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**OVERVIEW**  
**APRIL 2014 RESTORATION ADVISORY BOARD (RAB)**

**NWIRP BETHPAGE**  
**LONG ISLAND, NEW YORK**

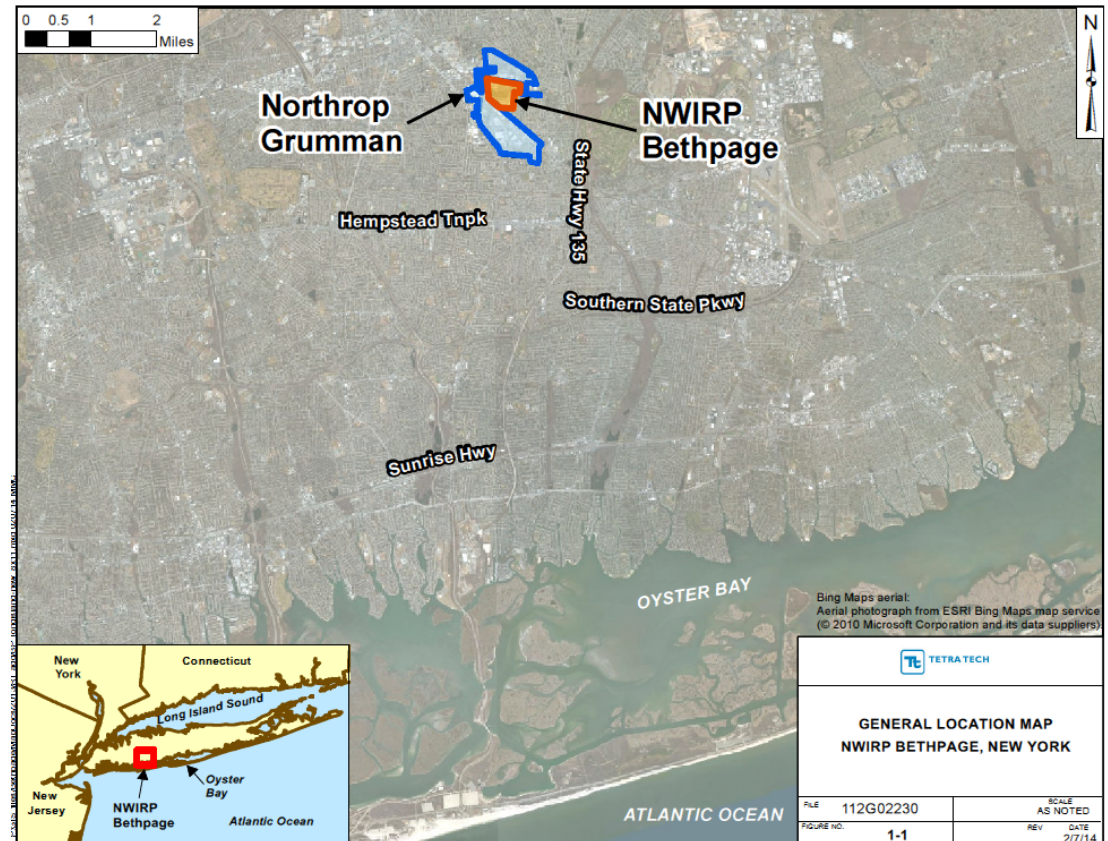
04/09/2014

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# Facility Background



- 1940s - Naval Weapons Industrial Reserve Plant (NWIRP) Bethpage
  - established to build Navy aircraft (originally 109 acres)
  - government-owned contractor-operated (GOCO) facility
- Northrop Grumman (NG)
  - operated the NWIRP as contractor;
  - also owned and operated its own facility adjacent to NWIRP (500 +/- acres)
- 1998
  - NG terminated activities
  - NWIRP property owned by Navy



