



**BARNSTABLE**  
Water Resources



**Town of Barnstable  
Comprehensive Wastewater Management Plan  
Ad Hoc Committee**

**Meeting Minutes**

**Date: August 12, 2025**

**Location: Department of Public Works Conference Room, 382 Falmouth Road,  
Hyannis, MA 02602**

*This meeting is being recorded and will be posted for future viewing on the Town of Barnstable's  
Government Access Channel:*

<http://streaming85.townofbarnstable.us/CablecastPublicSite/watch/1?channel=1>

**Committee Members Present (In-Person):**

Scott Horsley, Chair; Brian Hughes, Vice Chair; Tom Cambareri; Zee Crocker; Butch Roberts; Glenn Snell;  
Kris Clark, Town Council

**Committee Members Absent:**

Rob O'Leary; Louise O'Neil; Paul Neary, Town Council; Gordon Starr, Town Council

**Others in Attendance:**

Dan Santos, Director, Department of Public Works; 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

Members of the Public including John Lynch from Centerville and Bruce Walton of the Innovative/Alternative Onsite Wastewater Treatment Systems (I/A OWTS) Task Force and resident of Centerville.

**Others in Attendance (Via Zoom)**

Mark Milne, Finance Director, Finance Division

## **Agenda:**

### **Call to Order**

Scott Horsley, Chair, called the August 12, 2025 meeting of the Comprehensive Wastewater Management Plan Ad Hoc Committee to order at 5:01 PM. The meeting of the committee was held in-person in the Department of Public Works Conference Room at 382 Falmouth Road in Hyannis. An invited speaker, Mark Milne, Director, Finance Division, attended 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

Scott Horsley, Chair, entertains a motion to approve the July 14, 2025 meeting minutes. Councilor Clark moves to approve the minutes. Butch Roberts seconds. The committee unanimously votes to approve the July 14, 2025 meeting minutes.

#### d) Next Meeting

- i. Scott Horsley, Chair, opens the discussion by inquiring about possible dates and times for the next meeting. Chris Gadd, Communications Assistant, Department of Public Works, provides several possible meeting dates and times. After some discussion, it was decided that the next meeting of the committee will be on Monday, September 15, 2025 at 5:00 PM in the Department of Public Works Conference Room, located at 382 Falmouth Road in Hyannis.

### **Review of Proposed Recommendation on Implementation of Innovative/Alternative Technologies**

Scott Horsley, Chair, opens the discussion on innovative/alternative technologies by introducing Mark Milne, Director, Finance Division, with whom Scott has had several conversations related to the financing of these technologies.

Mark provides information on the Community Septic Management Program (CSMP) as a potential funding source for the Town. He notes the program is managed through MassDEP as part of their Intended Use Plan (IUP). The program loans money to requesting communities to loan money to homeowners who need to upgrade a Title 5 System, which does include upgrading to I/A Systems. He emphasizes this is a loan program, with the homeowner entering a betterment agreement with the Town. An advantage of this is the homeowner does not need to provide collateral, except for a lien being

placed on the property. There is a better interest rate, and there is no income verification process. The loan can be added to their tax bill and can spread out payments through the tax bill for up to 20 years. This is similar to the Aquifund. The Town could set up their own loan program being fed by the Community Septic Management Program or continue to utilize the Aquifund as it has been doing.

Another idea for financing is to file a Home Rule Petition with the State Legislature, which would allow the Town to implement a property tax exemption program for homeowners who choose to install an I/A system. This is similar to existing exemption programs. While it would require legislative approval, the approval is not unprecedented, including exemptions for affordable housing and year-round rental housing. This would require further financial analysis as the current calculation of property tax dollars does not include the exemption.

- Zee Crocker asks if the interaction between the County's Aquifund and the CSMP is an "Either/Or" situation.
  - Mark responds that the programs are essentially the same program. The county created their Aquifund through the CSMP. Barnstable could create their own version of the County's program but would then be competing with the county. There would not be an opportunity for separate loans, one from the county and one from the town.
  - Scott adds that the Aquifund is an interaction between the homeowner and Barnstable County's Health Department who administers the program. If the town were to create their own program, it would be an interaction between the homeowner and the town.
  - Mark confirms this and adds that the county adds a lien to the property if a property owner takes a loan out, which is what the town would do in that scenario.
- Scott asks if the CSMP could be approached similar to State Revolving Funds (SRF) where a portion of the cost for installing an I/A system is subsidized.
  - Mark responds that this could be done by creating a Home Rule Petition asking for an exemption, which would exempt a percentage of the installation costs from property taxes. He recommends, if this approach is taken, to utilize a fixed dollar amount as opposed to a percentage of the property tax.
- Rob Steen, Assistant Director, Department of Public Works, remarks that there was a period when the town used a tax on meals and rooms to fund a portion of the CWMP. He recalls the state saying there are additional actions the town could take along these lines but hasn't and asks if that is correct.
  - Mark responds that Rob is partially correct. He notes Rob is referring to the Municipal Empowerment Act which has not been adopted yet. The act does propose slight increases in the local rooms and meals tax. The town is waiting for the act to pass. If it does, the Town Council would have to accept the increases through the legislative process.

