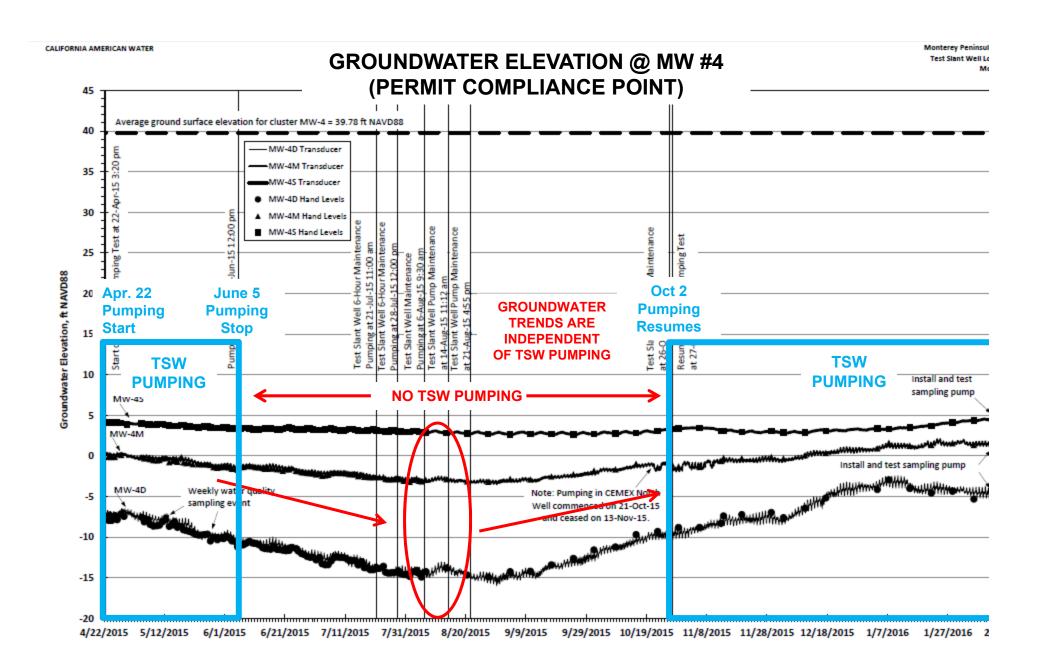


# MPWSP Overview Schedule, Test Slant Well & General Update

Presented to: MPWSP Governance Committee

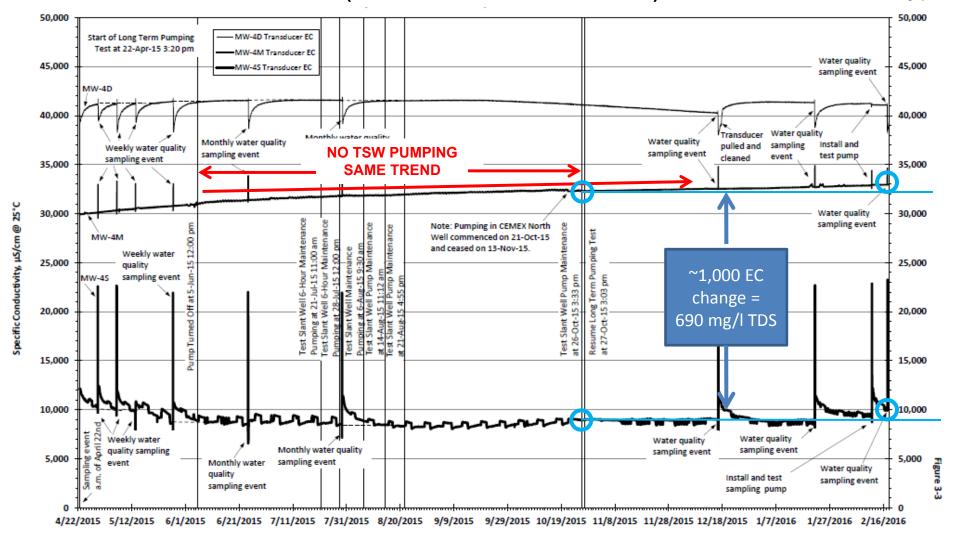
Date: February 29, 2016

#### MPWSP Anticipated Schedule AMERICAN WATER 2015 2016 2017 2018 2019 J F M A M J J A S O N D J F M A M J J A S O N D F M A M J J A S O N D F M A M J J A S O N DA SWRCB Current CDO Deadline Dec. 31, 2016 On July 9, 2015, CPUC indicated EIR & EIS / CPCN / CDP schedule changes would be issued in a subsequent ruling. DEIR released DEIR Draft FIR/FIS EIR/CPCN April EIR/EIS Decision comments due Sept/Oct Decision This schedule is based on our best Q1-Q2 2017 March/April Sept. NEPA EIS estimate as of 12/11/2015. Approval **Test Slant Well** Long Term Pumping struction Start Construction Governance Committee Approval Received Q2-Q3 2017 Q3-Q4 2018 Source Wells Dec 1 (15 month construction schedule) Con-Pre-construction Planning Activities Design RFP Construction tract Proposals Received Nov. 6 03-04 2018 Pipelines / Tanks / Pump Stations / ASR (15 month construction schedule) Design **RFP** Pre-construction Planning Activities Construction tract Proposals Received Nov. 4 **Desal Plant** Start-up Window Final Design & Permitting 90% Design Construction Partial or Full Design schedule pending CPUC schedule

