

Memo to: Truro Board of Health

From: Emily Beebe, Truro Health & Conservation Agent

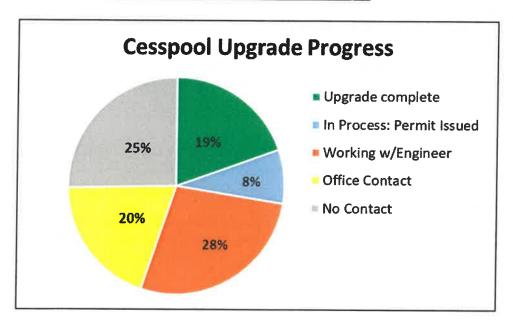
Date: November 14, 2022

Re: Water Resources Update: November 2022

Regarding cesspool upgrades to Title 5

To date, 27% of the properties with cesspools have either completed the upgrade process or have permits issued to do so. 28% are working with engineers and 20% have contacted our office with questions but may not <u>yet</u> be under contract with an Engineer/designer.

Our current challenge is making direct contact with the 44 homeowners who we have not yet heard from, so that we may assist them in their efforts to comply.



FINANCING:

<u>The Barnstable County Health department</u> has secured grant funding to enhance their septic loan program. They have not yet updated their program and anticipate offering interest rates from 0-5% based on income eligibility.

The Truro regional Housing Rehabilitation grant Program is now being administered by TRI, the Resource Inc. This program provides income-based assistance for homeowners needing to make critical home repairs including septic system upgrades. Call 508-694-6521 with questions, or go to their website: https://www.theresource.org/truroeasthamprovincetown

Regarding Administrative Consent Orders (ACO's) Revisions to the Board of Health regulations will be considered at their meeting of December 6. The revised local regulations, if adopted, would incorporate the use of ACO's to form legal agreements with property owners regarding the specific circumstances about their septic upgrade process. Once an understanding with a property owner has been forged, it will be discussed at a hearing with the Board of Health. Some ACO's will include establishing an escrow account, but all of them will include a compliance schedule that is specific and unique to each property.

Regarding the Massachusetts Estuaries project (MEP)

We have no additional information about the MEP since our October report was submitted but we continue to reach out.

Regarding stormwater management- We have no additional information at this time.

Regarding Pond water quality:

A use restriction and Public Health advisory for Snow Pond was issued on 10/26 and 11/3 by the Cape Cod National Seashore, and it was lifted on November 10.

Regarding Private well water quality:

Water testing kits are available at the Truro Health Department. Please call for a kit on Mondays, as the building is closed to the public on that day. A courier from Barnstable County lab picks up water samples on Tuesday and Thursday mornings each week at the Wellfleet Health Department at 220 West Main Street in Wellfleet. Please refer to the Truro Health department web page for more information on water testing your private well.

Regarding MA DOT:

The Outer Cape Conservation Agents are discussing a coordinated approach to engage the DOT about stormwater management.

Water Resources discussion with Provincetown:

The Select Board's of both Truro and Provincetown met on October 24 in Provincetown to hear an update about the Municipal Water Supply, the activities of the Municipal Water department, and future joint efforts regarding Water Resource Management. <u>Attachments</u>: 9-26-2022 Provincetown Water Superintendent's report; 10-17-2022 update from Truro DPW director regarding the water storage tank; an article from "Truro Talks", from Truro Town Manager Darrin Tangeman.

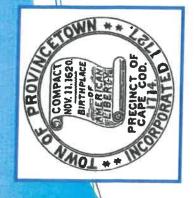
DEPARTMENT OF PUBLIC WORKS – WATER DEPARTMENT TOWN OF PROVINCETOWN

Town of Provincetown & Truro, Massachusetts Monday, October 24th, 2022 Select Board Joint Meeting









Memo

To: Alex Morse, Town Manager

From: Cody J. Salisbury, Water Superintendent

CC: Dan Riviello, Asst. Town Manager; David Gardner, Asst. Town Manager; Jim Vincent, DPW Director

