

Navy Grumman Groundwater Plume

Northrop Grumman Bethpage Facility and Naval Weapons Industrial Reserve Plant Sites

New York State Superfund Program

Bethpage, Town of Oyster Bay, New York

The New York State Departments of Environmental Conservation (DEC) and Health (DOH) are working to protect the public health and environment of the towns of Oyster Bay and Hempstead as part of the comprehensive investigation and cleanup of the Navy Grumman groundwater plume. The agencies investigated the source of contamination, selected a comprehensive cleanup plan, and are closely overseeing the implementation of actions underway by the parties responsible for the contamination, Northrop Grumman and the U.S. Navy. New York State is committed to keeping the community informed about the cleanup. This community update provides a summary of recent cleanup activities and includes information about a new **Community Participation Working Group** to engage the community in actions going forward.

Historic operations at the Northrop Grumman Bethpage Facility and Naval Weapons Industrial Reserve Plant Sites in Bethpage created one of the largest groundwater plumes in the nation. DEC will continue to hold Northrop Grumman and the Navy accountable for costs and meeting stringent standards for the cleanup of Bethpage Community Park and the Navy Grumman groundwater plume. The health of the Bethpage community is New York State's top priority and the cleanup plan is designed specifically to protect the public and the environment from potential contamination, both now and into the future.

New Community Participation Working Group

As part of the legal settlement between DEC and Northrop Grumman, a Community Participation Work Group (CPWG) is being formed to serve as a community liaison with DEC, Northrop Grumman, the U.S. Navy, and other stakeholders to help ensure information is shared with the community in a timely manner. The Navy Grumman Groundwater Plume CPWG is a voluntary, self-governing body – its role will include, but not be limited to, providing a forum for enhancing dialogue, fostering public understanding and encouraging discussion about the cleanup of the Navy Grumman groundwater plume, establishing a schedule, and making recommendations on outreach and public participation. Updates will be provided about current and upcoming cleanup efforts during CPWG meetings. Consensus Building Institute (CBI) was selected to establish the Navy Grumman Groundwater Plume CPWG and will be in attendance at the March 7, 2023, Community Availability Session to provide additional details and encourage participation in the CPWG through the application process.

COMMUNITY AVAILABILITY SESSION

March 7, 2023, 5 p.m. to 8 p.m.

Bethpage Community Center

103 Grumman Road West, Bethpage, NY 11714

The public is invited to a community availability session to learn more about the formation of a Community Participation Working Group and the cleanup of the Navy Grumman groundwater plume at the Northrop Grumman Bethpage Facility, Naval Weapons Industrial Reserve Plant (NWIRP), and the Former Grumman Settling Ponds (portions of the present-day Bethpage Community Park) located in Bethpage. Experts from DEC, DOH, United States Geological Survey, Department of Navy, and Northrop Grumman will be available for community members to interact with in a one-on-one format. Multiple stations will be set up in the Community Center with representatives available at stations detailing specific areas of interest. Participants can attend any time between 5 p.m. and 8 p.m.

DEC prepared a CPWG report that is available with other site-related documents online through the DECinfo Locator:
<https://www.dec.ny.gov/data/DecDocs/130003A/> or
<https://www.dec.ny.gov/data/DecDocs/130003B/> or at the location(s) identified in the section of the Community Update titled "Where to Find Information."

Community members interested in joining the CPWG can submit letters of interest to CBI at the address below or sign up online at the following link:
<https://forms.gle/fQGmvpQ8bvZ1L2bk6>

Navy Grumman Groundwater Plume Recent Actions

New York State is advancing a comprehensive plan to contain and clean up the groundwater plume associated with the Northrop Grumman Bethpage Facility and Naval Weapons Industrial Reserve Plant sites in Bethpage. The full containment of this groundwater plume will prevent the further spread of contamination to water supplies in neighboring communities and provide peace of mind to local residents.