- Scott asks if the CSMP could qualify for loan forgiveness through the Cape and Islands Water Protection Fund. He notes conversations with others about the loan forgiveness which is required to be on the Intended Use Plan (IUP), which this program is, and is approved by the Cape and Islands Protection Fund Board, which every community has a representative on. He asks if his understanding is correct.
  - Mark responds that Erin Perry, Deputy Director, Cape Cod Commission, would be the best person to talk to about this. The whole process depends on the governing regulations. There could be a change in regulations to make loans eligible for forgiveness.
  - Scott notes the language that created the fund includes innovative/alternative septic systems, so the possibility is there.
- Councilor Clark asks if there are other communities within the county that are utilizing Aquifund for I/A Systems.
  - Mark responds that he is uncertain if any money has been loaned out for innovative/alternative septic systems. He assumes they have as I/A systems are eligible for a loan through the program.
- Brian Hughes, Vice Chair, asks if there is a limit to the amount of property tax exemption that is possible.
  - Mark responds that this would have to be established locally, determining what an appropriate amount is. He again recommends a fixed dollar amount instead of a percentage, to ensure every property owner gets the same benefit.
- Brian asks if the property tax exemption would have to be approved outside of the Town Council
  - Mark responds that the first action would be to go before the Town Council for their approval of a Home Rule Petition. Once approved, it would go through the state legislature.
- Scott notes a discussion with Nathaniel Keenan, Deputy Director, Massachusetts Clean Water Trust, which is the source of SRF funding. He indicated there is guidance being developed by MassDEP on this issue. He was unable to provide a timeline but there is something in the works.
- Zee asks how long the process to approve a Home Rule Petition could take.
  - Mark responds it would take at least a year.
- Zee asks if the Town would be obligated to use the Home Rule Petition immediately upon approval, or if it could be put in a “toolbox” for future use. Could it be implemented with certain criteria, such as performance levels of I/A systems.
  - Mark responds that the qualifying criteria would be included as part of the Home Rule Petition.

- Zee notes, with the current appropriation of \$5 million in the Aquifund, if a unit is \$50,000 the funding will cover 100 units. With the State Tax Credit, it may get up to 200 units. The discussion is not necessarily about a large number of units.
  - Scott notes there is a need to get more funding in the Aquifund.
- Rob asks to confirm whether the Aquifund recently received a “Plus Up” or some form of additional funding which makes the program better funded than noted.
  - Scott responds there was some funding that was recently awarded, but it may be for items separate from the IUP list.
  - Rob notes this is a benefit of utilizing the county’s Aquifund as it is already well-funded.
  - Mark notes the county is better capitalized. He spoke with the Program Manager of the Aquifund about their capitalization, and they have participated in several loan programs in the last 20 years.

*Tom Cambareri joined the meeting in-person*

- Scott asks who represents the Town on the Cape and Islands Water Protection Fund
  - Rob responds it is Mark Ells, Town Manager.
- Scott asks if Mark has been made aware of these conversations as the Water Protection Fund will eventually have to be discussing and deciding on these topics.
  - Rob notes his understanding that Mark Milne attends the meetings along with Mark Ells
  - Mark clarifies that Sean O’Brien, Treasurer/Collector, attends the meetings with Mark Ells.
- John Lynch, Citizen, asks if the financing for the CWMP is done by bonds or by cash flow.
  - Mark responds that the financing is done primarily by borrowing through the State Revolving Fund, which has been largely successful so far. There have been some smaller general obligation bonds issued.
- John Lynch, Citizen, notes conversations he has had that indicated a dramatic decrease in the price of I/A systems, to the point where in Phases 2 and 3 property owners wouldn’t want to connect to sewer because I/A systems would be so cheap. This would affect cash flow, and he wonders if this is something to consider.
  - Dan Santos, Director, Department of Public Works, responds that property owners do not currently have the option to choose not to connect to municipal sewer. This may be an option in the future, but not currently.
  - Zee notes there are a lot of “what ifs” in John Lynch’s statement.

- Zee notes the Town has been successful so far in funding Phase 1 of the CWMP. He notes that the “runway” will get shorter and the town will need to lean more on borrowing unless there are other avenues that Mark is aware of. Is there any visibility on where the town may be looking in terms of additional funding sources or actions? He notes that, while he is a proponent of I/A systems, many of them are not ready for “primetime” and it may be years before the option becomes viable. The need to look at a Plan B is based on the potential for not having enough funding.
  - Mark responds that the town is constantly monitoring funding of the CWMP. The timeframe for discussing additional revenue sources is now. Everything committed to so far has had resources identified to make the loan payments, which amounts to over \$300 million. When projects slated for fiscal years 27-30 are added to this calculation, a potential problem does arise. Before additional borrowing is enacted, a conversation is needed about where the resources for repayment of loans will come from. The FY26 capital program was passed recently, and resources are available for it. A flow neutral policy was adopted recently which should make the town eligible for 0% interest on SRF loans. These will allow the town to likely move forward with projects anticipated for FY27, but after that an evaluation is needed.
- Zee notes the town has an excellent credit rating and asks if the rating agencies make note of potential future actions or possible lack of funding resources.
  - Mark responds that the conversations with credit rating agencies occur yearly. The conversation includes a discussion of the town’s 5-year plan for the entire capital program. They monitor outstanding debt, as opposed to debt capacity. The town can, at any time, have outstanding loans equal to 5% of the town’s equalized valuation, which is close to \$1 billion. The town currently has about \$165 million in outstanding debt. There are a couple more million that has been committed to. If the town continues on the current track, it will be a few more years before we reach half-a-billion-dollars in commitment. When that does occur, there would likely be a reassessment. He notes that, as with personal finances, the more loans that are added the less flexibility is available. This is the same case with the town, which is currently in a good spot. However, in time more of the budget could be going towards repaying loans. This would affect the bond rating, but the town is far away from that currently.
- Councilor Clark asks, if the low-interest loan gets funneled through the county program, doesn’t the funding source get replenished. Is it self-sustaining.
  - Mark responds that loans are not the same as a recurring revenue source such as new taxes. Loans are a way to finance construction costs but need to be paid back. There must be resources created to pay the loans back. The conversation at hand is about creating additional resources to do more construction projects and paying them back.

