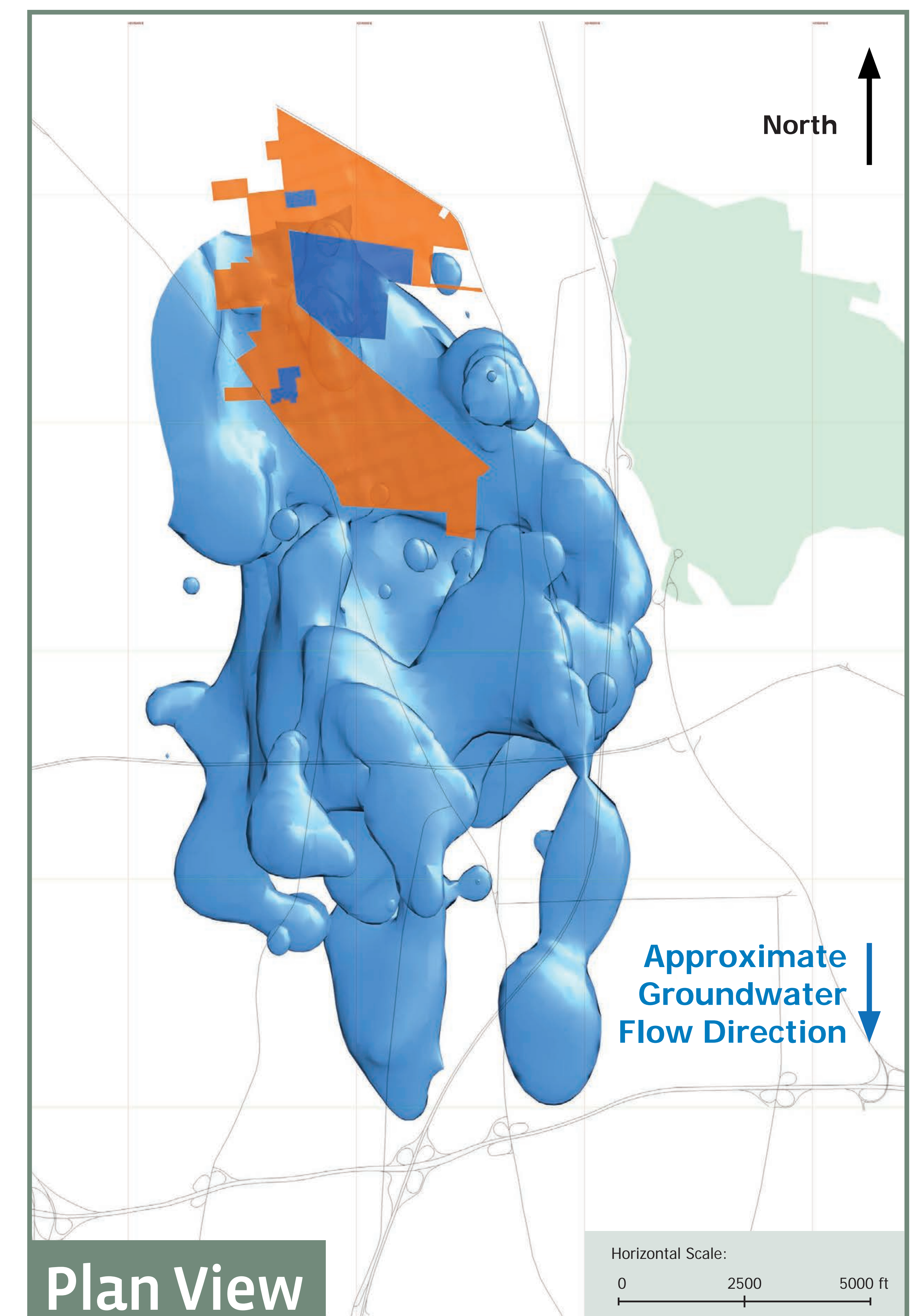