# Facility Background (continued)

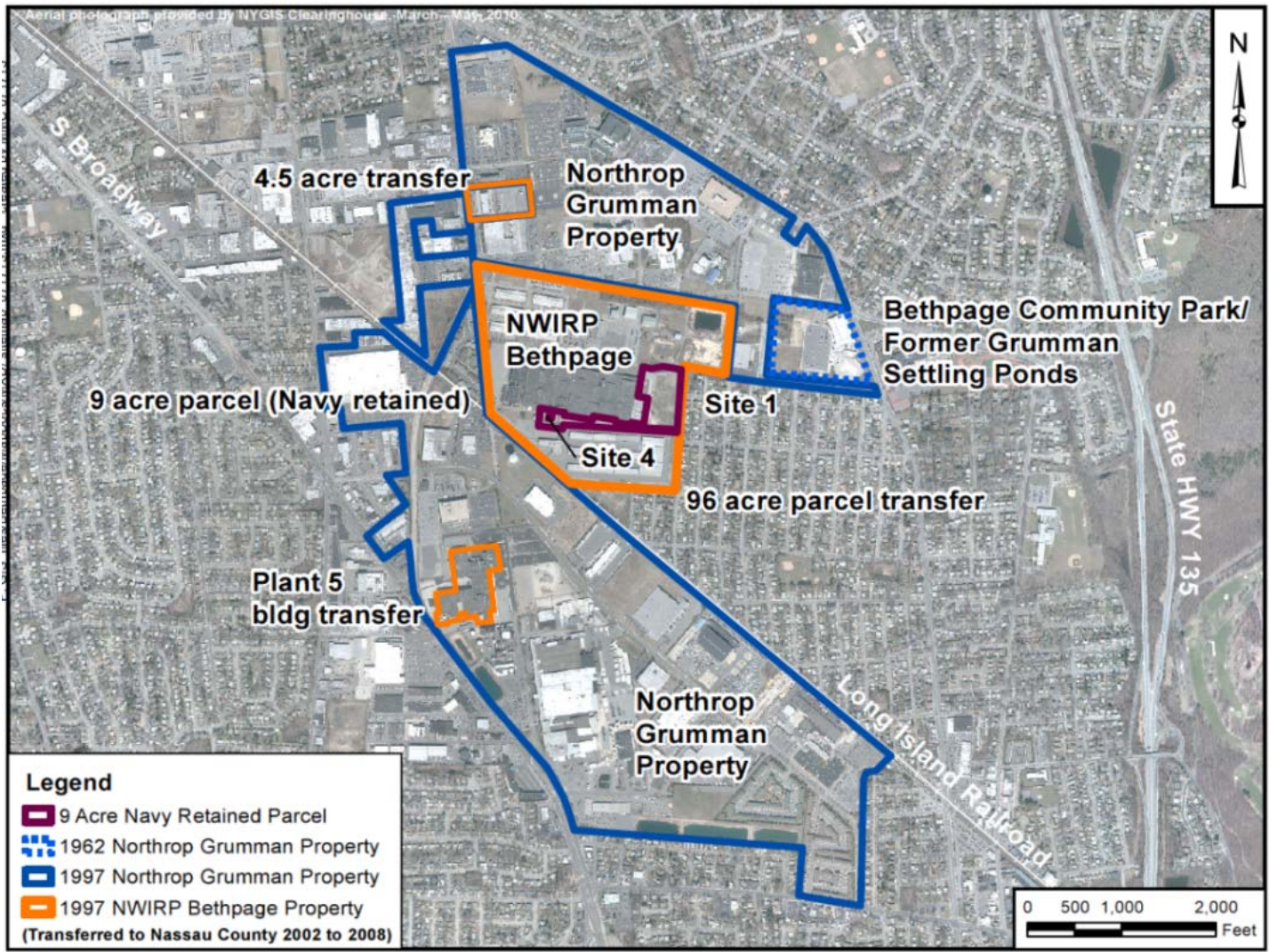


## Property Transfer/Description:

- **1998** - Special Legislation enacted to transfer facility to Nassau County for economic redevelopment
  - Prior to transfer – Environmental cleanup conducted as needed by **Naval Facilities Engineering Command (NAVFAC)** Mid-Atlantic under the **Environmental Restoration (ER)** Program
- **Feb 2008**
  - transfer complete to Nassau County for most of the facility (100 acres)
  - 9 acres retained by Navy for environmental cleanup (ER Sites 1 and 4)
- **Current Navy property**
  - 500-foot boundary with a residential neighborhood along the east
  - Remainder mostly bounded by Nassau County and Steel-Los III, LP properties (both former Navy property).
  - Multiple businesses utilizing the Steel-Los III, LP property



