



October 27, 2023



PFAS

Town of Killingworth

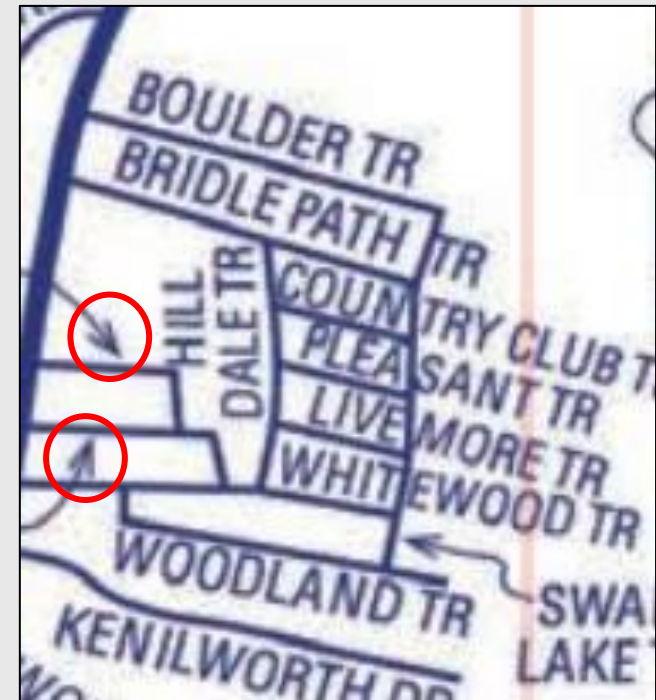
PFAS – Town of Killingworth

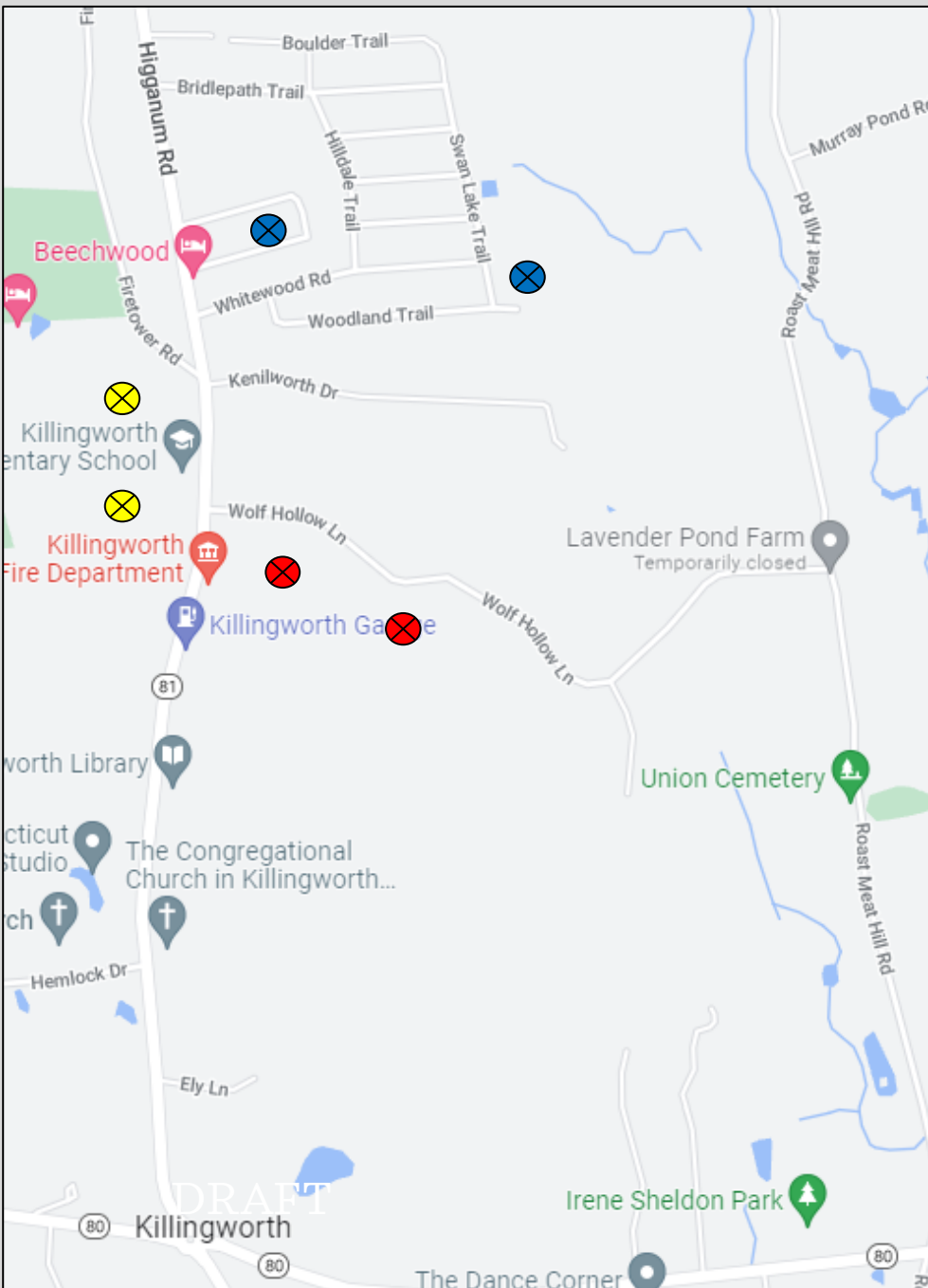
- BACKGROUND

- In spring of 2021, Connecticut Water Company (CWC) conducted voluntary sampling of both the treated water supplying the Beechwood community located on Route 81 in Killingworth as well as untreated samples collected from each of three wells.
- Although CWC's existing treatment system proved effective at removing PFAS to well below the action level, laboratory results for the untreated water samples identified PFAS at concentrations of up to 147.3 ppt, more than twice the action level of 70 ppt in effect at that time.