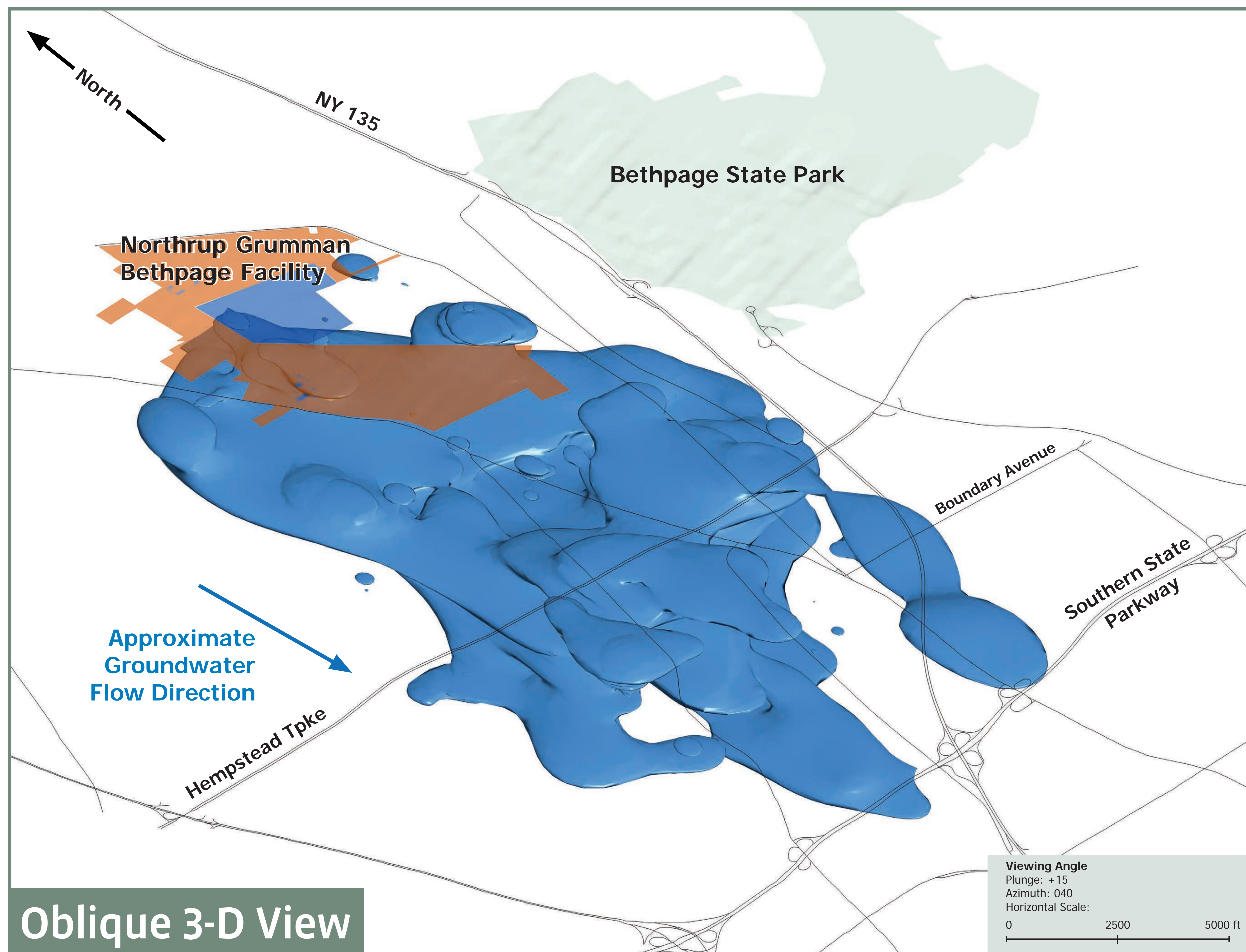