- Councilor Clark asks specifically about the Aquifund, is it self-sustaining because it is a loan and those loans get paid back after a certain amount of time.
  - Mark confirms that the loans are paid back to the Aquifund. The Aquifund then has to pay the State. That portion of the loan is 0%. The county uses the resources from the betterment to the property owner to pay back the state.
- Zee notes the county is the ‘look-through’ entity with the Aquifund. If the town were to create their own program, he asks to confirm that the town would be the “look-through” entity.
  - Mark confirms this is correct.
- Rob asks to confirm, if the town were to create their own program, there would be administrative costs associated with creating and managing its own entity, which the Aquifund already has in place.
  - Mark confirms this is correct. The Aquifund has a good infrastructure in place and could take on several more loans without an impact on staff. If the town were to take an internal approach, there would need to be loan staff in town, which is a duplication of efforts and likely does not make good financial sense.
- Scott asks if there is any precedent or benefit to consider a differential subsidy cost program for I/A systems. He uses an example of someone buying a new expensive house on the water and assumes the property owner would be able to afford the full cost of installing an I/A system. There is a discussion on implementing I/A systems within a certain distance to the water with the goal of improving the water. There may be more rationale for the town to finance this element.
  - Brian asks if Scott is referring to need-based property owners
  - Scott responds that there are a lot of different triggers such as new homes, upgrades, or expansions that would be easier than a time-based upgrade.
  - Mark responds that there is value in considering this and it would take some thought as to how to go about this without penalizing property owners, utilizing incentives based on certain criteria. This would all need some authorization to create a program which may have to be brought up through the state legislature.
- Zee notes a twist to this is that, if someone chooses to install an I/A for any reason, there is going to be an issue of sewer being installed in “X” years and there needing to be a determination of what to do. Currently there is a 6-month period to hookup. There should be a conversation to figure this out.
  - Rob notes that the town is mandated by MassDEP to hookup a certain number of properties within a timeframe to fix the estuaries. He also notes the financial aspect of needing the cashflow from betterments. Time was spent looking at the experience of implementing sewer in Stewart’s Creek, which was not the smoothest. This time around there are more stringent timeframes.

- Mark responds that opportunities for property owners to connect have been created, and it's important from an environmental standpoint to connect. Financially, the utility rate revenue is part of the financing plan for the entire program. If properties don't connect, there is no utility revenue.
- Zee asks how much flexibility exists in the plan to move pieces of the puzzle around, for example if an area is known to need sewers could we advance the building to utilize current funding? He notes certain areas being more difficult to sewer due to geography. How might this fit into a long-term plan?
  - Mark defers to the engineers in the room.
  - Rob responds that it depends on which sub-watershed the approach is in. Some watersheds have no option aside from sewer to achieve the goals. Some watersheds may have flexibility. The main "wait" now is seeing how I/A Systems perform. As the 5-year updates continue, the town will be in a better position to evaluate using them "instead of" as opposed to the current approach of "in addition to". At the end of the day, TMDLs must be achieved as outlined using the MEP model.

*Mark Milne, Director, Finance Division, left the meeting.*

#### **Selection of Options for Initiating I/A Program Recommendation**

Scott Horsley, Chair, notes a conversation with DPW staff and the chairs of the committee to begin formalizing the recommendation to present to the Town Council. It appears the recommendation will be brought before Town Council in October or November.

- Rob Steen, Assistant Director, Department of Public Works, asks Kris Clark, Town Council, when the Council is looking to schedule the recommendation discussion.
  - Councilor Clark responds she is uncertain but will bring it up at the next agenda setting meeting, scheduled for the following day.

Scott notes there has been a lot of good work to identify potential areas for implementation but is uncertain how to actually make the decision on which setback to select. There is no technical reason to select one distance over another. He notes that more is better, but there is benefit in getting systems that are closer to shore as they will have a quicker response. He notes the Board of Health is getting interested in regulating certain related policies.

- Rob asks to confirm that the Board of Health is anticipated to attend next month's committee meeting
  - Scott responds it is intended to have the Board of Health at the next meeting.
  - Rob notes that the Board of Health's recommendation of 100' can be implemented "tomorrow".



