

Protecting Manchester's
Existing and Potential Water
Resources for the Future

Development as Potential Threat

Hamilton's 133 Essex Rd

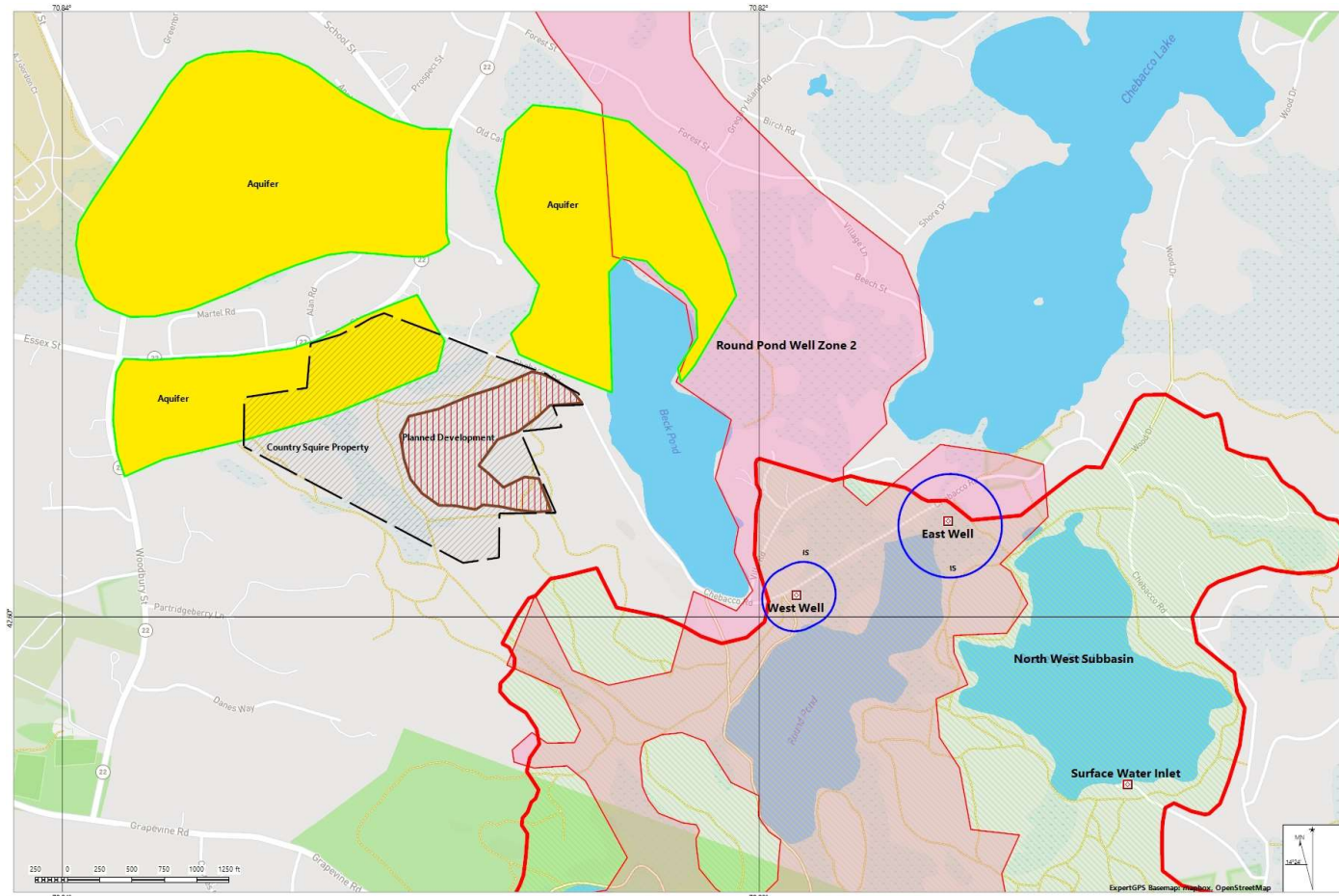
- Proximity to Round and Gravelly Ponds

Shingle Place Hill 40b

- Proximity to Cedar Swamp aquifer and potential impact on Sawmill Brook and Lincoln Street Well

Cape Ann Granite

133 Essex Street Relative to Aquifers and Wells



Shingle Place Hill Relative to Aquifer



All of the Cedar Swamp, Lincoln Street and other aquifers around the Gravelly Pond water supply are listed as Medium Yield aquifers in MassMapper

