

2009 Progress

OUTREACH & STAKEHOLDER INVOLVEMENT

- Implemented 2008 Public Outreach Plan: updated web site (<u>www.sonomacountywater.org/svgroundwater</u>) and prepared fact sheets.
- The Basin Advisory Panel met 4 times to oversee implementation of the groundwater plan, the Technical Advisory Committee met 10 times to advise on technical matters.
- Conducted technical presentations and briefings for over fifteen local organizational meetings and statewide conferences.
- Preparation of private well owners guide.
- Produced a video highlighting the Sonoma Valley GMP.
- Panel and TAC members visited numerous sites in Sonoma Valley for potential stormwater retention/groundwater recharge projects.

VOLUNTEER GROUNDWATER-LEVEL MONITORING

- 37 additional wells were added to the program in 2009, bringing the total number of voluntary wells to 133.
- DWR, VOMWD, the City of Sonoma, SCWA and local trained volunteers coordinated the semiannual measurement of water levels from these 133 wells using protocols developed with stakeholder guidance.
- Select wells were instrumented for the collection of continuous groundwater-level measurements.
- Incorporated available groundwater-level data from the SWRCB Geotracker website.
- Enhanced the secure web-based data entry and management system for individuals to enter and analyze well data, called Web H2O.

RECHARGE AREAS BEING IDENTIFIED

- Initiated recharge mapping project using funding received as part of \$250,000 DWR AB 303 grant.
- The Sonoma Valley Groundwater Flow Model was updated by a Stanford University graduate student to better account for recharge variability in the watershed.

CONSERVATION REDUCES GROUNDWATER USE

- In 2009 the Panel developed a Water Conservation Awards Program that recognized several individuals, groups, and businesses from Sonoma Valley for extraordinary levels of water conservation.
- The Panel is implementing its \$25,000 grant to conduct water saving assessments and make recommendations for other conservation activities tailored to the Sonoma Valley.

IMPROVE GROUNDWATER SUSTAINABILITY

- The "Slow It, Spread It, Sink It" guidebook has been developed by the Southern Sonoma County Resource Conservation District with input from the Panel and TAC to serve as a resource guide for property owners to implement projects that promote stormwater retention and groundwater recharge.
- Progress on the feasibility analysis and design work for the Sonoma Valley Recycled Water Project was accomplished.

2009 Hydrologic/Groundwater Conditions

ANNUAL RAINFALL/SURFACE WATER CONDITIONS

- Annual rainfall was approximately 60% of average in 2009 (18 inches at the City's rain gage compared with the 50-year average of 29.5) and represented the third straight year of below average rainfall.
- Consistent with the low rainfall, annual discharge of Sonoma Creek measured at the USGS Agua Caliente gage was approximately 43% of average in 2009 (22,511 acre-feet compared with the average of 51,800 acre-feet).

GROUNDWATER CONDITIONS ell construction data was reviewed to categorize well

- Well construction data was reviewed to categorize well data according to well-screen depths.
- Groundwater level trends observed in shallow-zone wells (<200-feet)
 are generally stable and groundwater level declines are more
 pervasive and pronounced in deeper-zone wells (> 200 feet).
- Two previously identified groundwater pumping depressions remain evident — Southeast of the City of Sonoma and Southwest of El Verano. Groundwater levels are locally below sea level in these areas. These groundwater-level depressions are primarily within the deeper-zone.

2010 Goals and Planned Activities

CONTINUE STAKEHOLDER INVOLVEMENT AND OUTREACH

 Continue Panel and TAC meetings, prepare media outreach materials and conduct stakeholder briefings.

EXPAND GROUNDWATER-LEVEL PROGRAM

- Expand Voluntary Groundwater-Level Monitoring Network with a focused priority for adding deeper-zone wells in the areas shown on the back of this flyer.
- Construct two new multi-depth monitoring wells using DWR grant funds to improve monitoring of groundwater-levels and salinity.
- Increase use and utility of web-based data management system (WEBH2O)

PROMOTE GROUNDWATER SUSTAINABILITY

- Conduct seepage runs in Sonoma Creek and tributaries to better understand interaction of surface water and groundwater.
- Complete groundwater recharge mapping using DWR grant funds to identify areas suitable for groundwater recharge enhancement projects.
- Implement DWR long-term groundwater quality monitoring program.
- Identify and plan projects that capture available stormwater from Sonoma Creek and its tributaries for recharge into the groundwater basin.
- Explore feasibility of banking excess winter flows from the Russian River in the Sonoma Valley groundwater basin for storage and use in the summer.
- Upgrade existing groundwater model to fully-coupled surface water/groundwater model.