- Chris Gadd, Communications Assistant, Department of Public Works, clarifies that the 100' discussion from the Board of Health only relates to requested variances.
- Butch Roberts notes a concern that the current plan ignores the rest of the town who are not anticipated to receive sewer as part of the CWMP. There are approximately 12,000 households that will not be addressed in the 30-year plan. These houses will continue to put nutrients into the ponds.
  - Scott responds that the ponds are slightly different as they are impacted by phosphorous. The group of I/As being discussed by the committee are not designed to reduce phosphorous. We do need to address it, but there are two separate issues.
  - Butch responds this is not necessarily the case. If the installation of the best available I/A system were to occur for any reason, at least for now they are removing nitrogen. As phosphorous systems come online there would be a policy in place.

*Chris pulls up the map with setbacks overlaid, shown at a previous meeting.*

- Rob asks to clarify that Butch is suggesting ending the ability to replace a Title 5 System with a Title 5 System everywhere in the Town of Barnstable. The Title 5 System would be replaced when the system dies or is based on a set of triggers and be replaced by the best available technology as defined by the town.
  - Butch responds this is correct.
- Scott asks if there is map of the setbacks overlaid with the CWMP map
  - Griffin responds that the figure does not exist as it was overly complicated.

*Chris pulls up the 30 Year Phasing Plan map of the CWMP.*

- Councilor Clark notes she understands Butch's point and notes that her property in West Barnstable will not be sewered. However, there is also no incentive for residents not getting sewer to pay more for an I/A System. Instead of ordering an upgrade to an I/A System, she recommends beginning with incentivizing the upgrade.
  - Butch notes this is where some of the financing discussion comes into the picture.
- Councilor Clark notes a possible first step is an extra-low interest loan through the Barnstable County Aquifund.
  - Kelly Collopy, Communications Manager, Department of Public Works, notes several conversations she has had with the Aquifund. The loans for septic upgrades cannot be used if the property is not mandated to connect. There must be an upgrade.
- Scott asks if the town were to regulate upgrades, then the loans would be available.
  - Kelly confirms this is correct.

- Zee asks to confirm that it's not good enough that an upgrade is done because the drinking water well is 100 feet away from the septic system.
  - Kelly confirms this is correct.
  - Zee notes this is something the town should be able to mandate. This relates to the concept of "subsidize to equalize" which is like what Councilor Clark is discussing. There are several parts of the puzzle, including regulations and incentives. There is a potential that the Board of Health adopts a 660-gallon per acre regulation with an I/A system, which triggers an ADU by right or allows for an additional bedroom. If I/A systems can be incentivized, there will be an opportunity to learn more and identify additional policing that may be needed.
- Zee notes there is also a matter of "north side" residents not wanting to vote for overrides that primarily affect the "south side" residents.
  - Councilor Clark notes she heard that sentiment "loud and clear" when knocking on doors, with residents outside of Hyannis not wanting to pay for the sewer in Hyannis.
  - Zee notes that if everyone was getting something there may be an incentive.
- Rob notes this goes back to the Municipal Empowerment Act, which could create a dedicated funding resource for these sorts of incentives. It's likely not enough to do major actions but it could be enough for seed money to get the I/A implementation off the ground.
- Butch notes this should be considered and added in to the recommendations, instead of ignoring it.
  - Brian Hughes, Vice Chair, notes that it seems there will have to be a regulation in order for homeowners to qualify for Aquifund loans.
  - Kelly notes a regulation is also needed to qualify for the State Tax Credit.
- Scott asks if there are any recommendations for how to get closer to recommending one of the setback distances.
  - Bruce Walton responds that one way is to calculate the number of septic system failures each year and set that against how many properties the committee would want to evaluate for I/A Systems. The setback could then be selected off of that calculation.
  - Scott notes that when a system fails the yard has to be dug up to replace it, so the cost to upgrade to an I/A at that time is marginal. This seems to be an opportunity.
- Rob notes there appears to be two different discussions occurring. The first he refers to as the "Butch Camp" which is Title 5 Systems being replaced by I/A Systems townwide, especially in nitrogen sensitive watersheds. The other approach he refers to as the "Scott Camp" which is more focused on time-to-travel and wanting impacts faster, so mandate I/A systems within certain distances. There is a third idea, referred to as "Rob's Camp" which pertains to the Phase

3 areas and can be put on the backburner for now. These approaches do not appear to be in conflict with one another and are ways to look at the setback distances which at some point someone has to “just vote and guess”. The DPW is looking for guidance as they start to write recommendations for the committee’s approval and eventually the Town Council’s consideration. If the committee goes with the “Scott Camp”, a decision on numbers is needed to proceed with writing the recommendations.

