



# Groundwater Remediation Status

Board of Directors

November 1, 2017



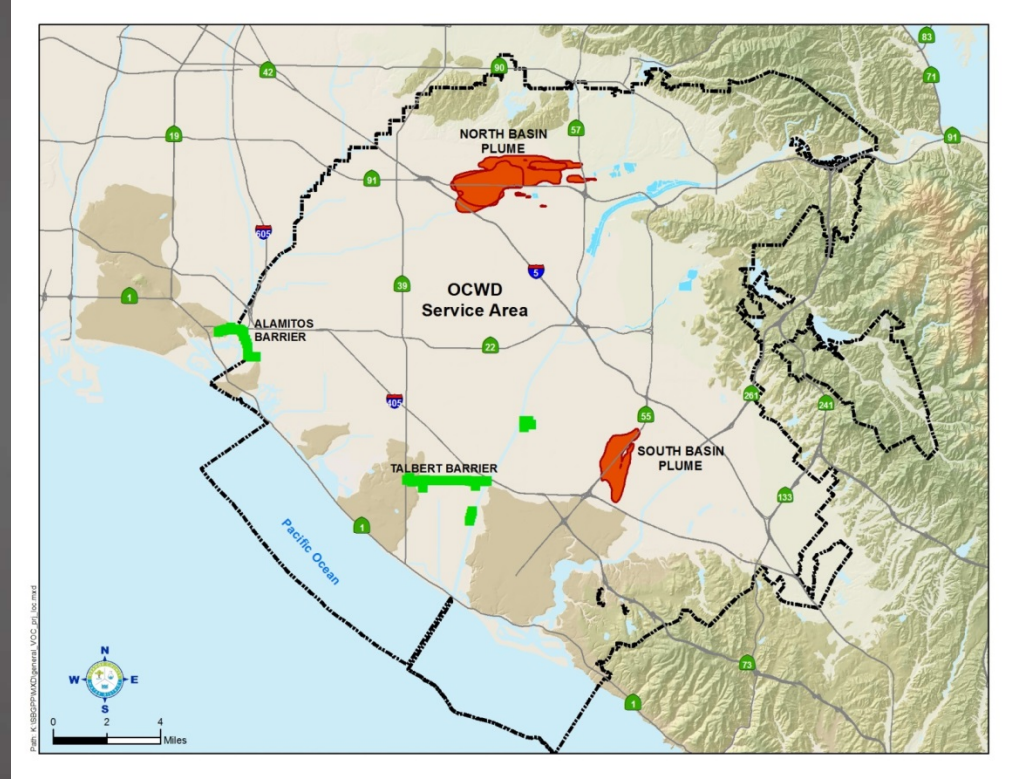
# Meeting with EPA

- Meeting on 10-18-17 in Washington DC office of EPA. In attendance were:
  - Scott Pruitt and two attorneys for EPA
  - Scott Sommer, Robert O'Brien, and Bill Hunt for OCWD
- Made the point that our Special ASA agreement with Region 9 is consistent with the new July 2017 superfund task force recommendations
- Asked EPA Administrator to support and expedite the North Basin NPL listing



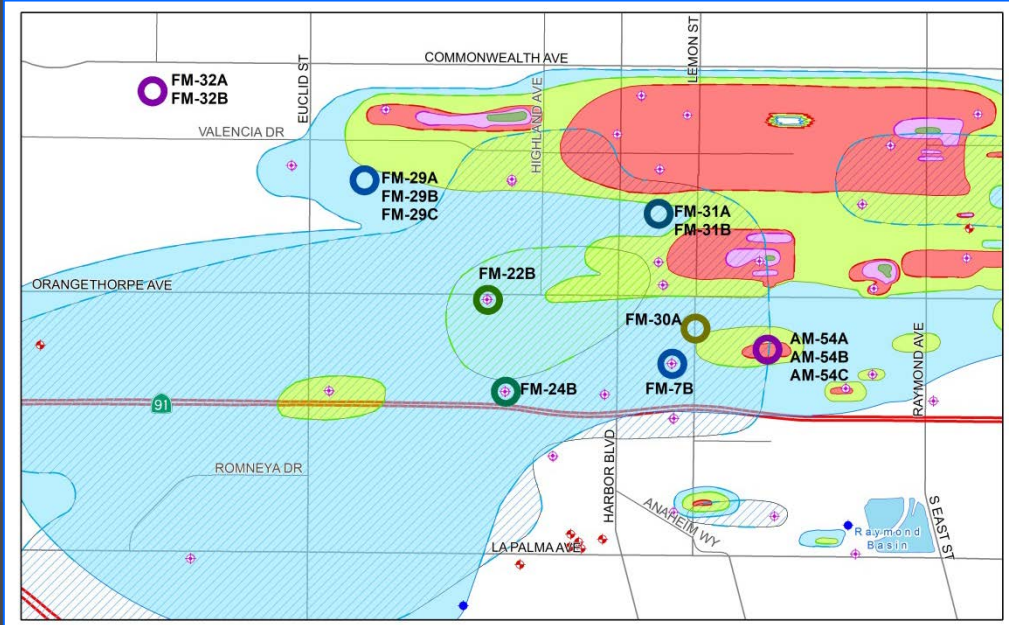
# NB & SB Updates:

