



Department of Navy
Naval Weapons Industrial Reserve Plant
Restoration Advisory Board Meeting

NWIRP Bethpage Program Overview

Presented by:
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NAVFAC Mid-Atlantic
16 November 2022

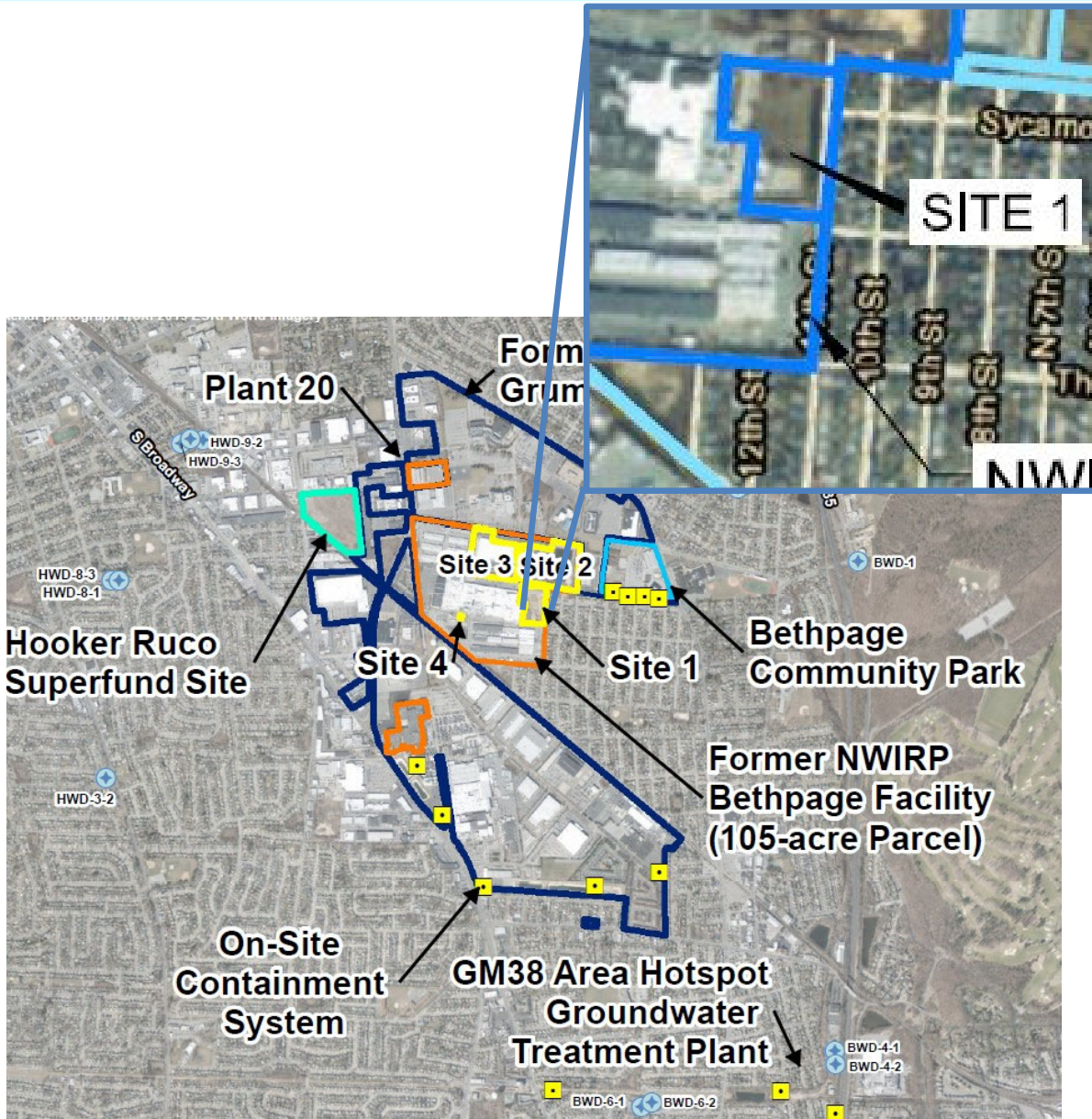
Presentation Topics – NWIRP Bethpage Program Overview