- Tom Cambareri notes that within the “Scott Camp”, the 1,000-foot setback relates to the nitrogen-reduction strategy, and a further conversation could be had about a town subsidy. He notes a concern with the “Butch Camp” and the nexus of this approach. There are areas of town that have been zoned to protect wells, so what is the nexus for implementing I/A systems. It would be difficult to have all residents embrace this idea. There is an added complexity with certain parcels needing nitrogen reduction to achieve the permit regulations while others don’t. He can understand utilizing the 1,000-foot setback as it relates to time of travel and nitrogen removal.
- Zee asks if the committee can recommend a subsidy without going to the legislature.
  - Scott responds this is why he asked Mark Milne about this. He notes that Tisbury is requiring upgrades and there is no funding, residents just have to pay.
  - Rob notes this is the same approach with the upgrade to Title 5 Systems, with everyone having to upgrade and not getting a subsidy for it.
- Zee notes there is a complexity as the Phase 2 and 3 areas have not been overlaid on the setback map.
- Scott suggests using a 1,000-foot setback as it’s a nice, round number. He adds that it is outside of Phases 1 and 2 of the CWMP, which includes Phase 3 and areas not identified to receive sewer as part of the CWMP. Triggers for the upgrade should include new construction, expansion, and failure of the septic system as people will be spending money at that time regardless.
- Griffin points out the data on the map which includes the setbacks and parcels in each phase of the CWMP. There are 160 parcels identified in Phase 3 at a 1,000-foot setback. There are 251 parcels not identified in the CWMP at a 1,000-foot setback. This amounts to 411 parcels. He identifies the areas on the setback map that are identified in the CWMP.
- Scott asks what the current timeline is for Phase 2 of the CWMP.
  - Griffin responds we are approaching year 5 of Phase 1 of the CWMP, so Phase 2 is in 5 years, with the phase anticipated to take 10 years to complete.
- Scott notes it seems the town is committed to Phase 2 at this point, so it does not make a lot of sense to implement the I/A recommendation in that area, hence why he exempted Phases 1 and 2.

- Brian asks if a failed system in Phase 1 or 2 should be required to upgrade.
  - Scott notes that it is a good point that he is uncertain of the answer for. If sewer is coming in 5 years, should the property owner be made to spend the extra \$30,000?
  - Butch notes that whether the property is anticipated to receive sewer in 5 years is different to if it is receiving sewer in 15 years.
- Scott notes this is a complicated decision. He notes the approach on Long Island where they eventually decided that half the properties would be sewer and half would get I/A systems. At some point a decision is needed, and there is likely not a perfect reason for it. It is a policy decision more than anything.
    - Brian notes it is about the total load. Is the load at 2,000 feet twice as at 1,000 feet, or is it less density and therefore has less load?
    - Scott notes this policy is a starting point and can be amended.
- Rob asks to confirm that a time-based trigger is not something the committee would like to utilize, instead preferring a life/event trigger.
    - Scott confirms this is what he is trying to figure out. A time trigger could be included.
- Brian notes an approach where if the property is anticipated to receive sewer you don't have to upgrade to an I/A system, but if the system fails and the property owner upgrades to an I/A system they could get a grace period to connect.
    - Scott notes this is possible, but the issue then arises with funding as Mark Milne discussed earlier.
    - Rob notes the watershed permit will have distinct nitrogen removal targets at each phase, which are based on people connecting to sewer and delaying connections may result in missed targets.
    - Brian responds that this assumes the I/A systems are not pulling out much nitrogen.
    - Rob responds that this assumes the I/A system is not pulling out the same amount of nitrogen as the sewer would. Sewer gets the nitrogen down to 0. Whatever the difference between I/A systems and 0 mg/L would need to be evaluated by the Engineering Team to meet the balance and meet targets.
- Brian asks if the delta between I/A systems and sewer will change as the systems mature.
    - Rob responds that he is uncertain of the question, assuming Brian is referring to the age of the system.
- Brian clarifies his question pertains to technology advancing over time.
    - Rob responds he assumes that technology will improve over time. He notes there is a relevant conversation about what the town will be allowed to credit for nitrogen removal. The systems may be doing better or worse than what MassDEP says they are

performing at, but the calculations must be made by using the numbers provided by MassDEP. He notes that Zee's group is seeing effluent around 10 mg/L.

- Zee notes that the timeline is important, and the plan is adaptive anyway. It is worthy to build in a recommendation to continue studying systems as a plan B. There is a fulcrum between the technology changing and improving and the budget being a factor sooner than we think. He assumes there is a real conversation about funding by 2030.
- Rob notes that the committee will return in 5 years, and that it is built into the CWMP and the Watershed Permit. As the fulcrums mature, there will be another peak at them in 5 years. Putting policies in place now gives us the chance to see if ideas are good or bad at the next update and possibly modify them.
  - Griffin notes the discussion on what the I/A System is permitted for applies to when the systems are part of an "or" conversation, which is not what is currently the conversation.
  - Rob notes the "and" conversation is easy because any action is being done on top of the actions that already meet the requirements.
- Butch asks to clarify that the proposal from Scott about excluding Phases 1 and 2 is "grave" in addition to the CWMP so this conversation about future I/A systems is not currently being discussed.
  - Rob responds that is correct, and the conversation is about the possibilities in the future. He notes this is why he has been a proponent of an "and" approach with future opportunities to look at it.
- Bruce notes that Tisbury has had their regulations for I/A systems in place for approximately 4 years and have already made 2-3 changes since then. Changes do not have to wait until the 5-year update.
  - Rob responds that the 5-year update is a minimum.
- Scott notes an additional thought that most of the real estate value within 1,000 feet will be relatively higher. They will almost certainly get the \$18,000 tax credit. Many of them within the setback will be able to afford the marginal cost of installing an I/A system when they need to replace their Title 5 system.
  - Zee notes the tax credit only applies to full-time residents.
- Zee notes he likes doing something outside of Phases 1 and 2 and where upgrades are necessary. There should be an incentive added on, such as additional bedrooms or ADUs. With the incentives, many will install the system to achieve that bedroom or ADU.
  - Councilor Clark notes it will increase the resale value of the house.