Navy Grumman Groundwater Plume

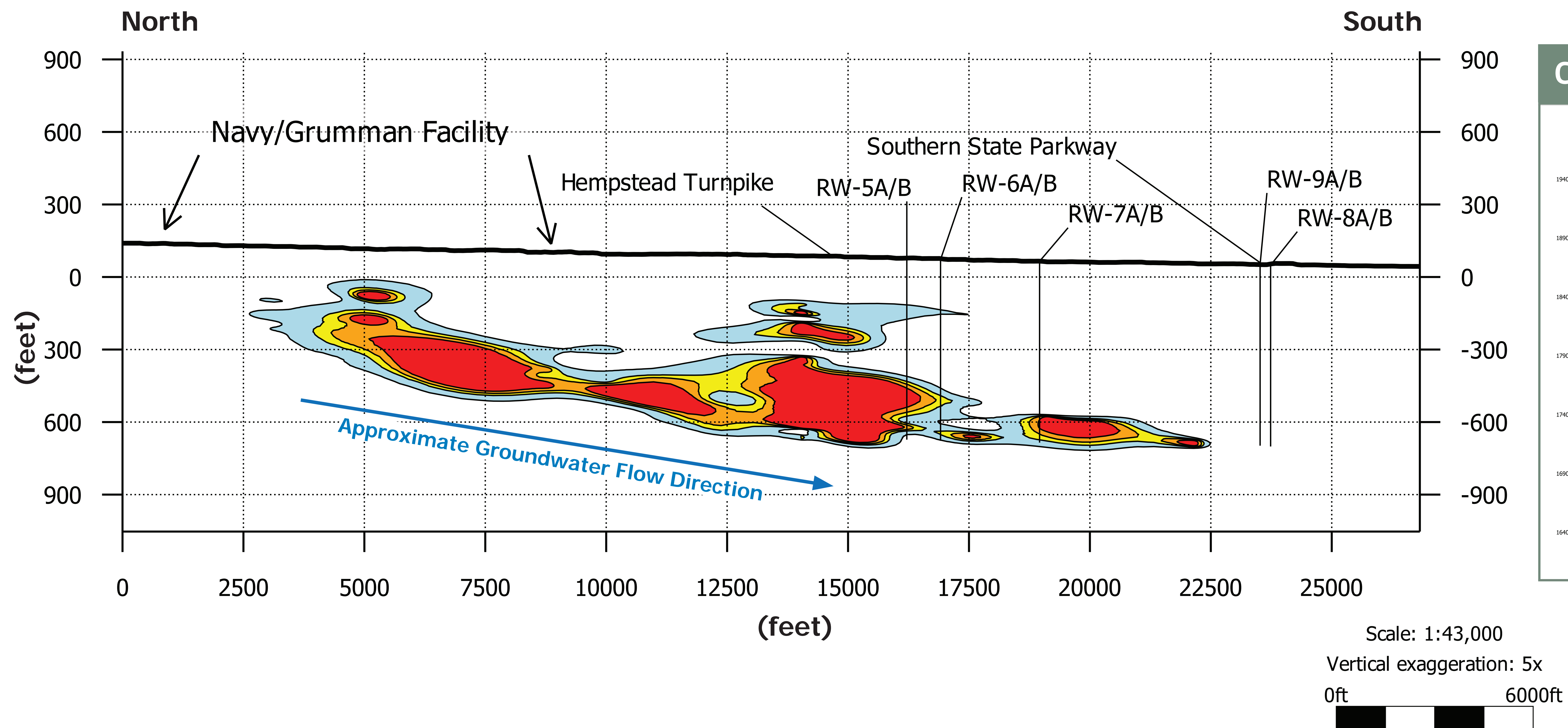
Contaminants of Concern Plume | Concentration of 5 $\mu\text{g/L}$ or Higher



