

South Bethany Canal Water Quality Committee
Meetings conducted In-person and Zoom
September 16, 2024

Committee Members Present: John Beauregard, Bob Biciocchi, Chris Carlyle, John Roberts, Pete Trelenberg, Chris Vanuga, Dave Wilson

The meeting was called to order at 10:00 am.

Minutes from the August 19, 2024, meeting was unanimously approved.

An update on the seasonal canal cleaning was presented. Envirotech is in the final month of the seasonal cleanup contract. As per Bob's discussion with the Town Manager, there has been minimal cleanup in the later months of the summer. For future contracts, Bob, the town manager, and Envirotech suggest we reduce the time spent on seasonal cleanup and instead apply funds to fall cleanup. A final report from Envirotech will be forwarded to committee members when available.

A suggestion was made to leverage police webcams for ongoing canal debris monitoring. Creating a "canal watch" program, like the SBPOA neighborhood watch program, was also discussed. Staffing the neighborhood watch program has sometimes been difficult. John B. will follow up with SBPOA.

The fall cleanup contract with Envirotech is still being finalized (date/duration). Funds have been budgeted. Expect 3-5 days of total effort. The preliminary target for cleanup is the first week in November, once leaves have fallen but before organic matter sinks to the bottom of the canals. We will solicit input from Envirotech on their views of optimum timing to maximize impact based on past fall cleanups. It was discussed that better communication of cleanup efforts was needed. The committee was encouraged to provide content covering ongoing cleanup activities to the Town and SBPOA newsletters.

The ongoing efforts around dredging were discussed. Anchor Engineering/Bob/Chris V. met with the mayor to establish relationships and provide an overview of Anchor's capabilities and experience. Anchor has provided a draft proposal outlining the next steps in the process. These include 1) Updating the Woods Hole sediment characterization study, 2) Estimating the scope and cost of potential dredging, and 3) preparing permitting and bidding documents. This proposal will be reviewed with the Council at an upcoming workshop, with the goal of including the proposal in the upcoming fiscal year budget. Efforts will be made to harmonize work with proposed stormwater management system improvements.

The impact of the (relatively new) retention pond near Sea Colony was discussed. Early indications are that sediment accumulation in the forebay has decreased since the pond was installed and vegetation established. The committee will continue to monitor the impact.

A proposal to engage Johns Hopkins Adjunct Professor Chris Overcash on hydrodynamic modeling of the canal system was discussed. Students would assist with the effort for an estimated initial cost of \$7,500-\$15,000 to evaluate the proposed pilot for circulating and aerating two adjacent canals. A full hydrodynamic model of the canal system could be created for approximately \$100,000. However, this needs further discussion to refine based on available information from previous studies and our new GIS.

This complete model could be helpful in master planning and could potentially be leveraged to support grant funding proposals. The model would also provide support for resiliency efforts and other Town planning efforts. A suggestion was made to review the original 2001 and 2007 tidal pump studies by Oceaneering/KCI to see what information or models they have that could also be leveraged. Also, we need to ensure we remain tied in with DeIDOT on the Route 1 stormwater study, which is in progress. Chris V. will follow up with KCI/Oceaneering/Matrix. Bob will follow up with the mayor to determine who is working with DeIDOT and request a briefing for this committee. We will discuss possible follow-up actions at the next meeting.

Restoring the as-built rain garden bio treatment functionality was discussed. Bob and Chris V. will follow up with the Town Manager regarding the responsibility for maintaining the rain gardens and report to the committee. Pending feedback from the Town Manager, the potential to develop an “adopt a rain garden” program (like the successful “adopt a canal end program”) was discussed. This item will be updated at the next meeting.

Canal water quality was updated. All but one canal had DO above the acceptable level. Cooler water temperatures help improve DO. Some new sites were temporarily added to bring to ten sites being sampled for bacteria. Site 12 was generally very low, as expected. Only one site met the suggested <35 CFU/100ml level for geometric mean bacteria levels. Almost all sites met the suggested level of <104 CFU/100 ml for single sample testing bacteria levels. Only Petherton's dead end was very high. Dave will provide a chart of water quality data that could potentially be included on the town website, which will be discussed at the next meeting.

No public comments were made, and the meeting was adjourned at 11:26 am.