

Land Purchase for Future Relocation of WWTF

Scientists around the globe have been sounding the alarm that extreme weather conditions have intensified over the past several years. Record heat waves and drought conditions are more frequent and widespread. Storm systems including wind, precipitation and storm surge are more intense. Tornadoes in Maine are becoming more frequent. The main beach in Ogunquit by the parking lot disappears at high tide.

The current Waste Water Treatment Facility (WWTF) is situated on a peninsula between the Ogunquit River and the Atlantic Ocean. The Ogunquit Sewer District's (OSD) Board and engineers saw the need to evaluate our potential risk and begin preparing for sea level rise and climate change. We performed two comprehensive studies in the past several years. The first study completed in 2012, gave us an overall guideline for planning and a time frame for when the Waste Water Treatment Facility (WWTF) would likely become at risk of inundation during a 100 year storm event. Our second study completed in 2014, reviewed the District's options for relocating the WWTF and the cost associated with these options as well as suggested guidelines for implementation (see page 4 for Implementation Timeline).

One option considered was to regionalize with Wells Sanitary District and abandon our current plant. This option would potentially save the District money for a number of years, but we would then be dependent on Wells Sanitary to set the rates for treating and disposing of Ogunquit's waste water. In addition, there is only a 2 foot elevation difference between the Wells and Ogunquit facilities, which means Wells Sanitary could have similar challenges with sea level rise and may also be faced with relocation in the future.

The Board believed that a more viable option would be to purchase a parcel of land, build a new WWTF and relocate. The timing of this relocation is dependent on how fast the sea level will rise. Our sea level rise study indicated that our current location may be at risk sometime after the year 2050. Steps would need to be taken to begin the process to prepare to relocate the WWTF.

- Suitable land would need to be purchased in the near future, while land is still available in Ogunquit.
- We would need to begin setting money aside from rate payers each year to offset the cost of relocating the WWTF, which is currently estimated to cost 30 million dollars.
- Several OSD owned pump stations that could be affected by storm surge long before the WWTF are at risk, and would need to be protected.
- Upgrade mechanical and electrical equipment that has reached its useful life. The last major upgrade to the WWTF was done 26 years ago and most of the equipment has run 24/7, which is a testament to OSD's preventive maintenance program. The current upgrade which began in

October of 2018 and is nearing completion, focused on moving electrical gear and controls to a higher location, replacing pumps and upgrading to the latest computerized equipment controls and alarming. These upgrades are a critical part of OSD's adaptation plans to protect our ability to maintain reliable operations in response to rising sea level and potential storm surges.

In 2017, with a list of potential properties in Ogunquit provided by our engineers, we began the search for suitable land that would meet all of the important qualifications: location, size, proximately to water & electricity, wetlands and vernal pools. Several properties were considered during this process. It soon became clear that appropriate buffering was an important part of selecting a suitable site for future relocation of the plant.

During our last Public Information Meeting in February of 2019, the Board informed the public that our search was focused in the area between the new highway garage and the Town of Ogunquit Transfer Station. During the engineering review process, a 10 acre site was reviewed, which had both an intermittent stream and vernal pool but did not have sufficient area to allow adequate buffer. Our engineers recommended pursuing additional space at bordering lots.