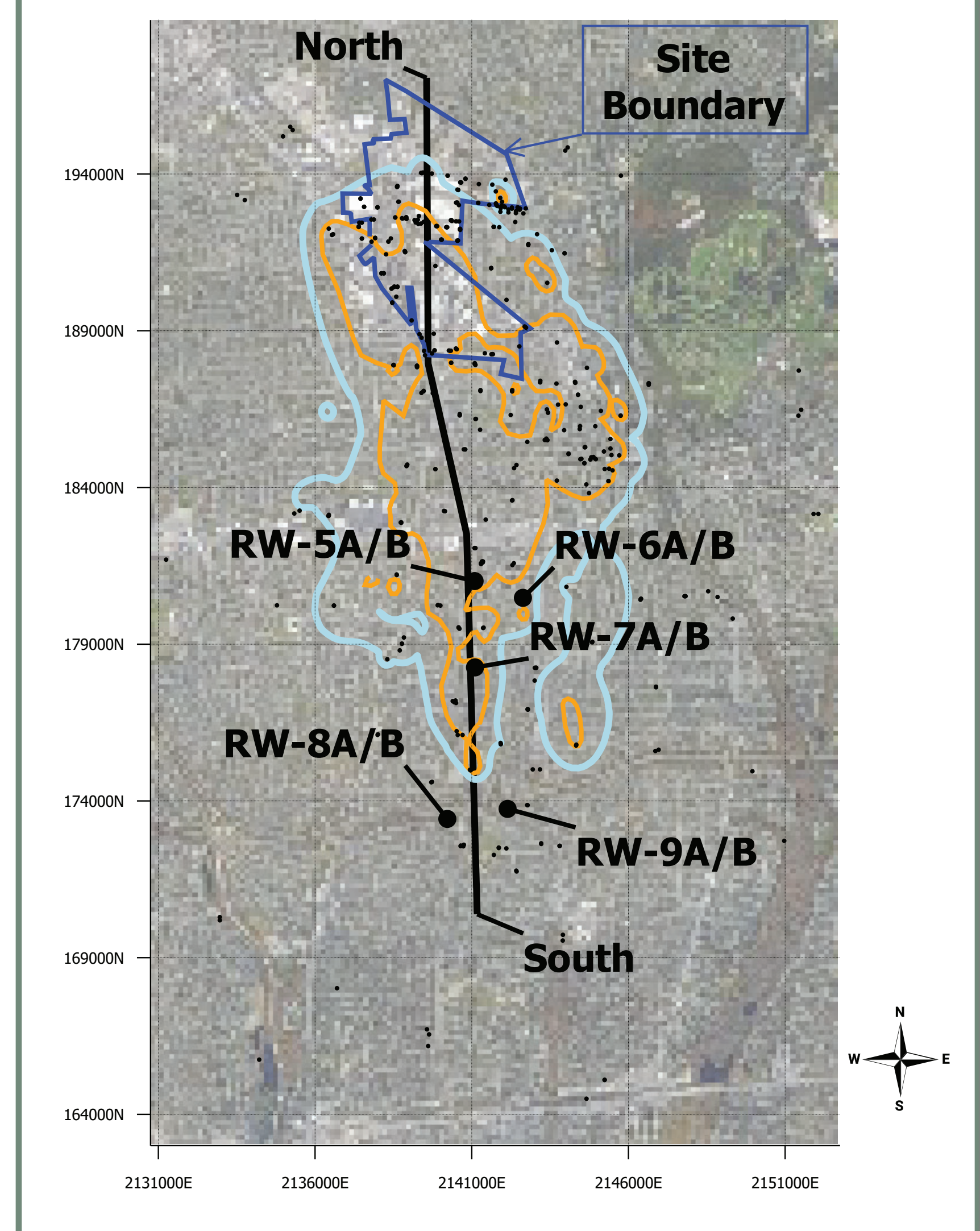
- Northrop Grumman Bethpage Facility
- Naval Weapons Industrial Reserve Plant

Groundwater Contaminants of Concern (COC) Plume
COCs mapped are Trichloroethylene (TCE),
1,1-dichloroethane (1,1-DCA) and Freon.
5 $\mu\text{g/L}$ = contaminant-specific drinking water criteria

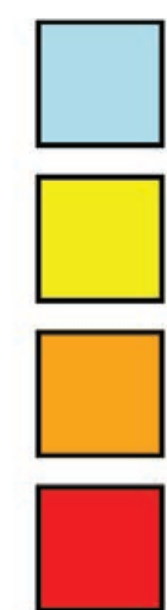
Navy Grumman Trichloroethylene (TCE) Plume



Cross Section | Location



TCE Concentrations



Note: 5 micrograms per liter ($\mu\text{g/L}$) is the drinking water standard for TCE.

