Town of Barnstable
Comprehensive Wastewater Management Plan
Ad Hoc Committee

Meeting Minutes

Date: March 4, 2025
Location: Selectman's Conference Room, Town Hall, Second Floor

The meeting will be televised live via Xfinity Channel 8 or high-definition Channel 1072. It may also be accessed via the Government Access Channel live stream on the Town of Barnstable's website: http://streaming85.townofbarnstable.us/CablecastPublicSite/watch/1?channel=1

Committee Members Present (In-Person):

Brian Hughes, Vice Chair; Tom Cambareri; Zee Crocker; Louise O'Neil; Butch Roberts; Glenn Snell; Kris Clark, Town Council; Paul Neary, Town Council

Committee Members Present (via Zoom):

Scott Horsley, Chair; Gordon Starr, Town Council

Committee Members Absent:

Rob O'Leary

Others in Attendance:

Rob Steen, Assistant Director, Department of Public Works; Griffin Beaudoin, Town Engineer, Department of Public Works; Amber Unruh, Special Projects Manager, Department of Public Works; Kelly Collopy, Communications Manager, Department of Public Works; Chris Gadd, Communications Assistant, Department of Public Works.

Agenda:

Call to Order

Brian Hughes, Vice Chair, called the March 4, 2025 meeting of the Comprehensive Wastewater Management Plan (CWMP) Ad Hoc Committee to order at 6:01 PM. The meeting of the CWMP Ad Hoc Committee was held in a hybrid fashion, with committee members attending in both the Selectman's Conference Room (Barnstable Town Hall) and virtually via Zoom.

Administrative Items

a) Recording Notice

Chris Gadd, Communications Assistant, Department of Public Works, read the notice of meeting recording.

b) Roll Call

Chris Gadd, Communications Assistant, Department of Public Works, conducted a roll call from the committee. The attendance of members is reflected above.

c) Approval of Meeting Minutes

Brian Hughes, Vice Chair, entertained a motion to approve the January 28, 2025 meeting minutes. Councilor Clark motions to approve the minutes. Zee Crocker seconds. The committee unanimously votes to approve the January 28, 2025 meeting minutes.

Roll Call: Louise O'Neil (Yes), Glenn Snell (Yes), Butch Roberts (Yes), Tom Cambareri (Yes), Zee Crocker (Yes), Brian Hughes (Yes), Scott Horsley (Yes), Councilor Neary (Yes), Councilor Clark (Yes)

d) Next Meeting

Chris Gadd, Communications Assistant, Department of Public Works, explains that he has been in discussions with the Board of Health and Health Division and they have provided several dates for when they are available to meet with the committee. After a brief discussion, it was decided that the next meeting of the Committee will be on Monday, March 31, 2025, at 6:00 PM.

Brian Hughes, Vice Chair, asks to confirm who will be attending from the Board of Health and Health Division. Chris clarifies that Tom Lee, Chair, Board of Health, and Tom McKean, Director, Barnstable Health Division, have been invited to the discussion and will be in attendance.

Chris notes that Councilor Starr has joined the meeting via Zoom.

Presentation on Additional Alternatives such as Dredging and Cranberry Bog Restoration
Amber Unruh, Special Projects Manager, Department of Public Works, introduces herself and the presentation on alternative solutions for nutrient management. The presentation will focus mainly on alternatives for nitrogen management, but there will be some mention of phosphorous management. Management solutions include cranberry bog restoration, dredging, aquaculture, inlet widening, stormwater improvements, culvert widening, fertilizer and stormwater controls, and permeable reactive barriers.

Amber shows a map of the CWMP overlaid with the Three Bays Watershed, with arrows pointing to non-traditional projects. These projects are listed in the CWMP as part of the management for the Three Bays Estuary. Other estuaries in Town do not have as many opportunities for applying these types of projects. As written in the CWMP, these projects are being done "at risk", funded through grants or Town funds or conducted in collaboration with non-profit organizations. If these projects were to show effective nutrient management, the Town would then pursue sewer relief from MassDEP.

Amber shows a map with an arrow pointing to the location of the Marstons Mills Cranberry Bog Restoration project. This project is led by the Barnstable Clean Water Coalition (BCWC). Approximately 60 acres of cranberry bogs at the head waters of the Marstons Mills River have been acquired by BCWC. They are working with various organizations to restore the bogs to wetlands, which will increase the nitrogen removal in these bogs.

Amber shows a picture of an excavator in a bog. The process of restoring a cranberry bog includes excavating the bog, taking away 100 years' worth of sand, and exposing the underlying peat. The next step is to create micro-topography, using mounding and depression to expose ground water and spread out the surface water. This slows the flow of the Marstons Mills River and increases nitrogen removal. Construction on this project is anticipated for 2026 but could be delayed due to permitting.

