



- Approximately 70 percent of water injected through ASR wells can be expected to remain in the basin over long time periods, assuming no active seasonal recovery occurs to limit losses. It is considered likely that seasonal recovery of injected water would significantly reduce or eliminate the predicted losses; however, the model will need to be rediscritized into quarterly or monthly stress periods in order to simulate such a program.
- Approximately 75 percent of additional stream percolation derived from de-lining Santa Monica and Franklin creeks can be expected to remain in the basin over long time periods.

It is noted that the primary purpose of this project was to develop a calibrated groundwater flow model of the CGB that can be used as an ongoing management tool for the District upon completion of the project. Additional basin management strategies to the initial scenarios simulated for this project are likely to emerge in the future that can also be simulated with the model (e.g., a seasonal ASR program). The initial scenarios performed for this project are not intended to encompass all possible basin management scenarios, but rather to provide a basis for demonstrating a range of capabilities (and limitations) of the groundwater model while also providing the District with useful basin management information.

## RECOMENDATIONS

Based on the results of the CGB Hydrogeologic Update and Groundwater Model Project, and our experience with similar projects, we offer the following recommendations:

- For conservative basin planning purposes and given existing well locations and land uses in the basin, an operational yield of approximately 3,600 afy is recommended. This is a long-term average annual value. During periods of deficient surface water supplies, the basin can support levels of extraction up to approximately 5,000 afy for short periods, provided the basin is allowed to recover during periods of surplus supplies.
- The groundwater model should be used to evaluate various basin management strategies to optimize basin pumping to capture additional recharge and increase the operational yield (up to 4,200 afy). Such strategies include various spatial and temporal redistributions of pumping in the basin to optimize capture of additional recharge without adverse impacts.
- Given that water levels have historically at times been (and are currently) below sea level, the conditions for potential seawater intrusion in the northwestern portion of the basin exist. The District should install at least one coastal sentinel monitoring well in the northwest portion of SU-1 of the basin that has dedicated monitoring wells completed in Aquifers A, B and C (and possibly Aquifer D). These wells should be monitored for both water-levels and water-quality as part of the District's ongoing Groundwater Management Plan.

Sentinel  
Well Recomm-  
endation