- North Basin VOC is 5 miles long and 2 miles wide
  - Forebay hydrogeology
  - Multiple PRPs
  - RWQCB & EPA oversight
- South Basin plume is 3 miles long and 1 mile wide
  - Pressure area hydrogeology
  - RWQCB & DTSC oversight





# North Basin Initial Phase Monitoring Wells





# North Basin RI/FS

- Nearly finished with initial phase drilling. Subsequent phases to include wells in La Palma Park and sites along northern edge of plume. Estimated completion, April 2018
- Formal RI/FS takes more than two years. EPA & OCWD looking for ways to streamline the process without compromising the integrity of the study

Well	Drilling Complete?	Notes
FM 7B	Y	Pending lab results
FM 22B	Y	Preliminary results indicate low VOC concentrations
FM 24B	Y	Preliminary results indicate low VOC concentrations
FM 29A	Y	Pending lab results
FM 29B	Y	Pending lab results
FM 29C	Y	Pending lab results
FM 30A	N	Pending site access
FM 31A	Y	Pending lab results
FM 31B	Y	Pending lab results
FM 32A	N	Drilling on hold until December school holidays. Located near school bus yard
FM 32B	N	Drilling on hold until December school holidays. Located near school bus yard
AM 54A	Y	Pending lab results
AM 54B	N	Currently being drilled
AM54C	Y	Pending lab results





# EW-1 Now Operational

## EW-1 Pump Operational

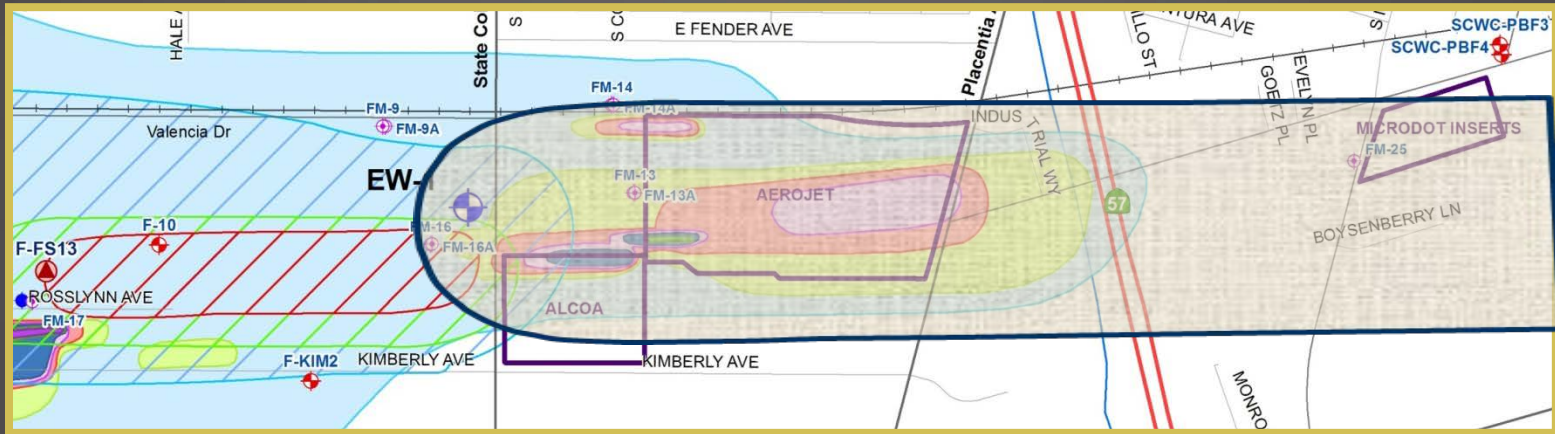
- Transducers placed in 12 nearby monitoring wells.
- Pumping plan is:
  - 30 days at 650 gpm
  - **30 days at 800 gpm**
  - 30 days at 1,000 gpm
  - 30 days at 1,200 gpm
- Aquifer response as measured by transducers will be used for capture zone analysis.
- EW-1 is expected to operate continuously for the foreseeable future.



(Left to right) Directors Roger Yoh, Denis Bilodeau, Bruce Whitaker and Cathy Green dedicate the opening of the EW-1 Extraction Well Connection.



