

Attachment 3 consists of the following items:

- ✓ **Work Plan.** This attachment includes summaries of the tasks necessary to complete each project in the Proposal, including necessary deliverables, and the current status of each project.

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Grant Administration

I. Introduction

Project Sponsor

Coachella Valley Water District (CVWD) will serve as the authorized grant administrator to act as the applicant and the grant manager for the Proposition 84, Integrated Regional Water Management (IRWM) 2015 Grant.

Project Partners

CVWD will serve as the grant administrator and will work with all local project sponsors (Mission Springs Water District, Desert Water Agency, Coachella Water Authority, and Torres-Martinez Desert Cahuilla Indians), and DWR to administer grant funds and respond to the California Department of Water Resources' (DWR's) reporting and compliance requirements.

Project Purpose

CVWD has served as the grant administrator on two existing Proposition 84 IRWM Implementation Grants (Round 1 and Round 2) on behalf of the Coachella Valley Regional Water Management Group (CVRWMG). In this capacity, CVWD will administer grant funds and respond to DWR's reporting and compliance requirements associated with the grant administration. CVWD will act in a coordination role: disseminating grant compliance information to the project managers responsible for implementing the projects contained in this Proposal, obtaining and retaining evidence of compliance, obtaining data for progress reports from individual project managers, assembling and submitting progress reports to DWR, and coordinating all invoicing and payment of invoices.

II. Proposed Tasks

Row (a) Direct Project Administration

Current Status: No direct project administration work has been completed to-date. Administration for the project will begin upon grant award on December 31, 2015.

Task 1: Agreement Administration

CVWD will respond to DWR's reporting and compliance requirements associated with the grant administration and will coordinate with the project managers responsible for implementing the projects contained in this agreement.

- Percent Complete: 0%
- Deliverables:
 - Executed Grant Agreement

Task 2: Invoicing

CVWD will be responsible for compiling invoices for submittal to DWR. This includes collecting invoice documentation from each of the project sponsors and compiling the information into a DWR Invoice Packet.

- Percent Complete: 0%
- Deliverables:
 - Invoices and associated backup documentation

Task 3: Progress Reports and Project Completion Reports

CVWD will be responsible for compiling progress reports for submittal to DWR. CVWD will coordinate with project sponsors to retain consultants as needed to prepare and submit progress reports and final project completion reports for each project, as well as the grant completion reports.

Reports will meet generally accepted professional standards for technical reporting and the requirements terms of the contract with DWR outlined in provisions of the Final Grant Agreement. For example, progress



reports will explain the status of the project and will include the following information: summary of the work completed for the project during the reporting period; activities and milestones achieved; and accomplishments and any problems encountered in the performance of work. Project completion reports will include: documentation of actual work done, changes and amendments to each project, a final schedule showing actual progress versus planned progress, and copies of final documents and reports generated during the project.

- Percent Complete: 0%
- Deliverables:
 - o Quarterly Progress Reports
 - o Draft and Final Project Completion Report



Project 1: MSWD Water Supply Reliability Program

I. Introduction

Project Sponsor

Mission Springs Water District (MSWD) will serve as the project sponsor for the *MSWD Water Supply Reliability Program*.

Project Partners

This project will be implemented by MSWD and will build upon work that has already been completed by water suppliers in the Region. In addition, this program will include extensive outreach and education efforts that will involve stakeholders throughout MSWD's service area, which is 100% economically disadvantaged (see Attachment 2 and Attachment 7 for more information).

Project Purpose

The purpose of this program is to implement two high-priority project components in MSWD's service area to address long-term water supply reliability. The two components include: 1) implementation of a weak base anion treatment system at Well 29, which will allow MSWD to operate the well and ensure compliance with Chrom 6 regulations, and 2) an advanced metering pilot project that will install 100 advanced meters and analyze data over a 1-year period to determine if advanced metering is an appropriate and cost-effective method for conserving water in MSWD's service area.

Work Completed

Component 1: Well 29 Chromium 6 Wellhead Treatment

The issue of Chrom 6 is prevalent throughout the Coachella Valley, and was addressed in the *2014 Coachella Valley IRWM Plan*. Chromium is a naturally occurring element and is the 11th most common element found in the Earth's crust. Several water supply agencies within the Region have performed extensive research to determine the most effective treatment process for removing Chrom 6 at the lowest cost considering both capital construction and operations and maintenance costs. Specifically, the Indio Water Authority (IWA) and Coachella Water Authority (CWA) completed a draft report, dated July 2015, titled *Indio and Coachella Water Authorities' Chromium-6 Treatment and Compliance Study*. The study considered all State-recommended treatment processes for Chrom 6 including both strong and weak based anion exchange treatment systems. The report concludes that strong based treatment is effective treatment for water that contains lower concentrations of sulfate while weak based is more effective for water with greater concentrations of sulfate. In addition to the study, MSWD has performed an independent investigation including extensive research with treatment system vendors and pilot studies and has arrived at similar conclusions to what was determined by IWA and CWA. Given the water quality conditions in MSWD's groundwater basins (high levels of sulfate), MSWD has selected a weak base anion (WBA) resin ion exchange process treatment technology for implementation at Well 29. It is anticipated that the normal operations process will treat a portion of water produced at Well 29 and will utilize a single media use adsorption application requiring pH reduction followed by vessel resin adsorption of Chrom 6. Thereafter, the remaining non-treated water will be blended with the treated water; MSWD will ensure that the blended water that is delivered to MSWD's drinking water system meets the Chrom 6 MCL; the treatment process that is being proposed will maintain a maximum level of Chrom 6 no greater than 8 micrograms per liter ($\mu\text{g/L}$).

Component 2: Advanced Metering Technology Pilot Project

MSWD has implemented substantial conservation programs throughout its service area, and is currently facing issues associated with water waste from breaking pipelines. MSWD has evaluated alternative methods for conserving greater amounts of water within its service area and has been in contact with vendors of advanced water metering systems. This pilot program will install 100 advanced meters in MSWD's service area, then will involve data collection and analysis over a one-year period to determine the feasibility and cost-effectiveness of installing advanced metering technology across MSWD's entire service area.



II. Proposed Tasks

Row (a) Direct Project Administration

Current Status: No direct project administration work has been completed to-date. Administration for the project will begin upon grant award on December 31, 2015. MSWD will administer both components together; as such, the work described in Task 1, Task 2, and Task 3 below apply to both components.

Task 1: Project Management

This task consists of project management responsibilities associated with the *MSWD Water Supply Reliability Program*, including managing the grant agreement, complying with grant requirements, preparing and submitting supporting grant documents, and coordinating with CVWD (IRWM regional grant manager).

- Percent Complete: 0%
- Deliverables:
 - o Environmental Information Form (EIF)
 - o Audited Financial Statements
 - o Invoices (anticipated quarterly throughout project implementation)
 - o Other Applicable Project Deliverables

Task 2: Labor Compliance Program (LCP)

The *MSWD Water Supply Reliability Program* would potentially qualify as a public works project necessitating labor compliance. MSWD will take all measures necessary to ensure compliance with applicable California Labor Code requirements, including, preparation and implementation of a labor compliance program, including any necessary payments to the Department of Industrial Relations under Labor Code Section 1771.3.

- Percent Complete: 0%
- Deliverables:
 - o Proof of labor compliance upon request

Task 3: Reporting

This task consists of preparing progress reports detailing work completed during the reporting period as outlined in the Final Grant Agreement. This task also includes submitting reports to CVWD for review and inclusion in a regional progress report to be submitted to DWR.

Task 3 will also involve preparing the draft Final Project Completion Report and submittal of said report to DWR for DWR Project Manager's comment and review within 30 days of project completion. MSWD will also prepare the Final Report addressing DWR comments. The report will be prepared and presented in accordance with the provisions of the Final Grant Agreement.

- Percent Complete: 0%
- Deliverables:
 - o Quarterly Progress Reports
 - o Draft and Final Project Completion Report

Row (b) Land Purchase/Easement

Current Status: A land purchase easement is not required for implementation of this program.

Task 4: Land Purchase – Not Applicable

Well 29 is already owned and operated by MSWD and MSWD has confirmed that the site is sufficient to accommodate installation of the proposed WBA treatment system; no additional land requirements or easements are necessary for the *MSWD Water Supply Reliability Program*. The *Advanced Metering Technology Pilot Project* involves installation of meters and would not require land purchase easements.



Row (c) Planning/Design/Engineering/Environmental Documentation

Current Status: Project-specific planning activities have not yet been completed. While initial feasibility has been completed for both components for purposes of this Proposal, final design, permitting, and environmental compliance needs to be completed.

Task 5: Feasibility Studies – Not Applicable

Component 1: Well 29 Chromium 6 Wellhead Treatment

As explained above under Work Completed, the issue of Chrom 6 has been substantially evaluated by MSWD and other agencies in the Coachella Valley. The results of the multiple evaluations has found that the WBA exchange technology is both effective and appropriate for water quality conditions in MSWD's service area, making the technology preferable for MSWD's Well 29. No additional feasibility studies are required for this component.

Component 2: Advanced Metering Technology Pilot Project

As explained above under Work Completed, this is a pilot project. After the pilot meters are installed, MSWD will conduct an analysis to determine the appropriateness of expanding the project throughout its service area. No additional feasibility studies are required for this component.

