

## Rocky Ledge Area Water Main Extension

### BACKGROUND

This project will bring public water to the residential area outlined in red, where residents currently obtain drinking water from private individual wells. Many of the wells in the area have documented public health code and drinking water quality concerns.

- 120 residential parcels on Rocky Ledge Drive, Oakwood Lane, Killingworth Turnpike, Margo Lane, Woodland Drive, and Happy Acres Road; average 0.4 acres in size
- Homes generally built in the 1950s and 1960s, average 3 bedrooms; home to approx. 300 residents

Under a CT DEEP groundwater pollution abatement Consent Order (1997), the WPCC is charged with developing a plan to address onsite wastewater disposal pollution concerns in a number of areas of town, including the Rocky Ledge area. Providing public water to the outlined area will allow continued use of septic systems by removing the required separation distance between wells and septic systems, eliminating the need for a more costly sewer system with wastewater treatment and disposal.

### NEED FOR PROJECT

File review and water quality sampling (2011-2014) confirmed many Public Health Code (PHC) non-compliances and drinking water quality violations (nitrates, coliform, pH):

- 46 properties have file documentation that the current septic systems do not, or likely do not, comply with the PHC, usually due to inadequate area available for a septic system as a result of the required separation distance from wells
- Well water from 49 of the homes was tested in 2011 and 2014. Of those tested, 31 (63%) had coliform present, contained nitrates of 5mg/L or greater, and/or had pH or turbidity outside of acceptable range.
- Not all properties have information in the files, and not all wells were sampled; thus it is likely that the actual number of violations is higher than documented.

These parcels cannot support both individual drinking water wells and on-site septic systems. A solution (drinking water or sewer) must be provided to meet current health codes, and will be required by DEEP. Importantly, a public water extension will also improve fire protection facilities along the Route 81 corridor and the Rocky Ledge area; the Town's volunteer Fire Chief, Brian Manware, wrote a letter in support of the project.

### COSTS AND FUNDING

- Estimated construction cost of the Rocky Ledge Area Water Main Extension project is approximately \$3 million (there are existing water mains on Route 81 at Walnut Hill Road and at new high school site).
- Estimated construction cost of providing offsite sewage treatment for the Rocky Ledge area is approximately \$6 million, including pumping and conveyance to a treatment and disposal facility. Further, this option would result in long-term maintenance to be provided by the Town rather than CWC.
- Either option also requires \$5,000 to \$10,000 per residence for work on private property (water service line plus well abandonment, or sewer service lateral plus septic abandonment). As such, private property work is anticipated to cost an additional approximately \$1 million for the 120 homes in the Rocky Ledge area. These costs may be borne by the homeowner or shared by the Town, and may be offset by grant funds discussed below.

The Rocky Ledge Area Water Main Extension will solve a documented public health problem in an existing residential area, and also allow septic system upgrades, eliminating the need for offsite sewage treatment and protecting groundwater quality in the area.

At this time it is anticipated that the design of the Rocky Ledge Area Water Main Extension project will be paid with Town funds, and construction of this project will be funded with a low-interest 20-year loan through DPH. The Town has already applied for additional funding in the form of an Office of Policy and Management Small Town Economic Assistance Program (STEAP) grant. Further, CWC has indicated that they will contribute financially to the project's construction, though the amount has not yet been determined. For the Rocky Ledge area, solving the existing pollution problems via a CWC public water extension is a substantially less costly option than a sewer project for the Town and its residents.

