

Minutes of the Water Quality Management Committee, January 23, 2023

Members Present: Ken Foreman, Steve Rafferty, Eric Turkington, Steve Leighton, Matt Charette, Tom Duncan. Also present: Chuck Martinsen, Deputy Director Marine and Environmental Services; Amy Lowell, Falmouth Wastewater Superintendent; Paul Dreyer, Planning Board; John Waterbury, Board of Health; Ron Zweig; Mike Borselli, Falmouth Engineering; Gilda Geist – Enterprise;

1. Update on town-wide shellfish survey – Chuck Martinsen, Deputy Director Marine and Environmental Services

Chuck Martinsen gave a presentation on the town-wide shellfish surveys. He highlighted the enormous effort involved to complete the surveys over the last two years for 13 estuaries. He briefly described the initial criteria that were used to determine the areas to survey. He described the general process of taking samples to determine bottom type, suitability for shellfish, identifying species present in samples, quantifying any existing resource in the area, among others.

For each estuary that was surveyed Martinsen showed areas that his department identified as possible locations for enhanced municipal or public/private aquaculture. He presented each estuary with the potential sites and their possible uses. Martinsen recommended applying a conservative area use factor to each polygon of 50% to allow for rotational use of the area and account for potential unsuitable areas within the polygons. Steve Leighton asked what the criteria was for choosing areas to survey. Martinsen listed numerous factors taken into consideration including boat traffic, breakwaters, presence of wild shellfish populations, timing of when the area is open, and more.

Martinsen went into some detail for the potential areas and uses individually by estuary and answered some specific questions for each estuary. He then presented a summary table of the areas, uses, and potential nitrogen removal based on use and applying the 50% conservative use factor. In most cases the nitrogen removal potential by shellfish meets or exceeds what has been previously planned for by the committee. In three watersheds the planned nitrogen removal target for shellfish would not be met. Martinsen did comment that the Falmouth specific nitrogen removal number for quahogs and scallops has not been determined. Kristen Rathjen indicated that the numbers used were conservative estimates.

Martinsen laid out the next steps which would be to have a conversation with DEP/DMF to determine whether this comprehensive plan should be permitted together or individually by estuary and whether it falls under a pilot Special Review Procedure currently open by the state.

Discussions continued about who would farm that number of sites. Martinsen said that is a big question whether the town would open the opportunity to growers outside of Falmouth to continue the municipal / private partnership as done with the Eel River pilot. Additional concerns were raised about the increased production of shellfish and flooding the market. Martinsen said he didn't think it would be a concern, but it is something he is considering. Ron Zweig commented that he thinks most of the oysters landed on Cape get shipped out of the area. Matt Charette commented that the quahog seeding seemed like low-hanging fruit

and asked what the limiting factor for increasing that effort is. Martinsen responded that there is only one supplier that will sell field plantable stock seed. Martinsen is trying to work with the commercial growers to open more harvest opportunity for them in exchange for more volunteer time to the department to assist with quahog planting.

2. Falmouth Wastewater Superintendent's projected April 2023 Town Meeting requests

Amy Lowell gave a presentation on the three articles on the Spring Town Meeting warrant.

Article 24 is a supplemental appropriation (\$10M) for the wastewater treatment facility improvement project. Lowell noted that a combination of factors has led to a significant increase in the project costs. She summarized the necessary upgrades and showed the breakdown of costs from the original estimate and the material costs at present day. She indicated that an independent cost estimator was contracted to provide an estimate at the 90% design phase and will do an additional estimate at the final design phase which is expected in the very near future. Several members asked whether delays in lead time to obtain the necessary materials were factored into cost. Lowell responded that lead time is a challenge and the cost estimate is for the anticipated mid-point of construction. Paul Dreyer asked how much capacity the upgrades would provide at the plant. Lowell responded that it would handle increased flow from the existing sewer redevelopment area (ESRA) and the Teaticket / Acapesket Sewer Area (TASA) only. Under optimal timing construction could begin in 2023.

Article 25 is for \$4.5M for the Phase 1 design of TASA. This would fund the collection and transmission system designs. It also includes the expansion of Beds 14 & 15 to allow for additional discharge capacity and includes a new discharge permit. Lowell commented that a big hurdle is the modification to the current groundwater discharge permit for the expansion of the recharge beds.