- Site 1 General Update
- Site 4 General Update
- Phase I – GM38 Groundwater Treatment Plant Update
- Ongoing/Upcoming Remedial Construction Projects
- Data Collection and Property Access



Site 1



- Former drum marshalling area
- Soil removal actions completed in 2020
- All remedies are in place and operational
- Currently leased to Steel Equities from Nassau County

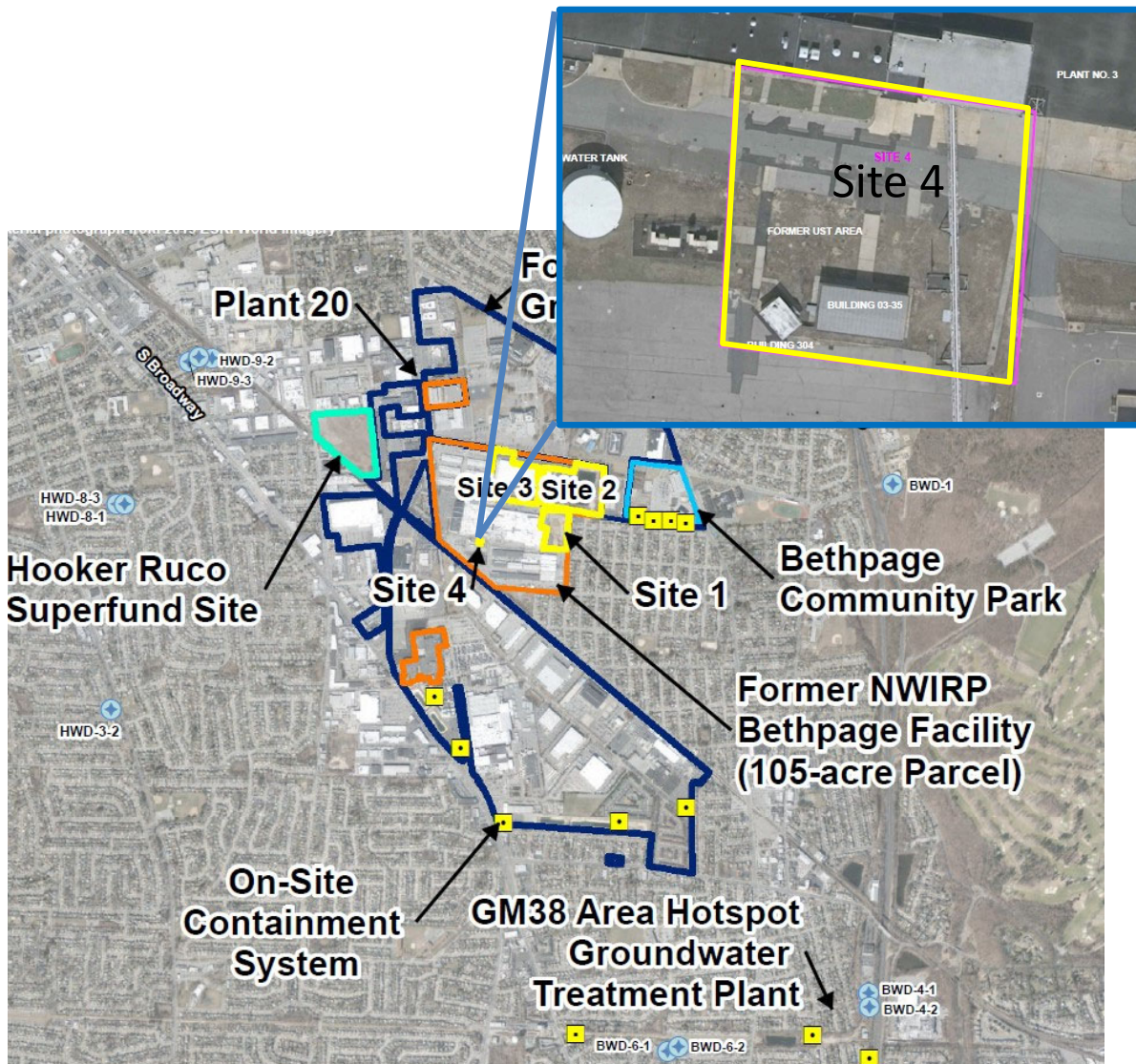
Site 1

- General Update
 - Remedial Action for Contaminated Soil is in its post construction Operation & Maintenance phase with quarterly inspections and site maintenance until February 2023
 - Soil Vapor Extraction System Expansion project was completed in August 2022

