

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

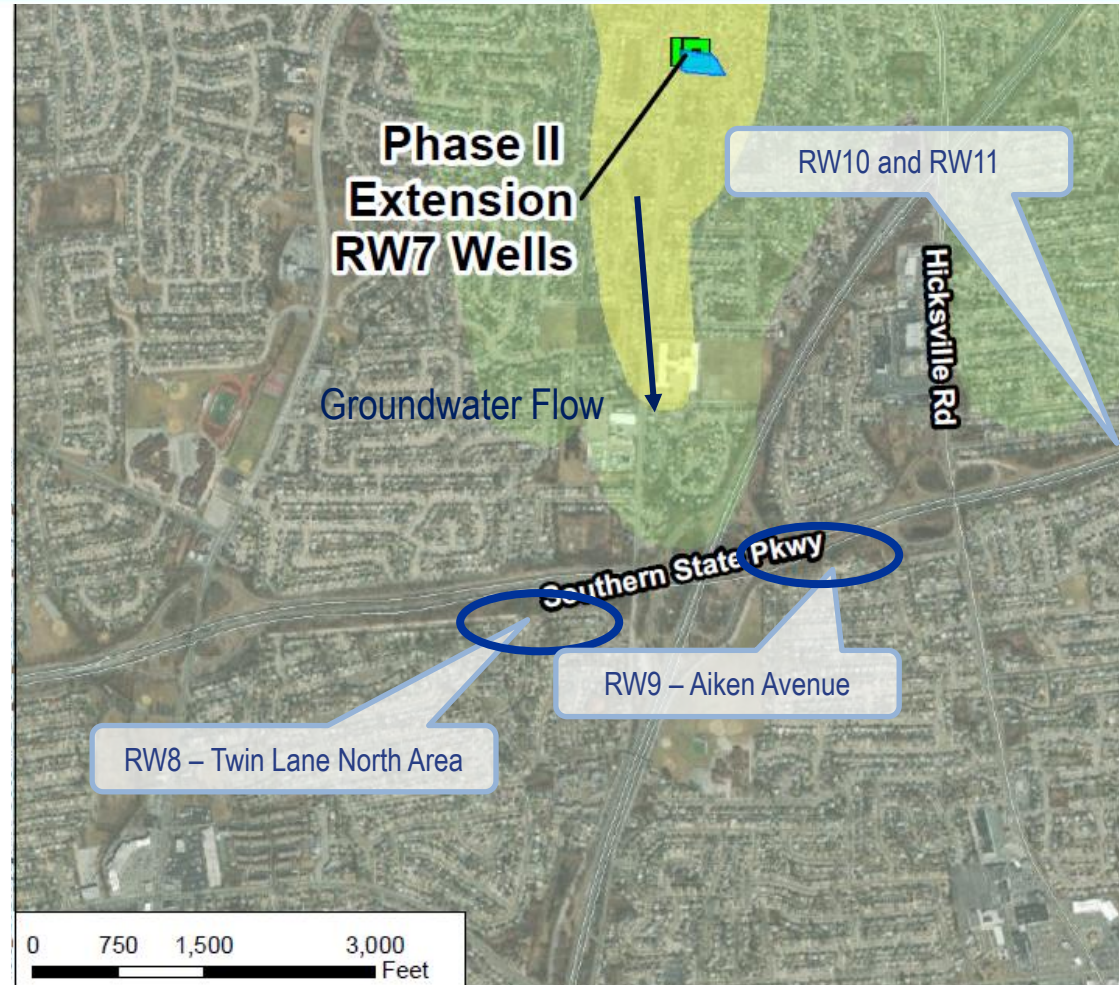
Phase III (RW8 to RW11) – Southern Plume Intercept
Treatment System Update

