



Town of South Bethany

Committee Report from November 20, 2023

The Canal Water Quality Committee met on October 23 with the meeting starting at 10:01am at the Town Hall and online Zoom. All members present.

Minutes were approved and adopted for the 10/23/23 meeting.

Town Council Updates: Tim Shaw updated the Committee on the new Long Range Planning Working Group led by Chris Keefe formed to lead the development of a 10-year view and rolling capital budget requirements. He presented a new estimation form to create a budget reference for new capital projects. The form will be circulated to committee members electronically after the meeting. The Forms should be used as a basis for funding requests for future projects. Tim expressed the importance of maintaining these forms to create a 10 year Rolling Plan. The CWQC work groups will now complete a form for any project under consideration and to present to Town Council for possible actions.

Tim noted that the Council continues to discuss the need to consider raising the bulkheads as one mitigating action to address sea level rise and increased threats to South Bethany. It was noted that it would be helpful if a conceptual drawing were available of what the proposed raised bulkhead would look like. This topic will likely be taken up by the new Resiliency Committee.

Tim updated the Committee on the continued discussions of Town Council and staff on the ability to make changes to the codes and other actions like remediation timeframes focused on eliminating pollutants entering the canals such as drains, fertilizers and grass clippings and other matter. We understand the Town Council and staff will continue to work with other experts to get guidance on addressing "grandfathering" and other potential barriers to putting in place new codes.

Canal Maintenance: The clean-up of 100' of all the Canal Ends was completed by Envirotech in November. Pine needles seem to be the primary concern in several western side Canal Ends (e.g. Russel East and West). Different suggestions were made to help mitigate the pine needles from entering the canals, including installing silt fences seasonally, raking away from canals by homeowners who own pine trees, contacting tree experts to learn what may mitigate the level of shed, more frequent usage of Harvesters or other equipment to keep up with the fallen needles. The Committee remains concerned with not being able to collect all the fallen needles and other organic matter in a timely matter, which is impacting the water quality. This is one of the many reasons we need to perform dredging and continue to explore other ways to improve water circulation to offset effects of decomposition.

As a next step, we need a formal debrief with Envirotech and Town Staff to assess what went well, what to improve and what to modify for future efforts. Timing for the cleaning remains a key concern and issue to address in future efforts. The Committee also wants to understand the final cost figures for this year's efforts to use in the continued assessment of continued contracting versus taking this work on by the Town.

Next, the topic of dredging was discussed. Tim Shaw provided a summary of the recent conference call with Tony Pratt and a few Committee members. It was explained that Tony has vast experience in Coastal Zone Region maintenance and improvements, as a former DNREC Administrator and has a firm understanding of the overall dredging process. Tony is currently working as a consultant for Fenwick Island's dredging effort. Fenwick is very close to obtaining their dredging permit. Tony is also very familiar with South Bethany and was formally under contract. He is a strong candidate to be a lead advisor to our dredging effort.

Tony would also be very helpful in creating an initial dredging scope of work and associated rough estimated budget number, which the Committee understands the Town Council needs before approving a longer-term contract with Tony or others. Tony also works on selected projects together with Anchor QEA. Anchor is the engineering firm working with Fenwick as well. Anchor would also be very helpful in determining a preliminary budget for dredging. Tim Shaw noted the goal should be for the Town to go under contract with Tony sooner than later. Some ideas were discussed as to how to fund Tony's assistance. We might ask Tony 'for a not to exceed number' to bring to the Town Council for approval for this initial consultation to help get a better sense of the overall cost of the program. Tim Shaw to follow-up with the Town Manager on our ability to contract with Tony currently and other questions or concerns.

Tim Shaw pointed out that DNREC would not be participating in any dredging or clean-up costs. Funding for dredging and other related capital improvements could come from a variety of sources ranging from the Town's operating and capital budgets as well as grants and municipal debt through bonds. The Committee noted all options need to be explored by the Town so the dredging can be completed in the near term.

Dredging is now a top priority for this Committee, and we believe should be for the Town as the Canals have only been dredged once over their nearly 70-year span, in early 2008. In the fifteen years since, the Town and surrounding areas have also seen a dramatic increase in activity, traffic on Route 1 and development that are contributing to the ongoing water quality challenges, including buildup of sediment. Additionally, the dredging was a more focused effort with combination of moving (auger) and transferring (hydraulic or vacuum) some of the sediment in selected areas.