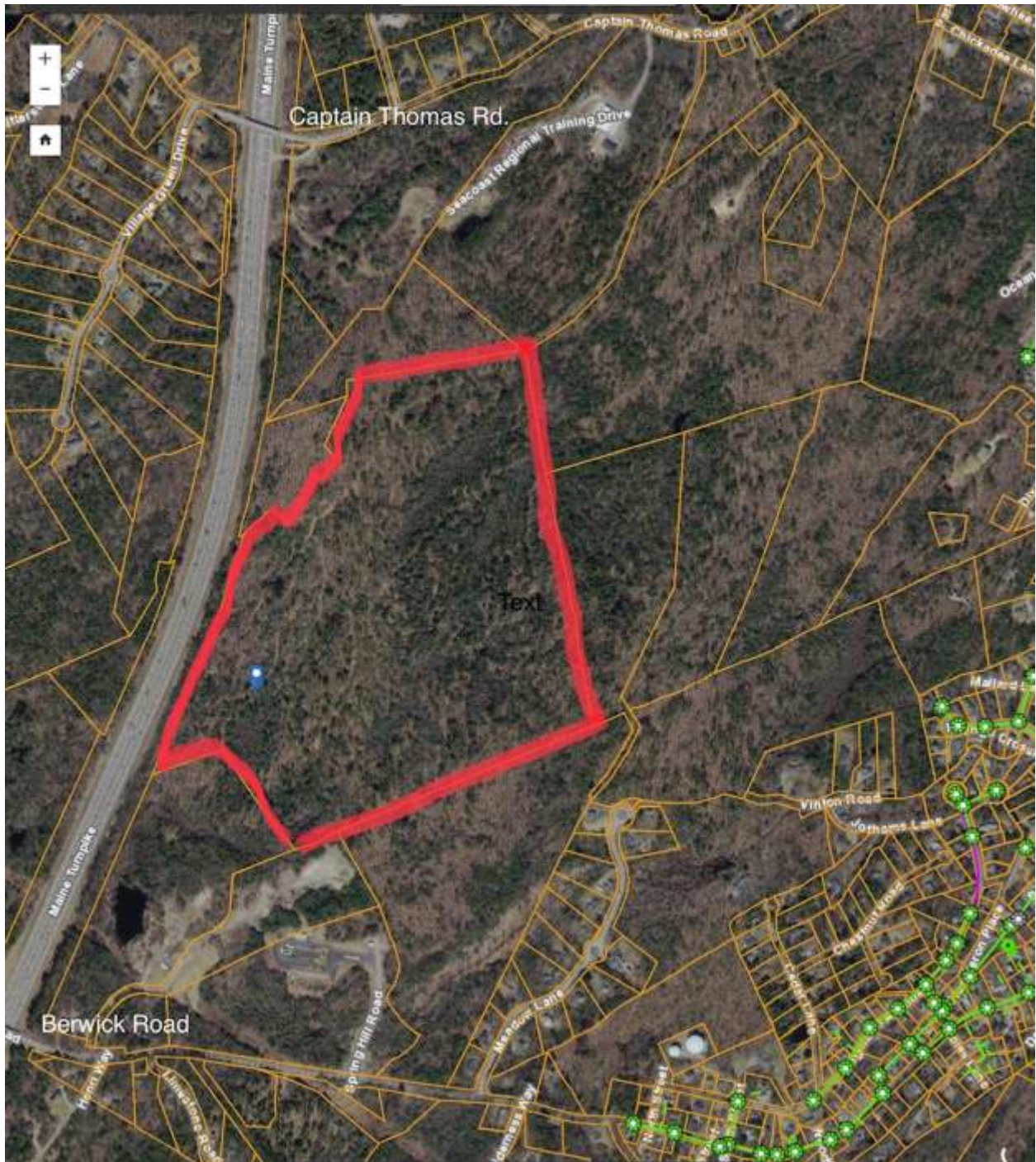
The Board then reviewed a 93 acre parcel, which had access to both Captain Thomas Road and potential access to Berwick Road. One important benefit to this property included access to our existing WWTF, which would be needed for piping wastewater to the site and connecting to our existing ocean outfall. Additionally, we could access public water service and three phase power from the Berwick Road area.

The Board of Trustees diligently reviewed all options and alternatives before making this very important decision. They have selected what they believe to be the best course of action to maintain a reliable and cost effective operation presently, while making the eventual potential relocation of our WWTF financially manageable.

On May 15, 2020, OSD officially purchased the 93 acre property, located on Map 19, Block 9, bordering interstate 95 (see map of property location outlined in red on page 3) with more than sufficient buffering area for the future wastewater needs of Ogunquit.

The future plans for the property is to clear a small area of trees for storage of critical equipment such as generators, and possibly build a garage. Due to the current pandemic, no work will take place for a year or so. This property will be held onto by OSD, in the event that the WWTF needs to be relocated due to sea level rise and climate change.

The property that was purchased is outlined in red below.



Implementation Timeline from 2014 Report

	Completed	2013-2014	2015-2016	2017-2018	2019-2020	2021-2022	2023-2024	2025-2026	2029-2030	2031-2032	2033-2034	2035-2036	2037-2038	2039-2040	2041-2042
Identify planning and implementation grants	✓	X													
Evaluate regionalization alternative with Wells Sanitary District	✓	X													
Establish a WWTF "investment cap"	✓	X													
Proceed with pump station 1 upgrade	✓		X	X											
Proceed with targeted WWTF upgrades	✓		X	X											
Continue planning for WWTF and pump station 1 relocation			X												
Evaluate impacts to user rates and reserve accounts	✓	X	X												
Perform infiltration/inflow studies		X	X	X											
Implement infiltration/inflow reduction projects Started			X	X	X										
Perform detailed wastewater facilities study Started							X	X	X	X					
Collaborate with Town of OGT on beach nourishment program		X		X		X		X		X					
Decide whether to regionalize with Wells Sanitary District	✓		X	X											
Purchase land for WWTF and pump station 1 relocation (for WWTF)	✓			X	X										
Relocate WWTF and pump station 1											X	X	X	X	X
New Item Flood mitigation at WWTF and pump station 1	✓														

X Suggested time frame
 ✓ Items Completed