- Due to the proximity of Beechwood to other public water supplies and residential wells, CWC notified Local and State agencies of their findings.

- DEEP/DPH Area of Investigation

- DEEP/DPH were notified and started an investigation





Public Well Testing

⊗ Beechwood

- CWC installed additional treatment to remove PFAS compounds to below laboratory detection limits.

⊗ Killingworth Elementary System

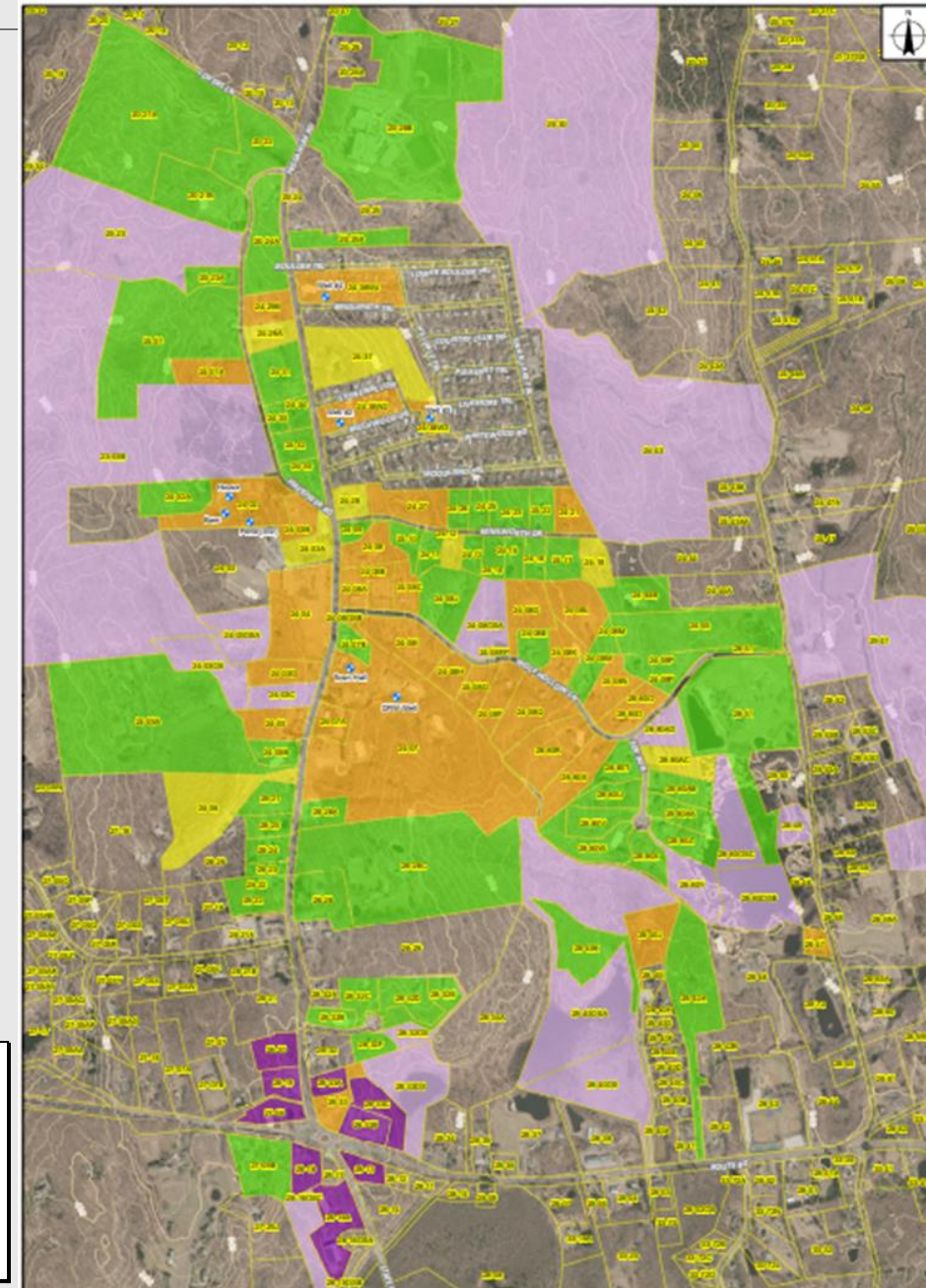
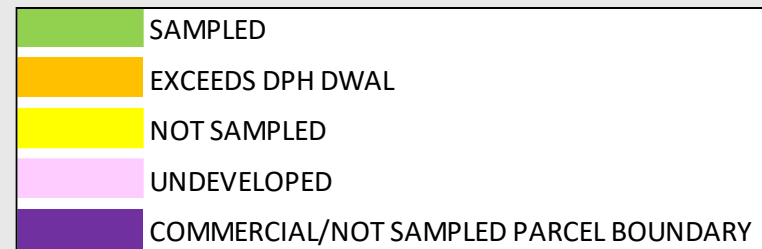
- One of the two wells at KES is over the action level
 - This well has been shut down since learning of the results
- Faculty and students are using bottled water for drinking and cooking