Amber shows a close-up map of the area surrounding the Upper Marstons Mills Cranberry Bog, with highlighted sampling sites. She explains that BCWC has been conducting water quality monitoring since approximately 2018. This monitoring focused on determining the level of nitrogen in the river. So far, this monitoring has shown that approximately 7,500 kilograms of nitrogen exits the bogs annually. Of the 7,500 kilograms, approximately 6,300 kilogram is in the form of nitrate, which can be denitrified under the right conditions. The total amount of unattenuated nitrogen in the Three Bays Watershed being targeted for removal is approximately 27,000 kilograms. This correlates to approximately 20% of the target goal being removed due to the cranberry bog restoration project. Once the construction is completed, monitoring will continue to measure the effectiveness of the project. If monitoring shows significant nitrogen reduction, sewer relief may be sought from MassDEP.

Amber shows a picture of Mill Pond in Marstons Mills next to a map of the location in the Three Bays Watershed.

- Zee Crocker notes that approximately eight years ago there was an idea to put a water treatment system in the middle of the Marstons Mills River. The idea for a physical system was determined not to be feasible, but Zee notes the cranberry bog restoration is, in essence, the previously discussed treatment system. Once the restoration is complete and the process is working, the water gets to North Bay in 6-7 hours. This is hugely impactful, potentially, when compared to any other actions such as sewer or innovative/alternative systems.

- Councilor Neary inquires about the expected timeframe for construction of the Cranberry Bog Restoration project.
    - Zee responds that it takes approximately six months.
    - Zee also notes the Cold Brook Project in Harwich which is a recently completed cranberry bog restoration project which is a comparable size and approach, which took about six months to complete.

- Councilor Neary points out the excavator in the picture of the bog and inquires how the Conservations Commission, along with state and federal agencies, would be approached.
    - Zee responds that heavy equipment driving across makes the bog look like a waterbed. The Conservation Commission has not yet signed off on this project.
    - Amber points out that excavators can drive across active cranberry bogs due to the farming exemption through the Conservation Commission. Many projects attempt to keep the bogs active to maintain this exemption.

- Glenn Snell inquires where marker number seven is, which is indicated as the outlet of the bogs.
    - Amber responds that it is between River Road and Whistleberry drive.
    - Griffin Beaudoin, Town Engineer, Department of Public Works, notes it is just south of the last cul-de-sac on Whistleberry Drive.

Amber continues her presentation by noting that Mill Pond has been artificially created through the dam in the area of Route 28.

Amber shows three aerial images of Mill Pond, ranging from 2001-2019. She notes that there has been lots of monitoring on Mill Pond from multiple organizations. This monitoring shows that nitrogen removal from Mill Pond has decreased over time, from approximately 27% removal in 2001 to a range from 13-22% in 2019. The pond has existed for over 300 years and has been slowly filling in with sediment. According to MEP reports, most ponds across the Cape remove approximately 50% of nitrogen passing through. The removal of approximately 27% is lower than this, but it is believed there is potential to increase the removal of nitrogen in this pond.

Amber shows a side-profile of a dredging project, highlighting a thick layer of “soft muck” that would be removed in the dredging process. This removal increases the volume of the pond, retaining the water

feeding from the Marstons Mills River for a longer period, approximately 2-4 times longer. This variance is mainly seasonal and based on groundwater levels.

- Brian Hughes, Vice Chair, asks what the chemistry is to remove the nitrogen in the pond.
    - Amber responds that it is denitrification through microbes that live in the sediment interface. The process transforms nitrate into nitrogen gas.
    - Rob Steen, Assistant Director, Department of Public Works, notes that the dredging process doesn't remove all the muck as it is essential to the denitrification process.

- Tom Cambareri asks why this pond is removing less than the standard 50%.
    - Amber notes there are several possibilities, including being a small basin with lots of flow. Most ponds have slower flow, which allows more time for nitrogen removal.

- Tom notes that most ponds on the Cape are "kettle hole" ponds with no inlets or outlets.
    - Zee notes that Mill Pond isn't even six inches deep anymore.
    - Amber adds that the deepest point is approximately one meter (3.2 feet).

- Councilor Neary asks where the "muck" will go.
    - Rob responds that MassDEP has previously said the material can be used for "beneficial reuse", which has resulted in the material being brought to the Solid Waste Division and mixing it with compost, making a decent soil. The intent is to make it into a beneficial product and avoid paying to dispose of the material.

- Councilor Neary asks how much material is in Mill Pond that would be removed.
    - Rob notes that it is a regulatory question, and many agencies have a say. This causes significant slowdown in the design process as well.

- Tom Cambareri asks about a recent Town Council Agenda Item about dam removal in Mill Pond and asked for additional information.
    - Amber responds that there is a fish ladder at the outlet of Mill Pond, which is in need of rehabilitation. The DPW has been working through another grant to redesign the fish ladder to meet modern standards. Part of that process uncovered a velocity barrier in the culverts under Route 149. This was seen as an opportunity to investigate if removing the dam would improve fish passage, and what that would mean for Mill Pond. This study will take into account the nitrogen removal and inclusion in the CWMP.

- Brian Hughes asks if we remove the dam, won't the water level sink?
    - Amber responds that yes the water would sink, resulting in a loss of the nitrogen removal. This is a consideration.