Remediation Progress Since December 2019 AROD

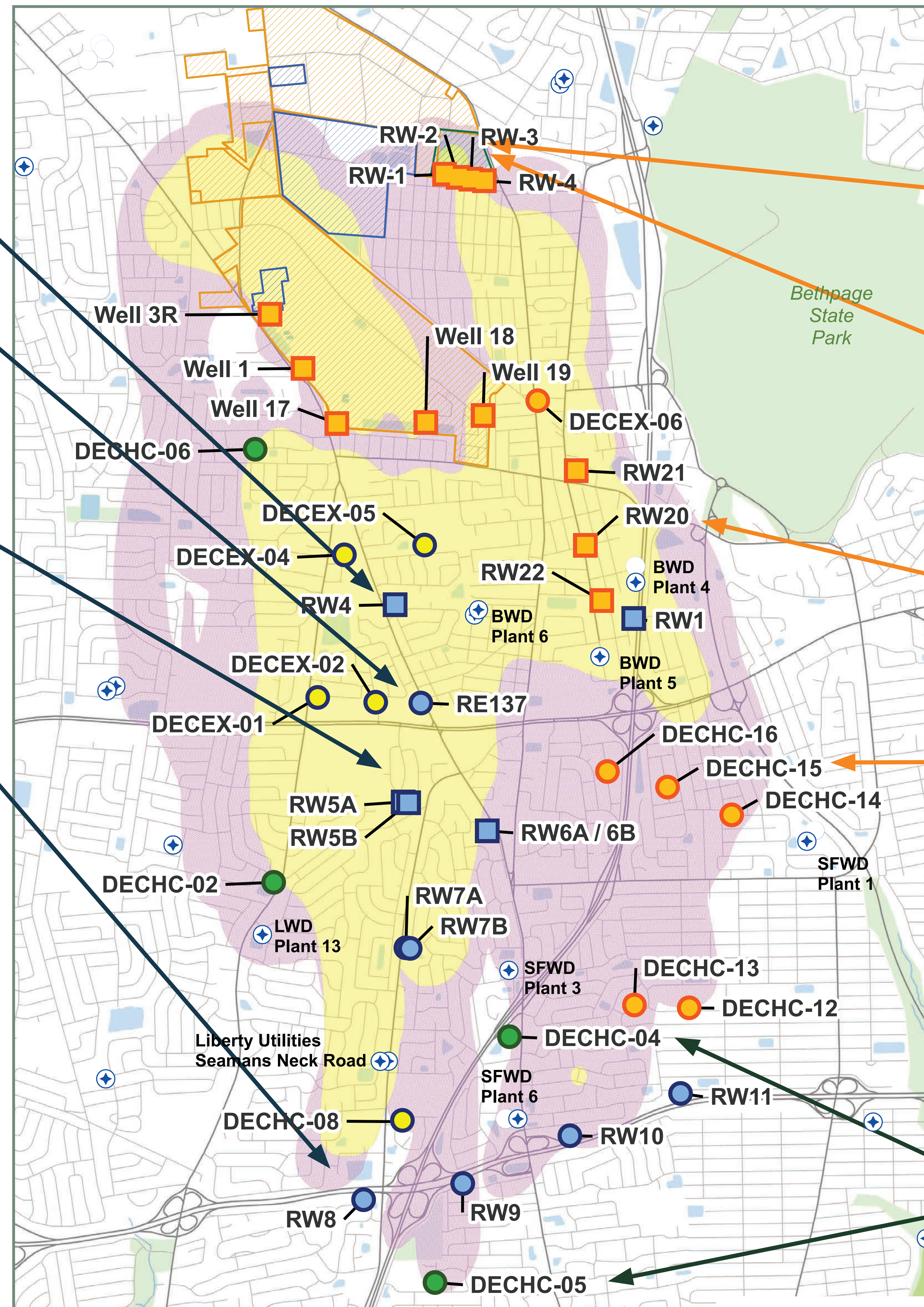
Navy



- Installed and Began Operation of RW-4 Extraction Well
- Constructed & Operated RE-137 System (>1,000 lbs of Contamination Removed Since May 2022)
- Construction of the RE-108 Phase II Groundwater Treatment System Underway, Installed RW-5, RW-6, RW-7 Extraction Wells, Currently Installing Discharge Piping
- Installed RW-8 & RW-9 Extraction Wells at Leading Edge of Plume and PDI for RW-10 and RW-11 Underway

On-Going Work

- 7 Million Gallons per Day contaminated groundwater removed from 7 extraction wells and treated at 3 water treatment plants has removed over 200,000 lbs of contamination



