



CALIFORNIA
AMERICAN WATER

Monterey Peninsula Water Supply Project - Presentation to MPWSP Governance Committee

March 31, 2014

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California American Water

Content

- **Borehole Overview, Summary of Results, and Photos**
- **Cemex Test Well Location and Profile**
- **Schedule MPWSP and Test Well**

Boreholes History

- 11 Boreholes completed
- 1 borehole under construction – Cemex #6
- 1 borehole remaining – State Parks Monterey Dunes Way

13 Boreholes completed in 7 months

CEMEX



Potrero Rd



Moss Landing – Del Mar Fisheries



Borehole Results



Cemex favorable results

- Dune Sand Aquifer with no significant clay layer found
- High TDS content – 24,000 to 35,000 mg/l
- Data suggests Cemex area is outside of the 180/400-Foot subbasins and primarily ocean water will be drawn, models to confirm



Potrero Road favorable results

- Dune Sand equivalent aquifer with defined aquitard from 140ft – 185ft
- High TDS content above 140-foot aquitard – 34,000 mg/l



Moss Land area – unfavorable for slant test well

- Large layers of clay mixed with intermittent sand/silt layers

CEMEX Test Well

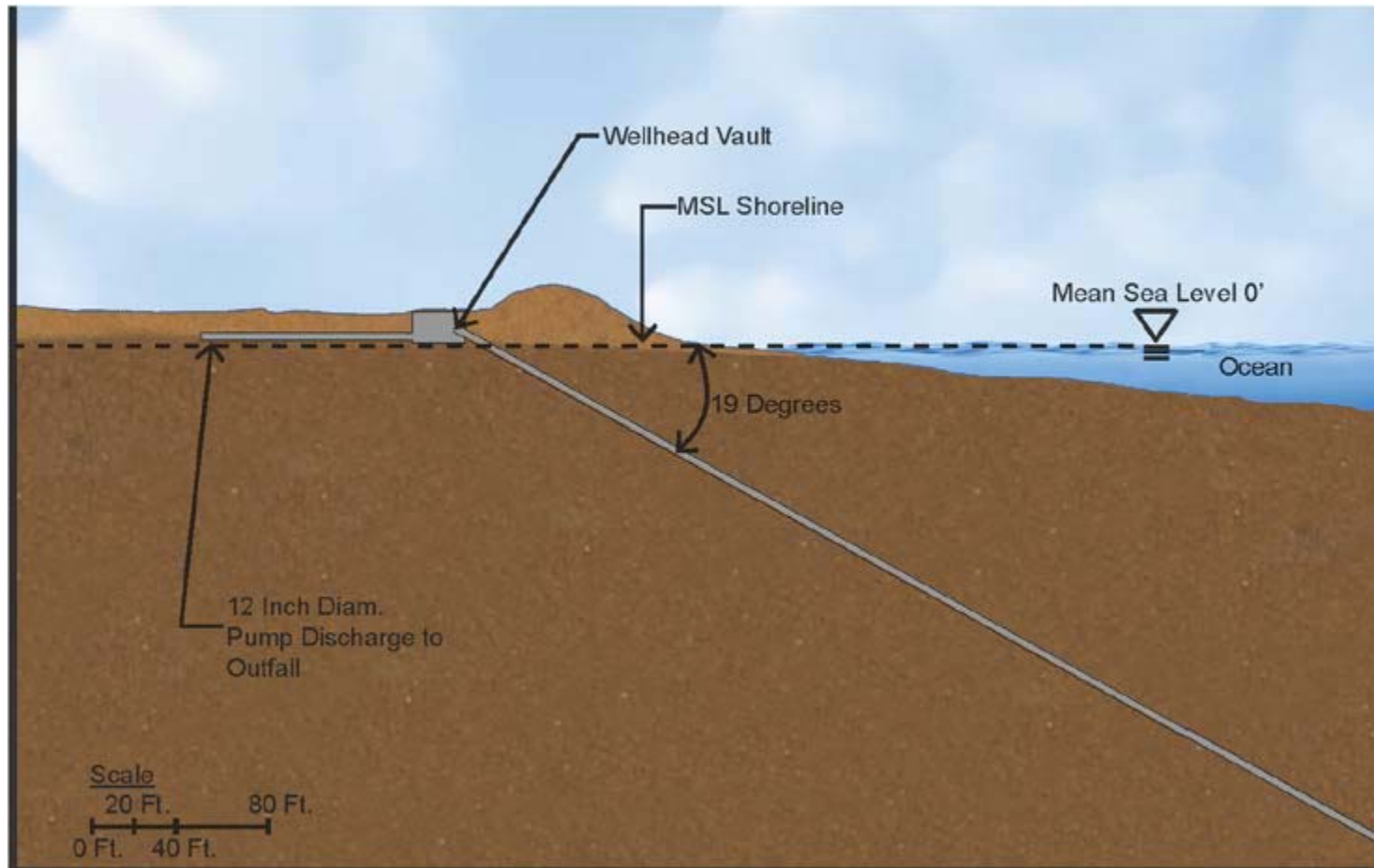
Slant Well Dual Rotary Drill Rig



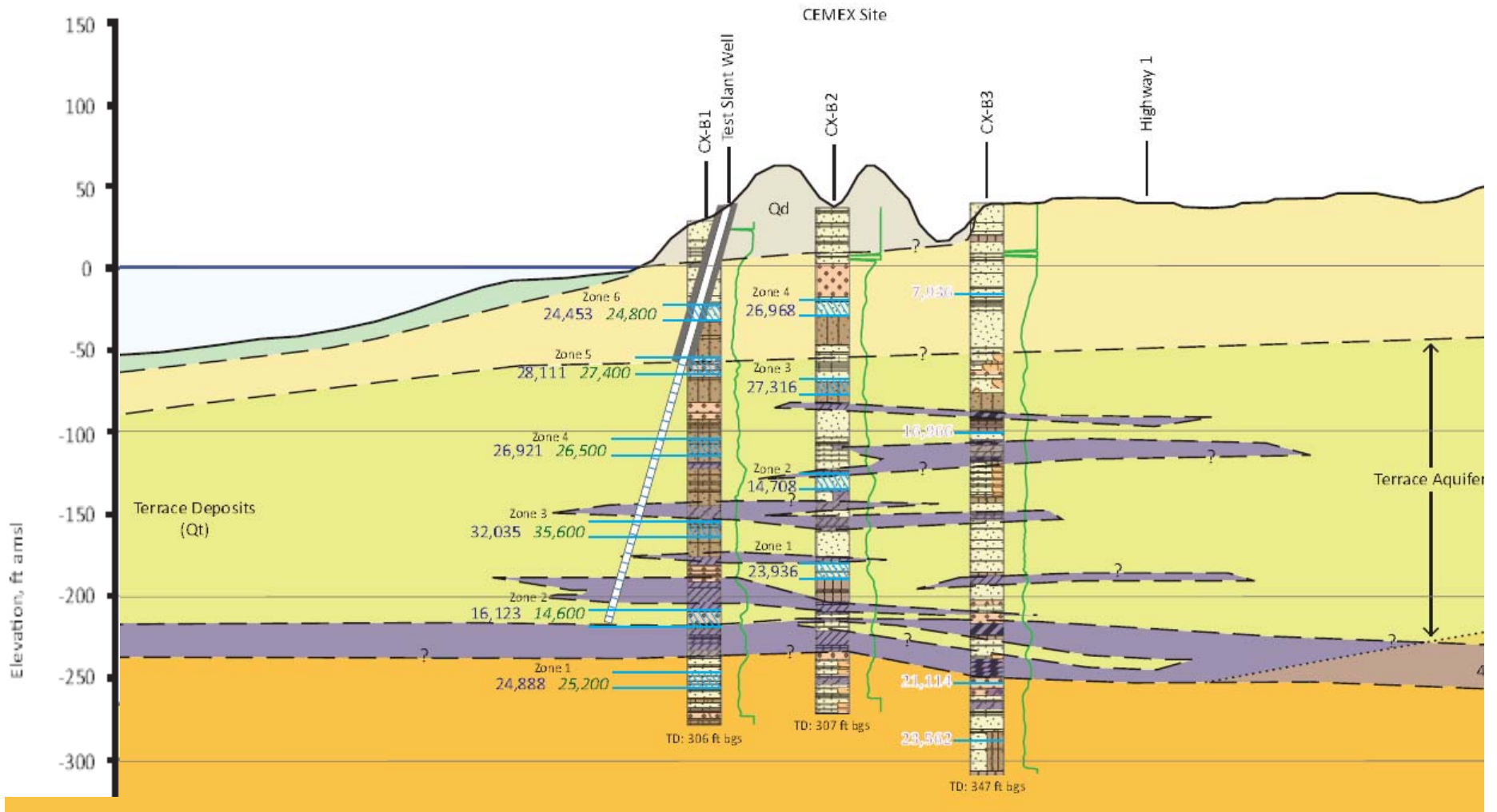
Test Well Location at Cemex – Preliminary Layout