Task 6: Environmental Documentation

Component 1: Well 29 Chromium 6 Wellhead Treatment

As explained above under Work Completed, MSWD has analyzed the WBA treatment technology required for this project. Based on this analysis and initial consultation with MSWD's environmental compliance processing consultant, it is anticipated that the project will qualify for a CEQA categorical exemption. The project will be located on an existing MSWD well site that does not contain habitat for species of any kind, and the site is maintained to remove all vegetation on a consistent basis. MSWD will prepare a No Legal Challenges letter per the terms of the Final Grant Agreement as well as tribal notification per requirements of PRC §75102.

- Percent Complete: 0%
- Deliverables:
 - Copy of Categorical Exemption
 - No Legal Challenges Letter
 - Proof of Tribal Notification upon request

Component 2: Advanced Metering Technology Pilot Project – Not Applicable

This project does not meet the definition of a project per CEQA. No environmental documentation is required.

Task 7: Permitting

Component 1: Well 29 Chromium 6 Wellhead Treatment

This task consists of amending MSWD's existing operations permit from the Division of Drinking Water (DDW) for Well 29 to include WBA as a treatment method for Chrom 6 removal. MSWD will be eligible to amend its current permit through a streamlined process with DDW. Work includes communication and coordination with DDW as well as preparing draft and final permit documents. Based on previous experience in the Region installing ion exchange treatment technology and consultation MSWD has had with its environmental compliance processing consultant, no additional permits will be required.

- Percent Complete: 0%
- Deliverables:
 - Draft and Final DDW Permit Amendment

Component 2: Advanced Metering Technology Pilot Project – Not Applicable

Based on consultation with vendors and experience from other agencies implementing advanced metering technology, permitting would not be required for this component.



Task 8: Design

Component 1: Well 29 Chromium 6 Wellhead Treatment

This task consists of work to complete preliminary and final design for the wellhead treatment system. First, survey records will be assembled for the project site and a topographic site survey will be completed. Base drawings will be created from the data assembled during the records research. 30% design work will include preparation of preliminary footprints, equipment sizing, building design, mechanical piping design, and other features of the project. 100% design work includes all work necessary to complete final drawings and specifications.

- Percent Complete: 0%
- Deliverables:
 - Site Survey Records
 - Base Drawings
 - 30% Design Documents
 - 100% Design Documents

Component 2: Advanced Metering Technology Pilot Project – Not Applicable

No design is required for this component.

Task 9: Project Performance Monitoring Plan

This task involves developing and submitting a Project Performance Monitoring Plan (PPMP) to DWR for the entire *MSWD Water Supply Reliability Program*. The PPMP will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, location of monitoring points, and any other stipulations required by DWR in the Final Grant Agreement.

- Percent Complete: 0%
- Deliverables:
 - Project Performance Monitoring Plan

Row (d) Construction/Implementation

Current Status: No project implementation work has been completed to-date. Implementation will begin after final design is completed for Component 1. Because Component 2 does not require any pre-work (design, environmental, etc.), implementation will begin following submittal of the PPMP to DWR.

Task 10: Contract Services

Component 1: Well 29 Chromium 6 Wellhead Treatment

This task consists of work necessary to secure a contractor and award the contract, including: developing bid documents, preparing advertisement documents, reviewing bids for completeness, selecting a contractor, executing contracts with the selected contractor, and issuing a notice to proceed.

- Percent Complete: 0%
- Deliverables:
 - Bid documents
 - Proof of Advertisement
 - Notice of Award
 - Notice to Proceed

Component 2: Advanced Metering Technology Pilot Project – Not Applicable

No contract services are required for this component.

Task 11: Construction Administration

Component 1: Well 29 Chromium 6 Wellhead Treatment

This task includes managing contractor's work, answering information requests, and issuing work directives.

- Percent Complete: 0%
- Deliverables:



- o Notice of Completion

Component 2: Advanced Metering Technology Pilot Project – Not Applicable

No construction administration services are required for this component.

Task 12: Construction/Implementation Activities

Work under this task includes work necessary to implement both components included in the program.

Subtask 12.1: Implementation of Well 29 Chromium 6 Wellhead Treatment

This task includes work necessary to construct and install the WBA treatment system, and includes:

1. **Mobilization:** Contractor will mobilize equipment and materials for construction.
2. **Site Preparation:** Site will be prepared for construction equipment.
3. **Potholing:** Contractor will verify locations of existing systems for connections.
4. **Site Construction:** Contractor will perform all grading, trenching, piping installation, backfilling, and compacting of site soils. Thereafter, surface construction will be completed including all foundations, concrete slabs, walls, fences, and equipment in accordance with contract documents.
5. **Startup/Testing/Commissioning:** Contractor will perform startup and testing to ensure the system is operating as intended. In addition, the contractor will be required to assist MSWD staff with ensuring that the project was designed, installed, tested, and can be operated and maintained according to the operational requirements of MSWD and the Final Permit from DDW.
 - Percent Complete: 0%
 - Deliverables:
 - o Photographic documentation
 - o Engineers Certification

Subtask 12.2: Implementation of Advanced Metering Technology Pilot Project

This task includes work necessary to implement the advanced metering pilot project, and includes:

1. **Public Outreach:** MSWD will conduct outreach throughout its service area to inform customers about the pilot project and solicit customers to sign-up to participate in the program. Existing customer data will be analyzed to ensure that customers selected for the pilot study are collectively considered to be a representative sample of customers across the District.
2. **Purchase Materials:** MSWD will work with vendors to solicit bids and will purchase advanced metering technology from the most competitive bidders. MSWD will purchase up to 100 meters and will also provide data connection support to up to 100 local customers who participate in the program.
3. **Installation:** MSWD will work with vendors and program participants to install advanced metering technologies for 100 customers participating in the pilot program. MSWD proposes installation of a platform that will have multiple tools to help customers track and understand their water use patterns. The platform will be set-up with alert systems to notify customers and MSWD when there is a spike in water use that could be attributed to a water leak. Through the advanced metering tool, MSWD staff and customers will have the ability to remotely shut water off to individual meters to stop leaks until somebody can arrive onsite and assess the cause of water spikes.
4. **Monitoring, Data Analysis, and Reporting:** MSWD will collect data from the 100 participating customers over a one-year period. The data collected will include pre-installation water use, and will monitor customer water use over the year, taking into consideration climate and precipitation fluctuations. After the data is collected, MSWD will prepare a final report of findings, which makes recommendations about the potential to expand the program throughout MSWD's service area.
 - Percent Complete: 0%
 - Deliverables:
 - o Agenda, presentations, flyers and other materials from outreach efforts and meetings
 - o Site visit installation reports (pre and post)
 - o Maps with geographic locations of program participants
 - o Final report on program effectiveness



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Project 2: Regional Turf Reduction Program

I. Introduction

Project Sponsor

The Desert Water Agency (DWA) and the Coachella Water Authority (CWA) will both serve as the project sponsor for the *Regional Turf Reduction Program*.

Project Partners

This project will be implemented by DWA and CWA and will build upon regional conservation efforts that are being implemented by all five water suppliers included within the CVRWMG. In addition, this program will include extensive outreach and education efforts that will involve stakeholders throughout the Coachella Valley, with an emphasis on outreach to DACs.

Project Purpose

The *Regional Turf Reduction Program* is a multifaceted program that will make turf rebates available throughout DWA and CWA's service areas for a variety of sectors, including: residential, commercial, municipal, and multi-family. This program will assist DWA and CWA in effectively managing groundwater by reducing demands, and will also move the Region towards meeting mandates established by the State Water Resources Control Board to conserve water by 25% statewide over 2013 levels and remove 50 million square feet of lawn statewide. Further, the project will provide habitat benefits associated with replacing monoculture turf with diverse, desert-friendly landscaping.

The grant funding requested as part of this Proposal is an extension of existing turf rebate programs, and would extend rebates to high-demand areas within DWA and CWA's service areas. Additional rebates are necessary to meet an extremely high level of demand in the Region. For example, DWA opened its turf rebate program in August 2014 to distribute funding available through the aforementioned grant programs; the program was so successful that \$1,000,000 in rebate funding was allocated in 60 days and DWA had to suspend the program until more funding could be dedicated to rebates.¹

For this specific solicitation, DWA and CWA will target turf removal within economically disadvantaged communities (DACs). CWA's service area is classified 90% DAC per mapping with U.S. Census Data (refer to Attachment 7 for more information). DWA's service area is 71% DAC, and both agencies will ensure that at least 25% of the rebates distributed within their service areas are provided to DACs (refer to Attachment 2 for more information).