Date: September 26, 2022

Re: Water Department IMA w/ Truro, Future Water Needs

Provincetown Water Department operates three wellfields within the Town of Truro, the most recent addition being the North Union Field well site located at 247 Old King's Highway in North Truro (placed in service 2013). The Inter-Municipal Agreement (IMA) between Provincetown and Truro was updated and executed in 2010, during which time Provincetown was working to finalize the plans for the North Union Field (NUF) site. Once NUF was placed in service in 2013, Provincetown Water Department was finally able to meet peak demands with all of our own sources for the first time in forty years. Previously, Provincetown operated under a Declaration of Water Supply Emergency and was forced to pump water from the former North Truro Air Force Base (NTAFB) wells within the National Seashore. The IMA included the addition of three elected members on the Water & Sewer Board from the Town of Truro. Further, the current IMA agrees that Provincetown will not increase the area within the Town of Truro for well sites beyond what was existing in December 1981 (with the exception of NUF). It further restricts Provincetown from constructing new wells within the present sites without seeking prior approval from Truro.

In 2019, Provincetown approved an extension of the existing distribution system in Truro in order to serve an affordable housing project, effectively known as the "Cloverleaf" project. Unfortunately litigation has delayed the project and the water main remains unused for domestic purposes, although fire protection from hydrants is available. Within the last year, Truro has engaged a consulting engineer to evaluate the feasibility of further extending a water main to serve Pond Road and Twine Field Road in North Truro. The Water Department has cooperated with Truro's consulting engineers by providing water pressure data and existing pipe sizing in the area; however we have instructed that in order to serve other areas of North Truro it is necessary to construct a water storage facility (i.e. tank) to rectify deficient fire flows and provide additional storage capacity.

Also in 2019, the Town of Truro finalized the purchase of a large parcel of land, approximately 60 acres, that directly abuts the NUF well site (formerly known as the Walsh property). The NUF site is a 99-year lease arrangement with the Town of Truro, with the exception of Provincetown owning a ~6.5 acre parcel encompassing a portion of the Zone I

wellhead protection area. Provincetown owns this portion because it was previously private land, and MassDEP regulations require the water supplier to own the Zone 1 area; the remainder of the Zone I is owned by the Town of Truro and was acceptable as it was not privately held. Truro has formed a thirteen member committee in order to evaluate the future use of this parcel, with affordable housing development a primary goal.

The former Walsh property is an outstanding site for water supply wells. It is surrounded by limited development and also abuts National Seashore property. The site is large enough to provide complete Zone I protection within the parcel, for multiple wells, a very difficult thing to achieve. The groundwater in the area is excellent, it is located at the peak location of the Pamet lens. Any future development on the site in close proximity to the existing NUF wells could be detrimental to long term water quality. I strongly believe any development for housing purposes should be located close to the Route 6 corridor, leaving the vast majority of the parcel for watershed protection and future water supply purposes. This site also provides the possibility of constructing a water storage facility, as not only is the ground elevation of the property a viable option, but the remoteness of the site offers the ability for a tank to be virtually unseen.

Regarding capital improvements within Truro, the current IMA states (page 3, paragraph 4) "The town of Provincetown further agrees to obtain the permission of the Town of Truro for any capital improvements to the Provincetown Water System in Truro. Such capital improvements must be mutually agreed upon by the Town of Truro Board of Selectmen and the Town of Provincetown Board of Selectmen before any implementation. In consideration of Truro's agreement to lease to Provincetown the land identified in Section 2 of this agreement, the Town of Truro shall not be responsible for any past or future capital improvements incurred in the development of the Provincetown Water System." The current IMA does not explicitly outline cost responsibility for future expansion of the current water system in order to serve additional ratepayers in Truro. Truro is investigating probable costs associated with a storage facility as well as expanding the current distribution in Truro in order to serve the areas previously mentioned, with the intention to fund these projects, I assume, by their taxpayers. However, long term questions remain, such as who retains ownership of the asset(s)? What is the long term outlook for demand/expansion in Truro? Is it feasible to serve the needs of both communities with the current supply capacity?

Provincetown Water Department is currently working with our consulting engineers of record, Environmental Partners (EP), to formulate a water demand forecast, which is expected to be completed within 4-6 months. However, this is specifically targeting the areas served in Provincetown as several development projects are in the queue, and several vacant and underdeveloped parcels remain. The demand analysis will provide data related to how much more development can occur within the limitations of our remaining withdrawal and production capacity, while still providing a reasonable "buffer". In order to serve the future requirements of both communities, planning for future supply availability needs to begin now, as new source investigation and planning takes several years and significant funding.