- Tom asks to confirm that Scott is proposing an upgrade to I/A systems within 1,000 feet and outside of Phases 1 and 2 of the CWMP, and to confirm those phases correspond to the colors green and red on the CWMP map.
  - Rob responds that it is correct and the area that the I/A upgrade would apply to is the yellow and white areas.
- Zee adds that there should also be a recommendation along the “subsidize to equalize” path for those outside of the CWMP. Even if it is incentivizing ADUs, there is a housing crisis so that will be a benefit. This addresses the housing part of the situation while allowing the town to learn more about I/A systems.
- Scott asks if Zee’s suggestion be in addition to his recommendation, and the ADU apply throughout town.
  - Zee responds he believes it can be anywhere, so long as the Board of Health adopts the 660 gallon per acre policy, which seems is the way the Board is heading. This may not be well known and could be incentivized by the Town or advertised through the Housing Assistance Corporation (HAC).
- Councilor Clark asks how the ADU incentive interacts with the Flow Neutral policy.
  - Griffin responds that the Flow Neutral policy doesn’t really matter in the conversation with I/A systems.
- Councilor Clark notes that a person in her neighborhood wants to install an I/A system which will cost \$50,000-\$60,000. The town’s sewer assessment is \$10,000. Those receiving sewer have gotten what is essentially a subsidy from the town, which is not fair to those not receiving sewer.
  - Scott notes that because the triggers would be homeowner-initiated, it is their cost and it’s part of the cost of doing an addition or something similar. However, he believes there should be a subsidy when the town mandates an upgrade to I/A systems. The mandated upgrade contributes to a public benefit, whereas the construction of an addition is not a benefit to the public.
- Tom asks to clarify that the current calculations are done using a load of 440 gallons per acre. With an I/A system this would get increased to 660 gallons per acre.
  - Scott confirms this is correct.
- Tom continues and notes he thought the load was limited to 330 gallons per acre, not 440.
  - Griffin responds that Title 5 flow is restricted to 330 gallons per acre.
  - After some discussion, it is clarified that the 440 Gallons is a town policy, which then was used for estuary protection.
    - Scott notes the 440 gallons per day is calculated for drinking water, with no math for proposing to estuaries.

- Scott notes he likes Zee’s idea of incentivizing affordable housing.
  - Zee notes it goes back to some of the math, including load versus flow.
- Tom Cambareri requests data on the load from the proposed recommendation.
  - Griffin utilizes the displayed map which includes the requested data. He notes that there is a total of 1,145 properties within the 1,000-foot setback. 776 are identified to receive sewer in the CWMP. 251 are not identified to receive sewer.
- Scott asks what the total number of properties are for this recommendation.
  - Griffin identifies the relevant data, below.
  - Amber clarifies that the 1,000-foot row does not include the data from the 500-foot row, so that data needs to be combined.
    - Phase 3 @ 500 Feet: 157
    - Non-CWMP @ 500 feet: 473
    - Phase 3 @ 1,000 Feet: 160
    - Non-CWMP @ 1,000 Feet: 251
    - TOTAL: 1,041 properties
- Scott adds that a consideration could be all properties outside of Phases 1 and 2, and a regulation over a period of time where it must be done, but those who trigger the upgrades do it right away.
  - Rob notes the generally accepted design life of septic systems is 20 years.
  - Scott notes disagreement with the design life of 20 years.
  - Rob continues that if the time period for all upgrades is set at 20 years, it is likely that the majority of septic systems will naturally need to be replaced.
- Brian Hughes asks if 20 years will be sufficient to reduce the amount the load of what is required to be removed.
  - Rob responds that adding anything on top of the sewer will reduce the load to be removed. Because the I/A discussion is an “and” conversation, any addition will be above what is required.
- Butch asks where the nitrogen reduction is being monitored at, asking as an example how a system in West Barnstable would show impact.
  - Amber responds that the DPW conducts water quality monitoring in Barnstable Harbor and across town. She expands the question to ask about the credit received from I/A systems showing a positive impact to waterbodies.
  - Rob responds that the town does not get any credit for the monitoring results, other than being able to see the data as it relates to the health of the waterbody. There is no credit, but it is still a good thing to do.

