

Las Posas Basin Plan Draft Discussion Paper No. 1

Las Posas Basin Plan Hydrologic Summary and Proposed Goals

March 25, 2009 HG and revision to 1.E as discussed by the Las Posas Users Group

1. Hydrologic Summary

- A. The South Las Posas Basin has experienced rising groundwater elevations due to recharge along the unconfined alluvial aquifer underlying the Arroyo Las Posas. A principal source of this recharge is discharges from the Simi Valley and Moorpark wastewater treatment plants and groundwater dewatering wells in Simi Valley.
- B. The rising groundwater in the South Las Posas Basin has resulting in increased salinity and saline groundwater has percolated downward into the underlying Lower Aquifer System and extended northward into the East Posas Basin.
- C. In the portion of the East Las Posas Basin unaffected by the recharge mound of saline groundwater coming from the South Las Posas Basin, groundwater elevations declined 190 feet over the period of 1973 to 1998 due to pumping in excess of recharge.
- D. The Calleguas Municipal Water District has an Aquifer Storage and Recovery facility in the East Las Posas Basin. Calleguas has stored water in the facility by delivering imported water supplies to groundwater pumpers in lieu of groundwater pumping. These deliveries have stabilized groundwater elevations in the East Las Posas Basin that had been declining.
- E. The West Las Posas Basin is geologically isolated from the recharge sources of the East and South Las Posas basins, but water purveyors operate water systems that straddle the basins. The West Las Posas Basin is hydrologically connected to the Oxnard Plain Basin with groundwater elevations in the western portion of the basin reflecting changes observed in the Oxnard Plain Basin. Groundwater elevations are highest in the west end of the basin and lowest in the east end suggesting recharge is from the Oxnard Plain Basin flowing into the West Las Posas Basin. There is also a recharge component from the northern flank of the basin.
- F. The recharge mound that has extending along the Arroyo Las Posas has reached the northern Pleasant Valley Basin north of Camarillo with a similar expression of rising groundwater elevations and salinity. The current dry weather surface water flows in the Arroyo Las Posas / Calleguas Creek end in the Somis area north of Camarillo. Dry weather surface flows have reduced the effectiveness of rain events to recharge the basins and improve water quality.
- G. The U.S. EPA has adopted a Salts TMDL that will require watershed stakeholders develop and implement a salts management plan to export salts off the watershed to improve water quality.

(over)

2. Proposed Goals

- A. Develop a safe yield groundwater management plan that keeps pumpers on the basin.
 - Provide for the sustainable operation of the Calleguas Aquifer Storage and Recovery Program.
 - Develop and reclaim saline groundwater in the South and East Las Posas Basins to supplement existing groundwater supplies.
 - Protect water quality.
- B. Integrate Las Posas Basin groundwater management within a regional context that includes inflows from Simi Valley and rising groundwater in the Northern Pleasant Valley Basin, and is consistent with the Salts TMDL.