



Private Wells: Identifying Neighborhoods at Risk and Options to Improve Resilience

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Private Well Facts

It is estimated that...

- There are **322,578** private residential wells in CT
- Over **820,000** people are served by their own well

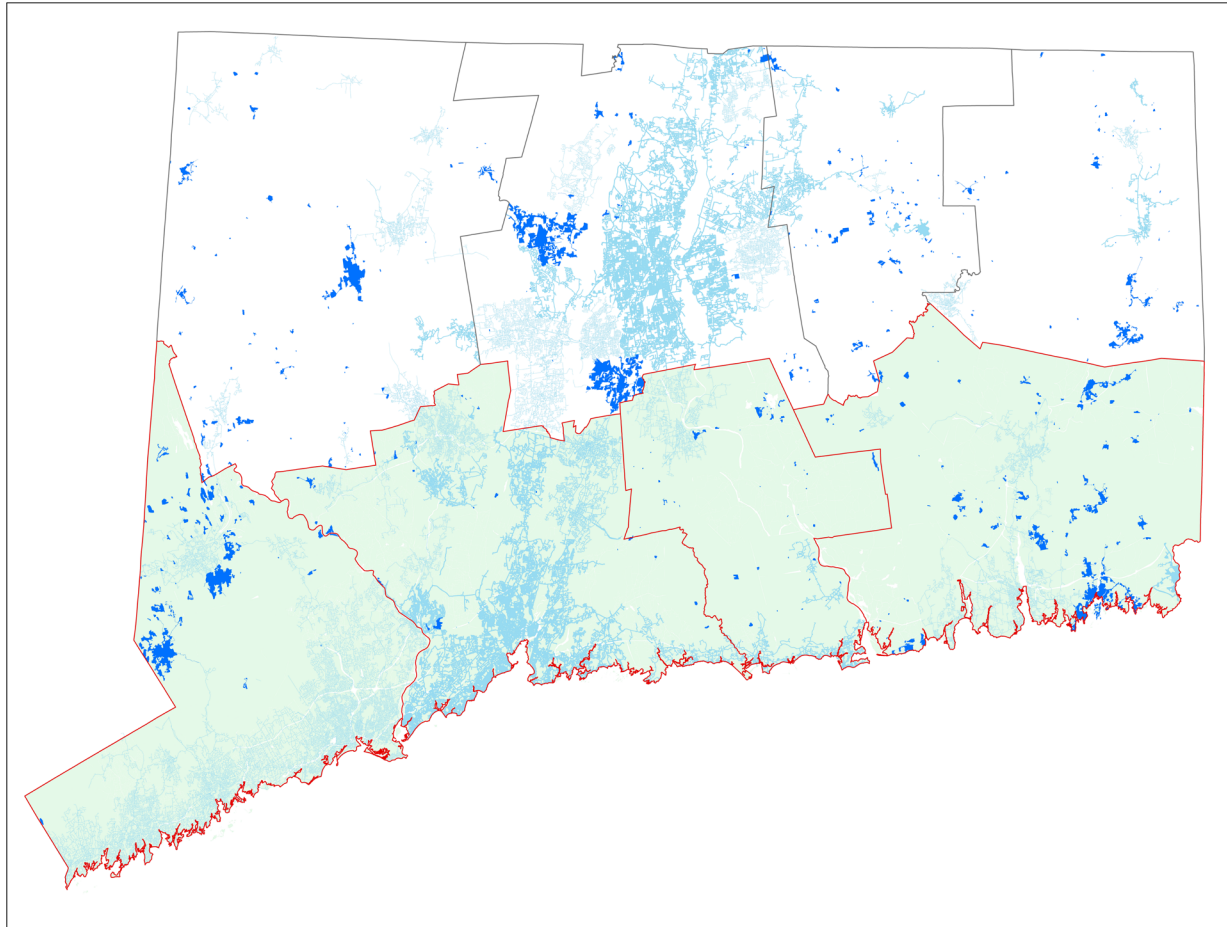
Did you know...

