



SINCE 1933

North and South Basin Groundwater Cleanup Update

April 2020

The Orange County Water District (OCWD; the District) manages and protects the Orange County Groundwater Basin that underlies north and central Orange County, from which 19 cities and water agencies draw their water supply. OCWD implements a proactive groundwater and surface water monitoring program to protect the quality of the Orange County Groundwater Basin and ensure the water it provides meets or exceeds state and federal drinking water standards.

Industrial chemicals have impacted areas in the northern and southern parts of the groundwater basin; North Basin (near Fullerton, Anaheim and Placentia) and South Basin (near Santa Ana, Tustin and Irvine). OCWD is proactively seeking ways to clean up the pollution in a united effort with local and national regulatory agencies.

Below is an update on activities in and around the North and South Basin sites. OCWD will continue to update stakeholders as the need arises.

North Basin

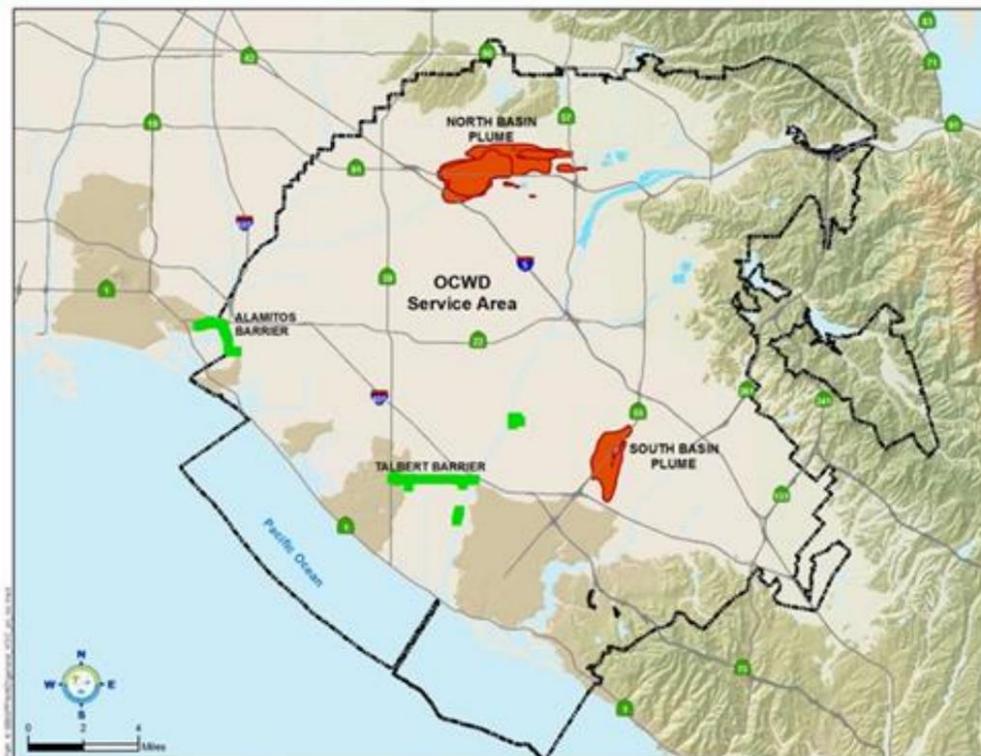
- The North Basin Site remains a priority site and is still on the U.S. Environmental Protection Agency (EPA) Administrator's Emphasis List.
<https://www.epa.gov/superfund/administrators-emphasis-list>
- The North Basin Site is still expected to be listed by the EPA as a National Priorities List (NPL or Superfund) site in Spring 2020. COVID-19 has caused delays across multiple sectors and businesses, including EPA, and there is a chance the listing may be delayed for this reason.
- EPA is preparing the North Basin Community Involvement Plan (CIP). The CIP will be finalized and made available to the public by or before June 2020. The CIP presents a site-specific strategy to enable meaningful community involvement throughout the remediation process.
- To help identify community interests and provide input to the CIP, in January and February 2020 EPA conducted interviews with 25 stakeholders made up of city council members, religious leaders, business leaders, and residents.
- The EPA plans to form a Community Advisory Group (CAG). The CAG will be representative of various community interests. The CAG's first item of business will be to host a Superfund 101 course so all stakeholders have an understanding and knowledge of the Superfund process moving forward.
- OCWD and its consultants continue to work on the Remedial Investigation and Feasibility Study (RI/FS) for an Interim Remedy. The primary objective of the Interim

Remedy is to contain parts of the contaminant plume with the highest concentrations to protect groundwater resources used for potable water supplies. The current status of RI/FS activities are as follows:

- A Draft Human Health Risk Assessment (HHRA) has been submitted to EPA and state agencies for review. The HHRA calculates the health risk posed by the contaminated groundwater if that groundwater was produced. State and federal drinking water standards preclude that from happening. However, it demonstrates that the contaminated groundwater cannot be used without treatment.
- A Draft RI Report is expected to be submitted to EPA and state agencies for review in late April. The RI Report describes the project area hydrogeology, and the nature and extent of contamination.
- A Draft Remedial Alternatives Screening Technical Memorandum is expected to be submitted to EPA and state agencies for review in late April 2020. This Technical Memorandum identifies and screens technologies that may be incorporated into alternatives that will be presented and evaluated in the FS.
- Groundwater modeling (computer simulations) is being conducted to estimate the number of extraction wells and their approximate locations and pumping rates to contain groundwater contamination for the Interim Remedy.

South Basin

- OCWD is nearing completion of the RI phase of work and will submit a Draft Final RI Report to state regulatory agencies and stakeholders in early May.
- OCWD performed an assessment of the risk to human health and the environment associated with contaminated groundwater in the South Basin area. A draft human health and ecological risk assessment (HHERA) report was submitted to the regulatory agencies in October 2019 and technical comments were provided to OCWD. The District is preparing responses to those comments in a revised HHERA report that is anticipated to be completed in May 2020.
- OCWD has initiated the FS phase of the South Basin project by developing a computer groundwater flow model which will be used to evaluate potential remedial alternatives to address groundwater contamination that has migrated away from source locations and is not being addressed. Potential implementation of a selected remedy, or remedies, will be consistent with and complementary toward existing active remediation systems operated by other parties.



Additional Information

For additional information, please contact Roy Herndon, chief hydrogeologist at rherndon@ocwd.com or (714) 378-3260.

- EPA North Basin website: <http://www.epa.gov/superfund/orange-county-north-basin>
- North Basin general information: <https://www.ocwd.com/what-we-do/water-quality/groundwater-cleanup/north-basin/>
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