- Tom asks to confirm that the 1,000-foot, non-CWMP data applies to only nitrogen sensitive areas and would be in addition to the CWMP, therefore meaning the nitrogen could be removed sooner.
  - Rob confirms this is correct and notes the plan has always been predicated on an adaptive management approach. He notes there are a lot of different actions such as the bogs, pond dredging, aquaculture, and stormwater management, and all get monitored for potentially future adaptive management strategies. He notes that the sampling the regulations are built on was done 20 years ago. There is likely nitrogen from developments that are still moving south through the watershed, not yet being at the estuary. Doing additional actions creates a safety buffer.
- Butch repeats his concern that most properties not being addressed by the CWMP are not included in this discussion.
  - Zee notes his agreement but suggests a staged approach of using 1,000-foot. He assumes 3-5% of properties in the area will be upgraded every year, over time it adds up. It may also be worthy of the implications of the math as an “and” to the CWMP, potentially creating a “minus” on the other side. If we can advertise ADUs and additional bedrooms, that is a win that won’t cost the town anything. There could be a regulation around the ponds based on setbacks to address phosphorous.
  - Brian notes we can’t specify a number yet
  - Rob notes there is not a phosphorous removal I/A system yet. Nitrogen removal I/A systems are very close. Within the next 5-year period there will likely be a conversation about phosphorous removal.
- Scott asks if there are any other thoughts before moving on to the next agenda item, noting the desire to formalize the recommendation at a later meeting.
  - Brian notes the 1,000-foot setback seems to be a default option and nobody can think of a good enough reason to do more.
  - Councilor Clark notes there may be reasons discovered in the next 5-year review.
  - Scott notes the 1,000-foot setback is generally a 3-year time-to-travel so there should be results by the next review.
- Rob asks what Scott would like the DPW to do going forward, suggesting to have the DPW craft a recommendation and bring it to the committee for review.
  - Scott agrees with this approach.
  - Butch requests that the recommendations include the town working on “the pond thing”, by way of incentivizing upgrades town-wide.
- Rob asks, in regard to the incentives, for people supplementing their existing septic system, not replacing it entirely, there is a potential for the town to contract with a concrete manufacturer to



create the tanks, similar to the approach with grinder pumps. The property owner would ultimately be responsible for the tank once delivered, but the town could provide the first tank. Is this something the committee would be interested in?

- Zee asks how much the concrete tank would cost
  - Various additional questions were asked including whether this would include the equipment, the difference between the cost of the tank and the equipment, and whether SRF financing could be utilized to accomplish this.
  - Zee notes there is additional information to find out, especially from SRF, and the existing systems are not ready for “primetime” at the scale of hundreds and thousands.
- Scott asks if there is a way to make a bulk purchase
  - Rob responds this is the thinking behind the approach. It would go out to bid and presumably get the lowest price.
- Rob notes an additional incentive seen in other communities where properties not anticipated to receive sewer will have their septic system pumped for free going forward.
  - Zee notes the conversation on bulk purchase for any reason is important. The plan covers a large area. If the town is working with a specific vendor, it makes a big difference.
- Councilor Clark notes that math should be done to evaluate these proposals of ADUs and the impact on Flow Neutral, ensuring we don’t potentially violate it.
  - Griffin responds that the Flow Neutral policy is exclusively related to sewer and won’t factor in.

### **Discussion on Concerns of John Lynch Regarding Grinder Pumps**

Scott Horsley, Chair, invites John Lynch, Citizen, to express his concerns regarding grinder pumps. John begins by thanking the committee for the time to speak. He provides some personal history, noting that he lived in Chatham for 40 years, then lived in Arizona, then moved back to Centerville in 2023. As he read up on the CWMP, he learned he would need a grinder pump to connect to sewer. He notes that when the sewers were promoted throughout the Cape, the costs mentioned were the sewer assessment and the sewer connection cost. When towns decided to use gravity systems it created a subset of property owners who would need an extra process and cost to comply. After various conversations with others, he believes the cost of the grinder pumps should be spread throughout the whole system. He notes realistically this will not happen. When the need for grinder pumps was discussed, towns decided to give the first grinder pump to the property owner, which he connects to Marie Antoinette and “let them eat cake”. The cost for the pump also includes extra utility cost, servicing, and other items. He asks the committee to consider the following items for recommendation:

Warranty-Assuming the same provider is used for grinder pumps throughout town, negotiate with the manufacturer to increase the warranty period

Servicing-The town should contract with a select group of contractors to provide uniformity as service becomes necessary.

Stipend-Provide a stipend to property owners needing a grinder pump to offset the cost of upgrading electrical systems to enable the connection of the grinder pump. Towns such as Chatham and Harwich discussed a \$2,000 stipend.

John concludes by reiterating there are more costs with grinder pumps than just the pump. There are unintended consequences with insurance claims if power to the pump is lost. The promotion process of sewers focused on the positives and neglected to address the intricacies. He believes the town owes more to the properties needing grinder pumps.

- Scott asks when a grinder pump is necessary
  - Griffin Beaudoin, Town Engineer, Department of Public Works, responds they are needed for low-pressure sewers and in situations when it is necessary to overcome gravity.
  - Rob Steen, Assistant Director, Department of Public Works, notes they are needed when a home is located at a level where the sewer is unable to flow by gravity.
- Scott asks what percentage of properties will need a grinder pump
  - Griffin responds that it depends on the location. It is highly variable on a case-by-case and project-by-project basis. He notes the Strawberry Hill Road Sewer Expansion Project required 10-15 grinder pumps.
- Zee Crocker notes it is an interesting discussion. The entire CWMP has approximately 80 pump stations in the current design. It would be interesting to look at approaches with only gravity or using a smaller point. It is a math question. There can be a checkerboard system that uses multiple approaches.
  - Griffin notes that every project that is designed begins with a schematic design that is used to identify areas that will be unable to be gravity sewer. The next step is to identify potential areas for municipal pump stations. There is generally an issue with ownership of the land, and there are technical and physical limitations throughout. Every project tries to maximize gravity.
- Zee wonders if this could be looked at differently in the future, possibly adding in I/A septic systems. He wonders how it may look both technically and financially.
  - Rob notes this may not solve the complaint, which is primarily about cost. Instead of the cost of a grinder pump, the complaint would be about the cost of an I/A system.

