Colonies: We treated the largest tributary into Mirror Lake, 4/10 of a mile of that tributary is located in Wolfeboro, there were two beaver dams. We try to stay away from beaver colonies because they always come back [even if they appear to leave the area during a disruption, such as stream treatment work].

5) June and July Storms Impacts on the Lakes:

- a. Lake Winnepesaukee
- b. **Rust Pond:**
 - **Libby Peard** reported that the 7/15/2023 storm event caused a complete breach at one end of Rust Pond and “it’s a disaster area.”
 - **Art Slocum** said that a beaver dam could have been an issue.
 - **Libby Peard** asked if the 7/15/2023 storm event was a 50-Year Storm Event or a 100-Year Storm Event? Can a 319 Grant can be used for remediation, or not?
 - **Art Slocum** said it would be ideal to do mitigation before a storm event does damage.
 - **Warren Muir** said if a flow-through device had been installed at the beaver dam, the washout [or breach] might have been avoided.
 - **Rich Masse** said that the 319 Grant should have a contact person for Libby Peard to consult, Beth Marcoux.
- c. Lake Wentworth
- d. Crescent Lake

6) Proposed 2024 Budget:

- a. **Assessing:**

	\$17,000 in 2023	\$20,000 in 2024
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 - **Linda Murray** asked **Warren Muir** about any changes to Assessing’s budget?
 - **Warren Muir** said the UNH Summer Intern, Kaleb Ducharme, was “fantastic and helpful in so many ways.” He said another intern is needed.
 - **Andra Dekkers** recommended that WWC continue to partner with UNH.
 - Invoices from UNH for the Summer Intern’s Stipend [\$5K in 2023 budget], and from Bigelow Lab for testing water samples [\$5K in 2023 budget] need to be received and paid.
 - **Linda Murray** suggested that the Assessing Working Group ask for \$20,000 for the 2024 Budget. She noted many of WWC’s bills are generated in summer and still need to be paid.
- b. **Communication:**

	\$2,000 in 2023	\$2,___ in 2023
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 - **Linda Murray** asked **Abigail Adams** if Comms needs any changes to its budget?
 - **Abigail Adams** said that all bumper stickers are gone, more could be printed.
 - **Linda Murray** suggested asking for a small increase for the 2024 budget.
- c. **Mitigation and Prevention:**

	\$2,500 in 2023	\$2,500 in 2023
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 - **Linda Murray** asked **Richard Masse** about M&P budget, he asked for budget to remain “as is.”
- d. **Changes for 2024**

	Totals \$21,500 in 2023	\$24,___ in 2024
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7) New Business:

- a. **Mitigation and Prevention:**
 - i. **Carry Beach:**

- **Warren Muir** said there are E.Coli issues at Carry Beach. He has concerns about the intensity of boat traffic during the summer season. One idea is to try moving the Town buoys 50 feet further from shore.
 - **Linda Murray** said that Carry Beach continues to be tested once a week.
 - **Andra Dekkers** asked where the test data can be found?
 - **Warren Muir** explained that Wolfeboro test data is not in the DES system.
- ii. Wolfeboro Bay Watershed Management Plan
- iii. Shorefront Residential District: Update Panning Board timeline
- iv. Hunters
- v. Albee Beach: Phase I completed. Phase II?
- b. **Assessing:**
 - i. Report: on the last meeting
 - ii. **Summer Intern, Kaleb Ducharme:** **Andra Dekkers** distributed a report about the summer project for the Town of Wolfeboro, “Cyanobacteria and Lake Water Quality Analysis” prepared by Kaleb, who returns to UNH as a graduate student at the end of August. In addition to doing his Masters work, he will be a teaching assistant. WWC congratulates you, Kaleb, and thanks you for your many contributions!
 - iii. Discussion of Dissolved Phosphorous, possible treatments
- c. **Communication:**
 - i. Update: Facebook website
 - ii. Summer
- d. **Rust Pond** - North Inlet Tributary Hydrology Evaluation by Comprehensive Environmental Inc.
 - i. **Update: A full breach took place at south end of pond during 7/15/2023 Storm Event.**
 - ii. The Selectman approved \$23,000 for 319 Grant match at December 2022 meeting.
- e. **Jockey Cove E. Coli issues**
 - i. **Update: Linda Murray said this area was re-tested for E.Coli after the failed septic system was repaired.**
 - ii. Update: 1) Testing by Private Citizens, 2) Town Testing Plan
- f. **Whitegate Road Stormwater issues**
 - i. **Update: Installation of larger culverts, about \$11K. No visibility at 5-foot depth in lake.**
- g. **319 Grant Phases**
 - i. Corrections of Washout at Camp Pierce Birchmont: \$3,000 Board of Selectmen approved.
 - ii. **Wentworth Watershed Update: Bree Rossiter said the Bish Shoreline Survey is moving forward.** Previous: Did not receive grant in 2023 will reapply for 2024. 319 Grant for Phase 5 of Wentworth-Crescent Lake Management Plan future match is \$15,000 to \$20,000.
- h. **2023 Warrant Articles**
 - i. Article 13 for \$1 million passed: **Forest Road and Varney Road**, a low-pressure sewer line and owners will be required to install their own infrastructure to utilize the system [septic tank and pumps]. **Bid awarded to Dawson Excavation & Utility, begin work Fall 2023.**
 - ii. Article 19 Passed: **Green Street** upgrade will address drainage along with water, sewer, and road upgrade for \$530,000. **Bid awarded to Lyman, begin work Fall 2023.**
 - iii. Article 31 passed: Water Quality non-capital capital reserve funding for \$100,000.
- i. **Public Safety Building** - Article 11 passed. **The plan for proposed Stormwater Control is attached [summary of discussion above].** The Project went before the Planning Board on 6/20/2023.
 - i. Should WWC send a letter to Town Manager/Steering Committee on this? Due to mobilization issues, we may need to take the trees out front. If we do, one item which