Presented by:
David Brayack, Project Manager
Tetra Tech 17 May 2023

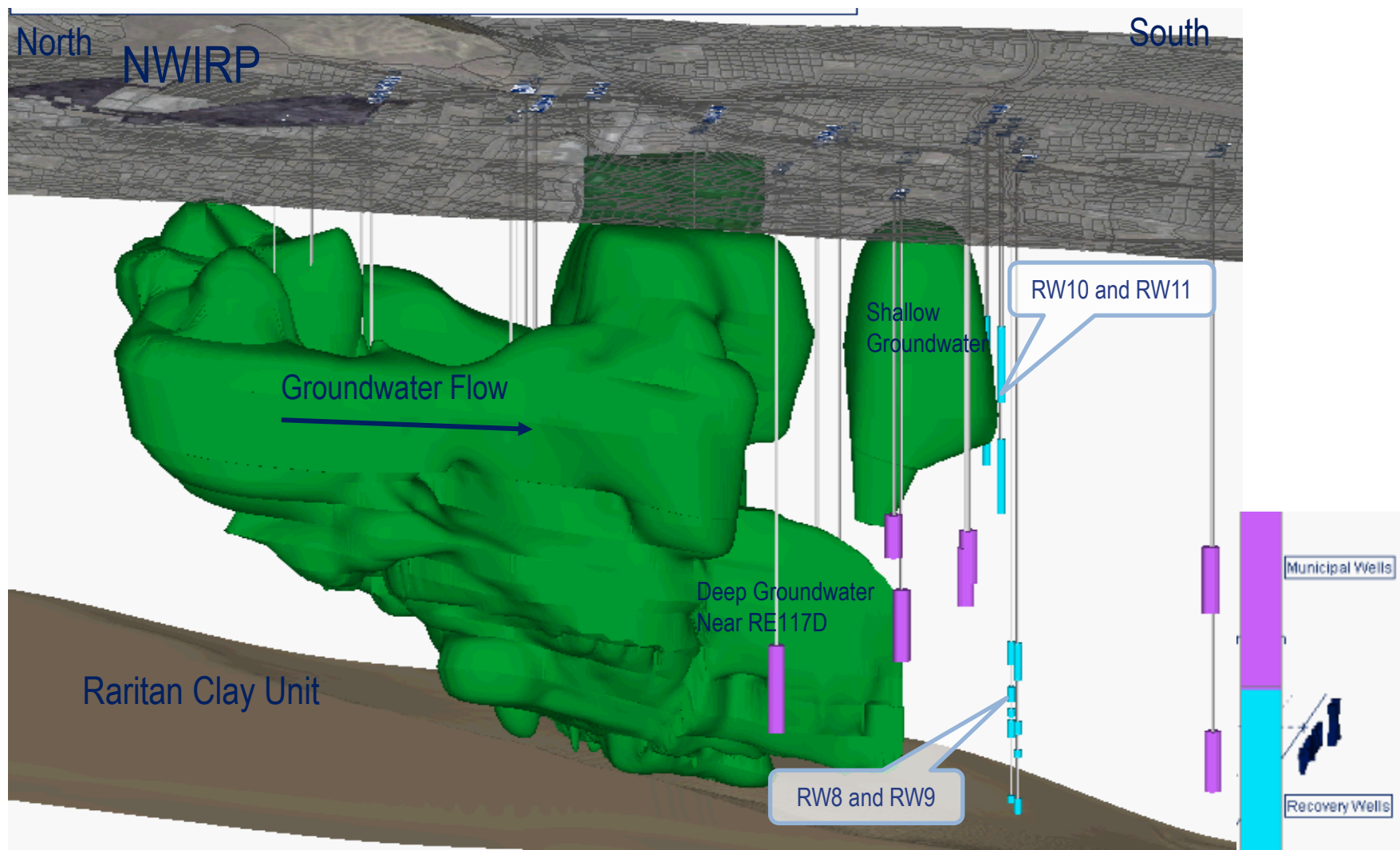
Phase III – Southern Plume Intercept Treatment System Update



- Location based on extensive monitoring of plume migration and space available
- Phase III-A - RW8 and RW9 target deep groundwater that is not captured by Recovery Well RW7 – Initial focus on deep groundwater
- Phase III-B – Potential for RW10 and/or RW11 wells to the east, with a possibility of a separate treatment plant – shallow groundwater