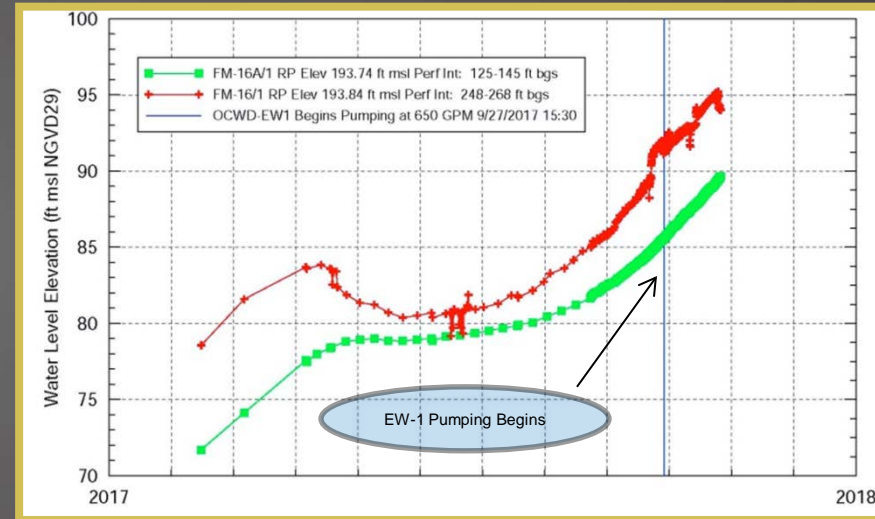
# EW-1 Capture Zone at 1,000 gpm





# Measuring the EW-1 Pumping Response

- The effects of increased Forebay recharge are raising water levels and masking the EW-1 pressure response.
- What matters is the local effect of EW-1 compared to the regional levels. In other words, plume capture is not changed by an overall increasing head, it is just more difficult to see during the periods of change







# South Basin RI/FS

- **Final CIP:** September 2017
- **Field Sampling Plan/QAPP Complete:** September 2016
- **Additional RI Field Work Complete:** April 2018
- **Complete Screening / Assembly of Alternatives:** November 2018
- **RI Report Complete:** September 2018
- **Groundwater Model Report Complete:** October 2018
- **HHRA Report Complete** December 2018
- **FS Report Complete** April 2019
- **Fact Sheet / Public Meeting (IRAP):** May 2019
- **Responsiveness Summary Complete:** June 2019

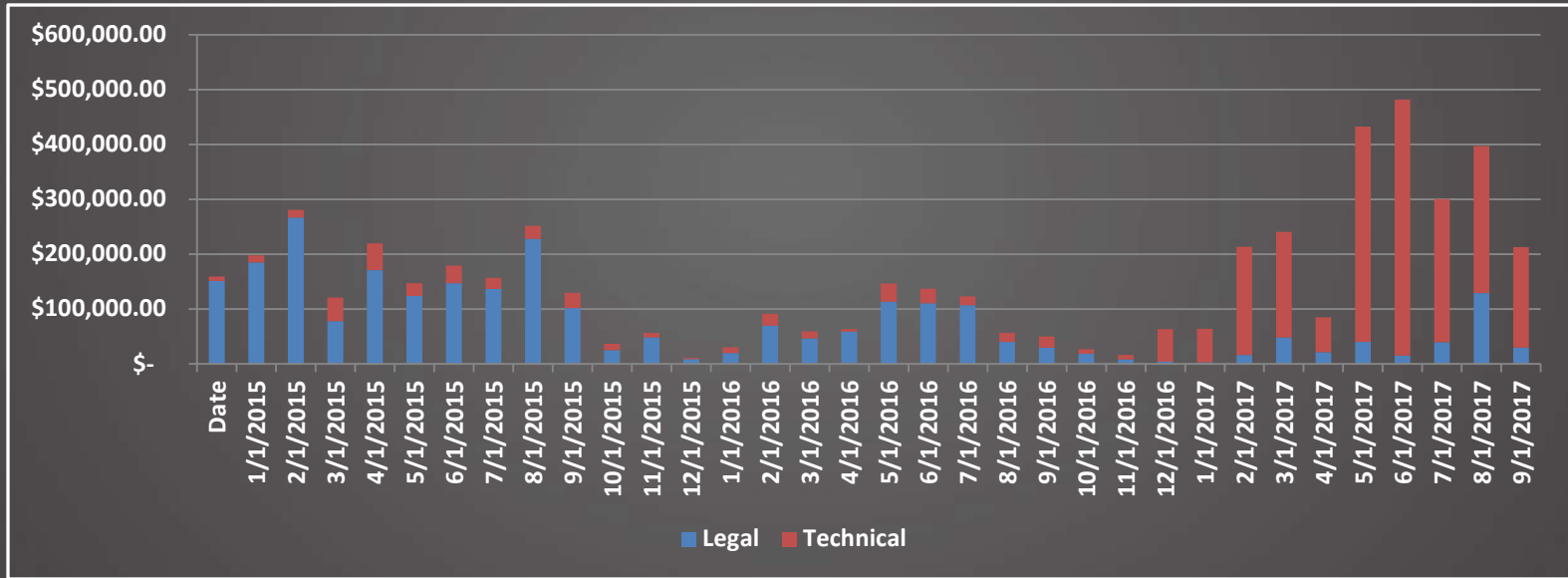


# Prop #1 Funding of NB & SB Work

Three Projects	Total Project Cost	50% Grant Funding Request
North Basin RI/FS D1712504	\$3,904,792	\$1,952,396
South Basin RI/FS D1712505	\$2,568,282	\$1,284,141
EW-1 Implementation D1712503	\$1,908,179	\$954,090
<b>Total</b>	<b>\$8,381,253</b>	<b>\$4,190,627</b>



# Recent Monthly Spending (NB, SB, & MTBE)





Questions?