Myths & Facts

About North Basin Groundwater









Chemical contamination exists in the northern part of the Orange County Groundwater Basin, known as the North Basin, and located in the cities of Fullerton, Anaheim and Placentia. Drinking water served to residents and businesses is safe; however, the groundwater contamination has caused drinking wells to be taken out of service. The contaminant plume extends five miles in length and must be controlled and cleaned up to prevent impact to additional drinking water wells. The contamination consists of industrial solvents that spilled into the ground from past industrial/manufacturing activities.

Control and cleanup of the North Basin plume is critically important to protect the underlying water supply for 2.5 million residents in Orange County, but it is also very complex, will take decades to complete and could cost more than \$100 million.

The Orange County Water District (OCWD) created this fact sheet to clarify misconceptions that have surfaced regarding North Basin efforts. Some claims have been voiced in ways that are meant to incite fear in the community and protect the bottom line for less than 20 businesses, many of which are no longer operating in Orange County.

It is important that stakeholders remain informed and know the facts.

Myth

EPA Superfund is heavy-handed and unnecessary.

Fact EPA oversight is necessary for North Basin.

If data proves a potentially responsible party (PRP) is responsible for contamination, the U.S. Environmental Protection Agency (EPA), through the Superfund process, can compel them to contribute financially to the cleanup and/or carry out the remediation themselves.

EPA is the federally-recognized authority specifically formed by Congress to address complex groundwater cleanup sites with multiple sources operating sequentially over

a period of decades. Unraveling the history and occurrence of contamination is difficult and requires specialized skills and legal powers. No other agency is better suited for this work than EPA.

EPA's involvement ensures cleanup projects are fairly evaluated for the following criteria: overall protection of human health and the environment; compliance with applicable, or relevant, and appropriate requirements; long-term effectiveness and permanence; reduction of toxicity, mobility and/or volume; short-term effectiveness; implementability; and cost.

Superfund causes property values to decline.

Property overlying many Superfund sites in CA have gone up in value.

Opponents of EPA's involvement in North Basin are citing an old 2000 study in which EPA acknowledged that in some Superfund sites involving surface water property values declined, but later rebounded once cleanup efforts were completed. Since cleanup projects can take decades to be completed, opponents would like the public to believe that it will take decades for property values to rebound.

Many factors affect property values including external economic and neighborhood factors not related to a site's Superfund status. Pollution and blight drives property values down; not regulatory designation.

For example, properties in Silicon Valley, which has 10 Superfund sites still in remediation, have some of the highest property values in the nation. Closer to home, in Fullerton, where the McColl site is still in remediation, property values have continued to go up.

Any downturns in property values are correlated to the regular ebbs and flows of the housing market, not the site designation. A Superfund designation is a strong indication that the problem is being dealt with; however, if those not wanting Superfund enforcement make a lot of noise about perpetuating a false stigma of Superfund designation, they have only themselves to blame if real estate investors are driven away and property values fall. Such communication just serves as a disingenuous scare tactic to detract from the matter at hand, which is to come up with the best solution to address the contamination and not have the public get stuck with the bill.

Having EPA involved will inevitably lead to a Superfund listing. There are no off-ramps.

The off-ramp away from Superfund remains open, but not for much longer.

In January 2018, EPA proposed North Basin for the National Priority List (NPL/Superfund). It could take approximately one year for EPA to determine if North Basin will be formally listed.

What is different with North Basin from other proposed NPL sites is that the Remedial Investigation Feasibility Study (RI/FS) is being performed during the NPL rulemaking process. Conducting this assessment before a final listing decision is made allows

PRPs the opportunity to see the potential infrastructure and/or operations costs for which they may be held liable. It provides real numbers, which helps them negotiate the terms of their efforts. If EPA is satisfied with the PRPs' and/or OCWD's negotiated commitments, an NPL listing might be unnecessary and could therefore still be avoided.

It is disingenuous to say that a Superfund offramp is not real considering that over the past 2 ½ years not one PRP has been willing to meet with OCWD to try and work out a voluntary cleanup agreement. PRPs have been offered that off-ramp in good faith and they have not taken it. The off-ramp is still open, but will close once EPA makes a final NPL decision.

The cost per household is minimal and can be absorbed by ratepayers so we can get on with the cleanup.

The cost per household is an irrelevant consideration.

There are less than 20 PRPs in North Basin and more than 2.5 million residents in OCWD's service area. Some of the North Basin costs will be indirectly paid for by residents through funding from a statewide Proposition 1 grant. Without contribution from the PRPs and their insurance companies, the balance will be taken from ratepayers in Orange County.

The \$100 million+ costs to clean up the contamination over the next 30 years are significant. To divide that amount by a population of 2.5 million does make it look deceivingly small. However, to do that is only a game of deception. What is right and just should not be glossed over by mathematically spreading the liability of others out over vast populations of the innocent.

OCWD's lawsuit is a means to shakedown innocent local businesses for millions of dollars.

Fact Scientific data points to 20 corporations - some no longer doing business in O.C.

North Basin involves less than 20 potentially responsible corporations and their insurance companies, many of whom are no longer doing business in Orange County. Some of the parties have performed cleanup on their properties, others have not. None of them have taken the initiative to deal with the large comingled plume which is the focus of OCWD's and EPA's efforts.

