

I93 - Exit 3 Water Supply

Brandon Kernen

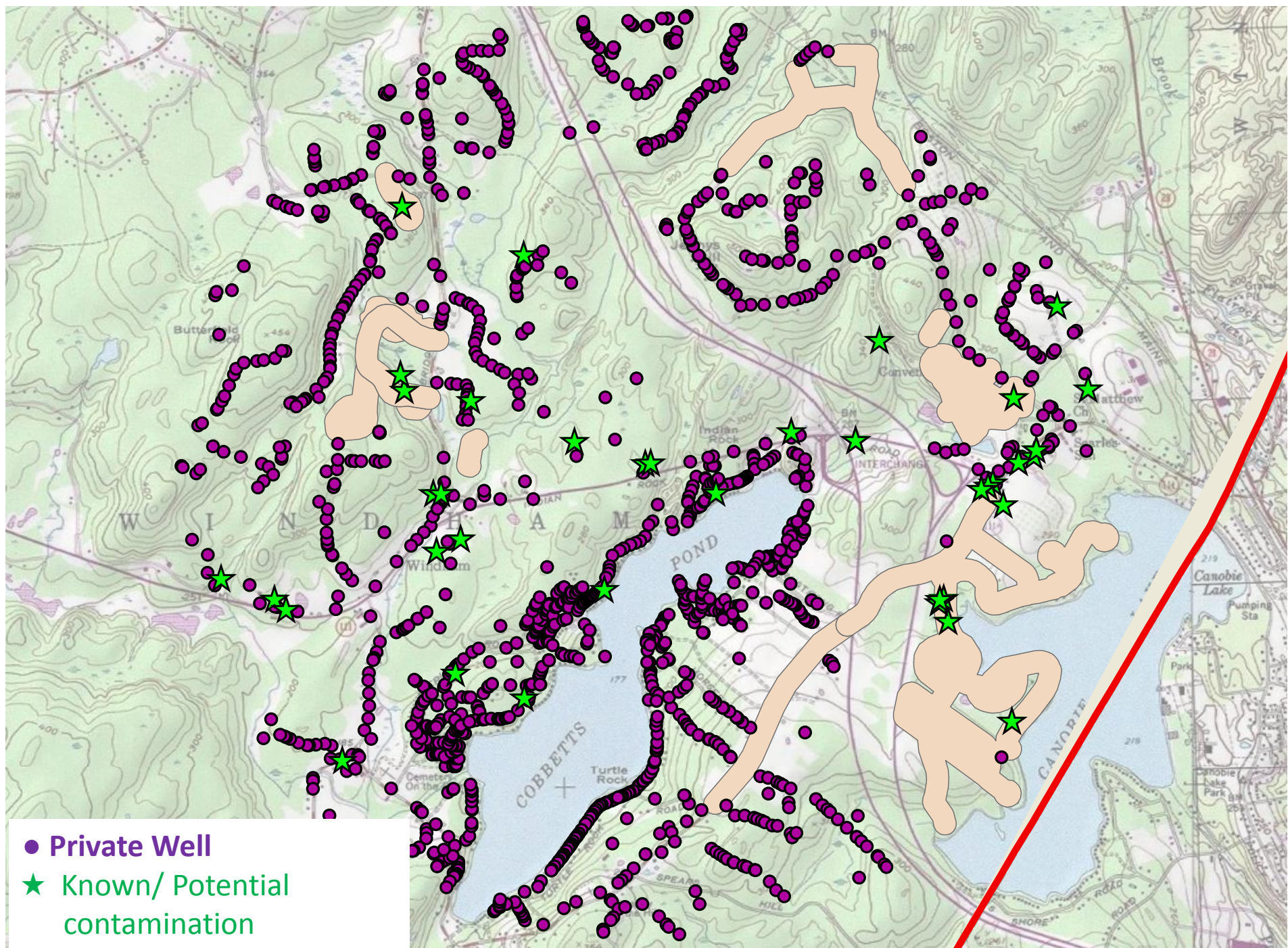
Brandon.Kernen@des.nh.gov/271-0660

Background

- A Town of Windham infrastructure subcommittee is working to obtain funding for a water supply study around Exit 3 in Windham.
- Extension of public water supply to the Exit 3 area could be analogous and complementary to a similar project in Plaistow.

Exit 3 Study Area

- Approximately 1400 private wells
- Six small community water systems
- Elevated sodium and chloride concentrations
- Several groundwater contamination sites
 - Blasting
 - Gasoline
 - Backwash from water softeners
 - Sporadic occurrence of contaminants
 - Septic systems
- 1000+ foot deep wells commonplace
- Approximately 20% of the wells geolocated in the study area had issues that required drilling deeper or a new well.
- Entire study area all utilizes septic systems