Work Completed

DWA has developed a robust Turf Buy Back Program that was launched on August 1, 2014. The program is divided into three segments: residential, commercial and public property. In order to participate, property owners need to fill out an application and successfully complete a pre-conversion site inspection with DWA. For residential customers, only front yards are eligible. For commercial and public property (including home owners associations [HOAs]), each project will be measured against the program preferences. The program will not apply retroactively, so landscape conversions that have already occurred are not eligible. Projects will be eligible for a \$2 per square foot rebate up to \$3,000 for residential and \$10,000 per project for commercial and public property. All of the aforementioned existing information about DWA's program is publically available via DWA's website <http://www.dwa.org/turf> and via the regional water conservation website <http://cvwatercounts.com/>

Backup documentation that demonstrates work DWA has completed to date for the program includes:

- DWA Turf Requirements Brochure
- Turf Buy Back Program Frequently Asked Questions (FAQ) Brochure
- Approved Plant List

¹ Desert Water Agency. 2014. *Staff Report to Desert Water Agency Board of Directors on the Turf Buy Back Program – November 4, 2014.*



- Compiled List of Landscape Professionals Trained for the Program
- Sample Turf Buy Back Agreement
- DWA Turf Buy Back Application

CWA has also developed a robust turf removal rebate program that was designed to help customers reduce outdoor water use by converting their front lawns to desert-friendly landscaping. Given that the majority of CWA's service area is economically disadvantaged, the program has been developed with particular outreach and information for DAC residents. Through the program, customers are eligible for a \$1 per square foot rebate up to \$750 for turf removal efforts. All of the aforementioned existing information about CWA's program is publically available via CWA's website <http://conservecoachella.com/> and via the regional water conservation website <http://cvwatercounts.com/>

Backup documentation that demonstrates work CWA has completed to date for the program includes:

- Turf Buy Back Program Brochure, which includes:
 - o Terms and Conditions
 - o Information about Measuring Turf
 - o Examples of Hardscapes and Mulches
- CWA Turf Buy Back Application

II. Proposed Tasks

Row (a) Direct Project Administration

Current Status: No direct project administration work has been completed to-date. Administration for the project will begin upon grant award on December 31, 2015.

Task 1: Project Management

This task consists of project management responsibilities associated with the *Regional Turf Reduction Program*, including managing the grant agreement, complying with grant requirements, preparing and submitting supporting grant documents, and coordinating with CVWD (IRWM regional grant manager). This task also includes administrative responsibilities associated with the project, such as preparing agreements between CWA and DWA (if necessary) and coordinating with any other partnering agencies.

- Percent Complete: 0%
- Deliverables:
 - o Environmental Information Form (EIF)
 - o Audited Financial Statements
 - o Invoices (anticipated quarterly throughout project implementation)
 - o Agreements between CWA and DWA, as necessary
 - o Other Applicable Project Deliverables

Task 2: Labor Compliance Program (LCP) – Not Applicable

Through existing program work, the agencies have verified that this program is not a public works project as it will not involve construction activities or any other activities that would necessitate a Labor Compliance Program.

Task 3: Reporting

This task consists of preparing progress reports detailing work completed during the reporting period as outlined in the Final Grant Agreement. This task also includes submitting reports to the CVWD for review and inclusion in a progress report to be submitted to DWR.

This task will also involve preparing the draft Final Project Completion Report and submittal of said report to DWR via CVWD for DWR Project Manager's comment and review no later than 90 days after project completion. DWA and CWA will also prepare the Final Report addressing CVWD/DWR comments. The report shall be prepared and presented in accordance with the provisions of the Final Grant Agreement.



- Percent Complete: 0%
- Deliverables:
 - Quarterly Progress Reports
 - Draft and Final Project Completion Report

Row (b) Land Purchase/Easement

Current status: A land purchase easement is not required for implementation of this program.

Task 4: Land Purchase – Not Applicable

The *Regional Turf Reduction Program* involves provision of rebates; installation of desert-friendly landscaping will be completed by individual land owners and would not require land purchase easements.

Row (c) Planning/Design/Engineering/Environmental Documentation

Current Status: Project-related planning activities have been completed and are described above under Work Completed. Because project-related planning activities have already been completed and were partially funded through Proposition 84 Implementation Grants (Round 1 and Drought Solicitation), details of this work are not included within the Work Plan, Budget, or Schedule of this Proposal. CWA and DWA have not yet prepared Project Performance Monitoring Plans, the plans for the project will begin upon grant award on December 31, 2015.

As explained within the Project Description, both CWA and DWA have already completed guidelines and program specifications for their turf reduction programs, which are existing programs. As such, only implementation activities will take place as part of this project.

Task 5: Feasibility Studies – Not Applicable

As explained above under Work Completed, both CWA and DWA have completed guidelines and program specifications for their turf reduction programs, which are existing programs. As such, no feasibility studies are necessary as part of this project.

Task 6: Environmental Documentation – Not Applicable

This project is an existing program and has been found not to require environmental documentation. Both CWA and DWA will prepare an EIF documenting that the project does not require environmental documentation as part of Task 1.

Task 7: Permitting – Not Applicable

This project is an existing program and has been found not to require permits. As such, no permitting work is necessary for this project. Information from CWA and DWA demonstrates that some large-scale (usually commercial) turf retrofits may need permits from applicable land use jurisdictions. However, any individual permits required for turf replacements will be the responsibility of the private entities receiving rebates and are therefore not included in the scope of work for this project.

Task 8: Design – Not Applicable

As explained above under Work Completed, both CWA and DWA have completed guidelines and program specifications for their turf reduction programs, which are existing programs. As such, no design work is necessary for this project.

Task 9: Project Performance Monitoring Plan

This task involves developing and submitting a Project Performance Monitoring Plan to DWR via CVWD. The Project Performance Monitoring Plan will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, location of monitoring points, and any other stipulations required by DWR in the Final Grant Agreement.

- Percent Complete: 0%
- Deliverables:
 - Project Performance Monitoring Plan



Row (d) Construction/Implementation

Current Status: CWA and DWA have begun distributing rebates for this program. Implementation activities began when DWA launched its turf rebate program on August 1, 2014.

Task 10: Contract Services – Not Applicable

This is an existing project that has already begun implementation; no contract services are required for this project.

Task 11: Construction Administration – Not Applicable

This is an existing conservation project that has already begun implementation; no construction administration is required for this project.

Task 12: Construction/Implementation Activities

Work under this task includes work necessary to implement the program, and is detailed in two subtasks described below.

Subtask 12.1: Outreach

Work completed under this subtask includes work necessary to execute marketing and outreach to promote the rebate program. The outreach materials will target different end-users (i.e. municipal, commercial, residential, etc.). This task will make necessary changes and updates to the existing conservation web pages on the DWA and CWA websites, as well as the regional conservation website (www.cvwatercounts.com) to promote the regional turf rebate program. DWA and CWA may also update existing supporting documents such as guidance brochures, FAQs, how-to assistance materials, etc. and may conduct additional outreach as appropriate, including social media updates, mailers, newsletters, press releases, etc. Given that this project has committed to targeting at least 25% of the grant funding to DACs, it is anticipated that outreach materials will be updated to target DAC customers within DWA and CWA's service areas.

- Percent Complete: 0%
- Deliverables:
 - Outreach campaign specified to different end-users
 - Additions to DWA and CWA's websites and CV Water Counts website
 - Revised guidance brochures, FAQs, how-to assistance files, and other supporting documents
 - Outreach tools and materials (social media, direct mail, newsletters, press releases, etc.)

Subtask 12.2: Implementation of the Turf Rebate Program

This subtask includes work to administer the program, including rebate application review and approval, pre- and post-site visits to customer sites, verification of successful project completion, customer support, rebate check processing, and program website maintenance.

This program will issue rebates to remove approximately 800,000 square feet of turf so that it can be replaced with a more sustainable water efficient landscape. Each square foot of turf removed is estimated to conserve 55.8 gallons of potable water per year. This task also includes work to measure and report program progress and budgeted funds for materials and equipment necessary to complete the turf replacement or removal activities in compliance with the conditions of the rebate program.

- Percent Complete: 10%
- Deliverables:
 - Site visit installation reports (pre and post)
 - Original customer material receipts
 - Maps with geographic locations of program participants, including location of DAC customers



Project 3: Regional Well Retrofit and Abandonment Program

I. Introduction

Project Sponsor

The Coachella Valley Water District (CVWD) will serve as the project sponsor for the *Regional Well Retrofit and Abandonment Program*.

Project Partners

This project will be implemented by CVWD and will build upon work that has already been completed by the CVRWMG, the Coachella Valley Mosquito and Vector Control District (CVMVCD), and the County of Riverside. In addition, this program will include extensive outreach and education efforts that will involve stakeholders throughout the Coachella Valley, including DACs. CVWD has committed to providing at least 25% of the funding rebates for well retrofits to DACs in the Region (see Attachment 2 and Attachment 7 for more information).

Project Purpose

The purpose of this program is to implement the findings and recommendations of the Technical Memorandum (TM) for the *Regional Well Retrofit and Abandonment Program* by offering rebates across the Region that fund up to 80% of the total costs needed to properly seal or destroy wells that are currently improperly sealed or abandoned. Further, the rebate program will provide rebates to fund retrofits to wells for inclusion in the existing California Statewide Groundwater Elevation Monitoring (CASGEM) network. The rebate program will implement recommendations in both of the Region's groundwater management plans and will protect groundwater quality, reduce groundwater losses from artesian conditions, and increase the Region's CASGEM monitoring network.