- Private wells are **not** regulated by the U.S. EPA
- Private well owners are responsible for testing and maintaining their well – local health departments and districts have the authority

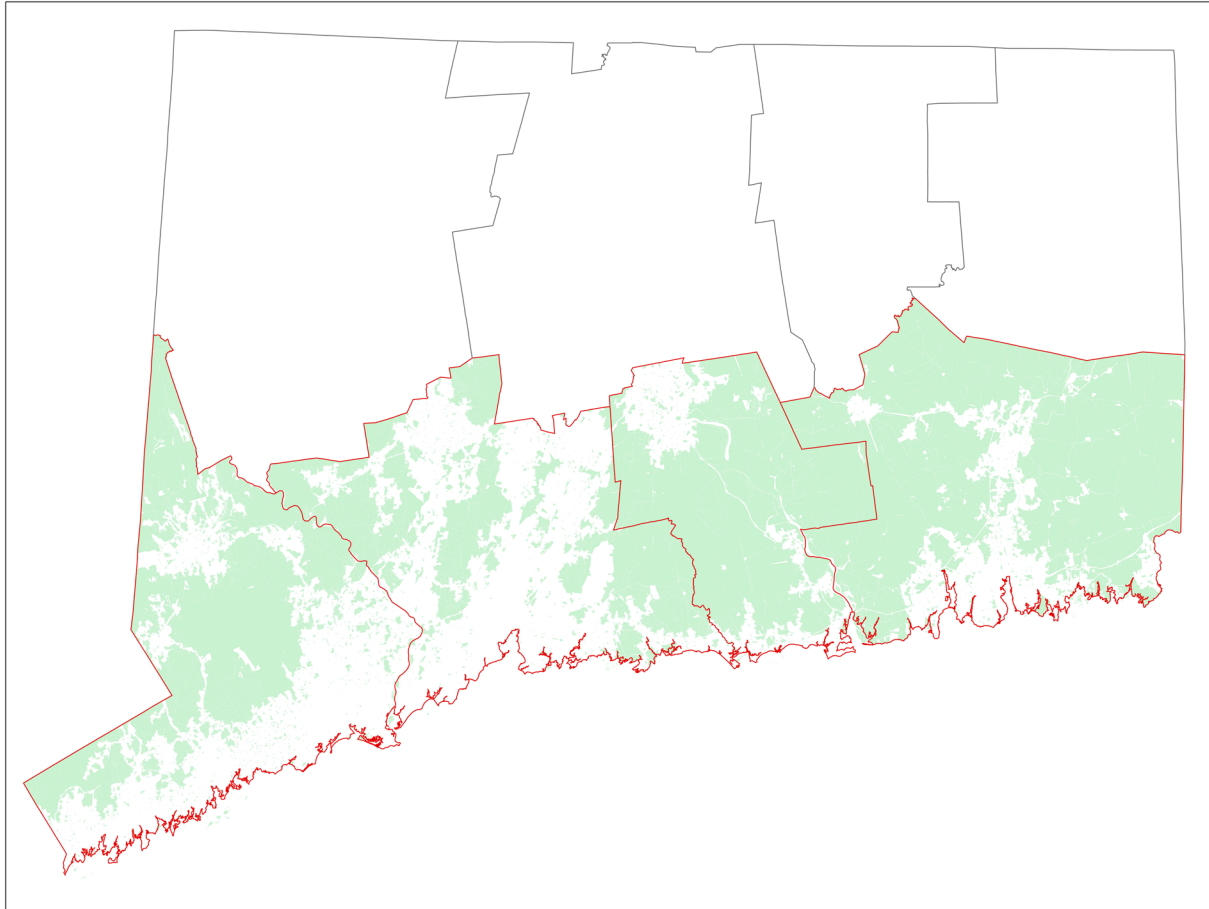
Task Objectives

- 💧 Determine where in the 4 coastal counties there are private wells
- 💧 Identify neighborhoods that are vulnerable to flooding and rely primarily on wells
- 💧 Recommend strategies for improving private well resiliency