- | | | |
|--|--|---|
| <ul style="list-style-type: none"> Northrop Grumman Other AROD Well Commitment Existing Northrop Grumman Extraction Wells Existing Navy Extraction Wells Navy AROD Well Commitment | <ul style="list-style-type: none"> New York State Extraction Wells Navy Potential Well in Pre-design Investigation Wells Public Supply Wells Major Roads Communities | <ul style="list-style-type: none"> CoC Plume >5 ug/l CoC Plume >50 ug/l Bethpage State Park Naval Weapons Industrial Reserve Plant (NWIRP) Northrop Grumman Facility |
|--|--|---|

NORTHROP GRUMMAN

- Completed Phase I Thermal Remedy at Park (>1,400 lbs of Contamination Removed). Phase II under Design and to Start in 2023
- PCB Excavation Remedy Being Coordinated with US EPA, DEC, DOH, and Town (Following EPA Requirements)
- Installed over 2 miles of Piping from RW-20, 21 & 22 to Treatment Plant That Will Begin Operating Spring 2023
- Planning PDI for DEC-12, DEC-13, DEC-14, DEC-15 & DEC-16, Field Work to Begin Spring 2023

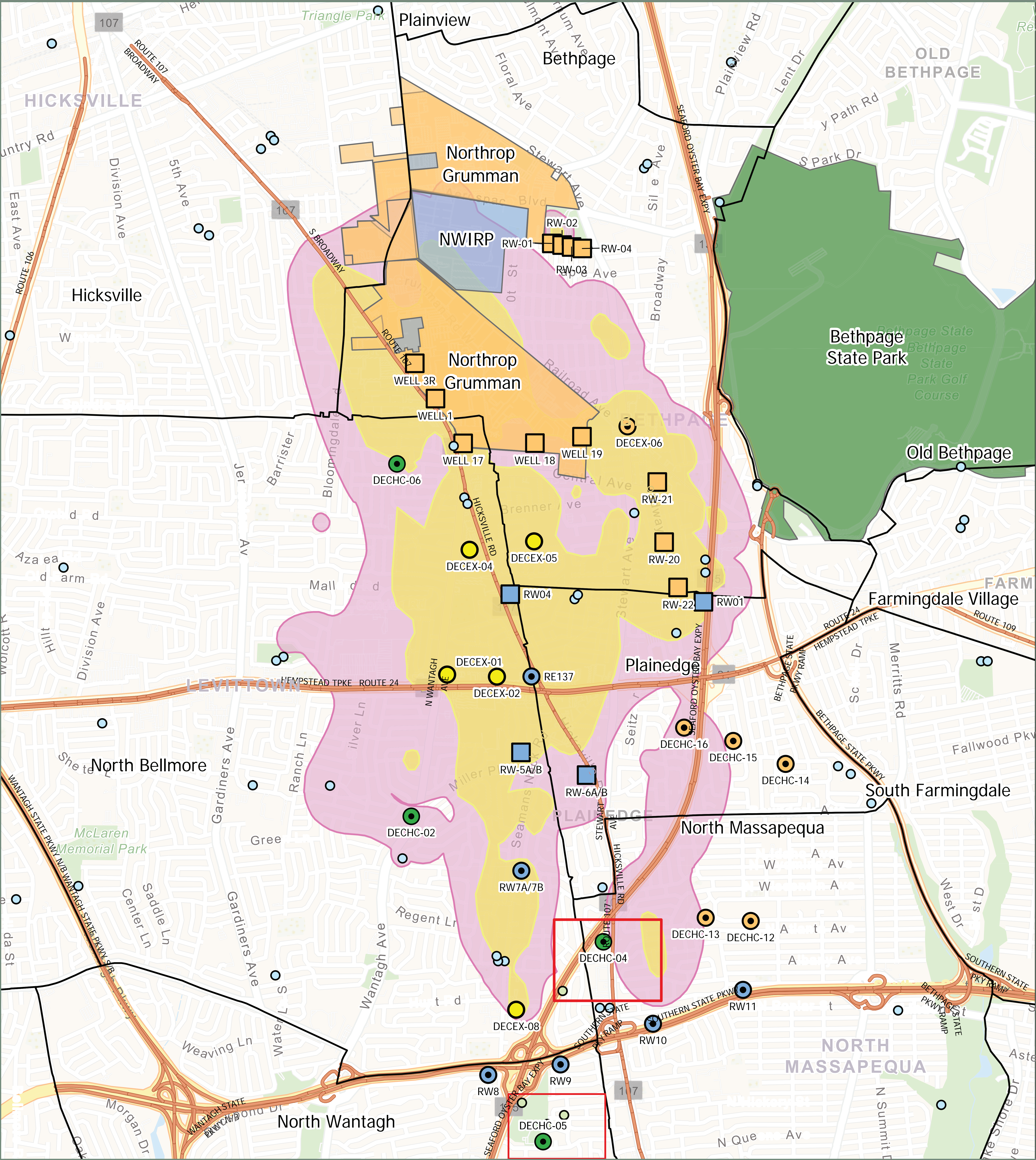


- Negotiated & Executed Consent Decree with Northrop Grumman & Explanation of Significant Differences with Navy
- Completed HC-04 & HC-05 PDIs
- Initiated Negotiations with Other Responsible Parties

PDI = Pre-design Investigation



Existing and Planned Remediation



- Northrop Grumman Other/New York State AROD Well Commitment
- Existing Northrop Reserve Grumman Extraction Wells
- Existing Navy Extraction Wells
- Navy AROD Well Commitment
- Extraction Wells
- Navy Potential Well in
- Pre-design Investigation Wells
- Public Supply Wells
- Major Roads
- Communities

- CoC Plume > 5 ug/l
- CoC Plume > 50 ug/l
- Bethpage State Park
- Naval Weapons Industrial Reserve Plant (NWIRP)
- Northrop Grumman Facility

0 0.2 0.5 Miles

NYSDEC Pre-Design Investigations

HC-04 Area

- VPB drilled to 982-feet
- **No Site-Related Contaminants were detected above SCGs in VPB Samples**
- New deep monitoring well installed and sampling pending.

HC-05 Area

- Three vertical profile borings (VPBs) and new deep monitoring wells (965-feet to 975-feet below ground surface)
- **No Site-Related Contaminants were detected above SCGs in groundwater samples**

SCG = Standards, Criteria and Guidance Values
SCG for toluene and TCE = 5 µg/L

NYSDEC Comprehensive Working Schedule - Navy Grumman Groundwater Plume Cleanup
March 2023

D	Task Name	Duration	Start	Finish	2020	2021	2022	2023	2024	2025	2026	2027	2028							
