



Inyo-Mono

INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM

# Inyo-Mono IRWM Water Supply, Reliability, and Conservation Implementation Proposal

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## **Attachment 3. Work Plan**

## **PROJECT 1: Grant Administration**

### **IMPLEMENTING AGENCY: Desert Mountain Resource Conservation & Development Council**

PROJECT DESCRIPTION: The Inyo-Mono Integrated Regional Water Management Group authorized Desert Mountain Resource Conservation & Development Council (DMRC&D) to act as the applicant and grant manager for the Proposition 84, IRWM 2015 Implementation Grant. DMRC&D will administer these funds and respond to DWR's reporting and compliance requirements associated with the grant administration. This office will act in a coordination role: disseminating grant compliance information to the project managers responsible for implementing the projects contained in this agreement, obtaining and retaining evidence of compliance (e.g., CEQA/NEPA documents, reports, monitoring compliance documents, labor requirements, etc), obtaining data for progress reports from individual project managers, assembling and submitting progress reports to the State, and coordinating all invoicing and payment of invoices.

The combined service area of Desert Mountain Resource Conservation & Development Council includes Inyo, Mono, and East Kern Counties. As a desert region, water demand has long exceeded natural supplies, demanding cutting-edge methods for water conservation, reclamation, and delivery.

In order to serve the area best, DMRC&D's partnership with the Inyo-Mono Regional Water Management Program and the six project proponents that make up the 2015 Implementation Funding Proposal ensures strong grant management, regional collaboration, and the utmost fiscal responsibility. With a 16-year history in the management and fiscal agency of government and foundational grants, DMRC&D carries a legacy of successful management, regional coordination, and fiscal responsibility. This organizational track record has proven the effectiveness of the procedures outlined in this work plan.

#### **Category (a): Direct Project Administration**

##### Task 1. Operations

In order to guarantee the continuous progress and record-keeping of each project and project proponent, DMRC&D will conduct routine check-ins with all project proponents. These informal calls or meetings will maintain lines of communication as well as the pressure to ensure reporting standards, accurate records, and realized deadlines. They will provide an opportunity to answer project proponent questions and provide information as needed. This work will be conducted by the Administrative Assistant and/or Project Manager.

Routinely (minimum of once per month), the Administrative Assistant and/or Project Manager will make a formal call to the contact person for each project proponent. The call will focus on each project's progress, any issues that arose in the work, questions that need to be answered, and a checklist for environmental standards/compliance. Notes will capture the areas of conversation and bullet the progress made by each project proponent, which will later be aggregated to compile the quarterly reports.

To ensure the high standard of DMRC&D record keeping and reporting, the Administrative Assistant and/or Project Manager will educate project proponents on the Google Drive file sharing procedure and manage files on behalf of project proponents. This procedure ensures DMRC&D's ability to monitor proponent progress, as well as collaborate on project documents including budgets, reports, and data. This method protects project documents in a secure cloud while making information accessible to administrators and proponents. It also eliminates potential reporting/budgeting errors by having all proponents operate from the same files (preventing duplicates and confusion).

#### *Deliverables*

- *Monthly report notes outlining progress, action items, and any issues.*

#### Task 2. Agreement Administration

DMRC&D will respond to and implement requirements in the grant agreement executed with DWR and will coordinate with individual project proponents to ensure those requirements are met within a timely manner. In order to provide project proponents with a clear understanding of reporting expectations, the Project Manager will create templates that specify all information DWR and DMRC&D require for effective reporting. These templates will provide a uniform method of analyzing progress, identifying issues, and reporting expenses. The goal is to save time for project proponents by creating guidelines that eliminate guesswork in the reporting procedure. Templates will be defined for each proponent based on the work plan. Progress reports and milestones will be derived from the schedule and tasks submitted by project proponents for inclusion in the grant agreement.

A monthly conference call for all project proponents will be conducted by the Project Manager. This meeting will ensure pressure on project proponents to meet deadlines, make progress, and consistently report to DMRC&D. This level of accountability is standard procedure for DMRC&D to ensure its high standard of reporting. Monthly calls will allow project proponents to ask and answer questions, provide progress reports, and address any issues that have arisen during the course of executing the grant. These calls will also allow project proponents to share lessons learned and successes with one another. Monthly calls will provide DMRC&D and proponents with a list of action items to ensure effective completion and reporting of each project.