With the statute of limitations looming, OCWD exercised its right to file a lawsuit in 2004 against the PRPs to compel a large-scale cleanup while minimizing costs to rate payers. Defendants were brought into the lawsuits based on scientific data provided by CalEPA, the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB).

OCWD hired attorneys that have had success in similar cases in the U.S. Under a contingency fee structure, upfront attorney fees are minimal as most of the payments are contingent upon certain milestones, including court decisions. Since filing suit, OCWD has received about \$22 million in settlements. Over the last 14 years, OCWD has spent more than \$27 million toward North Basin. \$4 million went to the contingency fee attorneys. \$23 million has been spent on investigatory and environmental work, construction of monitor and extraction wells and other litigation expenses.

In 2017, most of the remaining defendants in the case, except one, were released by a California appellate court. The judge's opinion was that trial experts did not demonstrate a specific pathway from individual contaminated sites to the larger five-mile plume of contamination lying underneath these sites in the groundwater basin. EPA has the expertise and legal authority to validate pathways from the contaminated sites to the larger plume and will determine which PRPs should be held accountable and the best cleanup plan. Monies OCWD collects in settlement agreements will go toward these efforts.

Since the court determined that most of the PRPs are innocent, **EPA and OCWD should** leave them alone.

EPA is the expert in the process of studying subsurface contamination.

The court verdict did not ascribe innocence for any of the PRPs. What was determined was that the data, or more precisely the lack of data, was not sufficient to say with certainty that many of the defendants caused the five-mile-long problem. In only two of the many polluted properties was the evidence specific enough to show that the contamination originated in the factory and migrated foot-by-foot to the water table approximately 100 feet below. These two properties (both owned by the

same company) were remanded back for a retrial. OCWD will exercise its right to keep this retrial option open as a precautionary measure should the parties not be able to come to a settlement agreement.

Regarding the other defendants, the EPA will determine their liability without regard to the state court's verdict. The "causation standard" in state court is very different than the one used in the federal EPA process. This difference recognizes the technical limitations on the ability to specifically map the underground pathways of pollutants spilled into a complex layer cake of soils. The EPA will revisit the technical data available and make its own determination of who caused the contamination and how.

OCWD's interest has always been to see North Basin contamination dealt with in an effective way while at the same time protecting ratepayers from taking on the environmental liabilities of others. It is true that if the site is listed, then the litigation will not be as critically important as it was before the involvement of EPA. However, it is also the case that the ratepayers are entitled to be reimbursed for the costs already incurred. These costs may be difficult to recover without the continuation of the lawsuit.

Myth

There is no need for a cleanup project because the groundwater contamination is naturally diluting, and drinking water wells are not at risk.

Ratural dilution of the North Basin plume is not occurring.

There is a need to clean up groundwater contamination in North Basin because the contamination is spreading into deeper parts of the basin that are the primary source of drinking water for north and central Orange County. As recently as 2014, Fullerton removed a well from service due to increasing concentrations of a contaminant that was approaching the drinking water standard. The well was removed from service before the drinking water standard was exceeded. While

OCWD and local water providers closely monitor drinking water quality and only serve water that meets or exceeds drinking water standards, data trends clearly show that the plume is moving and warrants remediation to protect drinking water supplies. Natural dilution is not adequately happening and is not the solution.

Myth

OCWD has been busy suing everyone and not doing anything about the cleanup.

Fact OCWD is the only entity mapping and remediating the large plume.

In addition to constructing 80 monitoring wells to map the extent of the plume, six extraction wells (EW) were drilled by OCWD several years ago in North Basin. Up until recently, none of the extraction wells were placed into service for the capture and control of plume spreading. The delay in well completion was the result of legal challenges, including a CEQA lawsuit filed by PRPs. After waiting a few years for a resolution of the legal challenge and considering the new directions set with EPA, the

OCWD Board of Directors took it upon themselves to direct staff to complete and operate EW-1, considered one of the most important of the original six wells due to its location upgradient of two drinking water wells. To expedite the completion of the well, OCWD engineers re-designed it to allow discharge of the contaminated water to the nearby sanitary sewer. Construction of the new pumping system was completed and the new well became fully operational in September 2017.

The water discharged by EW-1 is sent into a sanitary sewer that is a tributary to the Orange County Sanitation District's (OCSD) Plant 1 where it is treated extensively and then sent to OCWD's Groundwater Replenishment System where the water undergoes a three-step advanced purification process. The purified water is then recharged into the groundwater basin for subsequent reuse. Monies secured through settlements and a Prop 1 grant were used to pay for these efforts.

Myth

OCWD is suing companies that are cooperating and doing cleanup on their properties.

Fact The subject of the lawsuit is the unattended offsite contamination.

OCWD filed a lawsuit against the PRPs to try and compel them to develop and implement a long-term groundwater cleanup remedy to address contamination that spread beyond their property lines.

The lawsuit was not directed toward on-site cleanups. In some cases, those were being done under state regulatory direction. In many other cases they were not.

Overall, the offsite contamination was not being dealt with. The OCWD lawsuit was directed toward that large-scale plume, not the on-site work usually referenced as the myth.



If you have any questions or concerns about North Basin, please contact OCWD at (714) 378-8244.

For more information about OCWD, visit www.ocwd.com.

For more information about EPA and the Superfund program, visit https://www.epa.gov/superfund.