WAYLAND WELLHEAD PROTECTION COMMITTEE

MEETING MINUTES (#72, by L. Segal)

August 20, 2010

Attendance: Sherre Greenbaum, Jennifer Riley, Tom Sciacca, Linda Segal, Kurt Tramposch, Earth Tech consultant Doug DeNatale
Location: Selectmen's Meeting Room, 41 Cochituate Rd., Wayland, MA

Meeting convened at 8:00 a.m.

Happy Hollow wells Phase II Hydrogeologic Investigation final report: D. DeNatale presented final report to the WPC using two color maps illustrating capture zone for HH wells under both static and pumping conditions. Historically a glacial delta shed to lake to the south, became standing ponded water at high school, dried out to silt. Earth Tech installed 14 wells, in spring 2009 and 2010, adding to 10 already existing wells. A seven day pump test occurred in June 2010 to approximate capture zone under normal pumping conditions. Found it's not a uniform flow field. Sand & gravel layers constitute the aquifer that supplies the HH wells. There is a 60 ft. thick clay layer from glacial lake deposits, with 5 feet of sandy soils above and below it. Groundwater adapts to geological conditions; gw flows mostly to the west towards Sudbury River during static conditions & impeded by subsurface clay, which thins out as it approaches Dudley Brook. During pumping conditions, most water comes from east and south. How much water comes from wetlands bordering river was not part of study. Area is surrounded by higher elevations, e.g. Bennett Field & Charena Farm area. Fertilizers would be lesser issue on fields to north. Less than 1% of water to wells comes from turf field. Most water to wells comes from sand pit & brook.

T Sciacca reported groundwater level in Rolling Lane neighborhood dropped over 20 feet since spring floods. Sudbury River reached record low at Saxonville; can walk across river at Stonebridge. Increased paving negatively affects rivers, stream flow, habitats, etc. HH wells registered with DEP (before 1985, grandfathered). Chamberlain is permitted (after 1985) by DEP. High school parking lots located in capture zone (inside yellow line). Salting runs off to wells. Conventional paving cheaper than pervious. Rolling Lane kettlehole at edge of capture zone. Tighe & Bond suspects groundwater under Reeves Hills drains to Rolling Lane area.

Consultant suggestions for WPC next steps: Zone I protection: Intensity of activities at high school site poses threat to groundwater quality, e.g. parking lots, drainage, Old Conn Path, etc. "These and other deleterious activities should be removed from Zone I and moved as far from the wells as practical." Tennis courts in Zone I are not that onerous but should not be there, e.g. PAHs used in sealcoating. Sand pit should not host high school construction activities; "nothing should be happening in Zone I." WPC could seek reclamation plan to repair & protect sand pit & get copied on test data. **Other impacts to capture zone**: Look at Stonebridge and Happy Hollow neighborhoods with older homes, older septic & potential of finding USTs. Remind D. Millette to **lock all monitoring wells**. Bennett Field irrigation well installation failed first time because it was drilled improperly into bedrock. Shallow gravel wells require more skill and attention to geological info by the installer.

D. DeNatale will send WPC **a new map** comparing capture zone changes since starting study 2 years ago. He did not see a need for a second water treatment plant based on HH water

quality. WPC relayed DPW's rationale of addressing manganese and iron at Meadowview and possibly tighter DEP restrictions in the future.

HH water quality data showed marked increase in salt, triple from last testing round. Baldwin treatment plant does not have reverse osmosis system; does not remove salt. **Salt study** should take data all year round given migration times. Sample monthly at HH wells, Dudley Brook, and IEP monitoring wells. Not that expensive, can evaluate in-house.

Next meetings: Thursday, August 26 at 9 a.m.
Wednesday, September 1, 9 a.m. with MassRWA consultant Bruce Young

Meeting Minutes Approval: J. Riley motion, S. Greenbaum second, minutes for August 16, 2010 meeting were voted approved 5-0.

Adjournment: S. Greenbaum moved to adjourn, T. Sciacca seconded, voted approved 5-0. Meeting adjourned at 9:30 a.m.

Public record access note: A hard copy of the HH Phase II Hydrogeological final report is available for review at the DPW Director's office, Wayland Town Hall.

(minutes approved on September 1, 2010)