

***South Bethany Canal Water Quality Committee
Meeting Conducted In-person and Zoom
March 24, 2025***

Committee Members Present: John Beauregard, Bob Biciocchi, Chris Carlyle, John Roberts, Pete Trelenberg, Chris Vanuga, Dave Wilson
Guests: Russ Beland, Tom Rossberg, Ray Saunders

The meeting was called to order at 10:02 am.

Minutes from the February 24, 2025, meeting were approved.

Bob Biciocchi gave a Town Council update and began by mentioning a budget workshop this Thursday at 9:00 AM. It will include an overview of the budget, which is broken down by department and services. The Finance Committee will lead the discussion. Bob encouraged committee members to attend, as it includes the town's capital planning and operational maintenance budgets, including services related to the canals. Items such as Envirotech and Solitude contracts fall under operational maintenance. He also noted a new full time staff member has joined the Town's public works team.

Bob mentioned that he and Chris have been working with Jim Sullivan from DNREC on investigating water quality grants. They are preparing to get on the April Council agenda to seek authorization to pursue grant funding for projects like hydrodynamic modeling, canal circulation pilots, and bulkhead redesigns. The objective is to secure state-level funding contributions for environmental infrastructure improvements, especially related to the canal system.

The Stormwater check valve and pipe cleanout project is about 50% complete, but progress slowed due to labor shortages.

An update was provided on the Submerged Aquatic Vegetation (SAV) program led by CIB/UD SeaGrant/DNRE. The group is working with the town and committee to identify volunteer sites where they can monitor water quality and investigate why Widgeon grass thrives in some areas of some of our canals. The harvested seeds will be replanted in other back bay areas to improve oxygen levels. A town newsletter will soon be circulated with contact information (notably Brittany Heywood) for those willing to volunteer their docks or bulkheads for the project.

A discussion was held regarding the performance of the current canal cleanup contractor. It was noted that they visited on March 10th. A witness said they used rakes from the shore and left behind debris. Committee members expressed frustration that contractors and town staff are not notifying members of the visits as they have repeatedly requested, making it challenging to inspect their work. Bob emphasized the need to revisit and revise the scope of work for cleanup services for a new bidding process. The chairman circulated a draft RFP from

2022 for review. The committee is encouraged to provide feedback to him, so the town can determine whether to rebid or reassign the contract and the scope thereof.

Some floating wetlands are still in the canals. The town council ended the project, but some may be privately owned and maintained. If they are not maintained, the town will intervene.

Concern was raised regarding springtime lawn fertilizer use near canals and stormwater drains, particularly fast-release and water-soluble fertilizers being applied. It was suggested that the town should require slow-release fertilizers only and consider the creation of buffer zones near canal edges. Mr. Biciocchi confirmed he has already contacted the Code and Charter Committee Chair and plans to submit proposed ordinance language in April. Committee members will receive the previous list of proposed code updates for review and feedback this week.

Algae_Harvesting by Solitude is scheduled for the weeks of April 14 and May 15. Boaters are asked to delay boat launches until at least after the first harvest to maximize harvesting efficiency.

A recap was done of a presentation by Solitude on a new product called TryMarine, a non-toxic, NSF 60-certified treatment that promotes natural benthic organism growth, reducing canal muck and improving water quality over a period of months. It may make the dredging of the organic material unnecessary. Solitude claims the product works in brackish tidal water and is safe for fish and drinking water. A pilot test is being considered, possibly in the Anchorage or Petherton canals. Cost-benefit analysis and DNREC approval are the next steps. Bob aims to have Solitude meet with town staff and the committee in the next few months to consider using this product.

Pete is leading an effort to repair and expand the town's 19 rain gardens, particularly near Route 1. A \$50,000 budget request has been submitted to refurbish existing gardens and add a few new gardens and secondary drains. Due to tight fiscal conditions, no funds have been allocated yet; however, Bob is advocating for town funding and/or shared services if needed. These structures are vital in slowing and filtering rainwater entering the canals from storm drains. He suggested a program to support personally adopting gardens, like the canal end beautification program, as an alternative.

Mr. Roberts provided a recap of the proposed canal circulation pilot, which uses a submerged turbine pump to circulate water between canals such as Anchorage and Petherton. The goal is to increase dissolved oxygen and reduce stagnation. First, modeling and engineering assessments are needed to determine feasibility, cost, and the number of pumps required. The pilot could lead to broader system-wide improvements and potentially integrate with flood mitigation efforts. We are currently on hold while other efforts are considered, but Mr. Roberts will provide an updated one-page summary, including more details on the modeling, to be ready for submission to the Town Council.

Mr. Vanuga provided an update on pursuing a hydrodynamic model for South Bethany using existing UD and Rowan University research staff. This model could simulate flood scenarios, water movement, and sedimentation, and it would support projects like York Road, circulation pilots, and bulkhead analysis. A budget request of \$125,000, with \$112,500 requested from the town, was submitted but is unlikely to be approved in this cycle. The committee is on the April Town Council agenda to present the case for funding or grant-seeking. This project can serve as a foundational tool for implementing water quality projects, and feasibility studies and planning related to flood resilience and mitigation.

Dave Wilson presented a summary of the 2023-24 water quality report:

- Dissolved Oxygen (DO): Big canals generally meet the state standard (≥ 4.0 mg/L); dead ends consistently fall below that level.
- Algae: Reduced algae observations during the summer last year. Possible contributors include more efficient harvesting, weather conditions, and a significant February bloom.
- Bacteria: Levels were above swimming thresholds but within limits for recreational contact like boating and kayaking.
- Nutrients (nitrogen and phosphorus): There were mixed results. Petherton showed some improvement, but rainfall and stormwater influenced H₂O quality.
- Dave emphasized that harvesting in 2023 contributed positively by removing algae before it decayed and reduced DO.
- The report will be posted to the town's CWQ landing page.

Public Comments

- Ray Saunders submitted concerns about canal cleanup, floating debris, and specific bulkhead failures between 4th/5th and 5th/6th Streets and near Anchorage. He noted vegetation damage and structural issues. He also noted the appearance of an otter frolicking in the canals, so hopefully, this is a good sign that the canals are improving.
- Suggestions were made to improve the cleaning contractor scope, wind direction considerations during cleanup, and explore strategies for capturing floating debris.
- Several residents supported registering lawn care contractors and enforcing best practices for nutrient runoff and cleanup responsibilities.

The Chairman and Town Council Liaison again encouraged everyone to:

- Attend or dial into the budget workshop on Thursday
- Review and provide feedback on documents this week (RFP draft, water quality report, TryMarine, rain garden updates)

The meeting was adjourned at 12:02 pm