    - Griffin notes the grant is for a feasibility study, not an actual proposal to remove the dam.
    - Rob adds that it is a good opportunity to have a scientific third-party look at the site and report back.
    - Amber concludes that the grant provides for technical services. The Massachusetts Division of Ecological Restoration has hired a consultant to conduct a scope of work, the Town has been awarded technical services as a result.

- Zee Crocker provides additional background, noting that this project has been in the works for approximately 15 years, and has included several members of this committee. There is a rare species of minnow in the pond that could prove to be an obstacle to this project. The herring run is in bad shape, which would need to be restored in a certain way. That fix would likely involve a bridge over both Route 28 and Route 149 at an unknown but high price point. The good news is that many people in local and state governments want to conduct the work for dam removal. A potential grant may be available for dam removal through a grantor of the Barnstable Clean Water Coalition. This is an area with little historical records. Zee believes there was a smaller pond in the past, and a potential pond south of Route 28. These two small ponds could potentially remove the nitrogen that the single large pond removed, or more. This is dependent on money and assistance. There are several other projects that can be conducted which may not be clear for several years.

- Zee adds that the United States Geological Survey (USGS) is coming out with a report about Cape Cod Rivers. This report will show that the Marstons Mills River is the largest in terms of nitrogen contribution on Cape Cod. This river is a gaining stream, meaning groundwater comes in along the entire stream. The math model is not perfect. The well fields for the Centerville Cotuit Marstons Mills (COMM) water supply are to the west of this area. During the summer, millions of gallons of water are taken from those wells, which causes the river to drop substantially. This water does get treated and could benefit the CWMP as well. The Town is working in the right place and Zee is happy to help.

Amber advances to the next slide, explaining that the Mill Pond Dredging Project is currently in the design/permitting phase. Barnstable Clean Water Coalition is conducting pre-construction monitoring at the inlet and two outlets of the pond. Already the monitoring has shown active removal of 2,500 kilograms of nitrogen per year from the Marstons Mills River. We don't want to lose that removal, otherwise changes need to be made in the CWMP. If dredging proceeds, monitoring would continue afterward to determine effectiveness and potentially seek relief from MassDEP.

- Brian asks to confirm that Mill Pond is already dammed.
    - Amber responds that it is.

Amber continues her presentation to a slide showing Warrens Cove. This body of water has very poor water quality, as evidenced by an abundance of macroalgal blooms throughout the summer. The work upstream in the cranberry bogs and Mill Pond may help Warrens Cove, but if the habitat of the Cove could be improved to allow for shellfish aquaculture, the shellfish could provide a final "polish" before reaching Prince Cove and North Bay.

Amber shows a slide with a picture of two tanks of water, one murky, one clear. Amber notes that one oyster can filter up to 50 gallons of water per day. The picture shown emphasizes the effect of oysters on water and their ability to remove nitrogen through uptake into shells and tissues. There are also denitrification processes within their shells. Lastly, biodeposition helps cycle nitrogen in beneficial ways. Amber notes a recent demonstration project in Orleans that resulted in approximately 38,000 pounds of oysters removing approximately 75,000 kilograms of nitrogen.

Amber shows a slide focused on the Cotuit Bay inlet, showing aerial views of the inlet before and after dredging. She explains that the Barnstable Clean Water Coalition worked to secure permits for dredging the inlet. This activity was slated to improve navigational safety, coastal resiliency, and a potential for increased flushing of Cotuit Bay. Modeling from MEP on this widening determined it was unlikely to see a significant change in water quality due to widening. Using existing monitoring practices, data showed that there was no significant difference in water quality at four of the five monitoring stations measured around Cotuit Bay. Station 9 in West Bay was the only station to show any improvement. Overall, it was determined the project did not warrant a request for relief from sewer through MassDEP.

- Councilor Clark notes an oyster farm in the vicinity of station 9, which could be the reason why only station 9 is influenced.

- Scott Horsley, Chair, inquires about an outcome of the 208 Plan known as the technology matrix. This matrix attempted to quantify the benefits from some technologies. One that seemed persuasive was the shellfish aquaculture. He notes that the MEP Study was done using data from the early 2000s, and he is curious how much additional aquaculture has occurred within the system and whether it is worthwhile doing another calculation.
    - Amber responds that she has already looked into this and has found that licensed shellfishing areas haven't changed since 2000. These licenses are operated by commercial fishermen and it's up to their discretion of how to use those areas. Landings can change from year to year. Information is reported to the Division of Marine Fisheries (DMF) but the data is not tracked in an accessible way. If an analysis of the Three Bays Watershed were to be completed, it would likely be done utilizing analog data. An existing report does cite shellfish landings from 2014-2018 using data from DMF, but that report covers Barnstable as a whole. The report does show variance in landings by year. It is good for water quality that this aquaculture exists, but there is uncertainty of how significant the change is.

- Tom asks to confirm that we're not sure if the number of landings has increased over the time frame despite the grants staying the same.
    - Amber confirms this.

- Scott Horsley, Chair, asks if Councilor Clark has any additional insight into this.
    - Councilor Clark adds that DMF does attempt to protect commercial farmers for proprietary information. She suggests that a request could be made with the understanding of it being used for scientific purposes.
    - Scott notes from personal experience that Cotuit Oyster seems to be more active over the last 20 years. He indicates his uncertainty but appreciates the willingness to look into it.