Test Well Profile – Conceptual Illustration

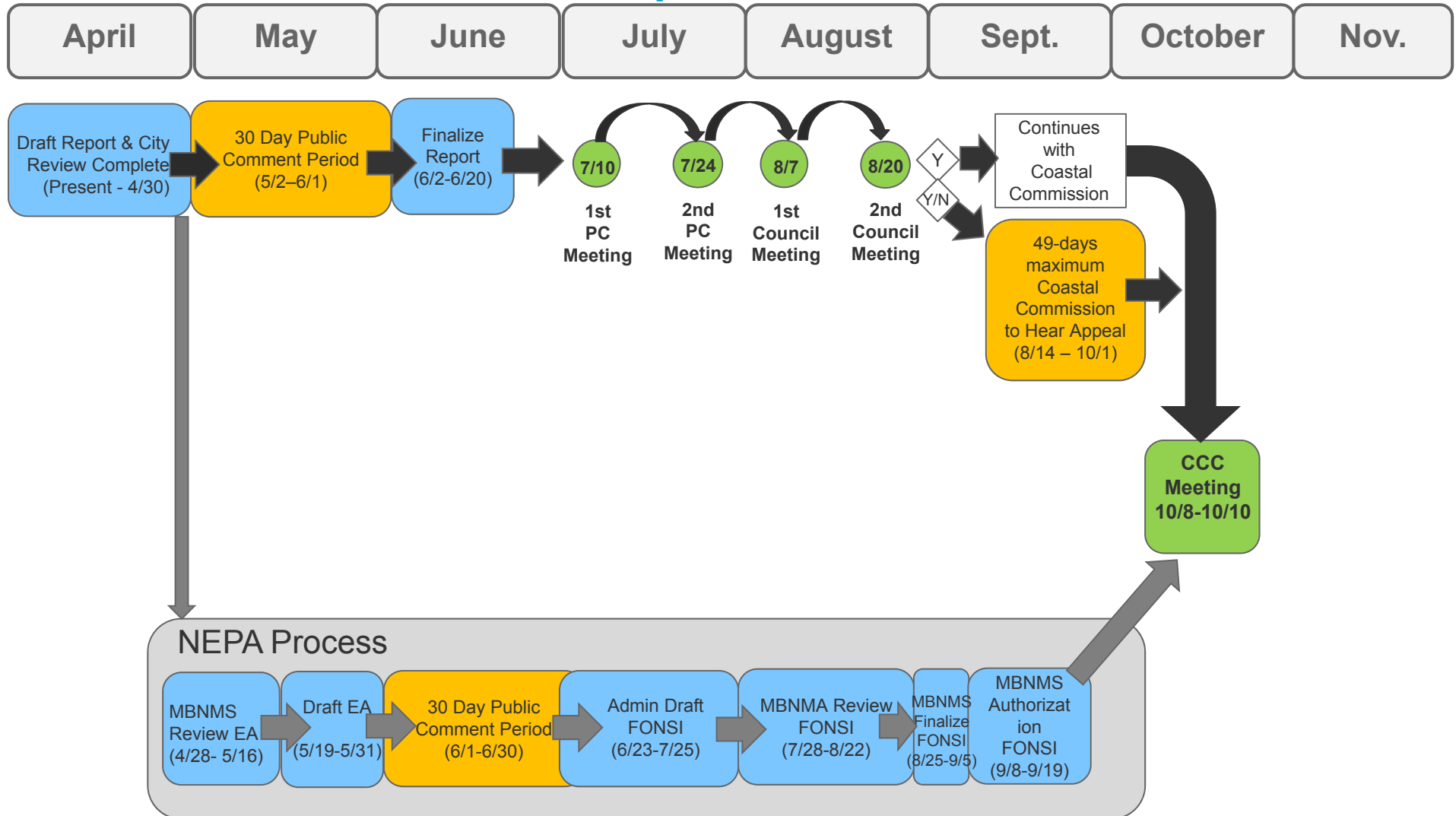


CEMEX Section – Preliminary Findings



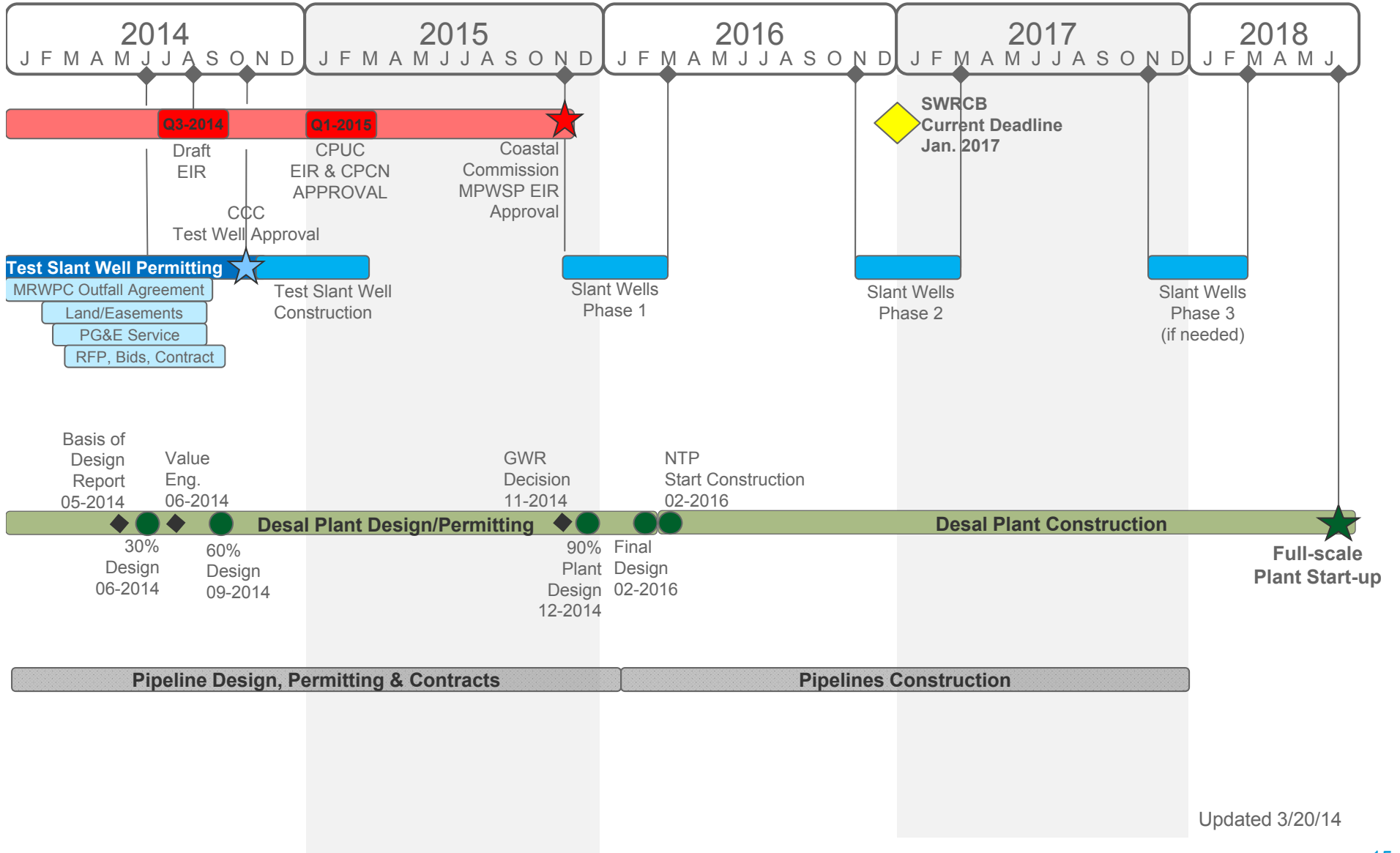
Test Well Schedule & MPWSP Overall Schedule