⊗ Town Hall Campus

- Highest levels of PFAS amongst the three locations
- Also contains high levels of sodium
- Staff using bottled water for drinking
- Firefighters using bottled water to clean PPE
- Town trucks being washed with water containing high levels of PFAS and sodium

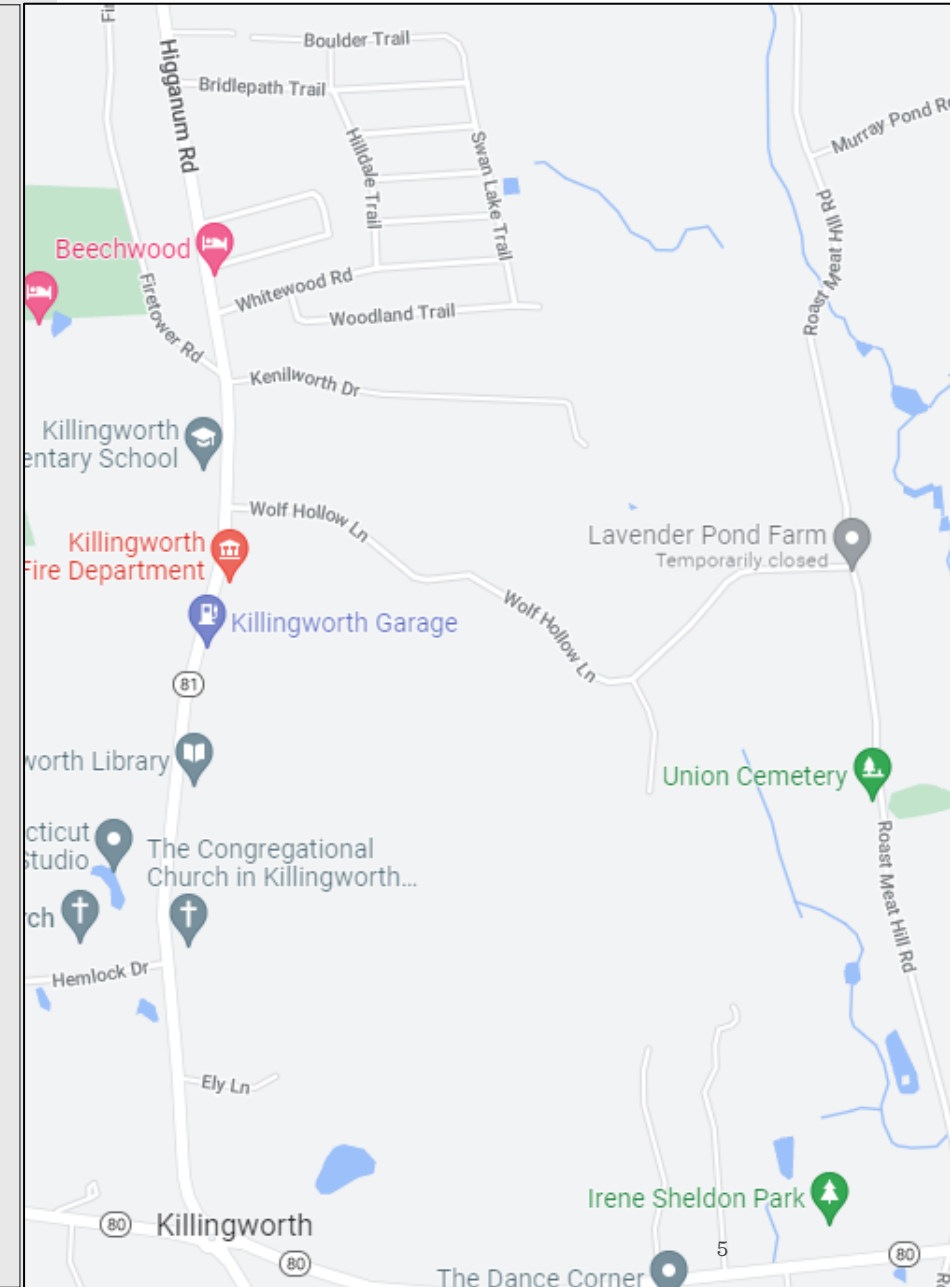
Sampling to Date

- DEEP initiated PFAS sampling May 2021
 - Approximately 95 residential wells in the area for PFAS
- Approximately 25 residential wells were above the DPH drinking water action level:
 - Homeowners were immediately given bottled water for drinking and cooking
 - Fitted with filtration systems supplied by the state
 - Retested to ensure filters were working as expected
- Well testing will continue as recommended by DEEP



PFAS – Town of Killingworth

- Work to Date
 - Monthly meetings with DPH, DEEP, CWC, KES and Killingworth
 - Submission of a Drinking Water State Revolving Fund application to DPH to address water quality at KES and town campus wells (approval pending)
 - Soil sample testing to identify PFAS source



PFAS – Town of Killingworth



LEGEND

- SOIL BORING LOCATION
- MONITORING WELL/SOIL BORING LOCATION
- COUPLETS W/ SHALLOW & DEEP WELLS
- POTABLE WELL
- FLOOR DRAIN DISCHARGE

- DEEP conducted a PFAS investigation at the Town Hall/ Fire Department property due to firefighting related activities conducted in the past and the presence of PFAS detected in drinking water wells in the area of the property.
- Aqueous film-forming foam (AFFF) was used in the past by many Fire Departments, including Killingworth, for fire-training activities and to extinguish petroleum-based fires. AFFF contained high levels of PFAS. In 2021, Connecticut state law banned training with AFFF and most other uses of AFFF.
- The results of the testing show that a release of PFAS occurred at the Property and soil and groundwater concentrations exceed the applicable clean up criteria.
