Eric Gagnon Superintendent

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Irving C. Felker, Jr. Chairperson, Board of Trustees

February 14th, 2023

Diane Barnes and North Yarmouth Select Board Town of North Yarmouth North Yarmouth Town Office 10 Village Square Road North Yarmouth, ME 04097

Re: Proposed Groundwater Protection Ordinance Amendments

Dear Diane and North Yarmouth Select Board Members:

The Yarmouth Water District (the "District") Board of Trustees understands that the North Yarmouth Select and Planning Boards are reviewing proposed Land Use Ordinance (LUO) amendments regarding development within the Town's Groundwater Protection Overlay District (GPOD). Because of the vital importance of the areas within that Overlay District to the continued quality and availability of public water for the District's customers and for future development and residents in North Yarmouth, the Board has decided to send this letter and to offer our input and assistance with this review.

The Town of North Yarmouth recognizes the importance of protection of its groundwater resources, as seen in this statement from the "District Purposes" provision of the LUO (Section 7.3 H.):

H. Groundwater Protection Overlay District: The Groundwater Protection Overlay District is designed to maintain and preserve critical groundwater resources associated with existing and future public and private water supplies, including wellhead protection areas for Yarmouth Water District wells. The protection of groundwater is critical to promoting the health, safety, and general welfare of the residents of North Yarmouth and other users of the public water supplies.

The District currently utilizes four high-yield sand and gravel wells in North Yarmouth that collectively pump an average of 840,000 gallons of water per day, which is more than sufficient to meet the water supply needs of its approximately 3,200 customers in North Yarmouth and Yarmouth. The District continues to engage a professional hydrogeological consultant, Matthew Reynolds, P.E., L.G., of Drumlin Environmental, LLC, to assess and monitor the District's water sources and to recommend ways to ensure these water sources are protected from adverse impacts of growth and development. After hearing from Drumlin on the subject, the Board respectfully requests that the Select and Planning Boards keep the goal of groundwater protection in the forefront of your minds as you consider these proposed amendments.

The District believes that any proposed ordinance changes to the GPOD must address the question - how does this change impact the groundwater? Some particular concerns Drumlin has raised regarding the GPOD are these:

- For ordinances, including the GPOD, to achieve their desired goal, performance standards need to include verification monitoring. Most components of a development project are traditionally verified by the Codes Enforcement Officer, Plumbing Inspector, etc. during construction. However, some components, such as advanced wastewater treatment systems, need to be monitored throughout the system's life to verify performance.. The GPOD should clearly identify who is responsible for this performance monitoring (e.g., the CEO, Developers, Home Owners, Home Owners Association, etc.), what monitoring and frequency are required and verification monitoring results should be filed with the Town, the same way that plumbing, building and other inspections are filed. If the monitoring and testing indicate that these systems are not performing as designed, how will they be corrected?
- Protecting the groundwater around the District's source wells involves more than just ensuring that
 septic systems are operating satisfactorily. Other pollutants, such as petroleum products (fuels and
 oils), pesticides, fertilizers, potentially toxic and hazardous materials and substances, and salts,
 should be limited to the greatest extent possible, and carefully managed when permitted in the
 GPOD, to prevent them from contaminating the groundwater.
- Increased housing density also brings with it risks from emerging pollutant threats, such as discarded pharmaceuticals, PFAs/PFOs, and other compounds currently not regulated in drinking water, but are likely to be in the future. Residential septic systems are not designed to treat these types of compounds, even with advanced treatment, so they can leach into the underlying groundwater in the GPOD and travel to the District's wells. The District will continue its ongoing monitoring program, but managing growth in the GPOD is the most effective way to minimize the risk of future groundwater contamination.

We will be glad to work with the Town to review the proposed amendments and to suggest ways the Town might achieve its goals regarding growth in the GPOD while minimizing adverse impacts to the groundwater resource.

The District itself also has undertaken creative, non-ordinance efforts to protect groundwater in North Yarmouth from the impacts of existing residential development in the aquifers. We currently offer subsidised septic pumping for residential septic tanks at reasonable intervals located within the Hayes Well aquifer 2500-day travel time zone and will be doing the same in the other two aquifers over the next two years. We also have provided significant financial contributions to finance furnace and oil tank replacement for homes within the Hayes Well Wellhead Protection area.

We look forward to working with the Town of North Yarmouth to help ensure that proposed amendments to the Town's Land Use Ordinance are protective of the water quality in the aquifers. Groundwater protection benefits both the District and North Yarmouth by protecting the Hayes Well, and ensuring that the District can provide high quality water to its current and future North Yarmouth customers.

Sincerely, 2

Irving C. Felker, Jr., Chairperson, Board of Trustees

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Yarmouth Water District

cc: North Yarmouth Planning Board

Yarmouth Water District Board of Trustees

Matthew Reynolds, P.E., L.G., Drumlin Environmental, LLC