Test Well CEQA/NEPA - Anticipated Schedule



Updated 3/20/14

Monterey Peninsula Water Supply Project Anticipated Schedule



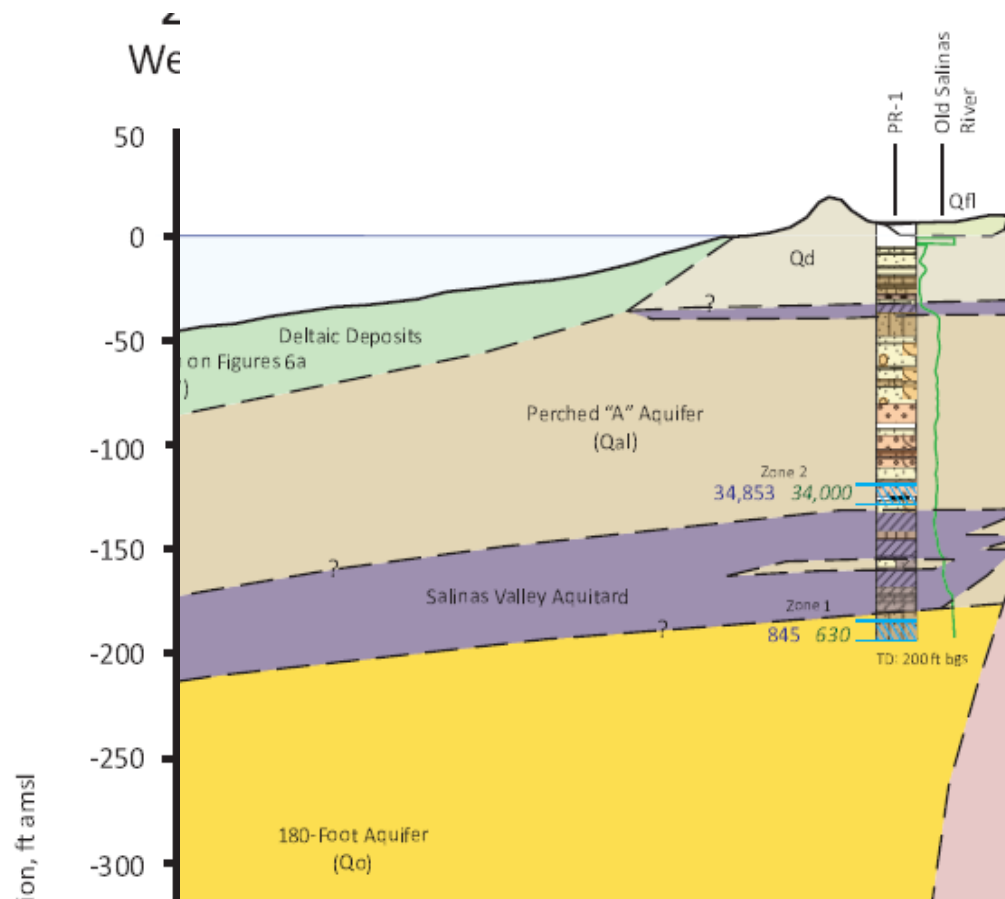
Updated 3/20/14

Potrero Rd Contingency Slant Well Source Water Location

Potrero Road - Contingency Slant Well Location



Potrero Rd Section – Preliminary Findings



Potrero Road Location Benefits & Challenges

Environmental

Disturbed parking lot and located outside Coastal Erosion

Habitat

No Snowy Plover historically, allowing year round drilling

Good Hydrogeologic conditions for Slant Wells

- Dune Sand equivalent aquifer with defined aquitard from 140ft – 185ft
- High TDS content above 140-foot aquitard – 34,000 mg/l

 **More Pipeline (21,000') & Cost (\$12m to \$16m) than Cemex option**

 **Construction complexity – river crossings, high water table, highways, bridge crossings**

 **No Outfall disposal option for test well**

Potrero Rd – Permitting Timeline & Cost

Timeline

- End of April - complete Project Description
- May – file project application with County
- 6 – 12 months of CEQA/NEPA processing

Cost

- Permitting Budget - \$300,000 to \$500,000