Amber continues her presentation with a slide showing stormwater improvement projects within the Three Bays Watershed. Much of this work is done in collaboration with the Association to Preserve Cape Cod (APCC) and a Southeast New England Estuaries grant and Coastal Zone Management grants. A total of nine projects were implemented, removing an estimated 35 kilograms of nitrogen per year. While this is not a huge amount, every little bit helps.

Amber shows a slide with a picture of a culvert and graph. She states that her discussion of non-traditional projects in the Three Bays Watershed is complete but wants to highlight some other projects in Town and around the Cape.

- Councilor Starr inquires if Shubael Pond was skipped.
    - Amber responds that while it is a non-traditional approach, as it was discussed by Zee Crocker in his presentation on innovative/alternative septic systems at a previous meeting, the decision was made not to include it in this presentation.

Amber discusses the Stewarts Creek Sewer Expansion and Culvert Widening Project that occurred in 2012-2013. The data shows a change in nitrogen concentration over a period of 5 years, leveling out around 0.5 milligrams per liter. Overall, there was a positive impact on the amount of nitrogen removed as a result of this project.

- Brian points out a decay in nitrogen prior to the implementation of the project and questions what would have caused that.
    - Amber explains that internal discussions were unable to provide any concrete answers, and it may be an artifact of how the data begins with a high degree of variability and ends with a lesser degree of variability. If early data were removed from the graph, the trend line prior to implementation of the project would likely be much flatter.

- Zee asks when the new culvert was installed.

    - Amber replies it was installed in 2013.

- Zee asks where the samples are taken from.
    - Amber replies that the samples are taken right in front of the culvert, in front of the grate shown in the picture.

- Brian notes a possible reason for the decline is the adoption of slow-release nitrogen fertilizer, which he notes being used at several golf courses.
    - Rob notes there was some sewering occurring in the upper parts of the watershed, separate from the CWMP, that was implemented before the Stewarts Creek Project. There are multiple smaller activities that could be resulting in the decline.
    - Tom noted it could be the tail-end of the Water Pollution Control Facility improvements.

Amber continues by discussing existing regulations in Town for nitrogen and phosphorous fertilizer usage. There is a regulation in the eCode which is regulated by the Health Division and the Conservation Division. The Health Division largely oversees compliance in retail settings, ensuring signage noting the negative effects of phosphorous-containing fertilizer on waterways is posted near the product, responding to complaints, and ensuring the provision of certifications for certified fertilizer applicators. The Conversation Division oversees anything falling within the Wetlands Protection Act, which includes restricting the application of fertilizer within 100 feet of a water body and proper management of grass clippings, leaves, etc. within 50 feet of a water body.

- Brian notes a friend who is working with the Town of Plymouth who is looking at phosphorous in addition to nitrogen, separate from their CWMP. He inquires if Barnstable is also looking at phosphorous management.
    - Rob notes that a lot of Amber's work is phosphorous-centered. The expectation is that in another five years, the update to the CWMP will focus more on phosphorous management. Similar to how the current committee is looking at I/A systems because of advances in technology, systems focused on phosphorous management are advancing in development. Amber is working on some of these now.

Amber shows a slide with an abstract of the Town's Stormwater Management Ordinance, which regulates stormwater discharges. This is overseen by the Department of Public Works, which includes the elimination of illicit discharges, requirements of erosion and sediment controls during construction, and implementation of low-impact design development strategies on new- and re-development areas. This does not dictate the amount of nitrogen removed, instead asking for nitrogen removal to be optimized as much as possible.

- Zee notes that some communities have "very draconian" fertilizer regulations. He notes people visiting his office stating they go elsewhere, and fertilizer is unavailable, but they

come here and the stores have plenty of it. If we change the regulations, is it because the community prefers a "nice green lawn".
    - Rob recalls this regulation was last discussed around 2012-2013. Since then, the discussion has not surfaced. The real problem is how it is enforced. If tighter controls were to be enacted, there is little to stop someone from going over to the next town and buying fertilizer. The only indication of use would be a greener lawn. This makes it very difficult to certify to MassDEP the amount of nitrogen being removed because of fertilizer regulations.

- Zee asks to clarify how MassDEP measures and gives credit for fertilizer regulations.
    - Rob notes that the last time this was discussed with MassDEP, there was very little in the way of measuring the effects from fertilizer regulations.
    - Amber notes that Orleans did a fertilizer use survey around the time of MEP modeling. They repeated that survey approximately 10 years later, aiming to see if people were using less fertilizer. She notes that there was very little difference between the survey results.
    - Rob notes there are communities that have made progress with golf courses implementing better fertilization practices, although it was driven financially.

- Brian Hughes asks if Barnstable's golf course follows the same pattern as other communities, implementing fertilizer regulations, but doing so for financial reasons.
    - Rob replies that is correct.