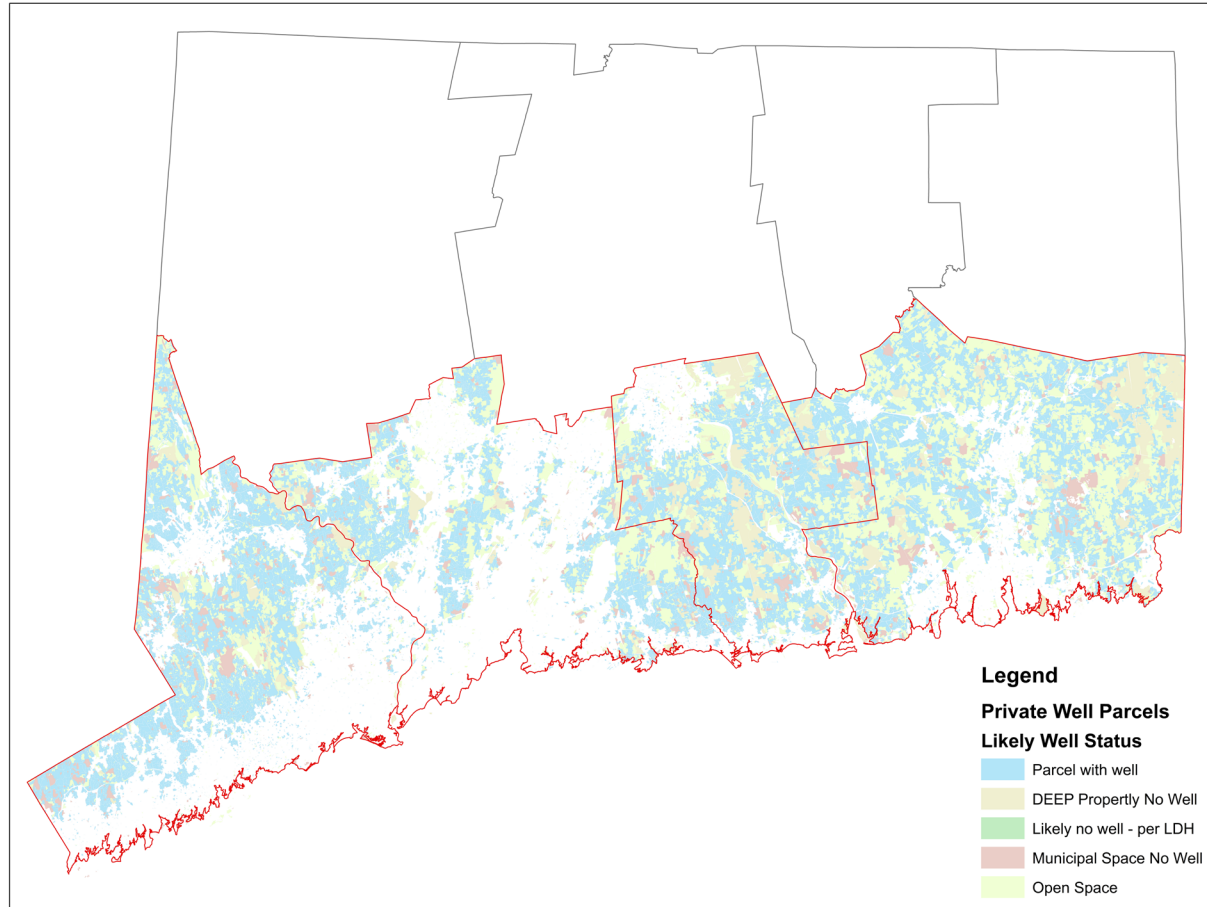
Where are the Wells?