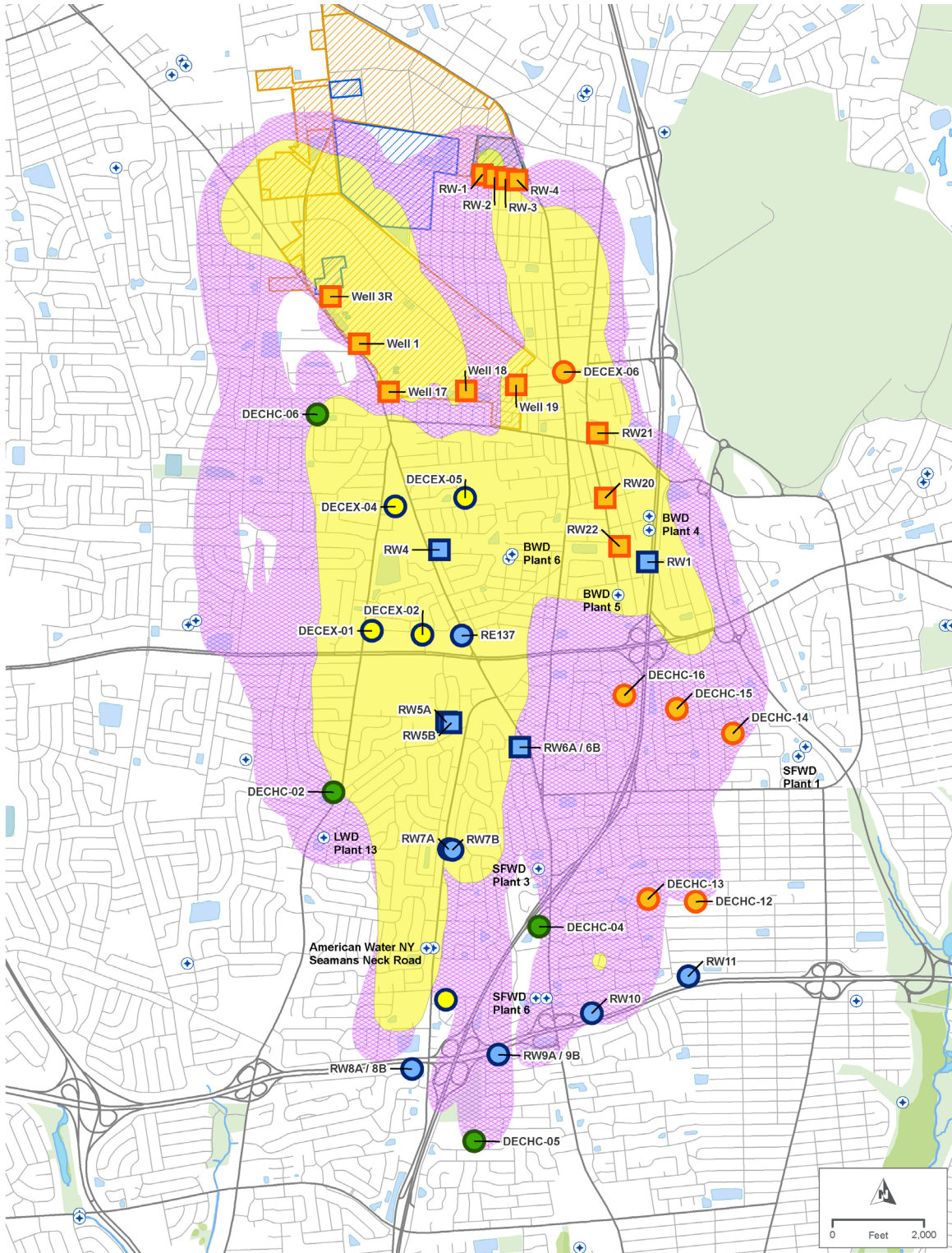
Immediately following the DEC's release of the Amended Record of Decision (AROD) in December 2019 to comprehensively address the Navy Grumman groundwater plume, negotiations with the Navy and Northrop Grumman were initiated. These negotiations led to commitments (see the figure on page 3) by the Navy and Northrop Grumman being memorialized in a 2021 Explanation of Significant Differences and 2022 Consent Decree, respectively. For the first time, the decree includes a schedule which ends five years from the effective date of the decree and requires Grumman to complete all construction documented in the agreement.

Since the AROD was issued, the following cleanup activities have been completed under stringent DEC oversight:

- DEC completed pre-design investigations at the DECHC-04 and DECHC-05 areas (see figure on page 3). To date, results indicate that extraction wells are not necessary in either of those areas;

- The Navy constructed and began operation of a groundwater extraction and treatment system at the RE137 location (see figure on page 3) in May 2022. Since startup, the system removed more than 900 pounds of contamination from the aquifer;
- The Navy installed four of six extraction wells (RW5A/B, RW6A/B, and RW7A/B in figure on page 3) and is currently installing the remaining two extraction wells. The Navy is also installing more than one mile of conveyance piping and nearing completion of a state-of-the-art water treatment plant to expedite cleanup of the Navy Grumman plume interior (referred to as the RE-108 Phase II Area);
- The Navy has installed two extraction wells (RW8 and RW9) along the leading edge of the Navy Grumman groundwater plume in the vicinity of the Southern State Parkway (referred to as the RE-108 Phase III Area), and is completing a pre-design investigation to support the design of up to two additional extraction wells along the leading edge of the plume;
- Northrop Grumman has installed approximately 11,000 feet of conveyance piping to transport contaminated water from the three extraction wells (RW20, RW21, and RW22 on figure on page 3) to an on-site water treatment plant that is nearly complete and will begin operation in early 2023;
- Northrop Grumman is preparing for a pre-design investigation in the southeast quadrant of the plume (DECHC-12, -13, -14, -15, and 16 on page 3). A drilling program as part of this pre-design investigation will be starting by Spring 2023; and
- As part of existing commitments, both the Navy and Northrop Grumman continue to operate three separate groundwater extraction and treatment systems. This includes 11 extraction wells pumping at a combined rate of approximately seven million gallons per day. More than 200,000 pounds of contamination have been removed from the aquifer since these systems began operating.