- Tom notes an attempt by the Cape Cod Commission to do a District of Critical Planning Concern for nitrogen fertilizer, which received huge pushback from landscapers. The final implementation relied on the registration of landscapers.
    - Rob asks if that was when there was a push for education on "Cape Cod Lawns".
        - Tom notes some relationships between the two and it was in the general timeframe, but not directly correlated.

- Scott notes a project in Plymouth at the Pine Hills Development where the town installed a fertigation well near their wastewater treatment plant to re-collect groundwater and use that to fertilizer golf courses in the area.

- Zee asks if Barnstable is doing fertigation, or just talking about it, with the golf courses.
    - Rob responds that anywhere that groundwater is pulled from contains nitrogen and is essentially fertigation. We are not currently pulling groundwater from the area around the Water Pollution Control Facility for the purposes of fertigation.

Amber continues with another non-traditional solution, a Permeable Reactive Barrier (PRB), which is not being used in Barnstable. Amber notes a PRB works to intercept groundwater on its way to an estuary.

There is a case study at Lagoon Pond on Martha's Vineyard, where soybean oil was injected into the ground for this purpose. Monitoring showed that the groundwater started with 5 milligrams per liter of nitrogen, which was reduced to 0 milligrams per liter after passing through the soybean oil. Rob adds that a PRB is basically denitrifying, using any organic carbon, which typically includes a buffering agent. Amber points out several considerations to be considered for PRBs, requiring extra work prior to implementation. Depth to groundwater is a consideration, as the depth can be 40 feet in areas of Marstons Mills. Another consideration is flow direction, especially as studies have shown that modeled groundwater flow is not actual groundwater flow. Hydraulic conductivity, soil type, and nitrogen concentration are also important considerations. Lastly, tidal influence can affect the depth of groundwater, hence affecting the PRB. Amber notes that any substance that is permeable and can convert nitrogen to, preferably, nitrogen gas can be used as a PRB. Amber notes that the Barnstable Clean Water Coalition was working with woodchip bioreactive barriers in bogs which is still being evaluated. Rob notes that compost and any organic carbon can be used for this process. The wastewater which encounters the barriers takes the oxygen from the carbon, which allows nitrogen to become nitrogen gas.

- Brian asks if the substance being used in a PRB is serving only as a catalyst or if it is getting used up.
    - Rob responds that it is getting used up. One of the questions, which Rob notes a definitive answer has not been determined, is how long the material lasts. The reaction is generally acidic, so a buffering agent is needed. While there is a science to it, it's important to figure out how to intercept the groundwater so that it must go through the PRB and so that the PRB covers the full depth of groundwater. A somewhat-recent attempt to create a demonstration site in Prince Cove was determined to not be ideal due to the flow and consistency of the groundwater.

- Tom Cambareri notes a study with USGS and the Cape Cod Commission to evaluate how PRBs should be sited, using many of the considerations Amber mentioned. The study showed a number of sites where a PRB is feasible. There is now a PRB in Orleans, Eastham, and Falmouth. It is most effective when the nitrogen removed is significant, but it takes a lot of work to figure those areas out.

Amber continues by noting freshwater management of phosphorous, which involves developing a pond specific management plan and implementing solutions where appropriate. These solutions include stormwater improvements, alum treatments, floating wetlands deployment, sewer expansion, and aeration of deep-water columns.

Councilor Clark (In-Person) and Councilor Starr (Zoom) left at 7:02 PM to attend another meeting.

Presentation on Funding of the CWMP

Rob Steen, Assistant Director, Department of Public Works, begins the conversation by remarking on requests about the financial aspects of the CWMP. To that end, Mark Milne, Director, Finance Division, is in attendance. Mark is the principal author of the financial plans for the CWMP and is involved with the Compressive Financial Advisory Committee (CFAC) which also looks at the finances of the CWMP.

Mark notes he was given some questions in advance and will start by answering those. The first question is what opportunities exist to mix Massachusetts tax credits with other funding sources such as State Revolving Funds (SRF). Mark notes that the income tax credit goes to the individual, while other funding sources such as SRF do not offer financing to individuals. SRF is designed to provide low-interest loans to communities for building out public infrastructure. The Cape Cod Aquifund was initially capitalized with SRF funding. He notes that sewer assessments are not eligible for a loan through the Aquifund, instead being financed through the Town with the cost being added to a property owner's tax bill over a multi-year period. I/A systems and sewer connections can be financed through the Aquifund. The Aquifund is regional-based, and while an attempt could be made to make a Town-based program, it would not be feasible to compete with the Aquifund. Mark believes the Aquifund will need a capital infusion as a result of additional projects across the region.

Mark advances to the next question, which asks how the Town can assist property owners with I/A upgrades. He notes that current constitutional law prohibits spending public dollars on private property. This is the same reason the Town cannot pay for the sewer connection onto private property. Special legislation through the State could allow the Town to spend public funds on private property, but more work would need to be done. It may be possible to look into creating a property tax exemption program similar to current exemptions, such as those for seniors, veterans, and surviving spouses. There is a recent program that provides a local property tax increment exemption, through the State, for builders of workforce housing. Again, some special legislation could be created specifying criteria for an individual to meet, which would result in a property tax exemption.