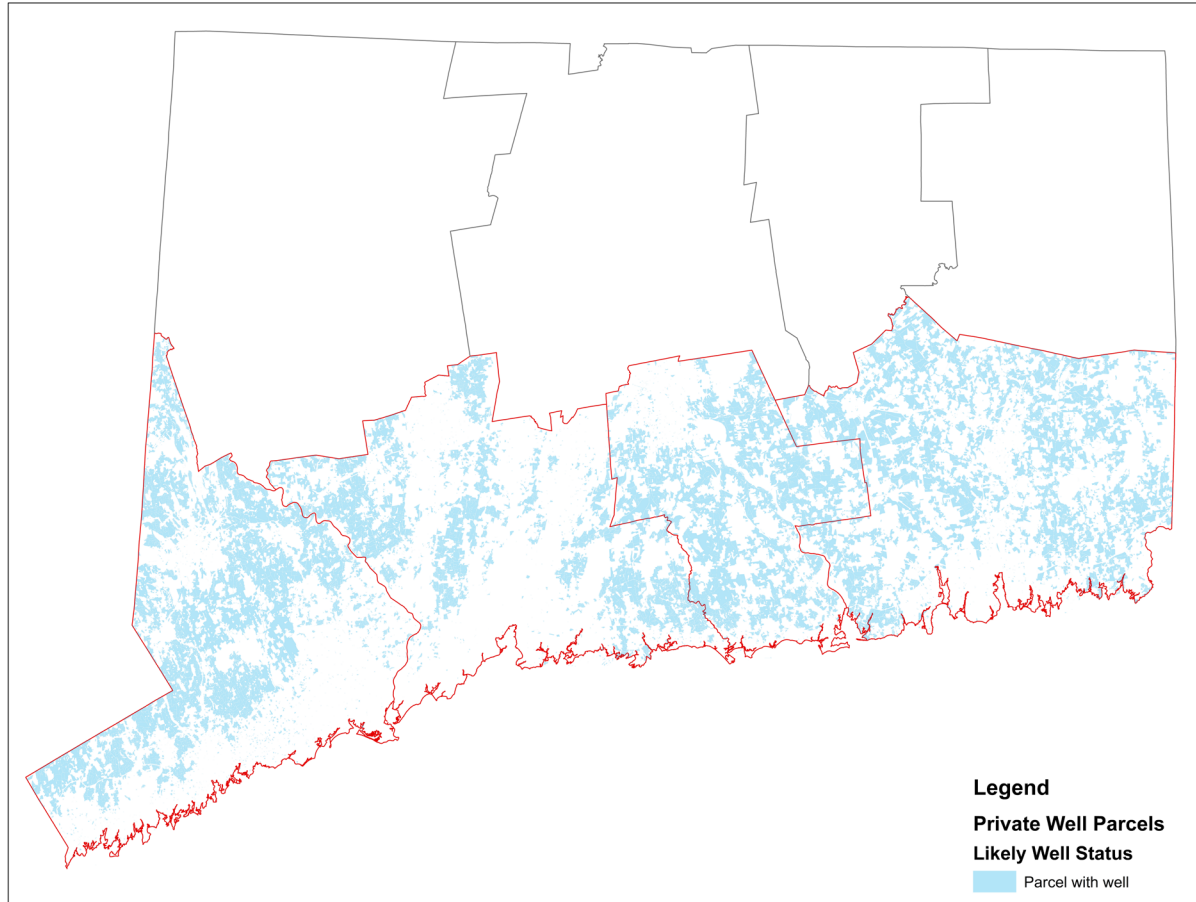
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