is being developed by Norway Plains is: another stormwater management system in the front of the building. Might have to ask for additional funds, see if there is grant funding, or if other money is available (water resources non-capital reserve).

j. Prior Years Projects:

- i. **Port Wedeln Drainage Project:** It is my understanding that this project has a tank prior to the beach outlet to slow the water down. Stantec Engineers are working on this project. They are to be informed that Wolfeboro Waters is concerned about the direct outlet into Lake Winnepesaukee. This project is on hold until an upgraded design is completed and will require a 2024 Warrant Article for additional funds.
- ii. **Route 28 South NHDOT Project:** The Committee needs to monitor the drainage for this project. BOS signed an agreement with Huggins Hospital for salt storage at the Public Safety Building instead of on Huggins Hospital property. In that agreement, Huggins agrees to provide an easement to the Town and NHDOT for a potential stormwater treatment system to treat stormwater from Town and State rights-of-way (to be de-fined at a later time). NHDOT met with Huggins Hospital to discuss the use of some of their land for drainage. The drainage plan is starting to be worked on.
 1. **Art Slocum: On August 24th 2023 at 6:00 pm, NHDOT will hold a Public Informational Meeting at Town Hall, to discuss the improvements along Route 28 in Wolfeboro, from the intersection with Pleasant Valley Road until the intersection with Pickering Corner/Routh 109.**
 2. The Rt. 28 Steering Committee met on June 29 at 2:00: 1) The drainage area behind the Hospital will be smaller than earlier thought. 2) NO clear drainage plan presented - most likely not until next year. 3) Two smaller sites around Kingswood Areas. 4) Discussion of tariff control and how to create two lanes. Cutting of existing trees will be needed.
- k. A Plan for Storm Drain Stenciling: Put labels on the Town's storm drains to educate the public that drains take pollutants directly into our waters. Approved by BOS. No update
- l. Road Salt Used on Town Roads: Continue looking at salt use on roads and how it relates to water quality and then use best management practices as they evolve.
- m. Dockside Parking Lot drainage- on hold. There is an issue with a broken drainage pipe.
- n. 2024 Budget request - Budget Committee Hearing Date scheduled for Dec 2024.
- o. **2023 Budget: Wolfeboro Waters Committee 2023 Budget request was \$21,500**

	Spent 6/2023	Budget	Remaining
Assessing		\$17,000	\$11,600
Testing	\$6,000 400.00		
Bigelow labs	\$5000		
Intern	\$6000 \$5,000		
Communication		\$2,000	\$1,000.
Handouts	\$		
Water Summit	\$1,000		
Mitigation and Prevention		\$2,500	\$2,500
Total			\$15,100

8) Other Business

Minutes are a **DRAFT-1** until approved by Wolfeboro Waters Committee, all comments are paraphrased.

9) Next meeting: Monday, September 11th 2023 at 1:00 p.m. [location to be determined]

**10) Adjournment: Motion to adjourn meeting by Art Slocum. Seconded by Kathy Barnard.
Approved by Unanimous Vote (9-0-0).**

Master Plan Goals for the Town of Wolfeboro:

- i. Support increased oversight and coordination of stormwater management based on the increased number of these projects.
- ii. Put labels on the Town's storm drains to educate the public that they take pollutants directly into our waters.
- iii. Continue looking at salt use on roads and how it relates to water quality and then use best management practices as they evolve.
- iv. The Town must continue to work with State and regional groups that help steward, manage, and protect water resources.
- v. Support existing watershed planning efforts on Lake Wentworth, Crescent Lake, Rust Pond, Mirror Lake, Wolfeboro Bay, and Winter Harbor and develop plans for the watershed that are not presently under study.

Meeting Minutes respectfully submitted by Recording Secretary,
Elvia M. Nicolescu