- Zee Crocker asks if the local property tax exemption would need to go through the State legislature.
    - Mark confirms that it would need to go through the State.

- Zee asks how the Town will pay for grinder pumps on private property.
    - Mark refers to the existing practice of the Town to have the Town purchase the initial grinder pump. The installation and replacement would not be paid for by the Town.
    - Rob notes this cost is built into the cost of the project and is then included in the betterment. This should be talked about as a policy conversation with this committee, as this practice has not been formalized. It is worthwhile and fair to have this discussion with the Town Council.

- Scott Horsley, Chair, notes recent experience in Wellfleet, where they have received a commitment from SRF for I/A system installations. They discussed the issue with public

funds on private property and ended up with a similar model where Wellfleet purchases the actual equipment for installation but does not pay for the installation itself. He also notes the consultant being utilized referenced the practice in Falmouth which matches the Barnstable practice of providing the grinder pump.

- Zee asks about the implications from the 2025 draft Intended Use Plan (IUP) and the potential issue of a $50 million cap without rollover. At least with equipment purchases it would work, but a project, such as the upgrades to the Water Pollution Control Facility, cannot be done halfway. Hopefully the draft IUP does not become the final as it is draconian.
    - Mark acknowledges that there is certainly a concern about the proposal as all towns have put in lots of local planning. Communities have made commitments and appropriations for these projects based on existing IUP and SRF loan practices. The draft is receiving a lot of pushback. The hope is for the program to be kept in place for an additional year while communities work with the State to find solutions for long-term financing. One idea is to utilize some of the Environmental Bond Bill for funding of SRF. There are a lot of unknowns right now and to speculate will only scare people with worst-case scenarios.
    - Rob adds that the IUP has always had a $50 million cap. Previous conversations with the State indicated that excess monies could be awarded if available. The funding of the Water Pollution Control Facility and Route 28 West Sewer Expansion project has already been committed to and are "through" as they went with last year's IUP. The issue going forward is prior understanding that while a cap exists, a project can be split over numerous years, hence funding the entire project. The entire Cape Delegation, along with consultants, are reaching out to MassDEP to make clear that large changes such as this can't be made this fast, and if discussions are to be had about re-capitalizing SRF then that needs to be done as a group. There are lots of rumors online which are misconstruing what the draft IUP says. At the end of the day, it will need to be seen how it all "shakes out".
    - Griffin Beaudoin, Town Engineer, Department of Public Works, adds that the change now is some future projects have only been identified for partial funding at this point.
    - Mark adds that there is over $200 million in existing projects that have full funding commitments.

- Mark asks Scott if the Wellfleet project he referenced is listed on the 2025 IUP.
    - Scott responds there are two projects, one for $450,000 which did get funded and one for $900,000 that did not get funded. This was funded two years ago.

- Zee asks how far out the $200 million takes us and when the effect of the draft IUP would occur.
    - Griffin responds that it is for projects identified in the Fiscal Year 2026 Capital Plan.

    - Rob responds that everything previous to that has been funded. The Project that would be impacted is the Phinney's Lane Neighborhoods Sewer Expansion Project.
    - Councilor Neary points out that historically there are several projects that are pre-engineered and "shovel ready", but now the Cape and the State are jumping on the funds.

- Zee notes the past presentation by Andrew Gottlieb, Executive Director, Association to Preserve Cape Cod, which indicated there is no problem and then the rules were changed.
    - Rob notes that Town Manager Mark Ells asked for a comparison between last year's IUP and this year's IUP. The two main differences were the matter previously discussed and a discrepancy between last year's having $150 million more than this year's. Reading between the lines seems to indicate less security in the bill funds, which was the Biden Infrastructure Law. There is approximately $26 million that was taken from clean water and put towards drinking water for PFOS issues. Speaking as an individual and not on behalf of the Department, it seems there are people at the political level that believe the wastewater problem to be fixed. This has since been pointed out to them as not just a single project, it is 30+ years of projects to address the problem.

- Brian Hughes, Vice Chair, asks to clarify the level at which these discussions are being held.
    - Rob replies that this is a State-level discussion.

- Tom Cambareri notes it seems that this is being driven by an overall budget situation, reducing the amount of funds for SRF.
    - Rob responds that it is a possibility, as well as other priorities such as transportation. There are various other areas where funds are being spent. Rob notes it is important for the Cape Cod Delegation and relevant entities to speak up and make it known that the problem is still there and has not been solved.

- Rob asks Mark if he has heard anything different from what has been said.
    - Mark responds he has not and adds that there is a Cape and Islands Water Protection Fund. This fund provides a 25% subsidy and anticipates they will be able to continue to provide it, for projects listed on the IUP as a funded project. This causes an issue where a project could not be listed in the IUP due to the funding cap, meaning the Water Protection Fund wouldn't provide the funds, meaning that money is inaccessible. The language creating the Cape and Islands Water Protection Fund needs to be fixed, perhaps being only listed in the IUP instead of funded, to receive the 25% subsidy.

- Rob asks to clarify where the funds for the Cape and Islands Water Protection Act come from.