- Site 1 Fence Removal
- Tree Watering and Maintenance



Site 4



- Environmental concerns were first identified at Site 4 during a 1997 investigation by Northrop Grumman Corporation (NGC) that identified former USTs and petroleum-contaminated soil in the area.
- The steam injection pilot study was run from April 2019 to May 2020.
- Biosparge system has been operating since July 2021

Site 4 Update



- The biosparge system will continue to operate for the next four years
- Conducting general site maintenance and upkeep

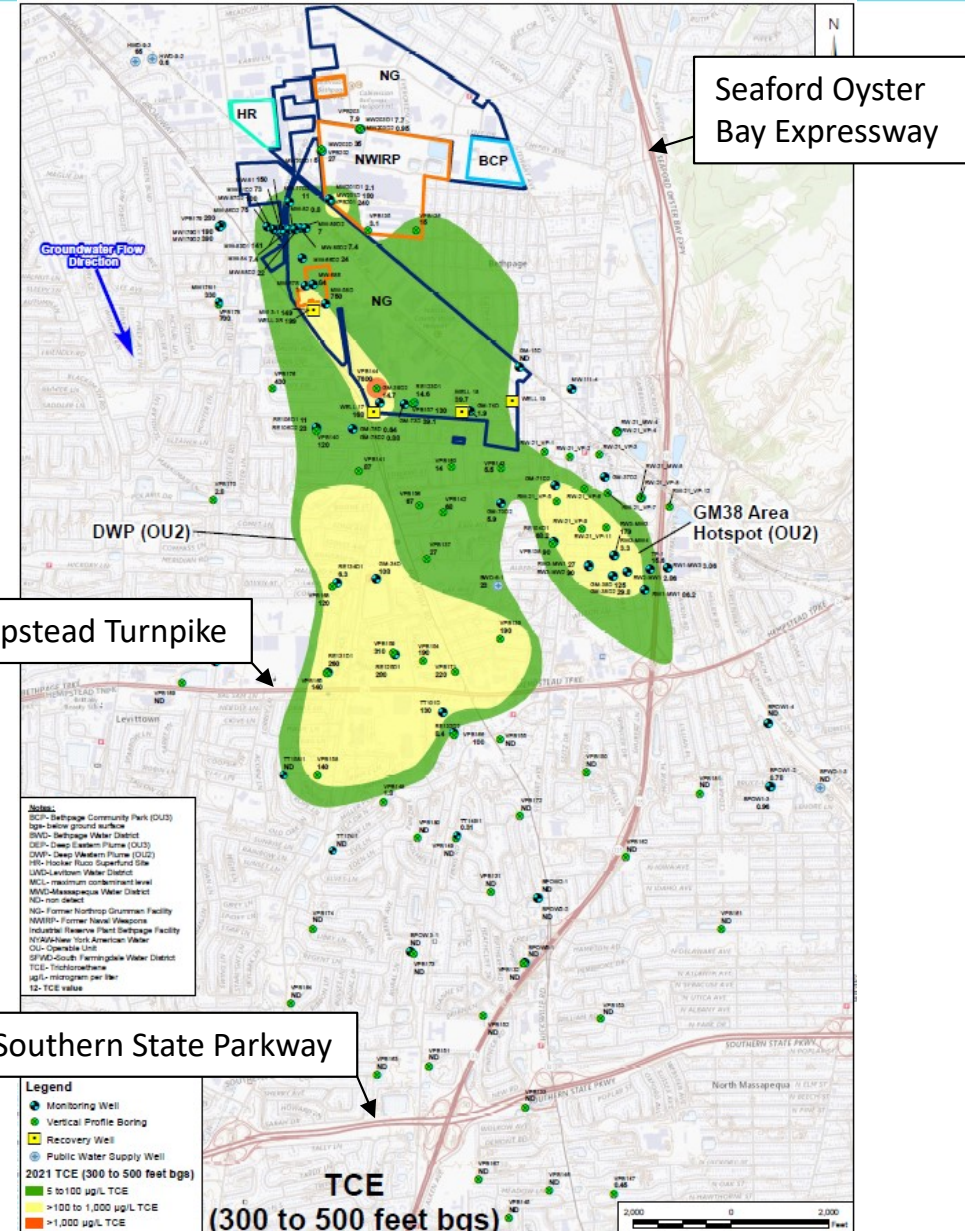
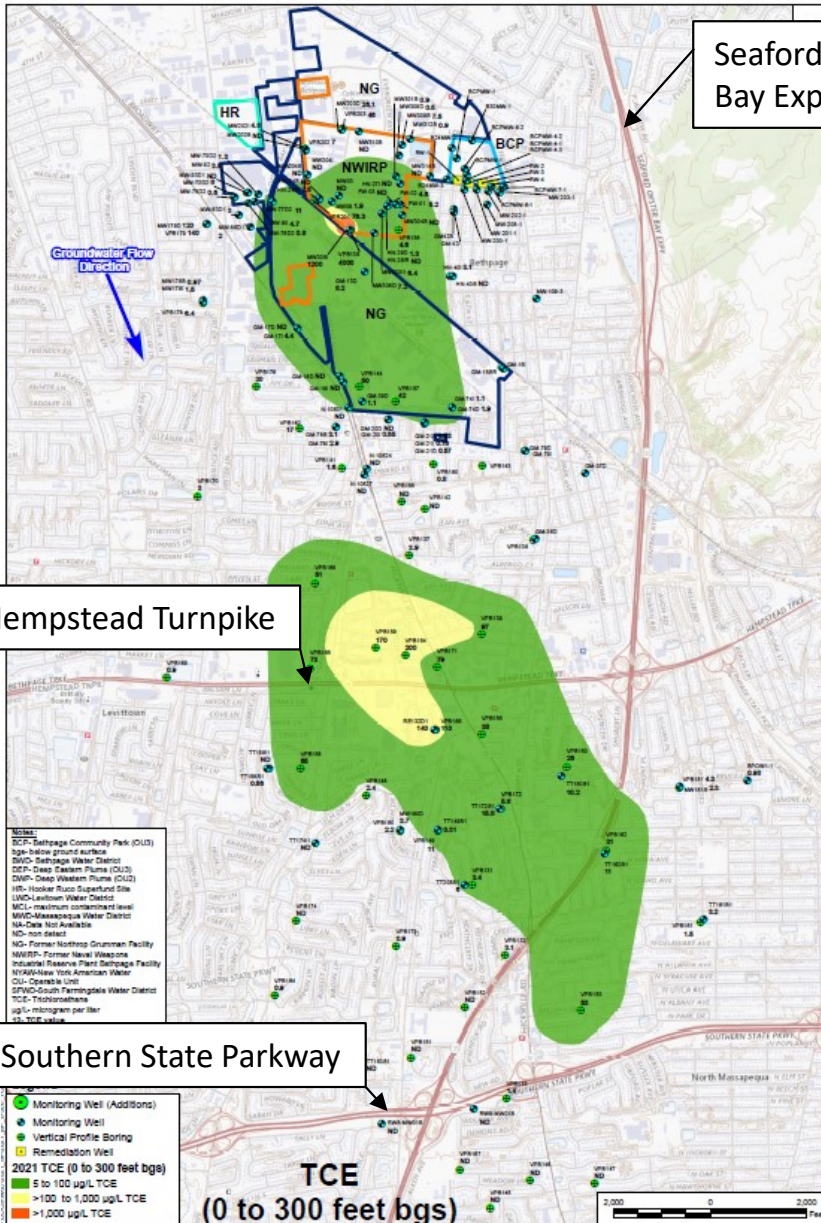