- The highest concentrations of PFAS in soil and groundwater were detected in the vicinity of the reported firefighting activities, located east of the fire department building.
- The residual PFAS in soil may be acting as an ongoing source, which could continue to impact underlying groundwater.

Where are we now



Ongoing - Killingworth responsibility for continued testing and maintenance of residential wells



Ongoing - Completion of an Engineering Checklist for the design of filtration systems at KES and Town Campus



Pending - Design and implementation of a solution to reduce further leaching of PFAS from the contaminated soil at the Town Hall campus



Pending - Long-term solution to provide city water to impacted wells

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- **TAXPAYER DOLLARS**
- **SB-100 AN ACT ESTABLISHING AN ACCOUNT IN THE GENERAL FUND TO PROVIDE GRANTS TO TOWNS THAT NEED PFAS TESTING AND REMEDIATION**



Ongoing - Killingworth responsibility for continued testing and maintenance of residential wells

- **CT DRINKING WATER STATE REVOLVING FUND**



Ongoing - Completion of an Engineering Checklist for the design of filtration systems at KES and Town Campus

- **TBD**



Pending - Design and implementation of a solution to reduce further leaching of PFAS from the contaminated soil at the Town Hall campus

- **TBD**
Grant Program to Improve Climate Resilience of Drinking Water Infrastructure - Killingworth does qualify in terms of size and issues with drinking water contamination. However, the grant is focused on improving resilience to natural hazards, not addressing issues of contamination. The EPA only expects to make 2-5 awards in the “National Priority Area 2” category, which this project would fall into. As the primary focus is on addressing PFAS contamination, not resilience to natural hazards, I’m not confident an application would be competitive.



Pending - Long-term solution to provide city water to impacted wells