# Facility Background



# Environmental Cleanup Program



## •Regulatory Compliance

- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)** – the legal mechanism for cleaning up abandoned or uncontrolled hazardous waste sites at DOD, Navy's Environmental Restoration (ER) Program
- Resource Conservation and Recovery Act (RCRA) Corrective Action** – a statutorily required cleanup program, similar to CERCLA, that addresses solid waste management units and contaminated media as a condition of RCRA permits, NWIRP Bethpage has a RCRA Permit with NYSDEC
- Title 6 of the New York Codes, Rules, and Regulations (NYCRR)**, Part 375 through the Applicable or Relevant and Appropriate Requirements (ARARs) process of CERCLA

## •The Navy is the lead federal agency for CERCLA

- the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300, and Executive Order 12580, as amended by Executive Order 13016, for CERCLA response activities at Bethpage.

# Environmental Cleanup Program



- **Regulator Involvement CERCLA Sites**

- New York State Department of Environmental Conservation (NYSDEC) provides regulatory review of Navy actions with assistance from the **New York State Department of Health (NYSDOH)**.
- **USEPA** has had limited involvement since NWIRP Bethpage is not a federal National Priorities List (NPL) site.

- **Regulator Involvement RCRA Sites**

- NYSDEC is the lead regulatory agency in accordance with the requirements of the New York State RCRA Hazardous Waste Permit for the facility.



# Investigation and Response



## Soil and Shallow GW:

–Onsite Response Actions conducted:

- Sites 2 and 3 (2002)
- Site 1 (VOC)-contaminated soil and shallow GW (2002)
- Soil Vapor migration (2010)

–Onsite Response Actions to be completed:

- Site 1 - Polychlorinated biphenyls (PCBs) soil,
- Site 4 – Former USTs contained No. 6 Fuel Oil



# Site 1 – Former Drum Marshalling Area

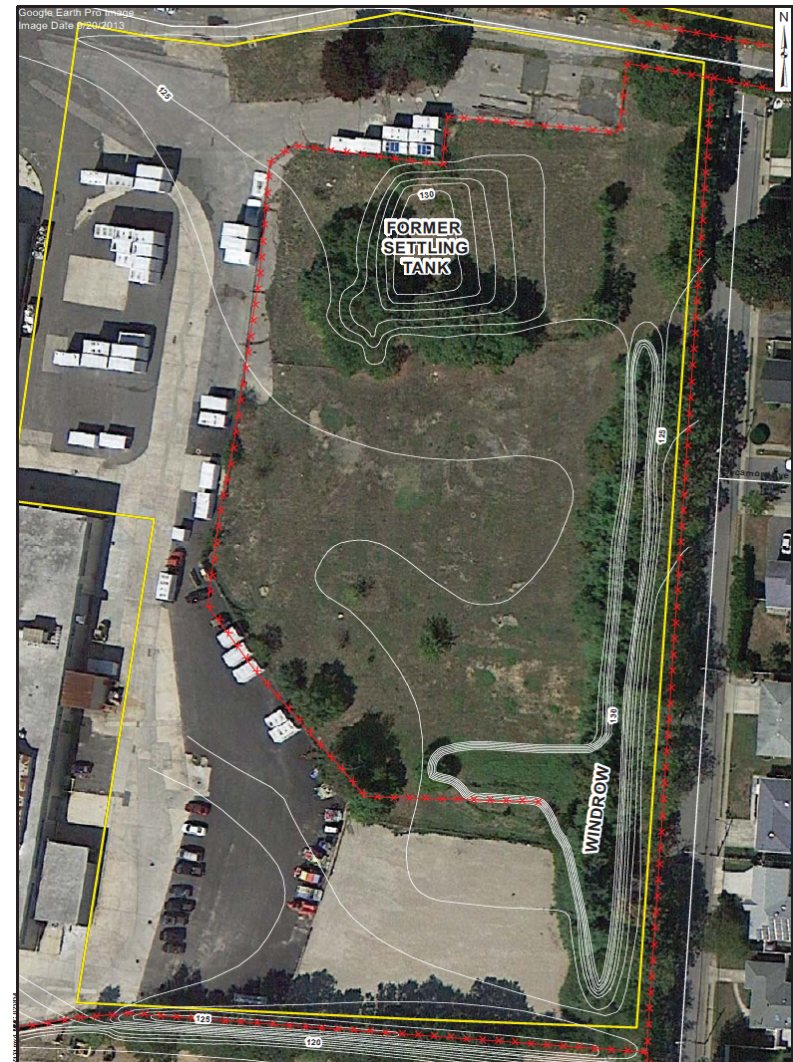


## Site 1 Issues:

- Site was used by Northrop Grumman for staging waste solvents, liquid plating wastes (metals), and autoclave (PCB fluid) wastes.
- PCB-contaminated soil original estimate: 1,400 cubic yards and less than 10 feet deep
- 1995 ROD (OU 1) identified excavation and offsite disposal
- Additional testing found PCBs to 65 feet deep
- Current volume estimate increased to 60,000 cubic yards

