

Summary Form Attachment
Water Reclamation Plant No. 7 Phase 1 Non-Potable Water Improvement Project

Project Description: CVWD proposes improvements to the existing tertiary treatment plant processes and an existing canal pump station at WRP 7. The Project would reduce the usage of non-potable water (NPW) from the Coachella Canal by generating additional recycled water (RW), which would benefit existing NPW/RW users in the WRP 7 service area. The WRP 7 Tertiary Treatment Improvements and MP 113.2 Pump Station Rehabilitation Project includes the following upgrades:

- Retrofit the existing dual media filter basins with cloth disk filters to improve tertiary treatment to match the rated capacity of the plant within the same footprint.
- Construct a low-pressure ultraviolet (UV) system with 12 lamps and 2 channels (100 ml/cm²) to match the rated capacity of the plant in accordance with Title 22 regulations, in an enclosed 44-foot by 61-foot building and with an electrical building to substitute use of chlorine gas.
- Abandon the existing chlorine gas system, and maintain the existing chlorine contact basin for potential future use by operations for effluent/backwash holding.
- Upgrade of the existing systems associated with the tertiary process includes the in-kind replacement of the following:
 - Secondary effluent flocculation system
 - Tertiary process chemical feed systems, including sodium hypochlorite storage in fiber-reinforced plastic-coated steel tanks. Includes replacement of existing feed pumps for additional capacity due to increased tertiary flows and feed piping.
 - In-plant secondary effluent, and NPW delivery pumping systems capacity increase for a 5.5 MGD system (2.5 MGD existing).
 - Tertiary Process electrical motor control centers (MCCs). A new electrical control building would house existing and new components.

CVWD is also replacing the aged infrastructure at canal water delivery pump station MP 113.2 as part of this Proposed Project. To maintain the current capacity of the pump station, the two existing pumps and MCC's are being replaced with more efficient pumps and drives requiring less horsepower. The motors would be approximately 10 percent more efficient, and horsepower (HP) would be reduced from 150-HP to 100-HP per pump. A third pump is being added to allow operations to perform routine maintenance while maintaining facility capacity in a typical two-duty and one-standby configuration. All improvements to the pump station are within the existing MP 113.2 site located on the southwest corner of the Madison Street and Avenue 40 intersection.

The Proposed Project would also install approximately 2,500 linear feet of NPW pipeline to connect Young's Farmland to the existing NPW pipeline on Avenue 38. Young's Farmland currently uses groundwater for irrigation. The Project would convert the primary irrigation source from groundwater to recycled water. The Young's Farmland NPW pipeline would be installed within the right-of-way of Jefferson Street and on Young's Farmland property (APN 691-060-010, 691-050-010, and 691-050-012).