Navy-Northrop Grumman TCE Plume Maps



Shallow

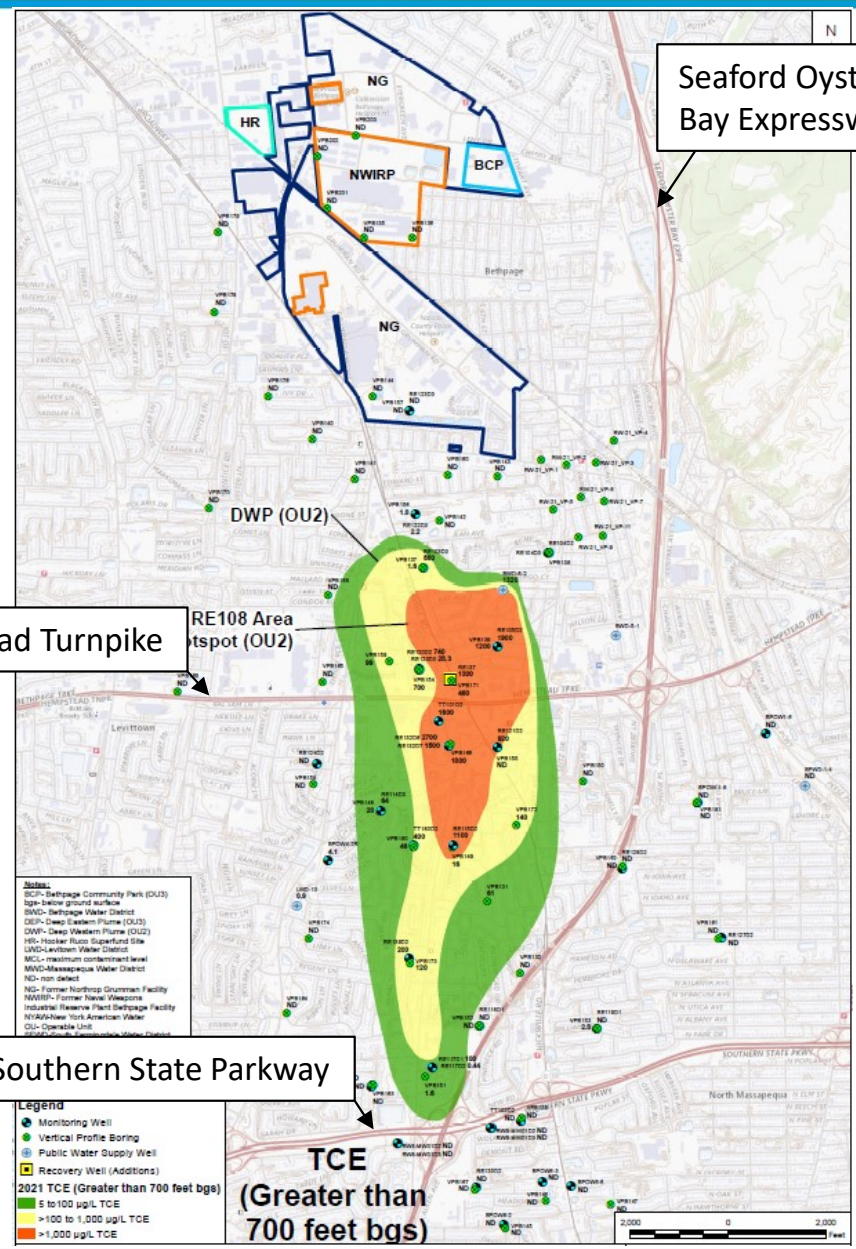