Site and Plume Location with Extraction Well Commitments



Northrop Grumman Commitments

Existing Extraction Well Commitment

AROD Well Commitment (preliminary, approximate location)*

Others / New York State

Extraction Well for Others/New York State

Navy Commitments

Existing Extraction Well Commitment

Navy AROD Well Commitment (preliminary, approximate location; some wells may be paired)

Navy Potential AROD Well in Reserve

Groundwater Exceeding SCGs per AROD

TcVOC 50 ug/l Plume

Public Supply Wells

Approximate Location

Bethpage Community Park

Naval Weapons Industrial Reserve Plant (NWIRP) 1997 Boundary

Northrop Grumman Bethpage Facility 1997 Boundary

Road

Recharge Basin

Waterbody

Park

Wetlands

*The number and locations of extraction wells will be determined after the completion of each phase of the Preliminary Remedial Design Investigation. This figure reflects the maximum number of extraction wells that would be installed/operated by Northrop Grumman in the SE quadrant.

Addressing Contamination at Bethpage Community Park

Prior to donation to the Town of Oyster Bay in 1962 for use as a park, portions of the present-day Bethpage Community Park were operated by Grumman as a series of settling ponds and sludge drying beds. The historic use as settling ponds/drying beds resulted in both soil and groundwater contamination that is currently being addressed in a Record of Decision with DEC. Using scientific and engineering analyses conducted to understand the extent of contamination, DEC carefully designed the cleanup goals in this area to fully protect public health and the environment. Based on the ongoing collection of data, the state's cleanup plan will be effective and provide full protection from contamination.

To address the contamination at Bethpage Community Park, Northrop Grumman completed the following cleanup actions to date:

- Between August 2020 and May 2022, Northrop Grumman implemented an initial (Phase I) in-situ thermal remedial (ISTR) program to address deep soil contaminated with volatile organic compounds (VOCs) beneath the present-day baseball field (see image below). This Phase I removed more than 1,300 pounds of VOC contamination and the infrastructure (more than 200 thermal points) for this first phase is currently being decommissioned. The second phase of ISTR is under design and is planned to commence this year.



Image Showing Phase I Thermal Remediation at Bethpage Community Park. To watch a video of progress and work underway at the Bethpage Community Park, go to: https://youtu.be/ta_gBrv22Qs

- Northrop Grumman has also been preparing a Risk-Based Disposal Application as required by the EPA for the excavation and disposal remedy to address PCB soil contamination identified in four areas of the Bethpage Community Park. To facilitate successful implementation of the PCB soil excavation remedy, Northrop Grumman is holding periodic meetings with the U.S. Environmental Protection Agency (EPA), DEC, DOH, and the Town of Oyster Bay. This PCB soil excavation remedy will be implemented after the second phase of ISTR treatment is complete.

Next Steps

- Additional information about the work planned and underway will be presented during the Community Availability Session on March 7, 2023, beginning at 5 p.m. and ending at 8 p.m. Participants can attend at any time within that window and interact with State, the U.S. Geological Survey, CBI, Grumman, and Navy representatives.
- Shortly following the availability session, copies of the materials presented will be posted on DEC's Navy Grumman Groundwater Plume cleanup website at <http://www.dec.ny.gov/chemical/35727.html>
- Community members interested in joining the Navy Grumman Groundwater Plume CPWG can submit letters of interest to CBI at the address below or sign up online at the following link: <https://forms.gle/fQGmvpQ8bvZ1L2bk6>. The first meeting is anticipated to be scheduled in May 2023. For more information about the CPWG, contact:

Nate Lash
Consensus Building Institute (CBI)
2067 Massachusetts Ave., Suite 570
Cambridge, MA 02140-1340
Email: nlash@cbi.org

State Superfund Program

New York's State Superfund Program (SSF) identifies and characterizes suspected inactive hazardous waste disposal sites. Sites that pose a significant threat to public health and/or the environment go through a process of investigation, evaluation, cleanup and monitoring.

DEC attempts to identify parties responsible for site contamination and require cleanup before committing State funds. Navy and Grumman have been identified as responsible parties for this cleanup. For more information about the SSF, visit: <http://www.dec.ny.gov/chemical/8439.html>

Additional site details, including environmental and health assessment summaries, are available on DEC's Environmental Site Remediation Database (by entering Site ID 130003A or 130003B) at: <http://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=3>

LISTSERV: SIGN-UP TO STAY INFORMED

<https://www.dec.ny.gov/chemical/61092.html>



WHERE TO FIND INFORMATION

Project documents are available at the following location(s) to help the public stay informed.

Bethpage Public Library

47 Powell Avenue
(516) 931-3907

NYSDEC Region 1 Office

50 Circle Road
Stony Brook, NY 11790-3409
(631) 444-0200

WHO TO CONTACT

Comments and questions are always welcome and should be directed as follows:

Project-Related Questions:

Kristin Granzen
Project Manager NYSDEC
625 Broadway
Albany, New York 12233
(518) 402-9772
kristin.granzen@dec.ny.gov

Health-Related Questions:

James Sullivan
NYSDOH
Empire State Plaza
Corning Tower, Room #1787
Albany, New York 12237
(518) 402-7860
beej@health.ny.gov

For Information on the Northrop Grumman and NWIRP Site Remediation Program:

<http://www.dec.ny.gov/chemical/35727.html>