The need to dredge now was further supported by the recent Woods Hole Group study in late 2019 that the Town completed which concluded: *"It is recommended that the nutrient rich surface sediments are removed from the South Bethany Canals to alleviate eutrophication processes that drive poor water quality."* The study further determined that while the sediment build up was contributing to the poor water quality, *"...initial results [from intensive sampling*

and analysis] suggest that the material dredged from the South Bethany Canals could be deposited upland or reused at landfills at a minimum.” This report provides highly qualified support for both the need and feasibility for this dredging now.

Lastly, the need for an algae harvester was revisited. Having our own equipment and staff would provide the ability to take on both seasonal and year-round clean-ups like in the fall, in addition to the overall algae bloom maintenance. The Committee agreed that we need an updated financial analysis to determine the viability of the Town owning additional equipment and staff vs waiting for DNREC or having to continue to contract with an outside company. While we understand the Town has re-contracted with Solitude for next season’s potential Algae blooms, the canal maintenance working group of the Committee will re-review the analysis and provide an update in a future meeting for possible presentation to the Town Council with any recommendations.

The idea was brought up again about sharing the equipment with Fenwick. In an email earlier this year Natalie Magdeburger, Mayor of Fenwick, indicated she would be interested in discussing further. We should follow up with Fenwick as part of this updated analysis to provide an additional option for supporting the operating costs of having our own equipment and staff for the updated feasibility analysis to bring to the Town Council for consideration.

Code/Communications:

Bob is continuing to review the Town Codes and research other municipal codes to specifically identify recommendations for improving the Town’s Charter and Code to address ways to reduce, eliminate and otherwise improve the quality of the Canal water. He will circulate to the Committee members a summary of ideas compiled so far, for review and adds. This compiled version would then be shared with the Charter and Code Committee for review and consideration.

Bob is still working to get a date to meet with the new leadership of the South Bethany Property Owners Association. The objective is to understand any updates to their plans and activities, as well as continue to align around efforts to improve the quality of the Canal water.

Grants:

Chris V. updated the Committee on the meeting he and Tim had with the Mayor and Edie Dondero, Chair of the new Resiliency Committee of the Town. The objective was to confirm our two Committee’s alignment and coordination around seeking Grants for projects in South Bethany. It was a very productive discussion with the commitment to keep the lines of communication open as both Committees work on their areas of respective focus and scope, including some that may potentially overall.

As for other Grant options for this Committee's scope and potential projects beyond the Hazard Mitigation Grant Program and related, John B. shared several other public and private foundation options that he has experience in working with that we will explore as appropriate.

Water Quality:

Dave summarized the latest water quality testing results, with the general condition of the canals relative to Dissolved Oxygen (DO) being okay now with all Canals' values over the target minimum for healthy water of a minimum value of 4 mg/l along with the water clarity being good. This is typical and expected this time of the year due to the colder weather. As a note, for healthier aquatic life and overall water quality, we should be striving for values much higher than this minimum. Low DO values are a sign of organic contamination, further supporting the need for dredging (as noted in the Woods Hole Group report reference). Dave also confirmed that the condition in the Rusell East canal end continues to be bad due to all the pine needles, which also seem more this year than in recent past. We are going to look further into this to see if this is the case.

The Committee discussed again the interest in exploring ways to implement instrumentation to perform continuous monitoring in the Canals. The combination of advancement in technologies and reduced costs, including wireless connectivity and solar power options, may make this possibly more feasible. Having more data will help support the continued efforts to secure grants as well. Dave will reach out to several organizations and companies about options and will report back to the Committee in a future meeting.

Public Comment: Three residents were in attendance. Mr. Ray Saunders spoke and asked some questions. He noted that only cleaning 100' of the Canal Ends was not enough, particularly in the Western canals. The Committee noted this and will discuss it in a future meeting. Mr. Saunders inquired about the status of the Floating Wetlands. The Committee reminded all that Town Council had voted to remove all of them, but in recent discussions with Envirotech who are contracted to remove them, they are recommending to the Town Manager that this get deferred further and completed mid-winter. The cold weather helps the crew to get them out of the water a bit more easily. Mr. Saunders expressed his disappointment in this decision. He also asked if residents could either "adopt" or "buy" the remaining floating wetlands. Tim S. said he would bring this to the Town Council for consideration, but if they did approve this option, it would likely come with very clear requirements on their upkeep, responsibility, and cost to be assumed by the homeowners, and enforcement actions the Town could take if they weren't properly maintained. The Committee will review the Town Council's updates on this request at our next meeting.

The meeting was adjourned at 11:41am. The next meeting will be on December 18, 2023 at 10:00am as a hybrid in-person and Zoom. Members of the public are welcome. Reported by Chris Vanuga – Chairman