As conversations continue regarding expanding the area Provincetown Water Department currently serves, at a minimum the IMA likely needs to be evaluated and revised. Long term, perhaps the structure of the Department as a whole will require evaluation, as to whether it remains under municipal operation with three elected board members from Truro (Water & Sewer Board), or if a district operation is more equitable to serve the future requirements of both communities.

In conclusion, the Town of Truro has an appetite to expand the current system arrangement in North Truro in order to serve residents of the Town and support their affordable housing needs. Provincetown continues to experience growth through condominium conversions and new housing projects, coupled with a town wide sewer expansion project that may allow further development that could not be realized previously. All of the above continues to add demand on the water system, particularly in the peak-season when usage is the highest. Since the addition of NUF in 2013, Provincetown Water Department has not been required to operate under a Declaration of Water Supply Emergency and operate the former NTAFB wells. The water demand analysis project which is currently underway is expected to provide data regarding how much growth is sustainable under the current water withdrawal permit and peak-season pumping capabilities. The former Walsh property that the Town of Truro acquired is a prime site for watershed protection and future water supply that has the potential to provide the future needs of both communities. As a stakeholder in the future use of the property, Provincetown Water Department deeply encourages a large portion be protected from development in order to protect groundwater and secure a future source if needed.



TOWN OF TRURO Department of Public Works P.O. Box 2030, Truro MA 02666 Tel: 508-349-2140

October 17, 2022

RE: Water Storage Tank

The Town contracted with Horsley Witten to conduct a water storage tank site suitability analysis. As part of the study Horsley Witten reviewed the WaterCAD model provided by the Town and other information related to the proposed water storage tank provided by the Provincetown Water Department. The model related to the water demands, fire flow and system pressure will be reviewed, and Horsley Witten will evaluate the Walsh parcel as a possible site for a storage tank and compare it with the previous recommended site located at 344 Route 6. The initial findings will be discussed with the Town before finalizing the study. Horsley Witten will also check the storage tank sizing requirements and make a recommendation with a probable cost estimate. The water tank modeling work should be in early December 2022.

Sincerely,
Jarrod Cabral,
Director
Department of Public Works



From the Desk of the Town Manager

Town Manager, Darrin Tangeman

The Town of Truro Select Board and Administration conducted their annual joint meeting with the Provincetown Select Board, Administration, and Water Superintendent on October 24, 2022, at Provincetown Town Hall to discuss water and future planning and development. This meeting was intended to discuss the annual water department report that included average annual daily usage, water production, and demand trends.

A key element of this discussion was related to future projected growth in both Provincetown and Truro and whether the current water production capacity of 850,000 gallons and average daily use at 700,000 gallons per day will be able to meet future demand.

As part of this discussion, Provincetown is predicting as many as 1,000 new units over the next 15 years and Truro is initially projecting between 200-300 new units over the next 15 years, with the Walsh property and other town-owned lands in play. As a result, the Town of Truro will seek to include itself in Provincetown's water demand analysis that is underway so that a more holistic approach can be taken with both towns.

Based on initial analysis, we are already seeing development projections tipping the scales of future water production, so we need to begin immediate discussions on future well expansion, which can take as much as 5 years to achieve.

We are very pleased with the cooperation and collaboration both towns are experiencing on this very critical issue and there is no doubt that both towns are sensitive to the production limitations and future quality of our current water supply. Truro's experienced and respected water resource consultant, Scott Horsley, is examining both water quality issues and comprehensive wastewater management planning for the town. He has also peer-reviewed a recent citizen-funded water resource report on future water quality and capacity.

Mr. Horsley makes a strong case that it is possible to provide for both housing development and the long-term protection of public drinking water of the Walsh property with careful planning and design. He asserts that 200 units on Walsh property is very feasible and safe with the implementation of stringent land use controls and appropriate wastewater treatment technology.

Possible methods to achieve these 200 units would be to include the development of a cluster/neighborhood wastewater treatment facility that would result in a net water quality improvement over the existing condition. This would be achieved through the collection of

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untreated wastewater sources within the Zone 2 protection area and including it within this wastewater treatment facility. Mr. Horsley's analysis and modeling indicate this could result in a net reduction of nitrogen loading within the Zone 2 area and a net water quality benefit and enhanced protection for the public water supply.

We look forward to jointly working with Provincetown to safely and responsibly secure adequate water production capacity, protect the quality of the water supply, and comprehensively address our wastewater management requirements over the next year.

Sincerely,

Darrin K. Tangeman, ICMA-COM Town Manager

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