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Northrop Grumman	1609 days	Thu 7/1/21	Tue 8/31/27																
2	DECEX-06 - Remedial Design and Action	359 days	Tue 11/1/22	Fri 3/15/24																
6	ESE Plume Quadrant (Phase 1) - PDI, Remedial Design and Action	860 days	Mon 10/31/22	Fri 2/13/26																
15	SSE Plume Quadrant (Phase 2) - PDI, Remedial Design and Action	1240 days	Wed 11/30/22	Tue 8/31/27																
23	RW-21 Area - Remedial Action	468 days	Thu 7/1/21	Mon 4/17/23																
25	Former Grumman Settling Ponds (Present-day Bethpage Community Park) Phase II VOC Soil Remedy - Remedial Design and Action, Site Restoration	626 days	Mon 8/1/22	Mon 12/23/24																
31	Former Grumman Settling Ponds (Present-day Bethpage Community Park) PCB Soil Remedy - Remedial Design and Action, Site Restoration	877 days	Tue 2/1/22	Wed 6/11/25																
40	Department of Navy	2769 days	Fri 5/1/15	Wed 12/10/25																
41	RE-108 Phase 1 - Remedial Design and Action (Recovery Well RW-4 Became Operational April 2021)	914 days	Sun 10/1/17	Thu 4/1/21																
44	GM-38 Upgrades - Remedial Design and Action	385 days	Mon 1/2/23	Fri 6/21/24																
47	RE-137 - Remedial Design and Action (Recovery Well RE-137 Began Operation in March 2022)	276 days	Mon 3/1/21	Mon 3/21/22																
50	RE-108 Phase 2 - Remedial Design and Action	2281 days	Fri 5/1/15	Fri 1/26/24																
54	RE-108 Phase 3 - RW8-RW9-RW10 - PDI, Remedial Design and Action	1262 days	Mon 3/2/20	Tue 12/31/24																
58	RE-108 Phase 3 - RW11 - PDI, Remedial Design and Action	1007 days	Tue 2/1/22	Wed 12/10/25																
65	Other Responsible Parties / NYSDEC	1575 days	Mon 3/1/21	Fri 3/12/27																
66	DECHC-02 - NYSDEC General Counsel Negotiations, PDI, Remedial Design and Action	1109 days	Mon 12/12/22	Thu 3/11/27																
73	DECHC-04 - PDI, Remedial Design and Action	348 days	Thu 9/1/22	TBD*																
80	DECHC-05 - PDI, Remedial Design and Action	741 days	Mon 3/1/21	TBD*																
87	DECHC-06 - NYSDEC General Counsel Negotiations, PDI, Remedial Design and Action	1110 days	Mon 12/12/22	Fri 3/12/27																
94	Notes:																			
95	* Item is based on long-term groundwater monitoring. Current data suggests Remedial Action may not be necessary.																			
96	PDI - Pre-Design Investigation																			