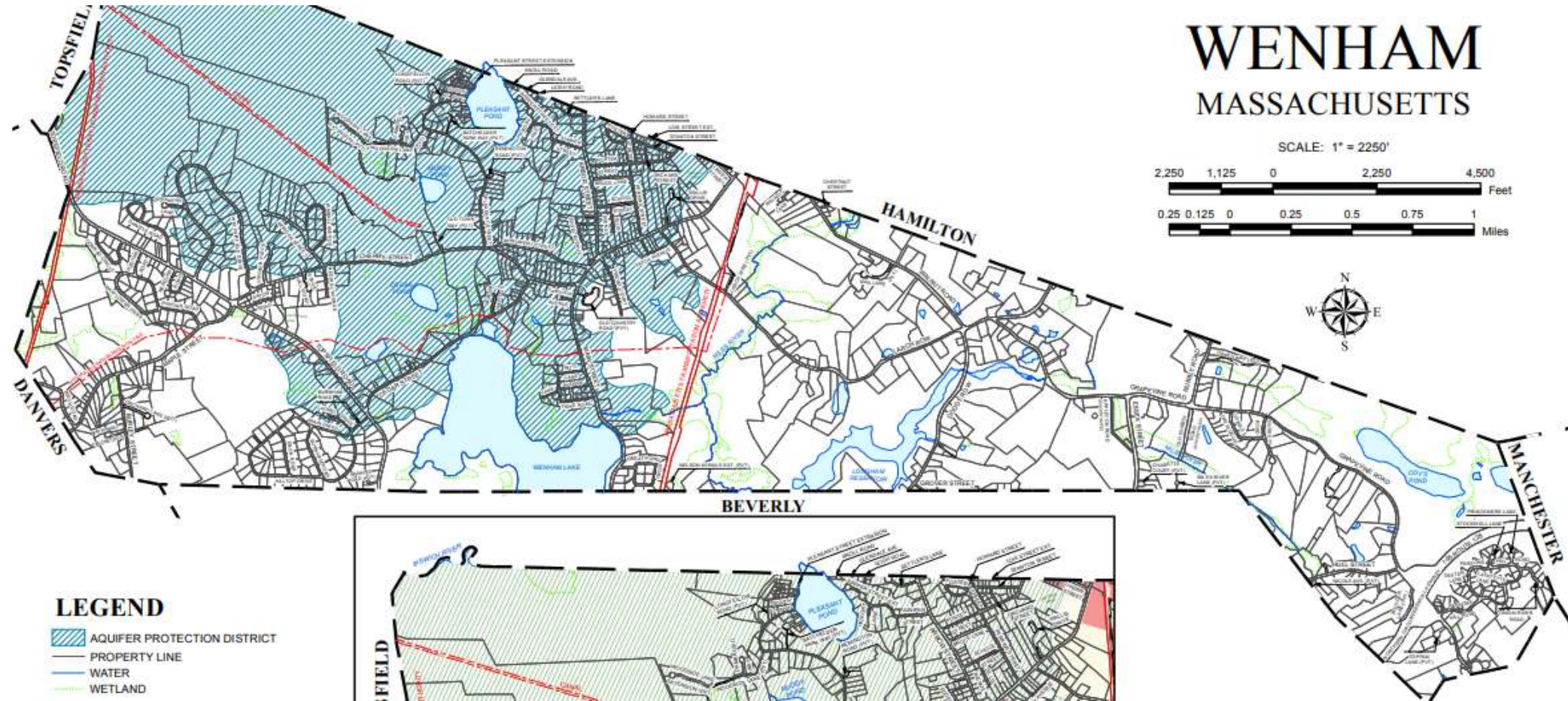
Why Should we Protect Unused Resources?

- Potential Threats:
 - Climate change
 - Drought
 - Chemical spill
 - Other contamination
- Let's proactively protect all of Manchester's Aquifers
 - Particularly the Cedar Swamp Aquifer and its wellhead area around the well used by Gloucester during the drought in the 1960s
 - It has been tested for water quality and pumping volume
 - This can be Manchester's emergency resource

How do Towns Protect Their Aquifers?

- Aquifer Protection Overlay Districts
 - Wenham
 - Weston
 - Great model for reference to develop recommendations for our BOS
 - Detailed limitations, addresses WWTP, excavation relative to water table, special permit guidelines (“activities cannot adversely affect an existing or future water supply”)
 - Scott Horsely will get back to us with more towns for reference
- Broader language in Groundwater Protection By-Laws
 - Manchester’s by-laws protect existing drinking water resources or the future
 - Many examples of towns which protect existing and future resources within their Groundwater Protection Plans

What Aquifers do our Neighbor's Protect?



What Aquifers do our Neighbor's Protect?

- Hamilton:
 - OSRP indicates that the Groundwater Protection District protects existing and future resources...
 - ...and notes that the district does not cover portions of Gravelly Pond, and Round Pond
- Essex:
 - Water Resource Protection Overlay District protects existing and future water supply resources
 - Specifically mentions the protection of Cedar Swamp
- Cooperation:
 - How can we work with our neighbors to expand their protection areas to cover aquifers sensitive to our watershed?

Understanding Manchester's Water

- Scott Horsley plans to create a map of our water table
 - Update Zones I & II & III
- Does Manchester have more aquifers which are not identified?
 - Map aquifers to create Aquifer Protection Overlay District

Board of Health Regulations

- Can we propose regulations to our Board of Health which will further protection our water supply
 - MECT has spearheaded this effort
 - The BOH wants us to take over from here, Peter Colarusso can lead
 - Is there anyone with legal experience who can volunteer for this effort?
- Board of Health is authorized by the Mass Department of Health and the Department of Environmental Protection
- Can Board of Health Regulations strengthen our town by-laws in the protection of our water supplies?
 - Would BOH regulations be waived in a 40B?