Article 33 is a technical amendment to the current Flow Neutral Bylaw to include flow for TASA. She noted that in order to receive a 0% loan from the State Revolving Fund (SRF) the update has to be done in this manner. A question was raised about how 40B developments fit under the flow neutral bylaw. Steve Rafferty explained that a 40B could connect and use up all the remaining flow capacity. If there is no capacity left, the Select Board would need to issue a sewer moratorium for any additional connections until there is additional capacity which would stop additional 40B's until the moratorium was lifted.

Several members provided minor feedback on the presentation to make some points clearer for when it is presented to the Select Board.

Amy Lowell reported that the town received the Secretary's Certificate for the Great Pond Targeted Watershed Management Plan (TWMP). She said there were no unexpected requirements in the certificate. In response to a question, she noted that it cost about \$350,000 and three years to complete the TWMP which included the discharge evaluation.

3. Discussion on wastewater treatment facility upgrades - Falmouth Wastewater Superintendent Amy Lowell and Steve Rafferty

This item was incorporated into the presentation during Item #2.

4. Update on DEP proposed title 5 and watershed permit regulations

Chairman Turkington gave a brief recount of the proposed regulations and remarked that the comments that were submitted by the Town were compiled and endorsed by the Select Board, Board of Health, the Health Agent, the Wastewater Superintendent, and the Water Quality Management Committee. He mentioned that the towns of Yarmouth, Barnstable and Dartmouth also have strong oppositions to the regulations. Turkington informed the members that the DEP extended the comment period until the end of January and explained there is no set timeframe for when DEP might read and respond to comments or when any version of the regulations could be adopted. He noted that Science Wares has been compiling bookend planning scenarios for Falmouth's estuaries and what the proposed DEP requirements might entail in each watershed. These plans incorporate and expand on plans that have been developed by the committee in recent years. This exercise will be the basis for discussions with DEP. Steve Rafferty commented that the town has been prioritizing needs and trying to seek the most cost-effective solutions while essentially doing the functional elements of a watershed permit already. The concern is the added administrative time and costs to file for watershed permits, thus causing delays to planned implementations. Chairman Turkington noted support from the legislature in that several bills have been introduced, filed or drafted. Mike Borselli of Falmouth Engineering spoke on how to advise clients that are looking for guidance for systems being put in now and in the near future. He remarked about the ambiguity of 'Best Available Technology' and how to move forward to do right by his clients in light of the proposed regulations. Steve Rafferty asked Borselli what capacity his company has for I/A installs in a single year. Borselli replied about 50 system designs per year. He also noted that designs take a lot less time than installs. Ron Zweig asked whether the town could put forward a legislative act or home rule that states that the town will follow its CWMP that has been approved by the DEP. Chairman Turkington remarked that is a potential path forward and that both Yarmouth and Barnstable have also made that suggestion.

5. Reports of members and staff

Chairman Turkington noted that the Barnstable Clean Water Coalition is advocating for what they have termed 'the Falmouth Model' which is based off John Waterbury's idea for a 300' boundary zone for I/A installations near coastal ponds in Buzzards Bay.

Kristen Rathjen reported that she has been in communication with SMAST working to sort out contracts and progress reports for outstanding projects.

Kristen Rathjen and Ken Foreman briefly spoke about the National Estuaries Program (NEP) open funding call. They mentioned a couple of potential projects that might be worth pursuing a letter of intent for. Steve Rafferty informally made a motion to endorse Foreman and Rathjen to pursue any of the ideas presented. Tom Duncan seconded. Unanimous in favor.

6. Vote minutes of prior meeting (12.19.22)

Tom Duncan moved to accept the minutes as presented. Steve Leighton seconded.
Unanimous in favor.

7. Motion to Adjourn -6:28pm. Unanimous

Minutes submitted by Kristen Rathjen

List of Documents

- Presentation of Falmouth shellfish surveys
- Presentation on wastewater related articles for spring Town Meeting
- Draft minutes of the 12-19-2022 WQMC meeting