



PROJECT COMPLETION DATE

April 7, 2022

PROJECT COSTS

Prop 1 GWGP Funds: \$206,965
Local Cost Share: \$206,966
TOTAL PROJECT COST: \$413,931

PROJECT PURPOSE

The purpose of the Project was to destroy two abandoned legacy irrigation wells located in the western section of the Niles Cone that were acting as potential preferential pathways for saltwater to enter into active water production aquifers. Destruction of the wells will assist in limiting the amount of saltwater intrusion impacting drinking water sources and threatening ACWD's Mowry Wellfield.

The primary goals of the Project were to:

- Limit the volume of saltwater intruding into the lower drinking water aquifers.
- Assess the effectiveness of the Project on improving groundwater quality.
- Perform outreach to community residents and businesses

PROJECT SCOPE

The Project scope included activities performed across the following five tasks:

Administrative Activities: *Coordination, communication, and reporting to keep the Project on schedule and budget. Key deliverables: Project Assessment and Evaluation Plan describing how performance of the Project would be assessed, evaluated, and reported, and a Final Project Report providing a summary of problems encountered, costs, and Project results.*

Planning Activities: *Prior to conducting field activities, ACWD finalized well locations, secured a drilling contractor, and completed permit processing.*

Implementation: *Field activities to perform the well destructions, including mobilization, site preparation, clearing out the wells to the extent practicable, using neat cement and explosive detonation to seal the borings, and restoring the Project site to pre-construction conditions.*

Monitoring and Performance: *Monitoring of the project performance will be performed by ACWD during its semiannual groundwater monitoring events and reported in its annual Groundwater Monitoring Reports.*

Outreach: *In addition to the public notification process used in selecting a contractor, ACWD delivered notification letters to residents and businesses located near the Project site including detailed Project information and potential impacts to the local neighborhood.*

BENEFITS

The desired benefits from the Project are:

- Decreased concentrations of chlorides in the lower aquifers
- Lessened threat to three production wells at the Mowry Wellfield
- Continued sustainable management of the groundwater basin.
- Ongoing evaluation of Project effectiveness through ACWD's semiannual monitoring program
- Informing the community about the Project's purpose and importance of protecting the groundwater basin, especially for nearby residents and businesses

Achieving these desired benefits will be determined based on ongoing monitoring and evaluation as part of ACWD's semiannual groundwater monitoring program. However, the benefit of performing outreach to community residents and businesses was accomplished through successful public engagement activities, including distribution of notification letters and holding a public meeting.

LESSONS LEARNED

Lessons learned and recommendations for future projects include:

- Development of contingency plans during the planning phase to accommodate nonstandard well constructions (e.g., blockages)
- Preparation of spill kits in case of presence of oil in effluent water
- Emphasis on continued coordination and communication with all partners and stakeholders in the Project

Several key aspects of successful implementation of the Project include:

- Frequent communication and coordination with the State Water Board, Project partners and stakeholders, and the public about task progress and issues
- Ensuring that staff with a depth and breadth of field experience are included on the Project team to promote ease of decision-making and efficient use of Project expenses

NEXT STEPS

ACWD will continue to monitor the effectiveness of the Project in decreasing chloride concentrations in the lower aquifers through continued implementation of its semiannual groundwater monitoring program, which will be reported in ACWD's annual Groundwater Monitoring Reports.

CONTACT

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ACKNOWLEDGEMENTS

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