    - Mark responds the funds come from local contribution created by a surtax of 2.75% on all rentals on Cape Cod.

- Mark thanks Zee for providing information regarding the Falmouth septic tax credit. A good point was raised that it is currently non-refundable, so the credit is primarily beneficial to higher-income taxpayers, with low-income taxpayers losing out on the full benefit of the credit. He notes the State House is working to change the language in order to give all income brackets the full benefits of the septic tax credit. This could also be brought to Town Council leadership to consider supporting.

- Zee asked if there were any "magic bullets", spare plans, or other wells to get money from.
    - Mark responds there is not. The Town has been proactive in their funding since approximately 2008. Every opportunity that has come up to raise additional funds for the CWMP at the local level has been taken advantage of. There is a surplus on hand currently, but we'll eat into it as projects are appropriated. The Town is always looking for additional ways to fund projects.

- Zee comments that there are several separate water departments. In Zee's opinion, waste water and water supply are connected. He wonders if there were a financial benefit to linking the two together in Town, acknowledging that is a much larger discussion. He has had financial discussions with large investment banks. They state the lowest cost financing anywhere is for wastewater separated from various restrictions. Is that something to table or discuss?

- Councilor Neary asks about the Wind Projects and Avangrid earmarking $16.9 million. If the project were not to be completed due to Avangrid not getting financing, what risk is there to this project?
    - Mark responds that there is always a possibility of a project not getting funded. This has been built into the projection model, with the ability to look at the project both with and without the Avangrid financing.

- Councilor Neary asks what the timeframe would be on knowing if Avangrid gets their financing.
    - Mark responds that the side agreement requires payment upon financing of the project. There is not a specific date for when this would occur.

- Scott mentions that he is a Water Commissioner in Cotuit, who has identified concerns with homes in Zone Two areas. They have been discussing possible solutions including connecting to Town sewer or another local option. The same question was faced with using District funds on private property. They have filed legislation which would empower the District to

use the funds for water quality upgrades. If this passes, it will be fairly unique. This would only cover Cotuit.

Public Comment/Questions

Brian Hughes, Vice Chair, opened the floor for public comments and questions.

- John Lynch of Centerville asked to clarify that the law prohibits using public funds on private property.
    - Rob Steen responds that is correct, and that it is not just in Barnstable but across the Commonwealth. As has been said there are some workarounds, such as buying the equipment but not funding the installation, but generally there is a prohibition against using public funds on private property.

- John asks if there is any workaround with taxes or anything like that.
    - Griffin Beaudoin, Town Engineer, Department of Public Works, responds that there needs to be special legislation for certain purposes to spend public money on private property.

- John wonders if as the pool becomes larger and there are more property owners requiring auxiliary equipment, does that preclude a class-action suit?
    - Rob responds that he cannot speak to that.

- John continues, that if the pool gets bigger and expands to off of Cape Cod for water quality issues, there is a "disadvantaged class".
    - Councilor Neary responds that it goes across many barriers. It could be related to road policies and getting a new road because of sewer construction but the neighbor who isn't getting sewer doesn't. Who then pays for that?

- John states his belief that it is unfair there is another "class" and perhaps that is why grinder pumps are the best that can be done.

- Brian Hughes, Vice Chair, asks if it may be possible for the Town to buy replacement pumps for when a pump fails or needs to be replaced.
    - Rob responds that it is not how previous projects were set up, but it is a conversation to be had with the Town Council about the matter. We have been following past practice, which has not been formalized by the Town Council.
    - Griffin adds that this would be a fiscal policy and go before the Town Council.

- John states that most of his experience is in Chatham, who recently implemented a moratorium on grinder pumps until a decision was made. They announced a program to provide the pump and a $2,000 stipend for upgrades required for electrical work. There is discussion of contracting with a firm to ease the process of finding an installer.

    - Rob responds that the Town's grinder pump supplier, eOne, currently works to get those needing grinder pumps together, as John suggests. This is a Town Council discussion as there is a varying degree of cost based on what level of service the Town wants to provide. Once the committee has done the writing of the 5-year update, the committee will work through the list of policy discussions included in Addendum 2 of the minutes. These will then be brought into the Town Council for their consideration.

- John notes he would like to see the discussion as an educational seminar. The Town computer system is "very difficult" to get around in. He notes that there are few people here attending from the public and it seems it should be advertised more. There should be more discussion about grinder pumps. Come the end of the committee he would like to see a recommendation to the Town Council regarding grinder pumps.
    - Rob responds that this is the intent.

Brian asks if there is any more public comment.

- Adriel Glavin introduces herself as working for the VMA and recently met Town engineers at a conference and became interested in the project. She grew up in Yarmouth and came to listen and learn. She will ask her questions after the meeting.

Matters Not Reasonably Anticipated by the Chair

- Butch Roberts inquires about the previously discussed visit to MASSTC and whether that was still on the table.
    - Chris Gadd, Communications Assistant, Department of Public Works, responds that he is working with Brian Baumgartel from MASSTC to coordinate a list of times that may work for the committee. Most of the tour would be outside, so it was advised to wait until slightly warmer weather.