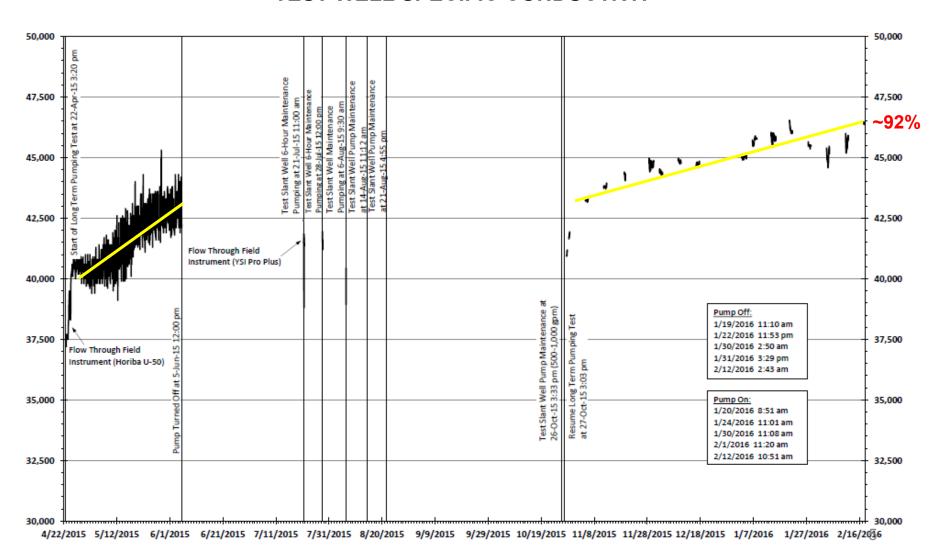


### SALINITY (EC) MEASUREMENT @ MW #4 (PERMIT COMPLIANCE POINT)

Monterey Peninsula Water Supply Project Test Slant Well Long Term Pumping Test Monitoring Report No. 42



#### **TEST WELL SPECIFIC CONDUCTIVIY**





# Initial assessment of an additional effort to value engineer the desal plant

Presented to: MPWSP Governance Committee

Date: February 29, 2016

## **Desal Plant RFP Cost Summary**

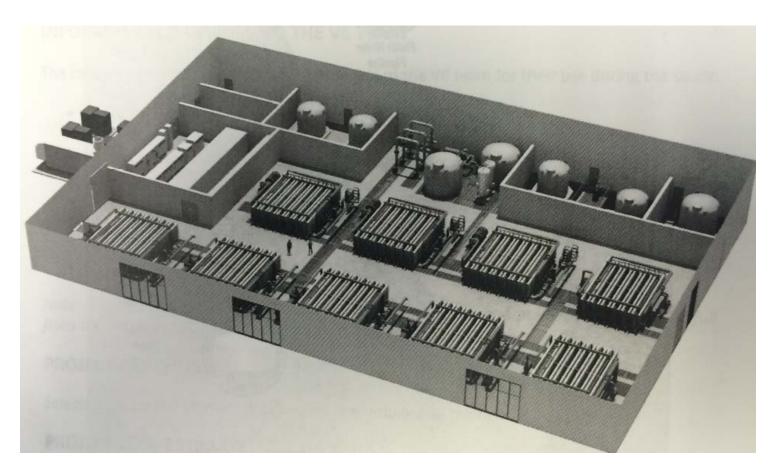


	BLACK & VEATCH		CDM SMITH		CH2MHILL		MWH	
	9.6 MGD	6.4 MGD	9.6 MGD	6.4 MGD	9.6 MGD	6.4 MGD	9.6 MGD	6.4 MGD
TOTAL FIXED DB	\$ 99,042,543	\$ 88,888,553	\$ 85,198,810	\$ 77,466,553	\$ 109,997,476	\$ 102,248,667	 \$ 89,984,426	\$ 80,195,770
		\$ (10,153,990)		\$ (7,732,257)		\$ (7,748,809)		\$ (9,788,656)

- Average \$8.9M difference from 9.6 to 6.4 MGD
- All proposals featured the most cost efficient approach as a unified design that accommodated either 9.6 and 6.4



## **Desal Plant RO Building Layout**



### Impacts to current design stage



- Redesign cost for just the RO building alone will cost hundred of thousands of re-work due to:
  - Structure, mechanical, electrical, storm water, underground utilities design,
    RO piping, building energy calculations, 3D BIM, etc.
  - All drawings sheets need to be updated.
  - Months of redesign work required.
- Complicates permitting review and increases time with agencies as review is underway with existing design.
- Increases future design costs significantly as it requires advancing two different designs towards final.
- CDMS performed smaller vs. larger and determine it was more economical to design one facility than undertaking to size alternative designs. Same with the other proposals as well.

### **Summary**



- Final VE study found no economical plant resizing opportunities for recommendation.
- Changes at current design stage have large impact to costs and time.
- Smaller RO building savings is minimal compared to redesign cost and time impacts.
- Most economical cost savings between plant sizes is captured in existing DB pricing