Class I and II groundwater reclassification to protect current and future public water sources in Vermont



Groundwater Reclassification

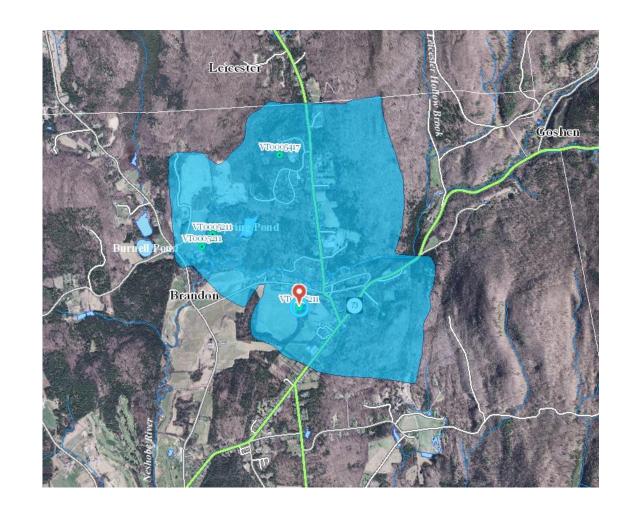
- Authority given in Groundwater Protection Rule and Strategy for the ANR secretary to reclassify groundwaters of Vermont
- Not a permit but a designation designed to help manage and protect GW resources
 - Class I: Suitable for public water system. Character uniformly excellent. No exposure to activities which pose a risk to its current or potential use as a public water system
 - Class II: Suitable for public water system. Character uniformly excellent but exposed to activities which may pose a risk to its current or potential use as a public water system
 - Class III: Suitable as a source of water for a potable water supply, irrigation, agricultural, and general industrial and commercial use
 - Class IV: Not suitable as a source of water for a potable water supply but suitable for some agricultural, industrial, and commercial use (could be provisionally allowed for potable supply by Secretary)

Class I and II reclassification

- Offers state level recognition and protection
- Can be used to both protect an existing public water supply and an area with a "high probability for use" as a future public water supply
- Procedure in place detailing hydrogeologic assessment and reclassification process
- No designated Class I areas and only one Class II area (Brandon)

Brandon Fire District #1

- Existing sources (gravel wells)
- Re-delineated SPA
- 10 year process
- Multi-agency effort (DEC, VGS, EPA)
- Attracted a brewery by placing ads in national beverage publications after reclassification



Challenges

- Specificity and reciprocity for state level protections
 - Inconsistent representation in Agency rules and regulations
 - Poor differentiation in rules for Class I vs Class II
 - Poor differentiation in rules for Class I/II vs SPAs
- Add more specificity to procedures for reclassification, especially for un-developed areas
- Why reclassify when you can control local development with a zoning overlay?

Rules Offering State Level of Protection for Class I and II Groundwaters

- Solid Waste Management Rule
- UST/AST Rules
- Vermont Investigation and Remediation of Contaminated Properties Rule

Rules Offering State Level of Protection for Source Protection Areas

- Solid Waste Management Rule
- UST/AST Rules
- Vermont Investigation and Remediation of Contaminated Properties Rule
- UIC Regulations
- Indirect Discharge Rules
- Stormwater Management Manual Rule and Design Guidance
- Wastewater and Potable Water supply Rules
- Vermont Wetlands Rule

Reciprocity is Needed

- GWPRS 12-401 and 12-402 specifies:
 - "The Secretary shall not permit wastewater systems in Class I groundwater areas;"
 - "Wastewater systems shall not be permitted in Class II groundwater areas unless a site specific assessment (demonstrating hydraulic separation or siting location beyond a two-year time of travel distance) performed by the applicant demonstrates that the activity will not present a risk to groundwater quality of existing sources of water for potable water supplies or public water sources."
- No mention of Class I/II areas in current draft of Wastewater and Potable Water Supply Rules!
 - Wastewater systems prohibited from Zone 1 of SPA for Public Community Water System
- Need to suggest specific protections for adoption in Agency rules that highlight the different management goals for Class I and II groundwater area

Procedures should be updated to specify delineation and evaluation of reclassification areas for undeveloped sources

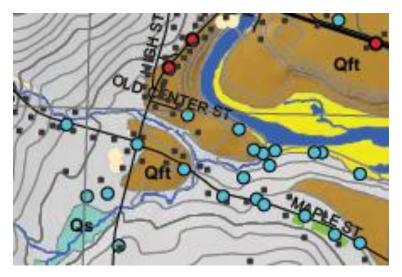
- How do you delineate a protection area for a well that doesn't exist?
- Does a test well need to be drilled?
 - Pump test and water quality data are required can existing private wells in the area wells be tested to reduce upfront costs?

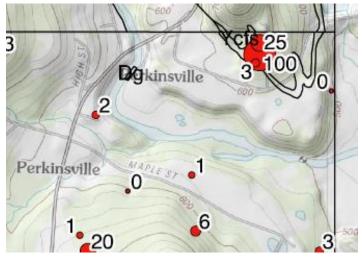
Need to better define benefits of a reclassification over municipal land use regulation

- Municipalities need to adopt plan, by-law, or ordinance providing protection for Class II areas proposed for future supply
- Limited state level regulations could easily by matched and exceeded by land-use regulation in municipal zoning overlay
 - Caveat would be easier to change municipal regulations or grant exemptions than to reclassify to Class III
- Cheaper and easier to enact local regulations than submitting a costly and time-intensive reclassification petition

Interest in Weathersfield

- DEC Water Resource Section contacted by member of town conservation commission
- Geologic mapping done by UVM
- Potentially interested in protecting future water source for Perkinsville with zoning and Class II
- \$\$\$?





Thoughts?