Work Completed

In 2014 the Coachella Valley Regional Water Management Group (CVRWMG) completed a TM for the *Regional Well Retrofit and Abandonment Program*. The impetus of this TM was that the two groundwater management plans in the Region (one for the Indio Sub-basin and one for the Mission Creek-Garnet Hills Sub-basin), both acknowledge that there are a number of supply wells in the Coachella Valley that are improperly sealed or abandoned, posing a water quality risk to the Region's groundwater resources as the wells present a potential conduit through which water quality constituents could enter the basin. Some of these wells are no longer in use for various reasons, and may be able to be converted to monitoring wells for use in the CASGEM program. Other wells that are not suitable for conversion to monitoring wells can be properly sealed or destroyed without being further retrofitted for monitoring. Similarly, wells that have become artesian as a result of overdraft reduction can be properly sealed to withstand artesian pressure, thereby reducing the risk of groundwater contamination and groundwater loss. The aforementioned TM was funded through a Proposition 84 Planning Grant as a special study to the 2014 Coachella Valley IRWM Plan. Because this TM has already been completed and was also funded through Proposition 84 funding, it is not included in the Work Plan, Budget, or Schedule of this application.

In addition, in an effort to reduce the instances of standing water due to artesian wells, CVWD and CVMVCD began an Artesian Well Rebate Program in 2011. The program offers a rebate of up to \$3,000 per well and requires inspections, metering for wells that are used for groundwater production, and the design and implementation of a mosquito management plan. CVWD has not received a single application for the Artesian Well Rebate Program as of June 2014, despite being available for multiple years. CVWD Staff indicated that well owners that are financially able or willing to retrofit their artesian wells to prevent standing water and associated health hazards have done so or are in the process of repairing their wells and have not expressed interest in the rebate program. However, the TM identified that there are many more wells, approximately 35 thus far that are unable to be repaired due to lack of financial resources. The cost of repair or destruction is often much larger than the \$3,000 rebate offered through the Artesian Well Rebate Program and thus the rebate does not provide enough financial incentive. Information about lessons-learned, the application process, and outreach across the Region from the Artesian Well Rebate Program will be used to help formulate materials for the *Regional Well Retrofit and Abandonment Program*. Given



issues with distributing existing rebates to retrofits for artesian wells, the *Regional Well Retrofit and Abandonment Program* will provide rebates to cover up to 80% of overall retrofit costs, which is intended to provide enough financial incentive to encourage well retrofits. Further, CVWD staff will provide permitting support and will not require additional plans (such as a mosquito management plan) to incentivize participation in the *Regional Well Retrofit and Abandonment Program*.

The County of Riverside currently oversees Well Destruction Permits and typically sees about five water supply wells per year permitted for destruction (not including environmental monitoring wells). The wells permitted for destruction are typically unused agricultural wells that exist on parcels undergoing development. The County does not have a database of wells needing proper abandonment/destruction, but is very interested in supporting a grant program that would provide property owners with funds through a rebate program to assist in completing proper well abandonment activities. Therefore, the County is considered a strong partner for the identification of candidate wells for the program as they are the Well Destruction Permitting agency for the area.

The work that has been completed for the *Regional Well Retrofit Abandonment Program*, as well as work completed by other agencies in the Region, and the outstanding need for this program, provide supporting information that demonstrate the program has been evaluated and vetted and will be successful in the Region.

II. Proposed Tasks

Row (a) Direct Project Administration

Current Status: No direct project administration work has been completed to-date. Administration for the project will begin upon grant award on December 31, 2015.

Task 1: Project Management

This task consists of project management responsibilities associated with the *Regional Well Retrofit and Abandonment Program* including managing the grant agreement, complying with grant requirements, preparing and submitting supporting grant documents, and coordinating with DWR per terms of the Final Grant Agreement. This task also includes administrative responsibilities associated with the project, such as preparing agreements between CVRWMG agencies (if necessary) and coordinating with any other partnering agencies.

- Percent Complete: 0%
- Deliverables:
 - Environmental Information Form (EIF)
 - Audited Financial Statements
 - Invoices (anticipated quarterly throughout project implementation)
 - Agreements between CVRWMG agencies and partnering agencies, as necessary
 - Other Applicable Project Deliverables

Task 2: Labor Compliance Program (LCP)

The *Regional Well Retrofit and Abandonment Program* would potentially qualify as a public works project necessitating labor compliance. CVWD has a labor compliance in place and will provide support to rebate recipients to ensure compliance with applicable California Labor Code requirements, including, preparation and implementation of a labor compliance program. This scope of work assumes that CVWD will work through its existing labor compliance program to select a short-list of contractors that have been verified as compliant with California Labor Code requirements; the short-list of contractors will be made available to complete retrofits for rebate participants.

- Percent Complete: 0%
- Deliverables:
 - Proof of labor compliance upon request



Task 3: Reporting

This task consists of preparing progress reports detailing work completed during the reporting period as outlined in the Final Grant Agreement. This task also includes submitting reports for review and inclusion in a progress report to be submitted to DWR.

Task 3 will also involve preparing the draft Final Project Completion Report and submittal of said report to DWR for DWR Project Manager's comment and review no later than 90 days after project completion. CVWD will also prepare the Final Report addressing DWR comments. The report shall be prepared and presented in accordance with the provisions of the Final Grant Agreement.

- Percent Complete: 0%
- Deliverables:
 - o Quarterly Progress Reports
 - o Draft and Final Project Completion Report

Row (b) Land Purchase/Easement

Current Status: A land purchase easement is not required for implementation of this program.

Task 4: Land Purchase – Not Applicable

The *Regional Well Retrofit and Abandonment Program* involves provision of rebates; activities necessary to retrofit wells will be completed by individual land owners and would not require land purchase easements.

Row (c) Planning/Design/Engineering/Environmental Documentation

Current Status: Project-specific planning activities have not yet been completed. While the TM that provides the basis for this program (see above for more information) is complete, specific rebate guidelines, standards, and specifications have not yet been developed.

Task 5: Feasibility Studies – Not Applicable

As explained above under Work Completed, a TM has been completed that defines the program, sets background information, and provides recommendations included in this work plan. The TM has been completed and was funded by DWR through a Proposition 84 Planning Grant, and therefore is not included in this scope of work. No additional feasibility studies are necessary as part of this project.

Task 6: Environmental Documentation – Not Applicable

This program is a rebate program that will not require environmental documentation. CVWD will prepare an EIF documenting that the project does not require environmental documentation as part of Task 1.

Task 7: Permitting

This task consists of work to assist applicants with securing Well Destruction Permits from the County of Riverside and ensuring that abandonment, construction, reconstruction, or destruction of wells takes place in accordance with standards recommended in Bulletin 74-81 and 74-90 from DWR. Final permitting will be the responsibility of individual well owners, but CVWD staff will provide technical and other support needed to help rebate recipients through this process.

- Percent Complete: 0%
- Deliverables:
 - o Final Well Destruction Permits from County of Riverside
 - o California State Contractor-signed documents affirming that abandonment, construction, reconstruction, or destruction took place in accordance with DWR and Riverside County standards

Task 8: Design

Work completed under this task includes developing final guidelines and specifications for the rebate program based upon CVWD's existing Artesian Well Rebate Program. The final design guidelines will



incorporate lessons learned from existing programs, and include coordination with the County of Riverside to ensure that projects can be properly vetted according to the County's regulations.

- Percent Complete: 0%
- Deliverables:
 - o Well retrofit, abandonment, and destruction guidelines, standards, and specifications
 - o Final rebate program application

Task 9: Project Performance Monitoring Plan

This task involves developing and submitting a Project Performance Monitoring Plan to DWR. The Project Performance Monitoring Plan will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, location of monitoring points, and any other stipulations required by DWR in the Final Grant Agreement.

- Percent Complete: 0%
- Deliverables:
 - o Project Performance Monitoring Plan

Row (d) Construction/Implementation

Current Status: No project implementation work has been completed to-date. Implementation of the rebate program will begin after final design is completed. Implementation of outreach efforts will begin upon grant award on December 31, 2015.

Task 10: Contract Services – Not Applicable

No contract services are required for this project. Project will be implemented by CVWD staff in coordination with partnering agencies.

Task 11: Construction Administration – Not Applicable

No construction administration is required for this project. Project will be implemented by CVWD staff in coordination with partnering agencies.

Task 12: Construction/Implementation Activities

Work under this task includes work necessary to implement the program, and is detailed in two subtasks described below.

Subtask 12.1: Outreach

Work completed under this subtask includes work necessary to execute marketing and outreach to promote the rebate program. The outreach materials will target different potential customers that were identified in the TM (see Work Completed) and will use existing resources such as CVWD's website and the regional conservation website (www.cvwatercounts.com) to promote the regional well retrofit rebate program. CVWD may also produce outreach documents such as guidance brochures, FAQs, etc. and may conduct additional outreach as appropriate, including social media updates, mailers, newsletters, press releases, etc.

- Percent Complete: 0%
- Deliverables:
 - o Outreach campaign specified to well owners
 - o Additions to CVWD's website and CV Water Counts website
 - o Revised guidance brochures, FAQs, and other supporting documents
 - o Outreach tools and materials (social media, direct mail, newsletters, press releases, etc.)



Subtask 12.2: Implementation of the Regional Well Retrofit Rebate Program

This subtask includes work to administer the program, including rebate application review and approval, pre- and post-site visits to customer sites, verification of successful project completion, customer support, rebate check processing, and program website maintenance.

This program will issue rebates to convert approximately 21 wells for CASGEM monitoring, properly seal approximately 62 wells, and destroy approximately 4 wells for a total of approximately 87 wells retrofitted. This task also includes work to measure and report program progress and budgeted funds for materials and equipment necessary to complete the retrofits in compliance with the conditions of the rebate program. Per information from the TM for the *Regional Well Retrofit and Abandonment Program*, retrofitting wells for inclusion in the CASGEM monitoring network, properly sealing wells, and destroying wells will require the following activities.

