

Water Supply Measures Reconnaissance Study

Lower Santa Clara River WCVC Meeting July 23, 2015

Reconnaissance Study Process

- Initial Data Review
- Groundwater Basin Modeling
- Concept Development
- Concept Screening
- Draft Report
- Final Workshop
- Final Report

Concept Screening

| Screening Criteria | Recharge with Recycled Water | Aquifer Storage and Recovery | Enhanced Stormwater Capture | Pumping Redistribution |
|--------------------------------|------------------------------|------------------------------|-----------------------------|------------------------|
| Meet Study Objectives Reliably | High | Medium | Medium | Medium |
| Cost and \$/af | Medium | High | Low | Medium |
| Phasing | High | High | Medium | Medium |
| Institutional | Low | High | Medium | Low |
| Other | Medium | High | Medium | Medium |

Recommendations and Conclusions

Recommended Projects for Further Development

- Groundwater recharge of the alluvial aquifer with recycled water and delivery to nonpotable customers
- Aquifer storage and recovery of imported water

Opportunity Projects

- Enhanced storm water capture
- Pumping redistribution

Future Projects

- Full advanced treatment (FAT) of recycled water at one or both of the Valley's WRPs
- Expanded treatment of contaminated groundwater

Implementation

Groundwater Recharge with Recycled Water

- Perform a feasibility and siting study of recharge basins, extraction wells (as part of RWMP update)
- Develop and execute an outreach plan
- Prepare a facility plan
- Prepare permitting and engineer's report
- CEQA compliance
- Title 22 engineering report
- Other permits (e.g. ACOE, Fish and Wildlife)
- Design and construction

Implementation (cont'd)

Aquifer Storage and Recovery

- Perform a feasibility and siting study of recharge basins, extraction wells
- Facility plan
- Permitting and engineer's report
- CEQA compliance
- Design and construction

Other Tasks

Both Projects

- Institutional arrangements
- Grant, loan and partner funding
- Evaluate integration with full advanced treatment of recycled water