



## Cadiz Water Conservation, Recovery and Storage Project

## Groundwater Monitoring Program

### GROUNDWATER MONITORING, MANAGEMENT AND MITIGATION PLAN PROTECTS NATURAL RESOURCES

#### HOW WILL THE PROJECT BE MONITORED?

*Resources across the 1,300-square-mile watershed will be continually monitored. Among the resources to be monitored and technology to be used are:*

- 3 springs
- 27 observation and cluster wells
- Up to 34 project production wells
- 20 land survey benchmarks
- 3 extensometers to measure land subsidence
- 5 downhole flowmeter surveys
- 4 nephelometers for dust monitoring
- 4 weather stations

The Cadiz Project, a potential new water supply for Santa Margarita Water District (SMWD) and other Southern California water providers, is designed to protect natural resources through the careful management of an extensive groundwater basin in eastern San Bernardino County.

Water that would otherwise evaporate will be collected and conserved for beneficial use. The project will then convey the conserved water to SMWD and other Southern California water agencies. Independent scientific reviews and an extensive environmental review process have determined the project can deliver a sustainable and reliable source of water and will have no significant impacts on plants, animals, surrounding streams and water sources or other natural resources.

To ensure the project operates as expected and protects desert resources, SMWD has approved a comprehensive Groundwater Monitoring, Management and Mitigation Plan (GMMMP). This plan will establish a robust monitoring program to provide independent oversight of the operation of the Cadiz Project and ensure protection of the desert's natural resources. The plan was designed by leading groundwater experts in consultation with San Bernardino County government officials.

#### MONITORING TO PROVIDE EARLY WARNINGS

The GMMMP will actively monitor critical resources in the desert, including water, air, natural springs, subsidence and saline/fresh water movement in the groundwater basin.

The goal of the monitoring plan is to provide an early warning of potential impacts so that these may be addressed before they reach a level of significance. The plan includes monitoring groundwater and surface water resources in the 1,300-square-mile watershed with an array of high-end technologies (see box). In addition to monitoring the surrounding natural resources, the plan establishes a "floor," or maximum groundwater draw-down level, to ensure the appropriate and safe management of the groundwater basin.

The various models used in the environmental analyses of the project also will be updated at least every five years to incorporate any new data or observations that resulted from this monitoring so that operators can better estimate potential impacts on groundwater levels, land subsidence and water quality. In this way, the project would undergo ongoing and pro-active assessments of future impacts on the environment.

### INDEPENDENT OVERSIGHT & ENFORCEMENT ENSURES RESOURCE PROTECTION

An agency-appointed, technical review panel of groundwater experts would assess the data from the monitoring sources. It would then recommend responses and corrective measures, if needed. SMWD and San Bernardino County would enforce its findings and, if necessary, halt withdrawals from the groundwater basin. In this way, independent oversight would be maintained over the life of the project.

A community advisory group also will be created to provide input to SMWD as it carries out the monitoring and mitigation for the project.

