

Subj: **Requests for variances for the WHS Wastewater Treatment Plant (WWTP)**
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To: jjunghanns@wayland.ma.us

Julia -

Thank you for discussing with me the BOH agenda item re the requests for variances for the WHS Wastewater Treatment Plant (WWTP).

As we discussed on Friday, I would like to point out the following:

The site for the WWTP and associated monitoring wells are outside the Zone I, within the Zone II and possibly within the Capture Zone of the Happy Hollow Wells - see attached AECOM EarthTech map and official town map showing the Zone I, Zone II and Capture Zone of the Happy Hollow Wells.

Capture Zones are defined as the aquifer volume through which groundwater flows that contribute water to the recovery of the well system during normal pumping conditions. Groundwater found in the Capture Zone will eventually be "captured" and pumped out of the ground at the well. A Capture Zone includes the Zone I and is typically within the Zone II delineation area.

As you may know, in 2008 the former Board of Water Commissioners hired Earth Tech AECOM to delineate Wayland's Wellhead Protection Areas at the five wellsites to include Capture Zones. Due to a number of activities in the Capture Zone of the Happy Hollow Wells, which were determined to cumulatively threaten to degrade the quality of the water, the Capture Zone for the Happy Hollow Wells was definitively determined in 2010 based on the installation of monitoring wells and well points, a seven-day pumping test conducted with the assistance of the DPW Water Division, an evaluation of hydrogeologic data, and approximating the Capture Zone under quasi-steady-state conditions.

Due to the location of the new WHS WWTP and associated monitoring wells, in an area potentially significantly affecting the nearby Happy Hollow Wells, I would request a determination as to whether the WWTP or any parts related thereto are within the Capture Zone of the wells. I would further request that the DPW Water Division and/or the BOPW express its opinion as to the advisability of these variances prior to the vote of the BOH. Since Eric Worrall's January 2010 letter was copied to "Jack Mitchell/Water Department," who was Acting Water Superintendent in 2009, I question whether the current officials of the DPW, including the Water Division, are in fact aware of these issues.

As we discussed, I would also suggest that the Happy Hollow Wells, as well as the sites for the proposed three new drinking water wells (currently before the Conservation Commission for permitting) be clearly delineated on maps pertaining to these variance requests and made part of the record. The maps I viewed in your office only showed part of the Zone I.

I hope this information is helpful. Thank you for your consideration.

Sherre Greenbaum