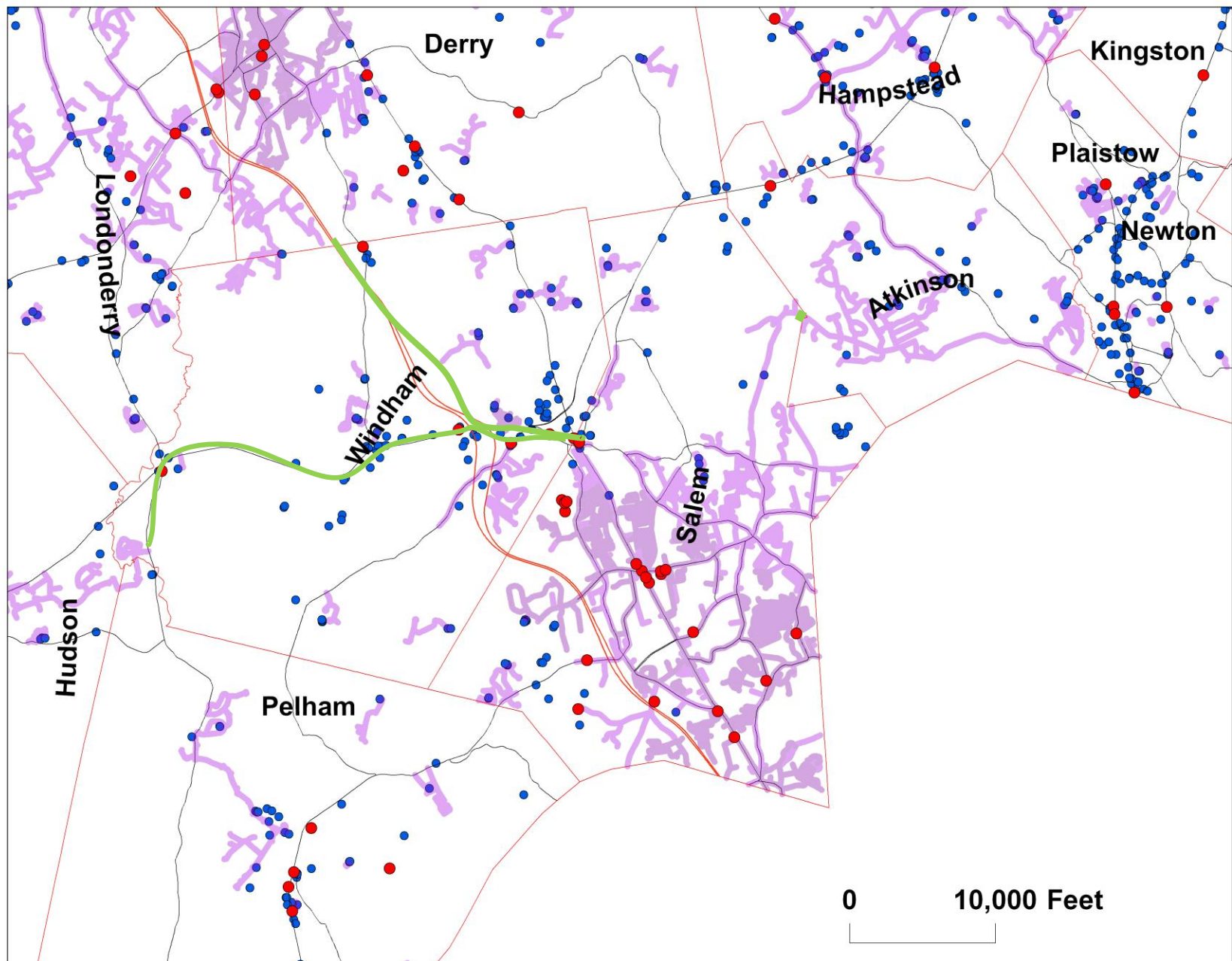


Need for Water Supply

- Water quantity concerns
- Water quality concerns (man-made and natural contaminants)
- Surplus NHDOT land from I-93 widening will potentially increase commercial development
- Business development will be deterred by complicated water quality and quantity challenges in the area
- Businesses will be drawn to an area with a reliable and affordable water supply
- Fire suppression will reduce insurance rates or cost of installing and maintaining standalone fire suppression systems

Extension of Merrimack River Water to Salem, Hampstead Area Water and Plaistow

- Manchester WW to Salem – Approx 4.5 miles
- Pennichuck/Nashua to Salem – Approx 8 miles
- Hampstead Area Water and Salem water system service areas are within hundreds of feet of each other
- Hampstead Area Water service area extends up to Plaistow



Need

- The 1990 Southern NH Water Supply Study identified extension of Merrimack River Water to SE NH as a priority
- The only other options for new large water sources in SE NH come from Massachusetts
 - Political/economic competition issues
 - Legal issues
 - Complicated and uncertain regulatory environment
 - Cost agreements (price or water)
- Salem's large sources of water are contaminated or are not legally available for use when needed
 - Contaminated high yielding bedrock aquifer
 - Arlington Pond Agreement
- Hampstead Area Water relies on dozens of low yielding bedrock wells
- Large number of water systems with man-made or natural contaminants in Plaistow and Windham

**Extension of a reliable source of water to SE NH
represents an important infrastructure
improvement that will benefit the public now
and for decades to come.**