

TOWN GREEN July 2024

Discussion about Truro's future growth, particularly the location and extent of new housing, raises essential questions about the environmental impact of development. As the soon-to-be-appointed members of the Ad Hoc Walsh Property Committee (AHWPC) begin their work, they—and all Truro residents—must answer a key question: Can the Walsh Property support a major housing development and continue to protect the pristine community water supply on the property? At the Special Town Meeting in May, voters approved the Walsh Property Community Planning Committee (WPCPC) Recommendation to develop 28.5 acres of the 69-acre property with up to 160 units of year-round housing. At the same time, the WPCPC recommended protecting water supplies for future generations. At risk would be the North Union Field (NUF) wells in the northeast corner of the property, and additional wells which will certainly be needed in the future.

Currently, the NUF wells provide pristine water for Provincetown and parts of North Truro, Beach Point, the Truro Public Safety facility, and Truro Central School. In 2010, Truro and Provincetown signed an [Inter-Municipal Water Agreement](#) (IMA) in which Truro agreed to lease North Union Field to Provincetown for 99 years. After the Massachusetts Department of Environmental Protection (DEP) granted the initial permit for Provincetown in 2012, the North Union Field wells began operating in 2013; the [permit](#) was renewed in 2017, and extends to 2030, allowing Provincetown to pump an annual average rate of 850,000 gallons of water a day, with a daily maximum volume of 734,000 gallons. But with planned growth in both Provincetown and Truro, more water resources will need to come online. In the 2018 Cape Cod Commission Regional Policy Plan, the Walsh Property was designated as a Potential Public Water Supply Area. Provincetown Water Superintendent, Cody Salisbury, has stated repeatedly that the Walsh Property is the best site for two more wells, and Truro and Provincetown Joint Water Resource Planning discussions are ongoing. A joint meeting of the Provincetown Water and Sewer Board and the Select Boards of both towns is planned for fall 2024, with spring 2025 as the target for an agreement on development of water resources for both towns.

In its current undeveloped state, the Walsh Property is an ideal location for new wells. According to DEP public water supply regulations, every well must have a [400-foot radius \(800-foot diameter\) Zone I protection area and a larger Zone II protection area](#). Zone I must be owned or controlled by the well owner; thus, for example, the Town of Provincetown purchased the Zone I area around the NUF wells, approximately 11.5 acres, from the Walsh Trustees, and must maintain it free of all development. The NUF Zone II area encompasses all of the Walsh Property and beyond, protecting the well recharge area from pollutants that would contaminate groundwater flowing towards the wells. In the DEP permitting process, a Zone II area for any new well is determined according to 310 Code of Massachusetts Regulations (CMR) 22.02 and includes “that area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated,” as well as factors like the permeability of the ground.

A number of other key factors determine the placement of any new well:

- The aquifer is thick enough at that point to support the additional volume of pumping.
- There is sufficient distance from other wells to avoid excessive pumping from one place in the water table. Lowering the water table too much risks salt water intrusion.
- There is a clear route from the well for water pipes to connect to the existing water system.
- There are favorable soil and water conditions: too much silt and clay prevent high pump rates and too little silt and clay allow salt water intrusion from below.

Considering all these factors, clearly, to determine the best site for a new well, a hydrogeological analysis of the property is essential, particularly if a housing development is also planned there. So far, the Town of Truro has not commissioned such a study to determine the risks to the NUF wells from development of the Walsh Property. Surprisingly, the WPCPC developed its recommendations without consulting an updated hydrogeological study that modeled the risks of groundwater contamination of the NUF wells from housing development wastewater.

However, Truro residents do have access to a hydrogeological analysis of the Walsh Property, prepared by Cape Cod's preeminent water resources expert, Tom Cambareri. Mr. Cambareri, the former Director of Water Resources at the Cape Cod Commission for thirty years, provides a [two-part report](#), "Groundwater Protection Priorities for the Walsh Property Master Plan to Sustain Long Term Drinking Water Availability and Quality." In Part 1 of the report, Mr. Cambareri compares a study of the Pamet Lens before the NUF wells began pumping with a model simulating "the drawdown of the water table caused by pumping at each of the well sites." He concludes that "drawdowns of the water table of greater than 13 ft result from pumping at each wellsite" and "if contaminants from wastewater, stormwater, and other sources are released to the ground in and near the Walsh property, they will migrate directly towards the NUF wells" (p.12). In Part 2 of his report, Mr. Cambareri provides aquifer contour maps showing the "deep depressions in the water table" caused by continued pumping from NUF wells and possible future wells. Again, the maps show how "Up to 100% of the wastewater discharged on the Walsh property will be drawn directly into the water supply wells under varying conditions" (p. 14).

As planning for the Walsh Property continues, the AHWPC can best fulfill its charge to provide advice and counsel to the Select Board by insisting that protection of current and future water resources is a top priority.

-Elaine Beilin