Navy Grumman Community Participation Working Group (CPWG)

What is the Purpose of the CPWG?



To be a forum for **enhancing public dialogue, fostering public understanding, and encouraging input and discussion** about the comprehensive remedy to clean up the Navy Grumman groundwater plume and Bethpage Community Park.



To bring together a broad group of stakeholders with varied interests who can **represent and communicate community concerns and perceptions** as remedial projects are being designed and performed.



To **make recommendations on effective strategies for communication** related to the remedial activities or public health implications.

How Will the CPWG Operate?



The CPWG will be a **self-governing and voluntary** body supported by NYSDEC.



The CPWG will be a forum to provide residents with a **voice in the process** with an opportunity to **provide information, opinions, and perspectives** on the comprehensive site clean-up and related communication strategies.



The CPWG **will not serve as a decision-making body**. It is not a voting entity, and it does not set policy or make decisions regarding project design or implementation.



Bylaws will establish ground rules, allow for working groups, describe duties, inform meeting announcements, and set the minimum frequency of meetings.

Navy Grumman Community Participation Working Group (CPWG)

How will CPWG Members Be Selected?

We are looking for **15-20 members** with **varied interests** who can provide **broad and diverse representation** of community needs and interests.



Applicants will be selected by the Consensus Building Institute in conjunction with the NYSDEC using a selection process based on:

- **Interest** in CPWG membership
- **Diversity** including diversity of age, background, experiences, and expertise
- Representation by **affected municipalities** and **water districts**
- **Proximity** to the groundwater plume and areas undergoing cleanup activities
- **Residence** or place of work in Nassau County, New York
- **Engagement** and **leadership** within the community
- **Interest** and **past involvement** with the cleanup
- Anticipated, perceived, or actual **conflicts of interest**
- **Input** from NYSDEC, responsible parties, and other stakeholders

Navy Grumman Community Participation Working Group (CPWG)

CPWG Selection Schedule

March 2023	<ul style="list-style-type: none">Availability Session and CPWG application period begins.Applications can be submitted here: tinyurl.com/CPWGapplication
April 2023	<ul style="list-style-type: none">Applications are due April 4, 2023.CBI will review all applications and letters of interest and gather input from key parties on CPWG member selection.CBI will provide CPWG membership recommendations to NYSDEC for final approval.
May 2023	<ul style="list-style-type: none">Announce the CPWG and inform selected CPWG members.Schedule CPWG kick-off meeting.

Contact Information

CPWG-Related Questions	
<p>Nate Lash Consensus Building Institute 2067 Massachusetts Ave., Suite 570 Cambridge, MA 02140 (617)-652-0560 nlash@cbi.org</p>	
Project-Related Questions	Health-Related Questions
<p>Kristin Granzen Project Manager NYSDEC 625 Broadway Albany, New York 12233 (518) 402- 9772 kristin.granzen@dec.ny.gov</p>	<p>James Sullivan NYSDOH Empire State Plaza Corning Tower, Room #1787 Albany, New York 12237 (518) 417-1531 Jim.Sullivan@health.ny.gov</p>