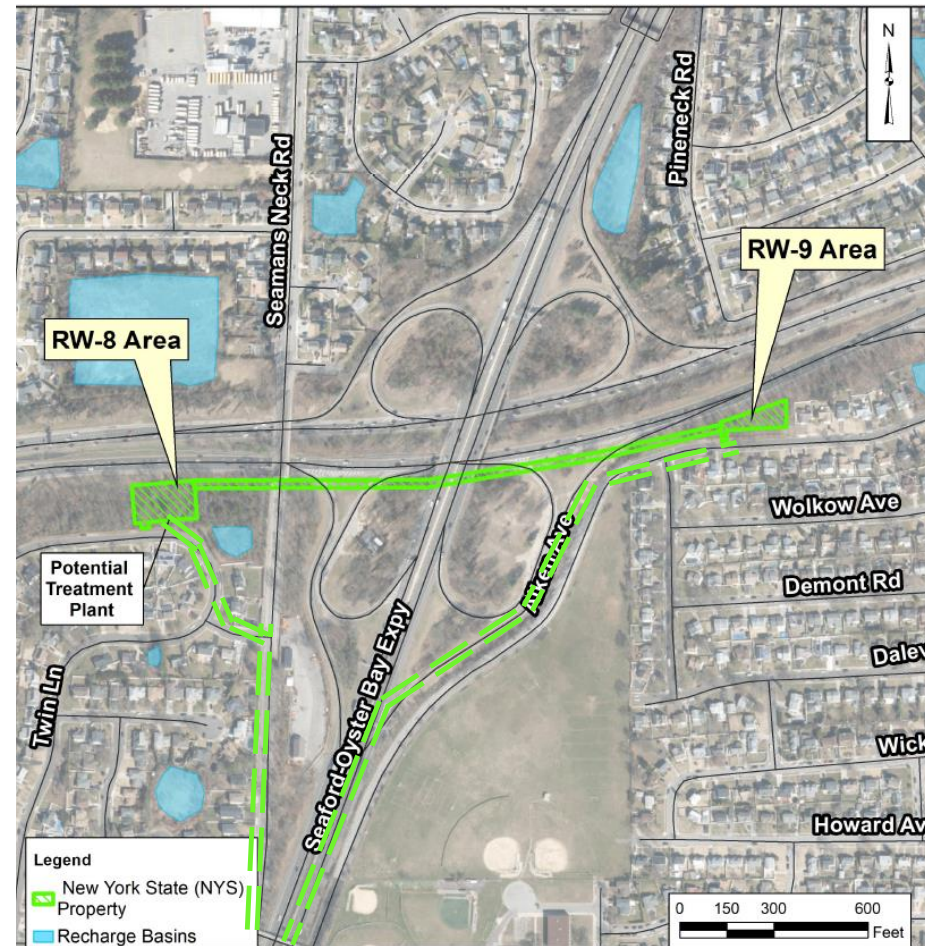
Phase III – Southern Plume Intercept Treatment System Update



