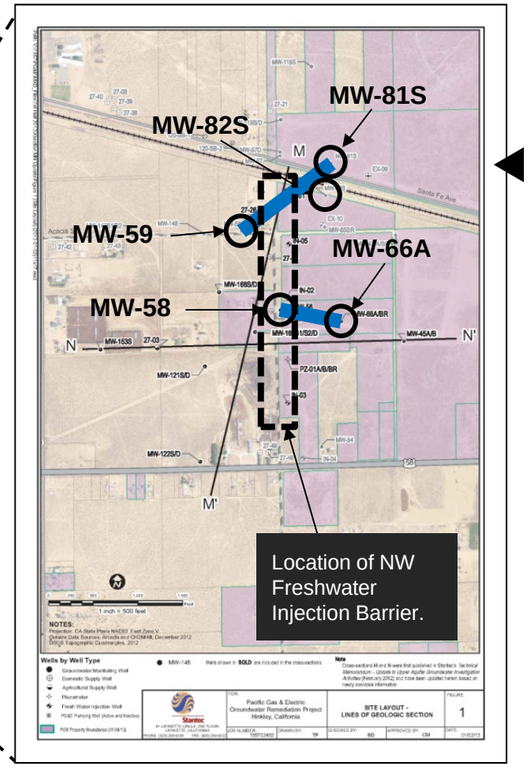
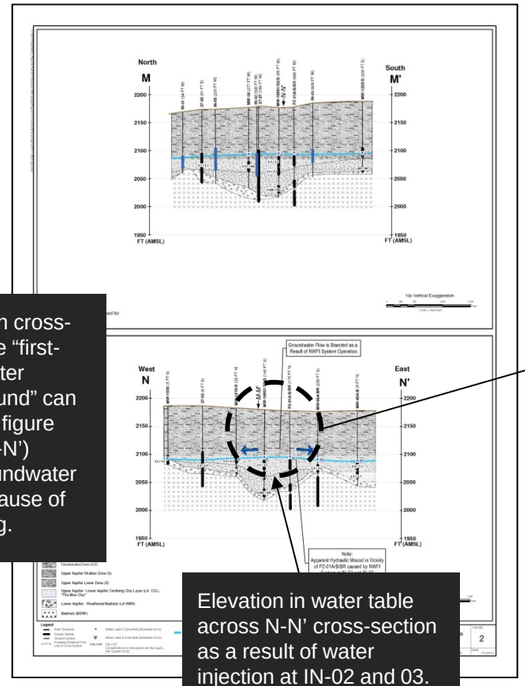
IRP Manager's Evaluation* of the Performance of the Northwest Freshwater Injection System

1 **Plume Map, 4th Q 2012 Highlighting Location of Freshwater Injection Barrier**

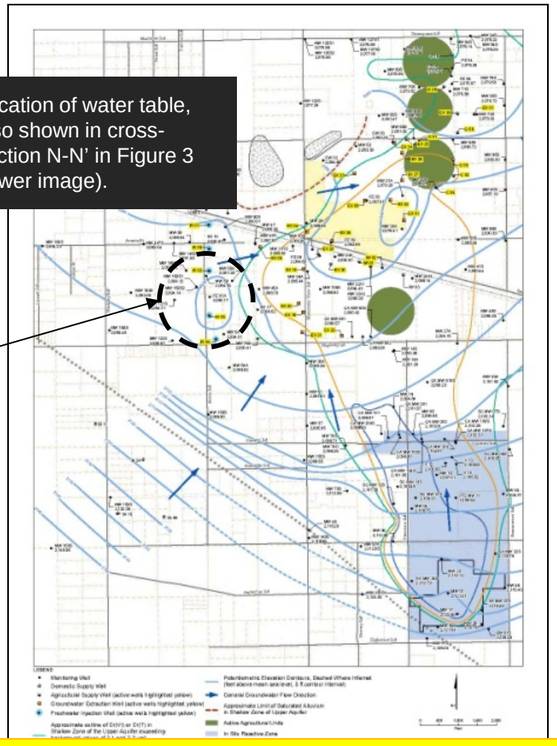


2 **Cross-section Locations at Injection Barrier** *(N-N', east-west, is across the barrier, while M-M', north-south, is along the barrier)*

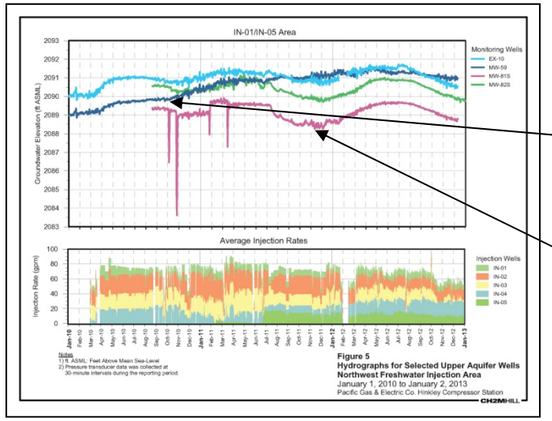
3 **Cross-sections Along M-M' *(upper image)* and Across N-N' *(lower image)* Injection Barrier**



4 **Groundwater Elevations in Shallow Zone of Upper Aquifer** *(4th Quarter, 2012)*



5 AND **6** **Hydrographs for Monitoring Wells Transecting the Injection Barrier** *(Max allowed injection rate = 80gpm)*

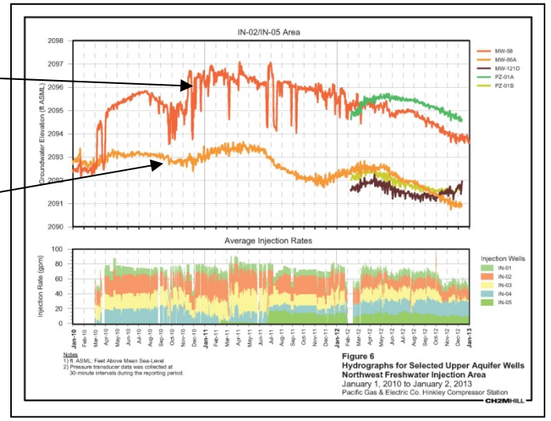


MW-58

MW-59

MW-66A

MW-81S



*** Prepared at the request of CAC member, Lester White.**

DISCUSSION

- The IRP Manager has reviewed water injection rates, groundwater elevations (Figures ❺ and ❻) across and along the location the Northwest Freshwater Injection (NWFI) barrier (Figures ❶ and ❷).
- By looking at the relative elevations via the location map (Figure ❷) and the hydrographs in Figures ❺ and ❻, the IRP Manager concludes, within the accuracy of the provided data, that groundwater gradients in the vicinity of the barrier have been sufficiently elevated to retard plume migration from east to west.

REFERENCES

1. Technical Memorandum: Interpretation of Chromium Sample Results from Newly Installed, Monitoring Wells in the Upper Aquifer and Occurrence of Chromium in Groundwater in the Western Area, Pacific Gas and Electric Company, Hinkley Compressor Station, Hinkley, California, CH2MHill, January 28, 2013.

2. *Figure 3-1, Chromium for Fourth Quarter 2012 Groundwater Monitoring and Domestic Well Sampling and Interpreted Maximum Plume Outline in Upper Aquifer*, Fourth Quarter 2012 Groundwater Monitoring Report and Domestic Well Results, Site-Wide Groundwater Monitoring Program, Pacific Gas and Electric Company, Hinkley Compressor Station, Hinkley, California.