SAN DIEGO Integrated Regional Water Management Proposition 84-Round 2 Implementation Grant Overview

In 2013, the San Diego IRWM program submitted a grant proposal to the Department of Water Resources for \$9.991 million in funds made available through the voter-approved Proposition 84 (2006). This proposal included 7 projects that would implement high priority programs to meet the San Diego Region's water management needs.

Project 1: North San Diego County Regional Recycled Water Project (NSDCRRWP) – Phase II



This project will implement the 10 priority sub-projects identified in Phase I of the NSDCRRWP to increase connectivity between recycled water facilities in North San Diego County. This effort will increase use of recycled water by allowing it to be distributed across the North County region, and will produce an estimated 6,790 AFY of recycled water. Project benefits include: reducing imported water dependency, reducing discharge of recycled water to the ocean, reducing energy consumption from pumping imported water, and providing more recycled water for future water needs. The agencies involved with this effort are the Leucadia Wastewater District, Vallecitos Water District, Vista Irrigation District, Rincon del Diablo Municipal Water District, Olivenhain Municipal Water District, Santa Fe Irrigation District, Carlsbad Municipal Water District, the City of Escondido, the City of Oceanside, and the San Elijo Joint Powers Authority.

Project 2: Turf Replacement and Agricultural Irrigation Efficiency Program

This project creates a fund to improve irrigation efficiency and reduce water use in both agricultural areas and urban landscapes. Through rebate and incentive programs administered by the San Diego County Water Authority and the City of San Diego Public Utilities Department, landowners will be encouraged to implement turf replacement, and retrofit onsite potable water irrigation systems used on agricultural lands to use recycled water. Additionally, this project will fund an outreach effort by the City of San Diego Transportation & Storm Water Department emphasizing dry weather runoff prevention and water quality protection achieved through improvements in irrigation efficiency.

Project 3: Rural Disadvantaged Community (DAC) Partnership Program – Phase II

This program will fund critical water supply and water quality projects in rural DACs in San Diego County. Projects will be chosen based on a project selection criteria developed by the Rural Community Assistance Corporation, the organization heading the Rural DAC Partnership Project. The communities that will be selected are low income, and all projects will have a public health benefit, and address critical water concerns of quality, reliability, and quantity. This program may also fund tribal projects. Examples of the types of projects that may be selected include well replacement, storage tank construction or replacement, or conversion from well water to supplies from a local water agency. Program partners include the San Diego County Water Authority, Indian Health Services, California Department of Public Health, United States



Department of Agriculture, United States Environmental Protection Agency, Rural Community Assistance Partnership, City of San Diego, County of San Diego, and the United States Department of Health and Human Services.

Project 4: Failsafe Potable Reuse at the Advanced Water Purification Demonstration Facility



This project is designed to develop and demonstrate a safe and reliable method of designing and implementing potable reuse treatment methods. Through the four tasks in this project, the WateReuse Research Foundation, the City of San Diego, the Padre Dam Municipal Water District, and the Helix Water District will develop expert panel guidelines for requirements for potable reuse without an environmental buffer, develop a test plan for a failsafe potable reuse system, perform testing to evaluate, monitor, and demonstrate the failsafe concepts developed in the test plan, and provide a complete strategy for failsafe potable reuse. In the processes, this project will also test alternative disinfection and oxidation processes, and assess treatment alternatives, monitoring, system

responses, and system reliability. Throughout the project, expert input and information gained through the testing process will be incorporated into the final strategy for failsafe potable reuse.

Project 5: Sustaining Healthy Tributaries to the Upper San Diego River and Protecting Local Water Supplies

This project will protect Boulder Creek, within the San Diego River Watershed, from numerous threats such as sedimentation, temperature increase, and nutrient loading. Given the high quality of Boulder Creek, data collected along the creek will be used as a baseline for other streams in the San Diego River Watershed. Additionally, this project has a goal to purchase and restore up to 3,000 feet of stream currently damaged by private development and wildlife. Utilizing the partnerships formed in developing this project, increased monitoring of creeks draining into the El Capitan Reservoir will occur, and educational programs will be implemented to engage private land owners and reduce pollutant loading, erosion, and sedimentation. Further, outreach specifically geared to three tribes will enable them to survey and monitor water quality on tribal lands. This project is important for protecting the largest local water supply in the region, the El Capitan Reservoir. By protecting and improving water quality upstream of the reservoir, water treatment costs are reduced and the reservoir will better maintain its capacity, reducing the need for imported water. Organizations involved in this integrated effort include the San Diego River Park Foundation, Kumeyaay Diegueno Land Conservancy, San Diego River Conservancy, San Diego State University, Helix Water District, San Diego Stream Team, and San Diego Fly Fishers.



Project 6: Chollas Creek Integration Project – Phase II

This project is part of a larger phased project, which will utilize knowledge gained from the initial project phase to implement restoration activities along key portions of Chollas Creek, which runs through Southeastern San Diego, a large disadvantaged community. This phase of the project is comprised of three parts: Northwest Village Creek Restoration; Invasive Species Removal and Restoration; and Water Pollution Source Tracking, Citizen Monitoring, Pollution/Conservation Education, and Community Engagement. The Northwest Village Creek Restoration improves water quality and reduces flood damage by realigning the creek, installing retaining walls and drop structures, widening culverts and installing headwalls, and removing non-native plants while restoring native

vegetation. This will reduce erosion, slow creek flow, and improve water quality, leading to a healthier creek system. The Invasive Species Removal and Restoration segment of the project uses data from Phase I to select restoration sites prioritizing water quality, recreation, wildlife conservation, and stakeholder benefits. Across the five sites selected, a total of six acres of invasive vegetation will be removed and restored to control erosion and create habitat. The final component of this project engages stakeholders through resident-led water quality monitoring and targeted educational outreach. Engaging stakeholders through local citizen science will help further protect the restoration efforts of this project. This project is headed by the Jacobs Center for Neighborhood Innovation, in partnership with Groundwork San Diego, San Diego Coastkeeper, University of California Cooperative Extension, City of San Diego, and Jackie Robinson YMCA.

Project 7: Implementing Nutrient Management in the Santa Margarita River Watershed – Phase II

Continuing work done in Phase I, this project will help establish appropriate water quality objectives for the Santa Margarita River and Estuary. This project has five goals: maximize community involvement, collect feedback from stakeholders to reach consensus on water quality objectives, fill data gaps necessary to establish water quality objectives, develop nutrient water quality objectives for the Santa Margarita River Estuary, and develop nutrient water quality objectives for listed streams in the Santa Margarita River Watershed. This project will improve protection and restoration of the watershed, conservation of water, and control of eutrophication. It will improve science-based management of water resources, and provide a template for similar efforts in the Region. Additionally, it increases stakeholder involvement in the watershed protection process, fostering a sense of stewardship and consensus



that will allow greater progress on future watershed management goals. This project is a partnership between the County of San Diego and the Santa Margarita Watershed Nutrient Initiative – Stakeholder Group. The group includes members from Riverside County Flood Control & Conservation District, County of Riverside, US Marine Corps Camp Pendleton's Office of Environmental Security and Office of Water, Rancho California Water District, US Bureau of Reclamation, Fallbrook Public Utilities District, Caltrans, US Navy Space and Naval Warfare Systems Center Pacific, San Diego County Farm Bureau, Upper Santa Margarita Irrigated Lands, Trout Unlimited, Sierra Club, County of San Diego, and Southern California Coastal Water Research Project.