Well Retrofit for the CASGEM Program:

CASGEM retrofits will first require scoping wells using video monitoring tools to assure that they are free of obstructions that could lead to incorrect groundwater level readings or issues during monitoring. After video scoping is complete, all existing wellhead and vault appurtenances will be removed and recycled. Generally, the candidate wells are likely to be 14 to 16 inches in diameter, and will therefore require a cover plate to downsize to a smaller diameter (approximately 2 inches) required for monitoring equipment. Once monitoring equipment is installed, a locking cap will be placed on the new equipment and will be welded to the existing casing to ensure that the well is not publically accessible. If the well locations are in confined spaces, equipment and personnel must meet confined space regulations for the Occupational Safety and Health Administration (OSHA). Once installation has been completed, a monitoring device will be used to test that equipment is working properly. 21 total CASGEM retrofits are anticipated.

Properly Sealing Wells:

Wells that are considered to be in good condition, with intact well casing below ground, are eligible to be sealed. Sealing activities will vary based upon the depth in which wells are located per the terms of DWR's Bulletin No. 74-81 and Bulletin No. 74-90. However, it is assumed that most wells are located in areas where it is desirable for the well sites to be used for other purposes in the future. As such, per the aforementioned bulletins, the sites must be excavated 5-feet below the ground surface, the well casing and appurtenances must be removed to this depth, and a sealing material must be placed to form a water-tight cap on the well, after which time the well will be re-filled with native soil.

Once sealing has been completed, testing will take place to ensure that the seal is water tight and that leaking will not occur. After installation, contractors will need to ensure that sealing has taken place in accordance with DWR's Bulletin No. 74-81 and Bulletin No. 74-90, and Ordinance 682 of the County of Riverside, which regulates the construction, reconstruction, abandonment, and destruction of wells. 62 total rebates to properly seal wells are anticipated.

Well Destruction:

Wells that have excessively corroded or have compromised casings or seals will need to be destroyed completely. Destruction is much more costly, because it requires dewatering and excavation to analyze the current status of the well. If well casings are corroded and unstable, measures such as perforating the casing will be necessary to ensure that wells do not collapse during destruction activities. Final sealing will be permanent in nature, and will therefore result in the well becoming unusable for future uses. After installation of final capping, contractors will also need to ensure that destruction has taken place in accordance with Ordinance 682 of the County of Riverside, as well as Bulletin No. 74-81 and Bulletin No. 74-90 prepared by DWR. 4 total rebates to properly destroy wells are anticipated.

- Percent Complete: 0%
- Deliverables:
 - Site visit installation reports (pre and post)
 - Original customer material receipts
 - Maps with geographic locations of program participants, including location of DAC customers



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Project 4: DAC Septic Rehabilitation and Demand Reduction

I. Introduction

Project Sponsor

The Coachella Valley Water District (CVWD) will serve as the project sponsor for the *DAC Septic Rehabilitation and Demand Reduction Program*.

Project Partners

This project will be implemented by CVWD and will build upon work that has already been completed by the CVRWMG as part of the DAC Outreach Program. In addition, this program will include extensive outreach and education efforts that will involve DAC stakeholders throughout the Coachella Valley.

Project Purpose

The purpose of this program is to implement the findings and recommendations of the DAC Outreach Program and local stakeholders by offering rebates for DACs in the Region that will fund rehabilitation of septic systems and implement greywater systems to reuse available local water sources. The rebate program will, therefore, implement recommendations from the DAC Outreach Program and local residents and will also address drought-related issues in the Region.

Work Completed

In 2011 the CVRWMG received a separate grant from DWR to implement a Disadvantaged Community Outreach Demonstration Program (DAC Outreach Program), which was completed in 2013. The goal of the DAC Outreach Program was to develop and implement methods to improve DAC participation in the overall Coachella Valley IRWM planning process. The DAC Outreach Program identified potential project concepts that could be implemented to directly benefit DACs and resolve high priority water-related issues in DACs. To move the project concepts forward, the DAC Outreach Program scope included additional work to develop in-depth engineering and project management plans for priority DAC projects.

One of the project concepts that was selected for additional engineering work was a program to evaluate rehabilitation or replacement of onsite wastewater treatment systems (septic systems) to address issues associated with aging or failing septic systems. This concept was selected, because aging or failing septic systems that result in surfacing wastewater have been cited as a serious public health concern and a potential source of water quality constituents such as bacteria and nitrates in local water resources. Due to the importance of public health and local groundwater quality throughout the Coachella Valley, there is a need to rehabilitate or replace aging or failing septic systems to protect local residents and the Region's groundwater supplies and prevent constituents of concern from entering the Coachella Valley Stormwater Channel and the Salton Sea in areas where failing septic systems are located in the shallow groundwater aquifer. Because the DAC Outreach Program that identified the need for the *DAC Septic Rehabilitation and Demand Reduction Program* was funded through a DAC Outreach Grant from DWR through the Proposition 84 IRWM Program, it is not included in the Work Plan, Budget, or Schedule of this application.

After work was completed on the DAC Outreach Program, the State of California entered a severe multi-year drought that is still ongoing. As a result of the drought and conservation restrictions in the Region, many residents have been looking for ways to increase water reuse and conserve water in accordance with statewide mandates. As a result of the drought and findings of the DAC Outreach Program, it was suggested by local stakeholders that a program be implemented to retrofit mobile home parks in the Region to install greywater systems with flows from washing machines. The installation of greywater systems would provide water supply benefits by providing a source of reuse water (greywater), and would also address findings of the DAC Outreach Program associated with failing septic systems. By removing washing machine flows from entering septic systems, a major source of overloading would be removed, making this nuisance water available for reuse.

Greywater systems that meet requirements of Chapter 16A of the California Plumbing Code do not require permits or inspection. In general, permits and inspection are not required for clothes washer systems that do not require cutting of the existing plumbing piping. As such, it is anticipated that the greywater systems



that will be installed as part of the *DAC Septic Rehabilitation and Demand Reduction Program* will not require permitting or inspection from the County of Riverside or other applicable jurisdictions.

II. Proposed Tasks

Row (a) Direct Project Administration

Current Status: No direct project administration work has been completed to-date. Administration for the project will begin upon grant award on December 31, 2015.

Task 1: Project Management

This task consists of project management responsibilities associated with the *DAC Septic Rehabilitation Program* including managing the grant agreement, complying with grant requirements, preparing and submitting supporting grant documents, and coordinating with DWR. This task also includes administrative responsibilities associated with the project, such as preparing agreements between other partnering entities (if necessary) and coordinating with any other partnering entities.

- Percent Complete: 0%
- Deliverables:
 - o Environmental Information Form (EIF)
 - o Audited Financial Statements
 - o Invoices (anticipated quarterly throughout project implementation)
 - o Agreements between partnering entities, as necessary
 - o Other Applicable Project Deliverables

Task 2: Labor Compliance Program (LCP)

The *DAC Septic Rehabilitation and Demand Reduction Program* could potentially qualify as a public works project necessitating labor compliance. CVWD has a labor compliance in place and will provide support to rebate recipients to ensure compliance with applicable California Labor Code requirements, including preparation and implementation of a labor compliance program. This scope of work assumes that CVWD will work through its existing labor compliance program to select a short-list of contractors that have been verified as compliant with California Labor Code requirements; the short-list of contractors will be made available to complete retrofits for rebate participants.

- Percent Complete: 0%
- Deliverables:
 - o Proof of labor compliance upon request

Task 3: Reporting

This task consists of preparing progress reports detailing work completed during the reporting period as outlined in the Final Grant Agreement. This task also includes submitting reports for review and inclusion in a progress report to be submitted to DWR.

Task will also involve preparing the draft Final Project Completion Report and submittal of said report to DWR for DWR Project Manager's comment and review no later than 90 days after project completion. CVWD will also prepare the Final Report addressing DWR comments. The report shall be prepared and presented in accordance with the provisions of the Final Grant Agreement.

- Percent Complete: 0%
- Deliverables:
 - o Quarterly Progress Reports
 - o Draft and Final Project Completion Report



Row (b) Land Purchase/Easement

Current Status: A land purchase easement is not required for implementation of this program.

Task 4: Land Purchase – Not Applicable

The *DAC Septic Rehabilitation and Demand Reduction Program* involves provision of rebates; activities necessary to retrofit septic systems and install greywater systems will be completed by individual land owners and would not require land purchase easements.

Row (c) Planning/Design/Engineering/Environmental Documentation

Current Status: Project-specific planning activities have not yet been completed. While the Final Report from the DAC Outreach Program that provides the basis for this program (see above for more information) is complete, specific rebate guidelines, standards, and specifications have not yet been developed.

Task 5: Feasibility Studies – Not Applicable

As explained above under Work Completed, a Final Project Report has been completed that defines the program, sets background information, and provides recommendations included in this work plan. The Final Report has been completed and was funded by DWR through a Proposition 84 Grant, and therefore is not included in this scope of work. No additional feasibility studies are necessary as part of this project.

Task 6: Environmental Documentation – Not Applicable

This program is a rebate program that will not require environmental documentation. CVWD will prepare an EIF documenting that the project does not require environmental documentation as part of Task 1.

