

To: Wayland Finance Committee
Wayland Board of Public Works
Cc: Brian Monahan, Conservation Administrator
Don Ouellette, Director of Public Works
Date: January 27, 2012
Re: Proposed Cemetery Upgrade of the North Cemetery

We understand that the expansion of the Old North Cemetery will be among the FY13 capital proposals the Finance Committee will be taking a final vote on this Monday, Jan. 30, 2012 as part of the total FY13 budget to be presented to the Board of Selectmen the following week.

As members of the former Wayland Wellhead Protection Committee (WPC), we are requesting that the FinCom defer approval of the request from the Board of Public Works titled: "Cemetery Upgrades, North Cemetery", for \$200,000, "to improve and expand North Cemetery (We will be adding 200 trees, regarding the area, adding a new road network, and new drainage. This work will add approximately 1300 new gravesites)."

The "Project Justification" of this capital request notes that "this upgrade has been on the planning stages for 10 years" and that "a preliminary plan was drawn up several years ago." However, we believe this proposed project warrants further review.

As you may know, the 2011 Wellhead Protection Plan (WPP) has been approved by MassDEP and accepted for implementation by the Board of Public Works (page 52, 2011 Wayland Annual Reports). The document is essentially a master plan for protecting town drinking water wells. In its efforts to find realistic and workable strategies to protect the wells, the former WPC consulted with the water superintendents, staff of town departments, and a MassRWA EPA-funded consultant. Their recommendations for dealing with potential sources of contamination of the town wells were incorporated into the Plan.

The WPP posted on the DPW website shows that this segment of North Cemetery sits directly within the "Capture Zone" of the Baldwin Pond Wells station and three shallow "gravel-packed" groundwater wells supplying approximately half of the potable drinking water for Wayland's residents. (See WPP, p.40 – Fig. 17, http://www.wayland.ma.us/Pages/WaylandMA_BComm/WellheadProtection/Wellhead%20Protection%20Plan) Groundwater found in the Capture Zone will eventually be "captured" and pumped out of the ground at the wells.

The "capture zone" designation is duly recognized and accepted by hydrogeological professionals despite not being specifically required by MassDEP. The Baldwin Pond Wells "capture zone" delineates the area of groundwater flows that contribute to the recovery of a pumping well system. Based upon geologic and pumping records, it appears that the Baldwin Pond Wells are located in areas where the soils consist largely of sand and gravel, with no significant overlying layers of fine-grained soils. Such aquifers are termed "unconfined aquifers" because flow of groundwater is not restricted vertically by a 'confining layer' of clay or fine-grained soil (EarthTech/AECOM report p. 2 - "Capture Zones – Wayland Municipal Water Supply Wells", Oct. 17, 2008, see <http://www.waylandwells.com/> "Wayland Information Resources" section)

There are numerous recent studies linking the burial of corpses in cemeteries and their subsequent degradation to potential groundwater pollution. Such groundwater contaminants stem not only from natural decay but from additives introduced during the embalming process, pharmaceuticals

and chemo-care chemicals left behind within the corpse, and the potential for longer-distance transport of viruses and pathogens (see <http://www.waylandwells.com/>, “Get Informed, Get Involved” section).

This is one of a number of emerging public health issues that warrant greater attention and public education by municipalities. For example, thanks to the efforts of our police department and Transfer Station, we already have changed our disposal of unused drugs in Wayland to protect our water supply.

In order to reduce the unintended potential contamination of our drinking water from cemetery activities, the WPP recommends that the DPW limit any expansion of the Old North Cemetery for conventional burials into the Baldwin Pond Wells Capture Zone. This matter needs to be fully addressed prior to sending this appropriation forward to Town Meeting.

We hope the above information is helpful and is given due consideration. Thank you very much.

Sherre Greenbaum
Jennifer Riley
Linda Segal
Thomas Sciacca
Kurt Tramposch