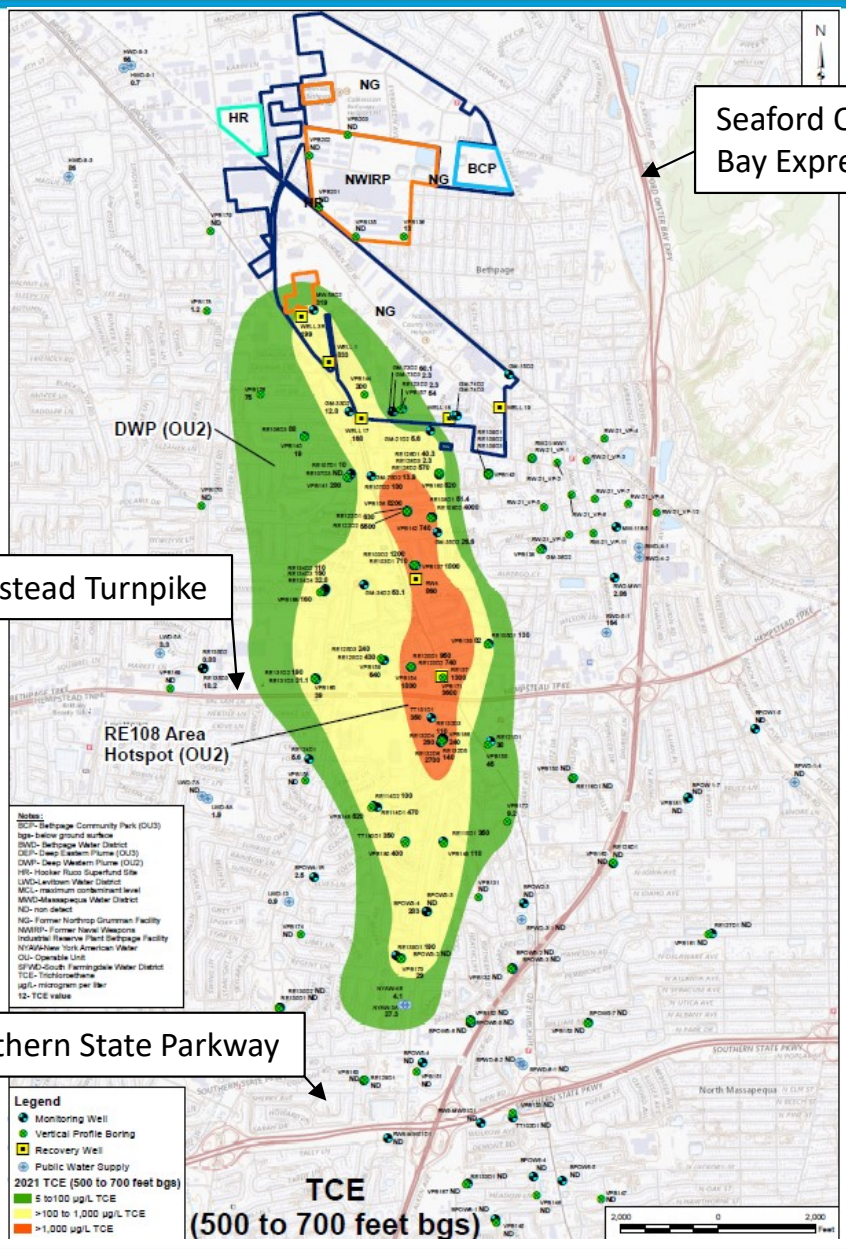
Intermediate