## Path Forward:

- 2014 Remedial Investigation Addendum
- 2014 Feasibility Study Addendum
- 2016 OU1 ROD Amendment or new ROD
- 2017 Start of Remedy





## Site 4 – Former UST Site



- Former location of underground storage tanks for No. 6 Fuel Oil (tar).
  - Tanks were likely removed in the 1980s.
  - Groundwater sampling found minimal or no impact.
  - Site boundaries are constrained by 20-acre building, limits excavation
- In-situ bio pilot study attempted in 2004 to 2006, limited success
- Treatment options limited
- Navy is proceeding with a Proposed Plan in 2014

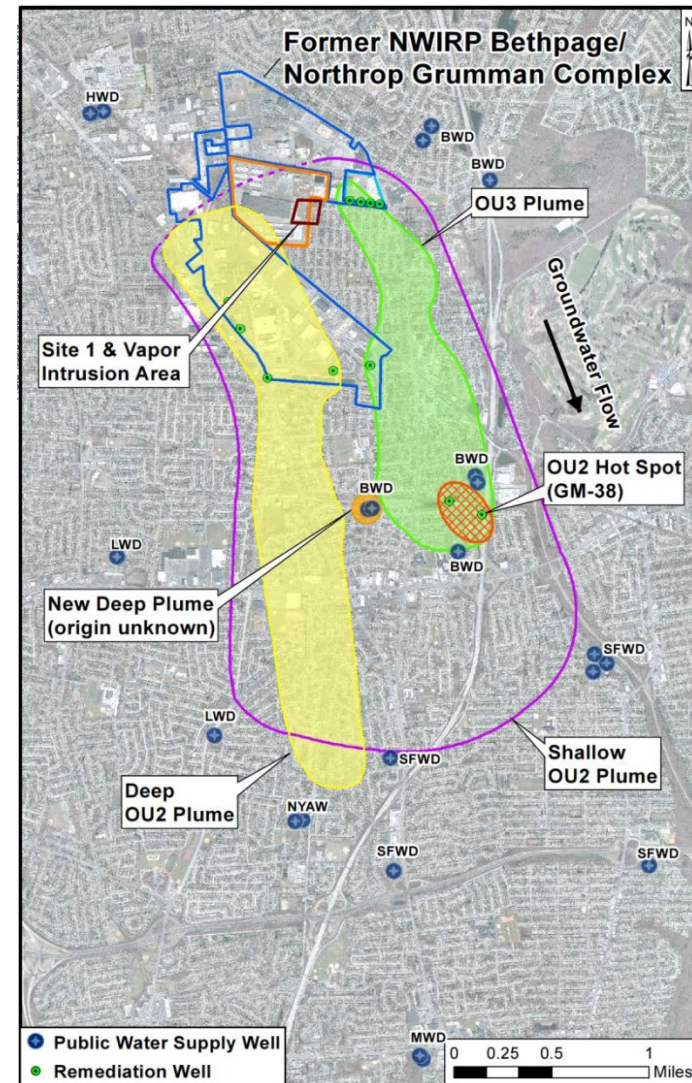


# OU2 Groundwater Investigation



Groundwater contamination that originated on NWIRP property and co-mingled with contamination that originated on Northrop Grumman property, such that the source of the contamination cannot be identified.