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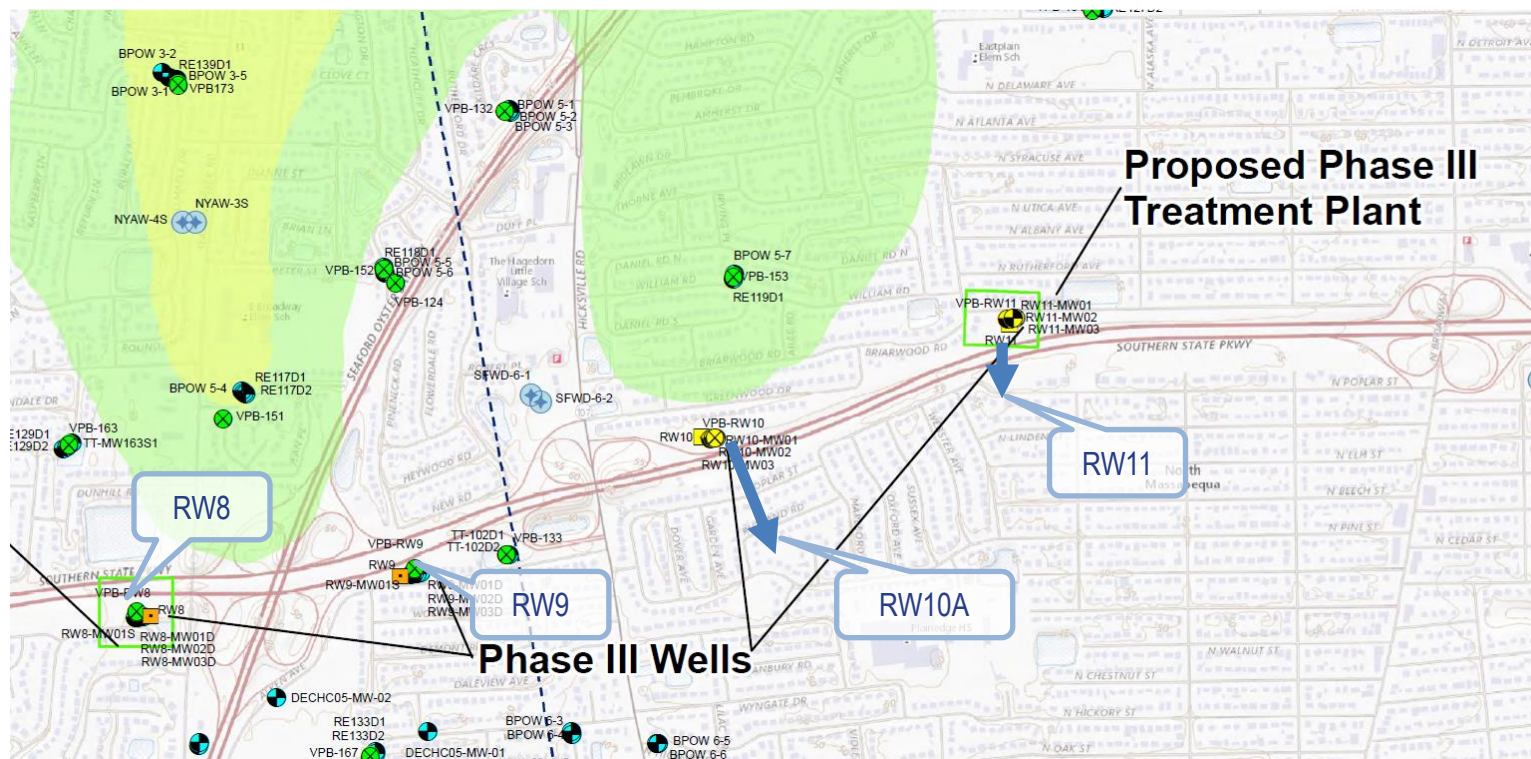
- Phase III drilling started in March 2021
- RW8 and RW9: (2) vertical profile borings, (8) monitoring wells, and (2) recovery wells are complete
- Computer modeling runs to evaluate capture are complete
- Recovery Well RW8 and RW9 pumping tests completed in December 2022
- Computer modeling evaluation confirm locations and identify target pumping rates
- Two different piping routes being evaluated



Phase III – Southern Plume Intercept Treatment System Update



- RW10 VPB and monitoring wells are complete
- May 2023, preparing to drill VPB and monitoring wells for RW11
- Due to access issues, plume location, and computer modeling, RW10 and RW11 and associated VPBs and monitoring wells moved south of Southern State Parkway



Phase III – Southern Plume Intercept Treatment System, Recovery Well RW8 Area



Phase III – Southern Plume Intercept Treatment System, Recovery Well RW8 Pumping Test Equipment

- Pumping tests conducted at 1,000 gallons per minute for three days
- Although water was clean, filtration and granular activated carbon (GAC) was used to treat water prior to discharge
- Data is used to check model calibration and if necessary, modify the model calibration in this area



Phase III – Southern Plume Intercept Treatment System Update – Path Forward

- Phase III-A (RW8 and RW9) Treatment System design: 2022 to 2023
 - Surveying and basin infiltration testing underway
 - Preliminary setting for treatment plant location
 - Design for RW9 to RW8 pipeline in progress
- Treatment Plant construction and operation to start in 2024
- Phase III-B (RW10 and/or RW11) Treatment System approximately one year after Phase III-A System

Phase III – Southern Plume Intercept Treatment System Update – Path Forward



RAB Questions

NEXT: Phase II Remedial Action
Steve Matney, AGVIQ