Task 7: Permitting – Not Applicable

Permits would not be required for this program, because this is a rebate program and does not include actual completion of onsite work. Greywater systems that would be installed with the rebates must meet requirements of Chapter 16A of the California Plumbing Code for greywater systems that do not require permits or inspection. Further, it is anticipated that any rehabilitation that takes place to septic systems would be done in accordance with applicable onsite permits (Conditional Use Permits and other permits) from the County of Riverside. Any additional permitting required for the onsite systems will be the responsibility of the applicable land owners.

Task 8: Design

Work completed under this task includes developing final guidelines and specifications for the rebate program based upon CVWD's existing experience working with DACs to administer rebates. The final design guidelines will incorporate lessons learned from existing rebate programs, and include coordination with local NGOs that represent DACs to ensure that the rebate program will meet the needs of local DACs and be understandable to stakeholders.

- Percent Complete: 0%
- Deliverables:
 - Septic system rehabilitation and greywater installment guidelines, standards, and specifications
 - Final rebate application

Task 9: Project Performance Monitoring Plan

This task involves developing and submitting a Project Performance Monitoring Plan to DWR. The Project Performance Monitoring Plan will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, location of monitoring points, and any other stipulations required by DWR in the Final Grant Agreement.

- Percent Complete: 0%
- Deliverables:
 - Project Performance Monitoring Plan



Row (d) Construction/Implementation

Current Status: No project implementation work has been completed to-date. Implementation will begin after final design is completed.

Task 10: Contract Services – Not Applicable

No contract services are required for this project.

Task 11: Construction Administration – Not Applicable

No construction administration is required for this project.

Task 12: Construction/Implementation Activities

Work under this task includes work necessary to implement the program, and is detailed in two subtasks described below.

Subtask 12.1: Outreach

Work completed under this subtask includes work necessary to execute marketing and outreach to promote the rebate program to DACs in the Region. The outreach materials will target mobile home parks in DACs and will use existing resources such as CVWD's website and the regional conservation website (www.cvwatercounts.com) to promote the program. CVWD may also produce outreach documents such as guidance brochures, FAQs, etc. and may conduct additional outreach as appropriate, including social media updates, mailers, newsletters, press releases, etc.

- Percent Complete: 0%
- Deliverables:
 - Outreach campaign specified to DACs
 - Additions to CVWD's website and CV Water Counts website
 - Revised guidance brochures, FAQs, and other supporting documents
 - Outreach tools and materials (social media, direct mail, newsletters, press releases, etc.)

Subtask 12.2: Implementation of the DAC Septic Rehabilitation and Demand Reduction Program

This subtask includes work to administer the program, including rebate application review and approval, pre- and post-site visits to customer sites, verification of successful project completion, customer support, rebate check processing, and program website maintenance.

This program will issue rebates up to \$2,000 per greywater system, and will result in completion of up to 175 greywater systems. The program will also issue rebates to retrofit septic systems with issues that cannot be addressed by offloading greywater flows alone. Rebates of up to \$15,000 per mobile home park will be issued to rehabilitate applicable failing septic systems, and it is anticipated to result in rehabilitation of septic systems in 5 small mobile home parks. This task also includes work to measure and report program progress and budgeted funds for materials and equipment necessary to complete the retrofits in compliance with the conditions of the rebate program.

Per information from the Final Report for the DAC Outreach Program and general information about simple laundry-to-landscape greywater systems, it is anticipated that implementation of the rebate program will involve the following activities.

Septic System Rehabilitation:

The first step of septic system rehabilitation involves soil percolation tests, which must take place in accordance with standards set by the Riverside County Department of Environmental Health (DEH). The soil tests will determine overall percolation findings and depth to groundwater, which will be used to determine the appropriate location for the rehabilitated septic systems as well as the necessary leach field size to allow for percolation. Once design parameters have been determined, the rehabilitation site must be excavated; if necessary, the existing septic systems will be removed and disposed of per requirements of the Riverside County DEH. After excavation, the piping, septic tanks, and other appurtenances will be installed per parameters determined during percolation testing. After the equipment has been installed, the



systems must be inspected and tested to ensure they are operating properly per terms of the Riverside County DEH. It is anticipated that 5 total rebates for septic system rehabilitation will be provided through this program.

Greywater System Installation:

All greywater systems will be “laundry to landscape” systems that involve a single connection from a washing machine unit to a greywater irrigation system in accordance with requirements of Chapter 16A of the California Plumbing Code (CPC). The requirements of the CPC that must be followed to avoid permitting requirements include: 1) avoid greywater contact with people or domestic animals, 2) above-ground spraying or sprinkling is prohibited, 3) surfacing, ponding, and runoff of greywater is prohibited, 4) greywater cannot be stored for more than 24 hours, 5) irrigation or disposal field must be filled with mulch, gravel, soil, or a soil shield 6) discharge point should be covered with 2-inches of mulch, gravel, soil, or a soil shield, 7) there must be a valve that allows for diversion of greywater back to the septic system, 8) diversion valve must be clearly labeled, 9) no toxins may go down the drain (into the washing machine), 10) greywater used for plant irrigation may not touch the edible part of the plant.

Simple greywater systems installed through the rebates will not require pumps, but rather will use the pump in the washing machine to move greywater from the washing machine to the irrigation system. For these systems, general installation includes: trenching and installing irrigation piping, re-plumbing washing machines, installing a diversion valve, and connecting the washing machine to the new subsurface irrigation lines. It is anticipated that 175 total rebates for greywater systems will be provided through this program.

- Percent Complete: 0%
- Deliverables:
 - Site visit installation reports (pre and post)
 - Original customer material receipts
 - Maps with geographic locations of program participants



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Project 5: Torres-Martinez Septic to Sewer Conversion Program

I. Introduction

Project Sponsor

The Torres-Martinez Desert Cahuilla Indians (DCI) will serve as the project sponsor for the *Torres-Martinez Septic to Sewer Conversion Project*.

Project Partners

This project will be implemented by Torres-Martinez DCI, in collaboration with CVWD, and will build upon work that has already been completed by Torres-Martinez DCI, Indian Health Services (IHS), and CVWD for the project site.

Project Purpose

The purpose of this project is to complete engineering, design, and environmental documentation that detail efforts necessary to connect the Avenue 64 Housing Subdivision to CVWD's municipal sewer system. The goal of this project is to complete planning work with assistance from Proposition 84 funding, which would allow Torres-Martinez DCI to acquire additional funding (USDA Rural Assistance funding) to complete construction activities. This model of leveraging IRWM funding to complete planning and design for local DAC projects has been successful in the past as IRWM funding from the Round 2 Proposition 84 solicitation were used in a similar manner for the St. Anthony (San Antonio del Desierto) Mobile Home Park in Mecca.

Work Completed

The *Torres-Martinez Septic to Sewer Conversion Project* is a planning and design project that would serve a Tribal community that is 100% economically disadvantaged (see Attachment 7 for more information). The project provides engineering, design, and environmental services for a project that would connect Tribal residents to municipal sewer services provided by CVWD.

The site that would be served by the project is known as the Avenue 64 Housing Subdivision, which is located within Tribal reservation land owned by the Torres-Martinez DCI. The Tribal population living within the reservation boundaries is approximately 400 and is spread out throughout the reservation, with higher population density (approximately 33 single occupancy homes) in the Avenue 64 Housing Subdivision that is located at the intersection of Avenue 64 and Monroe Street.

Preliminary reports specific to the wastewater system for the Avenue 64 Housing Subdivision have been completed, including a Preliminary Engineering Report that was completed by IHS in 2012. The 2012 PER noted that many of the septic systems in the Avenue 64 Housing Subdivision are failing, and that there is evidence of surfacing sewage and hydraulic overloading in and outside of homes, which presents acute public health and safety concerns. As a result of the size and location of the housing subdivision, the report noted that connecting to CVWD's nearby sewer system would address all of the existing health and safety needs of the Tribe associated with onsite wastewater services. The proposed sewer main would connect to an existing CVWD-owned 33-inch sewer main located at the intersection of Avenue 62 and Monroe Street. The new sewer main would be built within the Monroe Street right-of-way (ROW) between Avenue 64 and Avenue 62 and would connect to an internal sewer collection system constructed with IHS and Environmental Protection Agency (EPA) funds. The PER indicated that the new sewer main would be a gravity sewer main and would require construction of approximately 5,000 feet of 10" vitrified clay pipe (VCP) from the existing 33" VCP sewer main to the intersection of Avenue 64 and Monroe. The PER also noted that the new sewer main would need to include manholes located at least every 500 feet, and would also require manholes at the intersections with sewer laterals. After construction of the new sewer main, the existing septic systems would need to be properly abandoned per requirements of the Riverside County Department of Public Health.

The project site and the ongoing wastewater issues have been extensively documented, largely through the 2012 PER that was completed by IHS. The Tribe has also conducted coordination efforts with CVWD, and have secured a Sanitation Agreement that commits CVWD to assisting the Tribe with applying for



USDA funding for construction. The Sanitation Agreement also demonstrates CVWD's willingness to connect the Avenue 64 Housing Subdivision to CVWD's municipal wastewater system.