Navy-Northrop Grumman TCE Plume Maps



Deep



Hempstead Turnpike

Seaford Oyster Bay Expressway

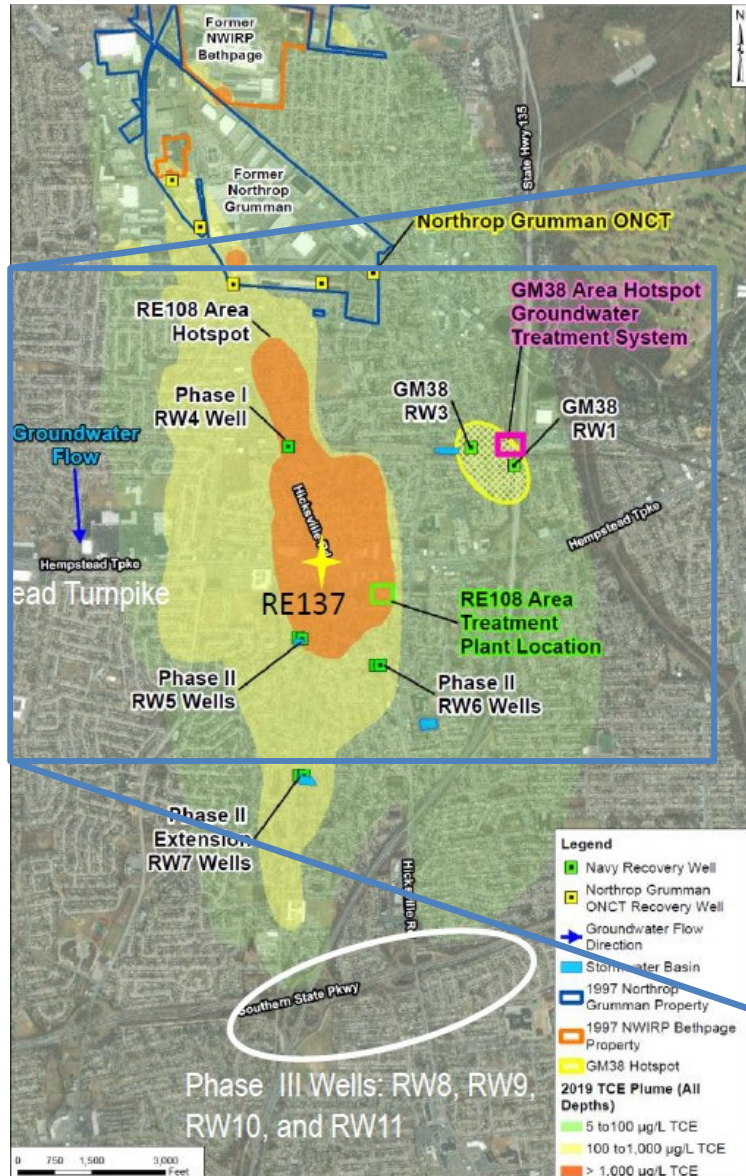
Seaford Oyster Bay Expressway

Hempstead Turnpike

Southern State Parkway

Southern State Parkway

Phase I RE108 Hotspot



Phase I

RE108 Hotspot



- GM38 Groundwater Treatment Plant Update
 - Advanced Oxidation Processing (AOP) was added to the plant in April 2021 for the treatment of 1,4 dioxane. The system has been operating as it should since it's installation
 - Navy is planning upgrades to the treatment plant to increase treatment capacity
 - The GM38 groundwater treatment plant is operating as expected, water testing of the system is taking place monthly and 1,4 dioxane and trichloroethylene (TCE) are non-detect or very low in the effluent

GM38 AOP



GM38 Peroxide Tank



RE137 AOP



Ongoing/Upcoming Remedial Construction Projects



- Remedial Construction Projects
 - Much of the Navy's remedy relies on recovery wells. Recovery wells are strategically placed to pump contaminated water from the plume and treat the water to drinking water standards for discharge to local basins.
 - The GM38 Groundwater Treatment Plant upgrade designs are in process. Treatment system upgrades will take place 2023-2024
 - The RE137 temporary treatment system (near the intersection of Hicksville Road and Hempstead Turnpike) will operate until RE137 is connected into the GM38 Groundwater Treatment Plant
 - Phase II Recovery Wells 6A, 6B, 7A, and 7B have been completed. RW 5A and 5B drilling is in progress, the well will be complete by May 2023
 - Phase III Recovery Wells 8 and 9 are complete. RW10 site work will begin in November/December 2022. The Phase III Groundwater Treatment Plant design is in progress
 - Phase II Groundwater Treatment Plant construction began in December 2021 and is projected to be commissioned by April 2023 with full operation by August 2023

Data Collection and Property Access



- Data Collection
 - Regular groundwater monitoring activities
 - The 2nd data gap study will commence November/December 2022, this study focuses on evaluating the efficiency of the Navy's remedial efforts
- Property Access
 - The Navy is completing the access required for current groundwater investigations and remedial construction activities
 - The Navy is reviewing access requirements for 2023 and future projects, including pipeline work and the Phase III Groundwater Treatment Plant

NEXT: Groundwater Monitoring Results
Dave Brayack, Tetra Tech