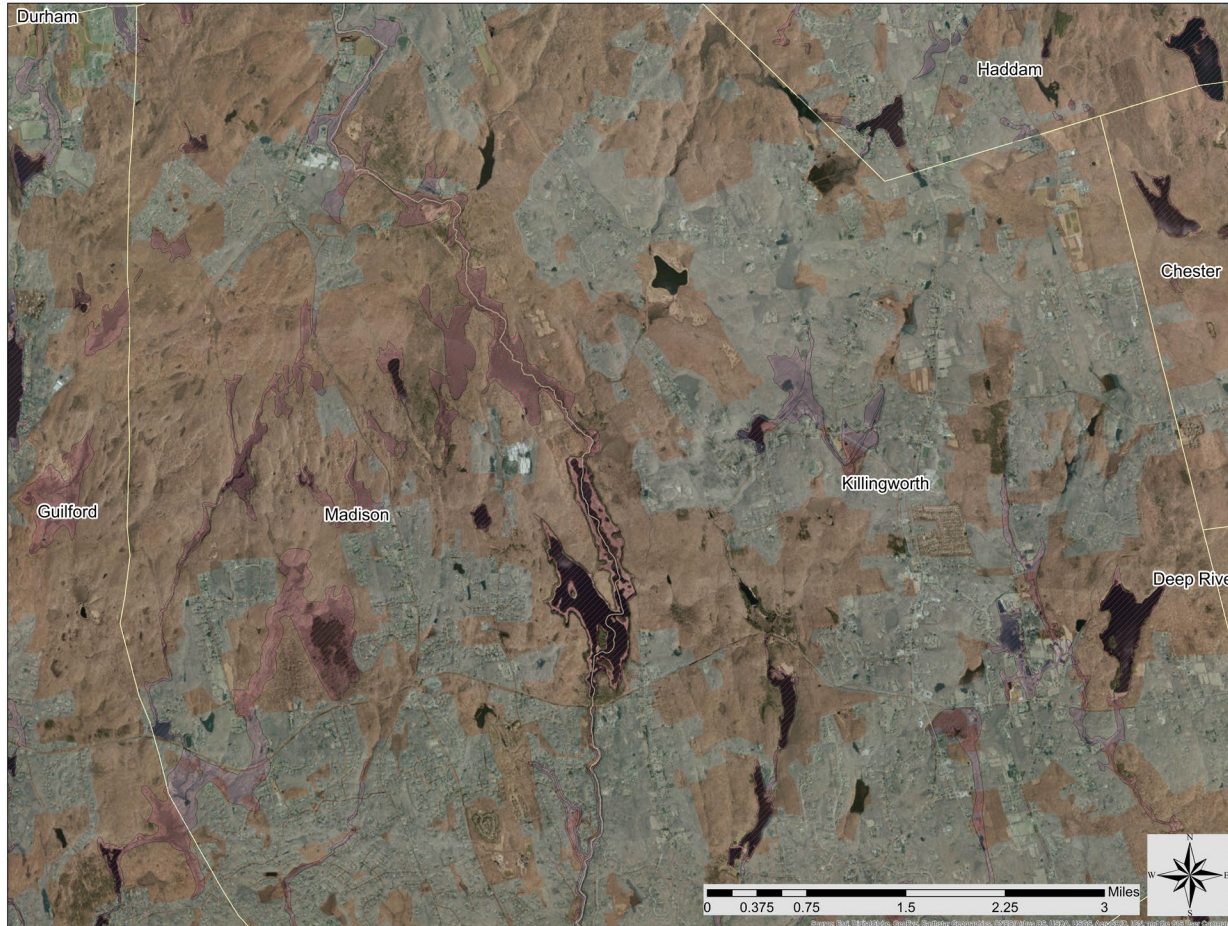
Where are the Wells?