The 2012 PER completed by IHS looked at three separate alternatives for extending the sewer main along Monroe Street to the Avenue 64 Housing Subdivision from the existing CVWD sewer system. The three alternatives included:

1. Tribally Owned Gravity Sewer
2. CVWD Owned Gravity Sewer
3. Tribally Owned Variable Grade Sewer

The PER recommended Option #2, and through the aforementioned Sanitation Agreement, CVWD has agreed to maintain ownership of the proposed gravity sewer system.

A project is currently underway and is being partially funded with Proposition 84-Round 2 funding that would connect the Avenue 64 Subdivision to CVWD's municipal water system. The water system pipelines would be co-located with the proposed sewer main and therefore have similar environmental resources issues and concerns. The ongoing project related to the water main connection is currently stalled due to cultural resources concerns that have been raised by the State Historic Preservation Office (SHPO). Therefore, since the time that the 2012 PER was completed, cultural issues have arisen that were not known at the time that the PER was completed. As a result of this issue, additional cultural resources studies need to be completed to meet SHPO's concerns. The additional cultural resources studies may impact the originally proposed design and pipeline alignment described in the PER to avoid sensitive cultural resources. The *Torres-Martinez Septic to Sewer Conversion Project* will include completion of a directed cultural resources report, a biological resources report, environmental documentation via an Initial Study-Mitigated Negative Declaration/Environmental Assessment (IS-MND/EA), final design work, and preparation of a PER per standards of the USDA. Completion of the environmental, design, and engineering portions of the project will allow Torres-Martinez DCI to complete work that is necessary to move the project forward toward construction.

II. Proposed Tasks

Row (a) Direct Project Administration

Current Status: Work under this task includes work necessary to prepare this grant Proposal, which began in June of 2015. No additional direct project administration work has been completed to-date. Grant agreement-related administration for the project will begin upon grant award on December 31, 2015.

Task 1: Project Management

This task consists of project management responsibilities associated with the *Torres-Martinez Septic to Sewer Conversion Project* including preparing the grant application, managing the grant agreement, complying with grant requirements, preparing and submitting supporting grant documents, and coordinating with DWR. This task also includes administrative responsibilities associated with the project, such as preparing agreements between other partnering entities (if necessary) and coordinating with any other partnering entities. Finally, work included in this task includes work necessary to prepare this Proposal.

- Percent Complete: 20%
- Deliverables:
 - Environmental Information Form (EIF)
 - Audited Financial Statements
 - Invoices (anticipated quarterly throughout project implementation)
 - Agreements between partnering entities, as necessary
 - Other Applicable Project Deliverables

Task 2: Labor Compliance Program (LCP) – Not Applicable

This project is a non-construction DAC project that will not involve construction activities or any other activities that would necessitate a Labor Compliance Program.



Task 3: Reporting

This task consists of preparing progress reports detailing work completed during the reporting period as outlined in the Final Grant Agreement. This task also includes submitting reports for review and inclusion in a progress report to be submitted to DWR.

Task will also involve preparing the draft Final Project Completion Report and submittal of said report to DWR for DWR Project Manager's comment and review no later than 90 days after project completion. Torres-Martinez DCI will also prepare the Final Report addressing DWR comments. The report shall be prepared and presented in accordance with the provisions of the Final Grant Agreement.

- Percent Complete: 0%
- Deliverables:
 - o Quarterly Progress Reports
 - o Draft and Final Project Completion Report

Row (b) Land Purchase/Easement

Current Status: A land purchase easement is not required for implementation of this program.

Task 4: Land Purchase – Not Applicable

The *Torres-Martinez Septic to Sewer Conversion Project* is a planning and design project that does not require land purchases to complete. However, the project that will ultimately be constructed will involve construction within an existing public ROW and Torres-Martinez DCI's land, and will also not require any land purchases or easements to be acquired.

Row (c) Planning/Design/Engineering/Environmental Documentation

Current Status: Project-specific design and environmental analysis activities have not yet been completed. Feasibility studies are not necessary to move the project forward.

Task 5: Feasibility Studies – Not Applicable

Initial project-related assessments have been completed as described in the section above regarding Work Completed. These assessments analyzed the feasibility of connecting to CVWD's existing sewer system, but did not consider a potential new alignment or design that would need to take place due to cultural resources issues. Therefore, the PER that was prepared by IHS is not considered as a "Feasibility Study" for the proposed project as it does not describe additional work that is currently proposed to address cultural resources concerns.

Task 6: Environmental Documentation

Environmental documentation for the project is currently stalled due to issues associated with cultural resources. In order to move the project forward and finalize CEQA-NEPA documentation (an IS-MND/EA), additional cultural resources investigations need to be completed.

After analyzing SHPO comments, the Tribe has determined that a 12-acre site will be analyzed, concentrating on potential cremations and resources within the identified Area of Potential Effect of the proposed sewer alignment. Work will involve a Phase II Testing Plan following the County of Riverside Guidelines and will also respond to questions posed by SHPO on the larger overall village and burial grounds, including the depth of the resource(s) to the extent possible. In total, a Section 106 report meeting requirements of the National Historic Preservation Act will be prepared. The results of the final cultural resources assessment will inform design of the project as it is anticipated that design will need to be completed in a manner that avoids culturally-sensitive resource areas. A Biological Resources Report also needs to be updated as the previously-prepared report is now more than two years old. Findings of the final, SHPO-approved cultural assessment and the revised biological report will be incorporated into an IS-MND/EA.

Once environmental documentation has been completed, a Mitigation Monitoring and Reporting Program will be developed and implemented to ensure compliance with CEQA and NEPA. Torres-Martinez DCI or



its contractors will prepare a No Legal Challenges letter per the terms of the Final Grant Agreement as well as tribal notification per requirements of PRC §75102.

- Percent Complete: 0%
- Deliverables:
 - Updated Phase I Cultural Resources Report
 - Updated Biological Report
 - Final Phase II Testing Plan
 - Phase II Cultural Resources Report
 - Section 106 Report
 - Notice of Determination
 - Final Initial Study-Mitigated Negative Declaration/Environmental Assessment
 - No Legal Challenges Letter
 - Proof of Tribal Notification upon request

Task 7: Permitting – Not Applicable

Permits for the project will be secured at a future date, prior to construction. The focus of this project is to complete the design and environmental work necessary to allow the Tribe to secure additional funding for construction. Additional construction-related work will involve securing permits; as such, permitting is not included in this scope of work.

Task 8: Design

Project design will require solicitation of engineering consultants, review of their qualifications and proposals, and selection and contracting. The selected design consultant will be responsible for delivery of 30, 60, 90, and 100% design plans and specifications for construction of the sewer and water connections to CVWD's system. Design plans and specifications must adhere to CVWD design requirements and therefore will require review and approval by CVWD. Work under this task also requires work necessary to complete a Preliminary Engineering Report that meets requirements of the USDA.

- Percent Complete: 0%
- Deliverables:
 - 30% Design Plans
 - 60% Design Plans
 - 90% Design Plans and Specifications
 - 100% Design Plans and Specifications
 - Plan Review and Coordination with CVWD – updated Final Design plans will be provided in the event that CVWD modifies the 100% Design Plans and Specifications
 - Preliminary Engineering Report per USDA Requirements

Task 9: Project Performance Monitoring Plan – Not Applicable

This project will provide direct water-related benefits to a project area entirely comprised of a DAC, is in the planning/design phase, and does not intend to complete construction with this funding. As per the stipulations of the Proposal Solicitation Package, a Project Performance Monitoring Plan is not required.

Row (d) Construction/Implementation – Not Applicable

Current Status: This project will provide direct water-related benefits to a project area entirely comprised of a DAC, is in the planning/design phase, and does not intend to complete construction with this funding. As such, there will be no work completed under Category D.

Task 10: Contract Services – Not Applicable

No contract services are required for this project.



Task 11: Construction Administration – Not Applicable

No construction administration is required for this project.

Task 12: Construction/Implementation Activities – Not Applicable

The project provides engineering, design, and environmental services for a project that would ultimately connect Tribal residents to municipal sewer services provided by CVWD. This project qualifies as a “planning DAC” project per the PSP as it would provide direct water-related benefits to a project area entirely comprised of a DAC, is in the planning/design phase, and does not intend to complete construction with this solicitation.



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Project 6: Shady Lane Water and Sewer Connection Project

I. Introduction

Project Sponsor

The Coachella Water Authority (CWA) will serve as the project sponsor for the *Shady Lane Water and Sewer Connection Project*.

Project Partners

This project will be implemented by CWA in collaboration with Shady Lane Mobilehome Park, Inc. and will build upon work that has already been completed by CWA and Shady Lane Mobilehome Park, Inc. for the project site.

Project Purpose

The purpose of this project is to complete preliminary design, engineering, and environmental reports to connect the Shady Lane site to CWA's municipal water and sewer system. The goal of this project is to complete planning work with assistance from Proposition 84 funding, which would allow Shady Lane Mobilehome Park, Inc. to apply for USDA Rural Assistance funding to complete construction activities. This model of leveraging IRWM funding to complete planning and design for local DAC projects has been successful in the past as IRWM funding from the Round 2 Proposition 84 solicitation were used in a similar manner for the St. Anthony (San Antonio del Desierto) Mobile Home Park in Mecca. Part of the selection process for this project included verifying that the project was eligible for USDA Rural Community Assistance funding (for construction) given its location and size.

