



TOWN OF PLYMOUTH

Department of Public Works

Water Division

169 Camelot Drive

Plymouth, Massachusetts 02360

February 14, 2023

Duane LeVangie, Chief, Water Management Act Program
Bureau Of Water Resources
Southeast Regional Office
20 Riverside Dr.
Lakeville MA, 02347

Re: Public comment response-BRP/WMA Plymouth Water Division PWS ID #4239000 Draft WMA permit #9P-4-24-239.01

Dear Mr. LeVangie,

The following is the Town of Plymouth Department of Public Works Water Division's responses to the issues raised by the Community Land and Water Coalition. These are responses to the Coalition's public comment letter regarding the renewal of Permit #9P424239.01 in the Buzzards Bay Basin. Please feel free to reach out to me with any additional questions or comments.

Issue 2: Need for improved management and oversight of uncontrolled water withdrawal and intrusions.

The withdrawal of groundwater in Plymouth is done so under the provisions of WMA Permit #9P-24-239.01 (Buzzards Bay Basin) and WMA Permit #9P-21-239.01 (South Costal Basin). Volumes of water pumped are tracked through flow meters at each well that are calibrated annually. Consumption data for all end use meters is calculated and reported in the Annual Statistical Report. The Annual Statistical Report is both issued and reviewed by the Department of Environmental Protection. Additionally, compliance reporting is submitted to the Department of Environmental Protection on a monthly basis. These reports include pumping volumes for each well. Oversight of water withdrawal is conducted in this fashion. The Town is not seeking to increase the previously permitted withdrawal volume under the Water Management Act Permit.

Since 2017, the Town has required proposed large residential and commercial developments that intend to connect to the Town's water distribution system undertake a hydraulic modeling and impact analysis with the Town's consultant, Environmental Partners. If the analysis determined the proposed developments would have a negative impact on the Town's water system, Environmental Partners recommended mitigation options that the Town pursued.

During the most recent hydraulic analysis for the proposed Claremont Development and based on observations by the Water Division during the Level 3 drought in the Summer of 2022, the Town

requested Environmental Partners analyze the West Plymouth Pressure Zone independently from the other three northern pressure zones and they identified a firm capacity deficit. In response to this discovery, the Town has followed the recommendation by Environmental Partners, and restricted any additional connections to the Public Water Supply in the West Plymouth Pressure Zone until redundancy or capacity can be increased. The Environmental Partners memo also states that the estimated demand from the Claremont Development is within the permitted capacity under the Town of Plymouth's Water Management Act Permit.

In addition to seasonal non-essential water use restrictions, see Response to Issue 3 below, the Town has undertaken water conservation measures as recommended in the 2019 Draft Water System Master Plan including creation of the Water Conservation Committee, recommending low flow water fixtures for all commercial and residential developments, and discouraging irrigation connections to the public water system. The Department of Public Works has offered rain barrels to residents over the last two years to encourage the use of rainwater for lawns and gardens in the hopes of promoting conservation awareness. Additionally, in conjunction with the Water Conservation Committee, the Water Division included water conservation brochures with water bills in 2022 to further highlight the importance of conserving water. Additional water conservation measures, such as seasonal water rates, are currently in the planning stages.

Issue 3: December 2022 Recommendations of the Plymouth Water Conservation Committee were not taken up; no implementation date announced

At the January 3, 2023 Select Board meeting, the Board indicated that additional data and analysis is required before any action is taken on the recommendations made by the Water Conservation Committee. Once the data has been collected and analyzed, the Board intends to put these recommendations back on the meeting agenda.

The Town implements seasonal restrictions on non-essential water use in accordance with the current Water Management Act Permit. Additionally, these restrictions are also put into place when a drought declaration is issued by the Office of Energy and Environmental Affairs.

The Town of Plymouth Water Division is currently drafting a water loss control program to address unaccounted for water.

Issue 4: The Town has implemented a patchwork approach to addressing Town's "water crisis", stating that wellhead protection zones must be protected, yet issuing permits for development within them anyway.

The Town has established Aquifer Protection Districts and development within those districts is regulated under the Zoning Bylaws. Development in wellhead protection areas is subject to these DEP approved Zoning Regulations. Please see attached for regulations, as amended through April 2022. The Aquifer Protection District includes a range of prohibited uses which are not allowed in a Zone II under any circumstance. The district also includes uses that are not prohibited but may require additional conditions and safeguards that are imposed through a special permit. These uses could be denied if such conditions are deemed by the Zoning Board of Appeals to be inadequate. Please note that some uses (i.e. agriculture and religious institutions are exempt from the Zoning Bylaw).

Issue 5: Impacts of Proposed Development Agreement

At this time, the Claremont project has only been approved for 198 rental units. Any additional development still requires additional review and approval by the Zoning Board of Appeals. It should also be noted that the Claremont project wastewater will not be discharged on-site it will be serviced by the Town's municipal sewer collection system. As stated in the Environmental Partners memo dated October 24, 2022, under normal and maximum day conditions with all sources of water available, the proposed Claremont Development will have a minor impact on the hydraulics of the water system. The concern identified in the above-mentioned memo, is a firm capacity deficit which already exists in the West Plymouth Pressure Zone, with or without the anticipated demand from the Claremont Development. The proposed booster pump station will allow for additional water to flow from the Plymouth Center Pressure Zone to the West Plymouth Pressure Zone and based on the analysis by Environmental Partners, will resolve the firm capacity deficit in the West Plymouth Pressure Zone. Additional development within that pressure zone will reduce the margin of available firm capacity however there is no known timeframe for when this will occur. Additionally, the booster station also serves as a source of redundancy for the West Plymouth Pressure Zone which is critical for preparedness of the water system.

In accordance with the Town's Aquifer Protection Bylaw, development within a Zone II must meet certain stipulations, such as groundwater monitoring. As part of the Zoning Board of Appeals Decision for the Claremont Development dated December 14, 2022, three groundwater monitoring wells must be installed on site and tested quarterly for Extractable Petroleum Hydrocarbons, Volatile Organic Compounds, sodium chloride, calcium chloride, magnesium chloride, acetate, and potassium chloride.

Water conservation is and will continue to be pursued by the Town. New water sources are planned to provide redundancy in the system and as alternate supplies as existing sources reach the end of their useful life. There is currently no plan for the Town to request an increase to the amount of water permitted to be pumped under the Water Management Act in the near future.

The Town does not have any municipal water supplies in the Taunton River Watershed. The Town's municipal water sources are in the Buzzards Bay Basin and the South Coastal Basin.

The Town of Plymouth is dedicated to water conservation as well as the preservation of the sole source aquifer serving its residents and surrounding communities. It is our mission to maintain stewardship while responsibly providing drinking water for our residents. We thank you for the opportunity to respond to these issues.

Thank you,

Peter Gordon
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