Ted Carman

From: Henry Woolsey <henrywoolsey@verizon.net>
Sent: Tuesday, October 04, 2016 12:29 PM
To: Ted Carman
Subject: FW: Nichewaug Inn water supply, Petersham

From: Paine, Douglas (DEP) [mailto:douglas.paine@state.ma.us]
Sent: Friday, July 29, 2016 11:44 AM
To: Henry Woolsey
Subject: Re: Nichewaug Inn water supply, Petersham

Henry,

Here's a brief summary of our Wednesday discussion.

Although we discussed several options, the last diagram, showing the two wells on the current Inn property appears to present the best option. That depiction showed a smaller well, with a Zone I radius of 100-feet serving 9 unit (12-bedrooms) within a structure identified as the Inn. A second, larger well with a Zone I radius of 150-feet, would serve a separate 12 unit (20 bedroom) structure identified on the plan as the Academy.

MassDEP would allow two (or more) PWS wells on one property, with overlapping Zone I protection areas. Although there is no minimum separation distance between the two (or more) wells, the closer they are, the more likely that the wells would adversely impact each other, so maximizing the separation distance is generally considered to be beneficial.

Each PWS well must have a Zone I which is either owned or controlled by the PWS owner. If not through ownership, Zone I control may be through an easement, a CR, or in some cases an MOU. Uses within the Zone I must be limited to passive recreation (walking, cross country skiing, etc.).

In order to estimate the amount of water required for a residential project, MassDEP would assign a flow rate of 110 gallons per day per bedroom. In the scenario presented, the required flow from both wells combined would be 3,520 gallons per day.

Zone Is are calculated using the formula [150 x log of pumping rate (in gallons per day)] - 350.

Wastewater flow rates in excess of 2,000 gallons per day on a single parcel, may result in a requirement for additional wastewater treatment.