Work Completed

The *Shady Lane Water and Sewer Connection Project* is a planning and design project that would serve a mobile home park that is 100% economically disadvantaged (see Attachment 7 for more information). The project provides engineering, design, and environmental services for a project that would connect the Shady Lane site to municipal water and sewer services provided by CWA.

The Shady Lane site, also referred to as the Garcia Mobile Home Park or Rancho Garcia, is located in unincorporated Riverside County. Specifically, the project site lies south of the city limit of the City of Coachella, but within the sphere of influence of CWA. The project area is a mobile home park community with 86 lots with an area of about 8.8 acres and is located south of Avenue 54 and east of Shady Lane near the address of 54596 Shady Lane, Coachella, CA.

On September 3, 2012 there was a lawsuit filed against the owners of the mobile home park for multiple causes of action concerning operation of the park, including issues with onsite sewer and water services. This case was settled in 2015, the result of which is that ownership of the park will be transferred to the Shady Lane Mobilehome Park, Inc., a non-profit organization dedicated to ensuring that the residents of this community can remain in their homes at an affordable price. Shady Lane Mobilehome Park, Inc. has been working with applicable agencies in the Coachella Valley to secure proper permitting for the park, and specifically, to connect the park to CWA's water and wastewater system. In 2012 CWA completed a Technical Memorandum (TM) for the *Shady Lane Sewer Improvement Project*. The purpose of the TM was to evaluate a potential sewer system design that would connect the park to the municipal sewer system and provide a preliminary opinion on construction costs.

The 2012 TM completed by CWA found that the proposed sewer improvements would include installation of approximately 3,300 linear feet of new 8-inch diameter gravity sewer, approximately 500 linear feet of new 4-inch diameter force main, approximately 14 manholes, and 86 lateral service connections with a diameter of 4 inches. The sewer would flow by gravity westerly in the community towards Shady Lane, and then northerly to south of Avenue 54. A new manhole in Shady Lane immediately south of Avenue 54 would serve as a wet well for sewer pumps to lift the flow through a short force main to a new manhole installed in the existing sewer main in Avenue 54. The project would connect to CWA's existing 12-inch gravity sewer main located in Avenue 54.



A 2015 assessment completed by CWA for the proposed water improvements found that installation of a water main would be fairly straight forward, involving a connection approximately 1,540 linear feet in length from the Shady Lane site to the existing water main in Avenue 54. This connection would include installation of 8-inch ductile iron pipe and one master meter.

Cumulatively, the work that has been completed demonstrates the following:

- Connection to CWA's municipal system is feasible given the site's proximity to existing water and sewer mains.
- Connection to CWA's municipal system is the most reliable long-term solution to resolve onsite public health issues associated with water and sewer provision.
- The project site is located within unincorporated Riverside County, which would allow the project to be eligible to receive additional grant funding from USDA's Rural Community Assistance Program for construction activities, provided that design and environmental work is completed.

II. Proposed Tasks

Row (a) Direct Project Administration

Current Status: Work under this task includes work necessary to prepare this grant Proposal, which began in June of 2015. No additional direct project administration work has been completed to-date. Grant agreement-related administration for the project will begin upon grant award on December 31, 2015.

Task 1: Project Management

This task consists of project management responsibilities associated with the *Shady Lane Water and Sewer Connection Project*, including preparing the grant application, managing the grant agreement, complying with grant requirements, preparing and submitting supporting grant documents, and coordinating with DWR. This task also includes administrative responsibilities associated with the project, such as preparing agreements between other partnering entities (if necessary) and coordinating with any other partnering entities. Finally, work included in this task includes work necessary to prepare this Proposal.

- Percent Complete: 20%
- Deliverables:
 - o Environmental Information Form (EIF)
 - o Audited Financial Statements
 - o Invoices (anticipated quarterly throughout project implementation)
 - o Agreements between partnering entities, as necessary
 - o Other Applicable Project Deliverables

Task 2: Labor Compliance Program (LCP) – Not Applicable

This project is a non-construction DAC project that will not involve construction activities or any other activities that would necessitate a Labor Compliance Program.

Task 3: Reporting

This task consists of preparing progress reports detailing work completed during the reporting period as outlined in the Final Grant Agreement. This task also includes submitting reports for review and inclusion in a progress report to be submitted to DWR.

Task will also involve preparing the draft Final Project Completion Report and submittal of said report to DWR for DWR Project Manager's comment and review no later than 90 days after project completion. CWA will also prepare the Final Report addressing DWR comments. The report shall be prepared and presented in accordance with the provisions of the Final Grant Agreement.

- Percent Complete: 0%
- Deliverables:
 - o Quarterly Progress Reports



- o Draft and Final Project Completion Report

Row (b) Land Purchase/Easement

Current Status: A land purchase easement is not required for implementation of this program.

Task 4: Land Purchase – Not Applicable

The *Shady Lane Water and Sewer Connection Project* is a planning and design project that does not require land purchases to complete. However, the project that will ultimately be constructed will involve construction within an existing public ROW and land owned by Shady Lane Mobilehome Park, Inc., and will also not require any land purchases or easements to be acquired.

Row (c) Planning/Design/Engineering/Environmental Documentation

Current Status: Project-specific design and environmental analysis activities have not yet been completed. Feasibility studies are not necessary to move the project forward.

Task 5: Feasibility Studies – Not Applicable

Initial project-related assessments have been completed as described in the section above regarding Work Completed. These assessments were largely associated with a lawsuit that is now settled, and are therefore not eligible matching funds. No additional feasibility work is necessary to move the project forward.

Task 6: Environmental Documentation

Environmental documentation for the project has not yet begun. It is anticipated that CEQA-Plus documentation will be completed, which will allow the project to qualify for future grant funding from federal agencies. Environmental documentation will require the completion of Biological and Cultural/ surveys and reports, records research, consultation with the State Historic Preservation Office, impact/mitigation determinations, and other tasks to ensure that the project will be in compliance with applicable provisions of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Documentation will also require preparation of a Notice of Preparation, including tribal notification to the California Native Heritage Commission. The draft CEQA-Plus documentation will be released for public review; a Notice of Determination will be filed with the State Clearinghouse. Given current knowledge of the project site, project size, and similar work completed by CWA, it is anticipated that an Initial Study-Mitigated Negative Declaration would be completed for the project.

Furthermore, once environmental documentation has been completed, a Mitigation Monitoring and Reporting Program will be developed and implemented to ensure compliance with CEQA and NEPA. A letter will be prepared and sent to DWR, which states no legal challenges have been provided, or will address any legal challenges that arose during the public process. Proof that tribal notification was conducted per requirements of PRC §75102 will be acquired and made available to DWR upon request.

- Percent Complete: 0%
- Deliverables:
 - o Biological Resources Report
 - o Cultural Resources Report
 - o Final Initial Study-Mitigated Negative Declaration/Environmental Assessment
 - o Notice of Determination
 - o Final Mitigation Monitoring and Reporting Program
 - o No Legal Challenges Letter
 - o Proof of Tribal Notification upon request



Task 7: Permitting

Although permits for the project will be secured at a future date, prior to and during construction, work included in this task involves activities necessary to coordinate with the County of Riverside, CWA, and any other regulatory entities to determine all permits that will be necessary for the project. Further, because the park is currently in the process of receiving a Conditional Use Permit from the County of Riverside, this task also involves work necessary to prepare CUP Documentation once final design and environmental documentation has been completed, including submitting design plans and environmental documentation to the County of Riverside.

- Percent Complete: 0%
- Deliverables:
 - Submittal of Final Design Plans and Environmental Documentation to the County of Riverside

Task 8: Design

Project design will require solicitation of engineering consultants, review of their qualifications and proposals, and selection and contracting. The selected design consultant will be responsible for delivery of 30, 60, 90, and 100% design plans and specifications for construction of the sewer and water connections to CWA's system. Design plans and specifications must adhere to CWA design requirements and therefore will require review and approval by CWA. Work under this task also requires work necessary to complete a Preliminary Engineering Report that meets requirements of the USDA.

- Percent Complete: 0%
- Deliverables:
 - 30% Design Plans
 - 60% Design Plans
 - 90% Design Plans and Specifications
 - 100% Design Plans and Specifications
 - Plan Review and Coordination with CWA – updated Final Design plans will be provided in the event that CWA modifies the 100% Design Plans and Specifications
 - Preliminary Engineering Report per USDA Requirements

Task 9: Project Performance Monitoring Plan – Not Applicable

This project will provide direct water-related benefits to a project area entirely comprised of a DAC, is in the planning/design phase, and does not intend to complete construction with this funding. As per the stipulations of the Proposal Solicitation Package (Page 21), a Project Performance Monitoring Plan is not required.

Row (d) Construction/Implementation

Current Status: This project will provide direct water-related benefits to a project area entirely comprised of a DAC, is in the planning/design phase, and does not intend to complete construction with this funding. As such, there will be no work completed under Category D.

Task 10: Contract Services – Not Applicable

No contract services are required for this project.

Task 11: Construction Administration – Not Applicable

No construction administration is required for this project.



Task 12: Construction/Implementation Activities – Not Applicable

The project provides engineering, design, and environmental services for a project that would ultimately connect a mobile home park community to municipal water and sewer services provided by CWA. This project qualifies as a “planning DAC” project per the PSP as it would provide direct water-related benefits to a project area entirely comprised of a DAC, is in the planning/design phase, and does not intend to complete construction with this solicitation.



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