Adjournment

Brian Hughes, Vice Chair, entertains a motion to adjourn the meeting. Tom Cambareri motions to adjourn the meeting. Butch Roberts seconds. The meeting is adjourned at 7:41 PM.

Roll Call: Tom Cambareri (Yes), Zee Crocker (Yes), Scott Horsley (Yes), Brian Hughes (Yes), Councilor Neary (Yes), Louise O'Neil (Yes), Butch Roberts (Yes), Glenn Snell (Yes)

Respectfully submitted by Christopher Gadd, Communications Assistant, Barnstable Department of Public Works

Addendum 1: Proposed Meeting Topics

Meeting Held/Topic Discussed
Next Meeting/Topic
Future Meeting/Topic

All meetings are subject to change. Official agendas will be posted to the Town of Barnstable's Website in accordance with Open Meeting Laws.

- Meeting #1 (*Held Tuesday, October 22, 2024*)
  - Introductions and overview of Town Council & DPW wishes for the committee.
- Meeting #2 (*Held Monday, November 18, 2024*)
  - Opportunity to ask questions from assigned homework to get up to speed on the current CWMP.
- Meeting #3 (*Held Monday, December 16, 2024*)
  - Presentation on Enhanced Innovative & Alternative Septic Systems.
- Meeting #4 (*Held Tuesday, January 28, 2025*)
  - Presentation on Growth
  - Presentation on Accessory Dwelling Units
- Meeting #5 (*Held Tuesday, March 4, 2025*)
  - Presentation on Additional Alternatives such as dredging and cranberry bog restoration
    - Amber Unruh, Special Projects Manager, Department of Public Works
  - Presentation on overall approach to funding of the CWMP
    - Mark Milne, Director, Finance Division
- Meeting #6 (*Scheduled for March 31, 2025)*
  - Discussion with Board of Health/Health Division on Title 5 systems
    - Tom McKean, Director, Health Division
    - Tom Lee, Chair, Board of Health
- Meeting #7 (*Tentatively April*)
  - Update on Water Pollution Control Facility nitrogen reduction upgrade and effluent disposal evaluations
    - Rob Steen, Assistant Director, Department of Public Works
- Meeting #8 (*Tentatively May*)
  - Discussion of the view of the CWMP through the lens of the Local Comprehensive Plan (LCP)
    - James Kupfer, Director, Planning Board
- Meeting #9 (*Tentatively June*)
  - Formulation of recommendations to be made to Town Council
- Meeting #10 (*Tentatively July*)
  - Meeting topic TBD based on Meeting #9
- Meeting #11 (*Tentatively August*)
  - Meeting topic TBD based on Meeting #9 & 10
  - *Around this time the goal is to make presentations to Town Council*
- Meeting #12 (*Tentatively September*)
  - Review of feedback from Town Council on proposed recommendations
- Meeting #13 (*Tentatively October*)
  - Final recommendations, discussions, and any other related topics.
- Meeting #14 (*Tentatively November*)
  - Hold for final discussions.
- Meeting #15 (*Tentatively December*)
  - *Potentially not needed*
  - *CWMP must be submitted to MassDEP in December 2025*

Addendum 2: Potential Policy Discussion Items

Accessory Dwelling Units (ADU)

- *Information on ADUs was presented by James Kupfer at the 01/28/25 Meeting.*
- ADUs recently became codified under Massachusetts Law
- Specific questions pertaining to ADUs include:
    - Can sewering and I/As incentivize ADUs, and vice versa?

Grinder Pumps

- *A request for this practice to be discussed was made by a resident through the DPW staff.*
- The current practice for grinder pumps is the first pump is purchased by the Town then becomes the responsibility of the property owner.
- Specific questions pertaining to grinder pumps include:
    - Should the existing practice be formulated/continued as is?

Innovative/Alternative (I/A) Systems

- *Information on I/A Systems was presented by Zee Crocker at the 12/16/24 Meeting.*
- Enhanced I/A systems are approaching general approval by MassDEP and the committee could evaluate recommending I/A systems as part of the CWMP.
- Specific questions pertaining to I/A systems would include:
    - How to determine the usage of specific technologies
    - When could I/A systems be required to be used?
    - How could I/A systems be implemented & funded?
    - Would I/A systems be used in specific watersheds or across town?

Private Roads

- *A request for this practice to be discussed was made by DPW Staff*
- The current practice for private roads is for the Town to obtain an easement for sewer installation.
- Specific questions pertaining to private roads include:
    - Should the existing practice be continued as is?
    - Alternatively, should the Town take the road?

Sidewalks

- *A request for this practice to be discussed was made by DPW Staff*

- The current practice for sidewalks is to not include them in a CWMP project, instead submitting them as their own individual project.
- Specific questions pertaining to sidewalks include:
    - Should the existing practice be continued as is?

State Revolving Fund (SRF) and 0% Interest Loans

- *Information on SRFs and 0% interest loans was presented by Andrew Gottlieb at the 01/28/25 Meeting.*
- Town Council is workshopping potential changes.