Where are the Wells?



FEMA Flood Zones





At Risk Neighborhoods

Flood Bridge Road, Southbury





At Risk Neighborhoods

Flood Bridge Road, Southbury





At Risk Neighborhoods

Hopeville Pond, Griswold





At Risk Neighborhoods

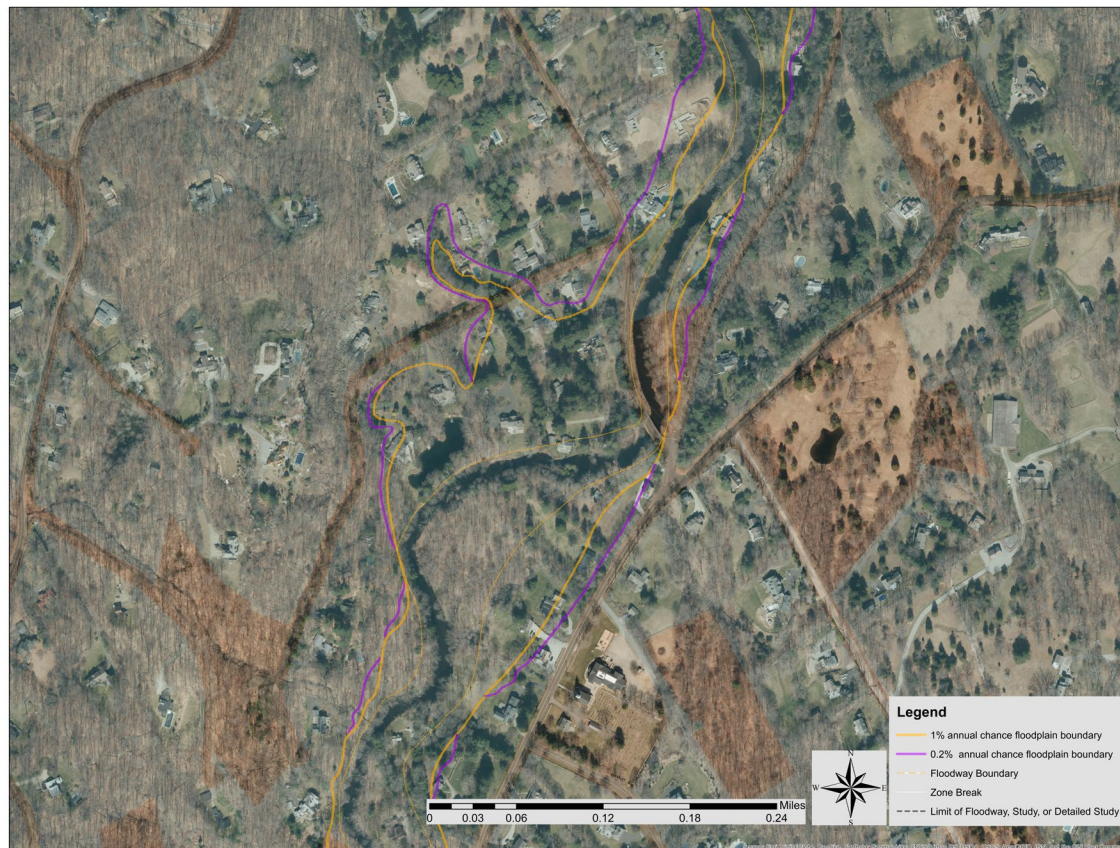
Sandy Hook, Newtown





At Risk Neighborhoods

Saugatuck River, Weston





At Risk Neighborhoods

Saugatuck River, Westport





At Risk Neighborhoods

- Meadowbrook Manor, Brookfield
- Still River Floodplain, Brookfield
- West Lake/Clear Lake, Guilford & North Branford
- Rogers Lake, Old Lyme
- Little Meadow Road, Haddam
- Hopp Brook & Long Swamp Brook, Middlebury
- Housatonic River, Oxford
- Downtown West Redding, Redding

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Private Well Resilience Strategies

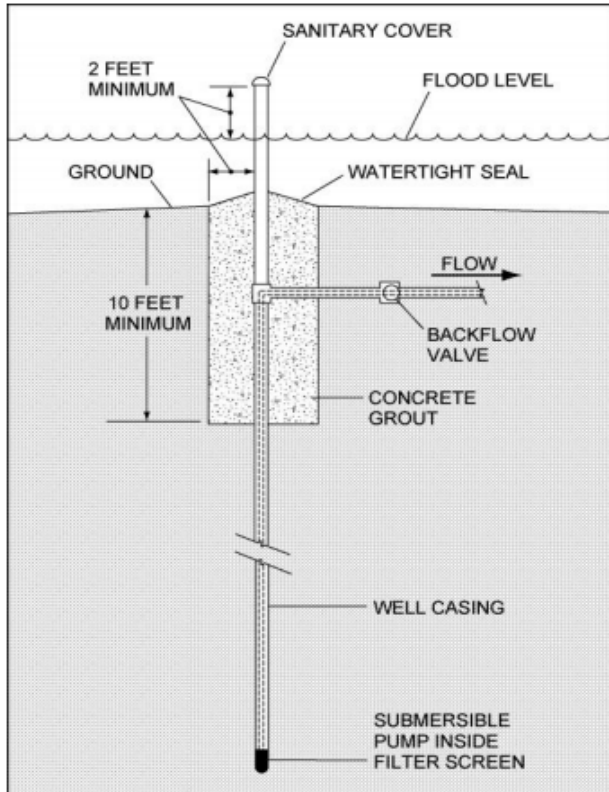
- Drainage Project
- Property Acquisition
- Water Main Extension
- Well Protection
- Relocate Well on Site
- New Public Water System
- Smart Development



Well water casing extension - Oxford, CT
Eastern Water Solutions

Well Protection

Retrofitting wells to protect against flooding events



Protect Wells From Contamination by Flooding, FEMA

FEMA suggests:

- Extending the well casing 2 feet above known flood elevation
- Installing a sanitary cap or seal
- Install a backflow valve
- Placing grout between the casing and the bore hole



Montana Water Quality District

Water Main Extension

Mulberry Point, Tuttle Point & Long Cove Neighborhoods Guilford, CT

- Project is expected to stretch roughly 2.4 miles
- This project could service approximately 145 homes
- Extension will alleviate salt water intrusion concerns and any septic contamination issues that residents may be experiencing



Wellhead located on Daniel Ave. in Guilford



Property Acquisition

River Trail Road, Southbury

Open Space



Source: Prime Publishers

Demolition



Best Practices

- Elevate your wellhead
- Test your well regularly
- Connect to public water supply if available
- Have a backup generator or a plan for storage
- Use steel casing for new wells, and implement protective devices for moving floodwater exposure

Thank you!

- CT Department of Public Health
- UConn
- MMI
- Local Health Directors