

RCWD/City of Temecula Non-Functional Turf Removal and Irrigation Upgrade Project

Project Monitoring

- ✓ **Project Monitoring Plan.** Describes the monitoring, assessment, and performance measures to be used to evaluate the Project. Will ensure that the Project meets its intended goals, achieves measurable outcomes, and provides value to the region and the State of California.

The RCWD/City of Temecula Non- Functional Turf Removal and Irrigation Upgrade Project (Project) consists of a suite of activities that will reduce dependence on imported water and improve water supply reliability, improve water quality, promote water conservation, reduce energy consumption and reduce greenhouse gas (GHG) emissions. Progress on meeting quantifiable Project goals can be determined through implementation of performance measures that will be used to quantify and verify project performance. Some Project goals, however, are more difficult to measure since the benefits that they derive are qualitative in nature. The performance measures will continue to be refined as the Project is developed.

Methodology:

- Project Goals include: 1) removing 388,820 square feet of high water use turfgrass plantings, 2) replacing the turfgrass with lower water use plant materials, 3) achieving a net reduction in irrigated area through the replacement activities, and 4) increasing irrigation system efficiency in the newly planted areas.
- Desired outcomes include: 1) reducing water consumption at the sites by 10.51 million gallons per year, 2) reducing energy consumption by 75,470 kWh per year, and 3) cutting greenhouse gas emissions by 20,981 kg CO₂e per year over a 30-year period.
- Performance measures include: 1) square feet of turf removed, 2) net difference between water requirements of turf removed and newly installed shrub plantings, 3) square footage reductions in irrigated areas, and 4) increases in irrigation system efficiency.
- Performance to be measured through verification of the removal of high water use turf plantings and their replacement with lower water use shrub materials, verification of net reductions in irrigated areas realized through turf replacement activities, and identification of post-project implementation water requirements through irrigation system audits.
- Monitoring of performance measures will take place at each conversion site bi-weekly throughout the construction process.
- Post-project implementation monitoring will take place monthly over a 12-month period and then annually over a 3-year period, at a minimum, to measure project performance relative to desired outcomes. This will be accomplished through measurement of water use reductions through analysis of water meter data. Water use reductions will then be translated to energy savings and greenhouse gas reductions per methods described in the Supporting Documentation for the Attachment 2 Excel workbook.