- **Shallow Plume**
  - 30 to 300 feet deep; less than 10 parts per billion (ppb) of each contaminant
- **GM-38 Hot Spot**
  - 250 to 500 feet; 50 to 1,500 ppb
- **Deep Eastern Plume, OU 3 groundwater**
  - 50 to 600 feet: 50 to 10,000 ppb
- **Deep Western Plume**
  - 300 to 750 feet; 50 to 400 ppb
- **BWD Plant 6 Plume, source uncertain**
  - Screen interval 700 feet; 1,200 ppb





# OU2 Groundwater ROD



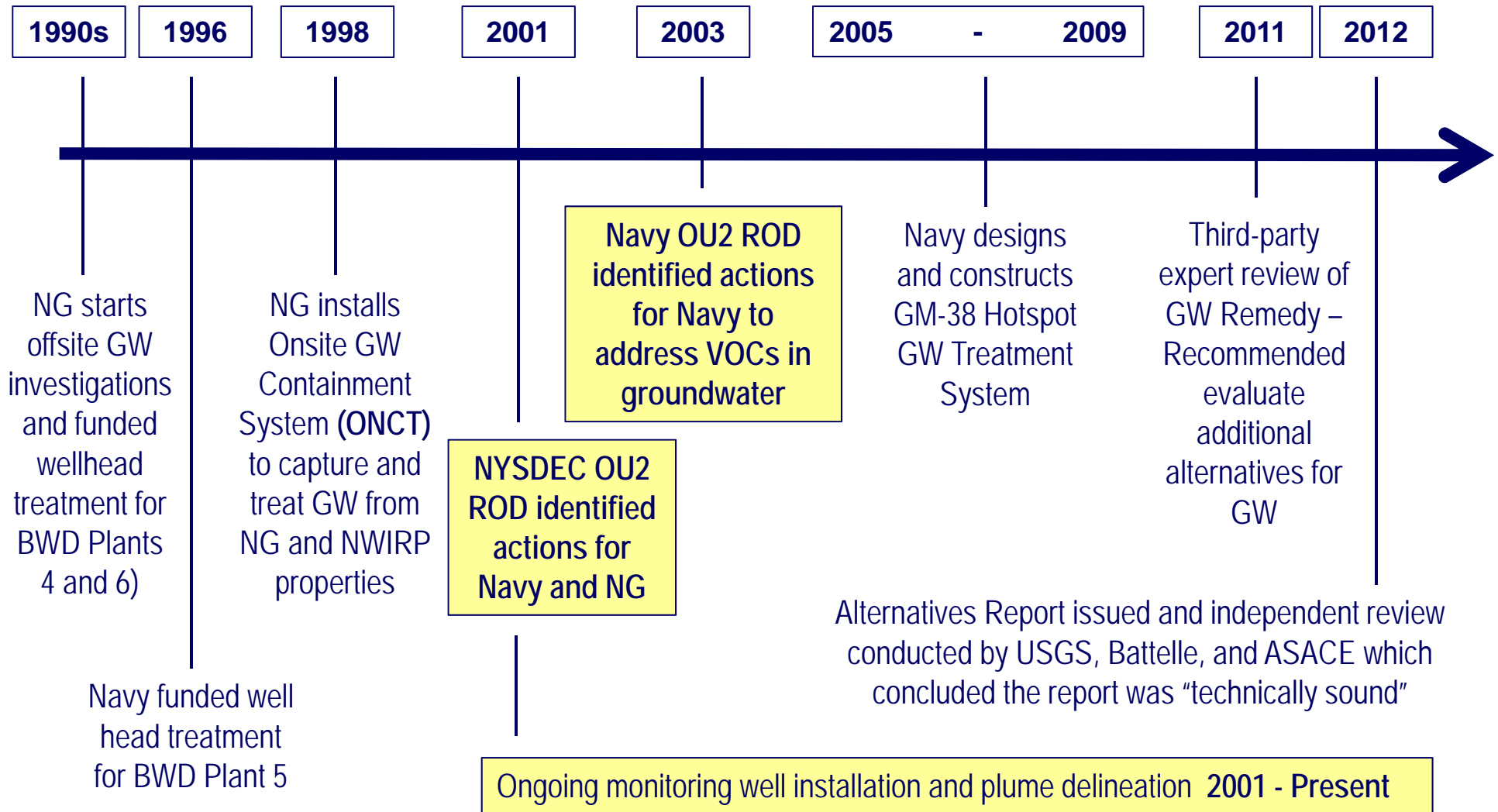
## 2003 OU2 Groundwater ROD:

- GM-38 Hot Spot treatment system
- Public Water Supply Protection
- Groundwater Monitoring





# Groundwater Investigation Timeline



# Groundwater



Groundwater  
remediation wells  
and  
public water  
supplies