- Zee responds that with the State Tax Credit and the cost of the I/A it won't be too far from the cost of a grinder pump.
- Tom Cambareri notes this is an important topic. So far, the sewer has been installed in relatively flat areas. As we head into Phase 2 there will be more complicated topography. He notes his property is in a hilly area and pushes to be as innovative as possible with siting a pump station. There needs to be more public education on grinder pumps.
  - Rob notes there are 200 grinder pumps in town that existed before the CWMP. Traditionally, the town purchased the first grinder pump. This has never been formalized into a policy. One of the requests of this committee is looking into formalizing this approach.
- Scott notes there are people who say you can't spend public money on private property.
  - Rob responds the town donates the pump to those identified as needing it.
  - Griffin notes the town can buy equipment, but it can't be financed through SRF.
- Scott asks to confirm that the issue is about equity, with those needing a grinder pump need it for a public benefit but are paying for it privately.
  - Brian Hughes, Vice Chair, notes he has one in his house to prevent sewage from backing up. His neighbor does not have the same problem.
  - Tom notes there is a preference for a gravity system as it reduced the O&M cost and issues with power.
  - Rob notes his house one of each. The old part has gravity, while the new part of the house has a grinder pump.
- Scott asks what triggered the need to install a grinder pump and if it was paid for privately.
  - Rob responds that it was installed prior to him purchasing the home, but it was done with private funds
- Scott notes this brings the conversation back to that of I/A systems where someone is building an addition or similar, it is a private matter.
  - Dan Santos, Director, Department of Public Works, notes that it's not too different from people who have an extreme cost to connect to sewer. Property owners with huge yards needing hundreds of feet of pipe pay a lot more than the property owner who just needs to run 20 feet. It is an artifact of their home and topography. Everyone has things that cost more than their neighbors.
- Glenn Snell notes he has a grinder pump at his house to comply with regulations for duplexes and needing 24-hour storage. He has had this for 25 years and reports no problems and negligible electrical costs.
  - John responds he hasn't seen a lot of information on that.

- Glenn responds that the cost won't be noticed.
- John notes that, regarding the sewer connection to private property, nothing was mentioned until the publication of the Homeowner's Sewer Connection Guide. This is the first thing he has seen about grinder pumps specifically.
  - Kelly Collopy, Communications Manager Department of Public Works, notes this is not entirely true. She has sent John the documentation available on the Town website, which she acknowledges is not the easiest to navigate. The documents pertain to O&M costs, and maintenance.
  - John responds that the documents talk in generalities about everyone who needs to connect to sewer.
  - Kelly responds there is specific documentation on the website about the eOne grinder pumps currently used by the town.
- Scott thanks John for bringing this to the committee's attention. He opens the possibility for the discussion to be brought back for further discussion. At this time, he is uncertain if there is anything else to say about it.
  - John reiterates his desire for service contracts and extended warranties.
  - Dan responds these are all policy decisions to be discussed. If there are more costs involved, who will pay for it?
- Brian asks why the town can't bulk purchase pumps and get a bulk discount.
  - Griffin responds that the town buys the first pump for the property owner.
  - Brian clarifies this would be for subsequent grinder pumps.

#### **Public Comment/Questions**

No matters were heard.

#### **Matters Not Reasonably Anticipated by the Chair**

Brian Hughes, Vice Chair, notes that additional alternatives such as Cranberry Bog Restoration should be brought to the attention of the Town Council. Scott Horsley, Chair, notes the committee will be including this in its report.

#### **Adjournment**

Scott Horsley, Chair, entertains a motion to adjourn. Councilor Clark moves to adjourn the meeting. Tom Cambareri seconds. The meeting is adjourned at 6:52 PM.

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

# Addendum 1: Proposed Meeting Topics

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

- 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 (Held March 31, 2025)
  - Discussion with Board of Health/Health Division on relevant policies
    - Tom McKean, Director, Health Division
    - Tom Lee, Chair, Board of Health
- Meeting #7 (Held April 22, 2025)
  - Discussion of the view of the CWMP through the lens of the Local Comprehensive Plan (LCP)
    - James Kupfer, Director, Planning Board
- Meeting #8 (Held May 19, 2025)
  - Formulation of recommendations to be made to Town Council
- Meeting #9 (Held on June 16, 2025)
  - Continuation of Formulation of Recommendations
- Meeting #10 (Held on July 14, 2025)
  - Continuation of Formulation of Recommendations
- Meeting #11 (Held on August 12, 2025)
  - Continuation of Formulation of Recommendations
- Meeting #12 (Scheduled for September 15, 2025)
  - Continuation of Formulation of 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 sewerage 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.