In the course of administrating the grant, DMRC&D will implement procedures that will ensure that environmental standards are met and the compliance protocol included for each project in the application is followed. The Administrative Assistant and/or Project Manager will develop a checklist for each project proponent, based on the specifics of the project. This checklist will be referenced during the regular (no less than monthly) check-in phone calls described in Task 1. This accountability protocol will provide a record and will work towards maintaining a dedication to a high environmental safety/protection standard and encourage compliance with all regulations.

Incorporated into each project work plan are metrics that monitor the progress and effectiveness of each project. As a means of ensuring strong reporting, as well as secondary verification of each project's impact, DMRC&D will develop a protocol by which data collected by each project proponent will be submitted and consolidated on a monthly basis. This ongoing record of the impact of the project work will produce an empirical evaluation of the overall effectiveness of the projects. By the completion of each project, DMRC&D will have a complete record of this effectiveness.

#### *Deliverables*

- *Templates outlining progress information and reporting expectations.*
- *Minutes made publicly available from each monthly conference call.*
- *Monthly checklist record of each project pertaining to environmental standards and compliance.*
- *Total project data summary broken down by project proponents and by month.*

#### Task 3. Invoicing

To ensure optimal financial records, the Accountant will develop templates that break down the work ahead and the submitted invoices into a usable tool to track expenditures and grant disbursement. By doing this work up front and creating a uniform template, the Accountant will reduce the time spent in financial recording by each project proponent, as well as ensure strong financial reporting.

In order to track the movement of monies between DMRC&D accounts, transfer records will be prepared on a quarterly basis (when reimbursement arrives from DWR). This consistent routine will ensure financial security and tracking, creating a clear paper trail for the purposes of reporting and auditing. The Accountant will be responsible for compiling the invoices that must be paid to meet project proponents' needs, preparing the transfer request documents for disbursement, getting approval by the DMRC&D Project Manager and/or Executive Director, and submitting them to the Board Treasurer or Secretary for execution of the transfers. Once complete, it will be the Accountant's responsibility to verify the transfer so that monies are in checking for disbursement of funds.

In order to create a schedule that can be followed by all project proponents, the Accountant will prepare checks to disburse grant funding upon receipt of DWR checks. The procedures for submitting invoices quarterly will be made clear by the Accountant, and proponents must submit invoices concurrent with the quarterly report to receive reimbursement. The Accountant will follow a financial tracking process (an Excel tool in addition to Quickbooks accounting) to ensure an understandable and consistent financial record is kept whenever funds are drawn down from DWR or disbursed to project proponents or DMRC&D.

To accompany the quarterly report narrative that will be prepared to show progress for each project, the Accountant will prepare a financial invoice. The invoice will be prepared based on the invoices submitted by project proponents and the administrative costs from DMRC&D. The invoice

will include specific amounts, purchases, and requests for each project, as well as an aggregated summary of the total draw down on grant funding. The financial report will be prepared alongside the quarterly report and included with the submission to DWR (as well as made available to project proponents).

On a routine basis, the Accountant will provide financial documentation to DMRC&D staff and board, ensure financial tracking tools are updated, and verify that the Project Manager has a clear understanding of the state of the financials. This routine is intended to ensure consistent reporting and record-keeping. The Accountant will be available to project proponents to ensure their records are being kept and quarterly invoicing is made on time.

The Accountant will be responsible to answer any questions from the Project Manager or project proponents regarding financial tracking, submitting invoices, or using the provided tools/templates. The Accountant will be available during regular business hours to make sure tools are used correctly, instructions are clear, and ongoing records are being kept accurately.

#### *Deliverables*

- *Templates for each project proponent.*
- *Quarterly transfer documentation recording transfers with review and signature from supervisor.*
- *Checking reports and update to financial tracking tool (Excel workbook & Quickbooks)*
- *A financial summary and invoice prepared each quarter until the close of the grant.*
- *Quarterly invoice on file and submitted to DWR.*

#### Task 4. Progress Reports and Completion Reports

Each month, the Project Manager will prepare a monthly progress report based on the information provided by project proponents during the monthly conference call. The monthly progress report is intended for internal tracking and is supplemental to the preparation of a quarterly report, as well as for maintaining proponent accountability and overall clarity of the work completed and work ahead.

The Project Manager will be responsible for the preparation and submittal of the quarterly progress report. The report will consist of the aggregated information from each project proponent that has been submitted during routine talks, monthly conference calls, invoices, financial reports, and written progress reports. The quarterly report will provide total project outlays, as well as progress markers and milestones that relate to the metrics of success for each project. The quarterly report will be prepared and submitted to DWR and also made available to project proponents and the Inyo-Mono Regional Water Management Group for accountability and clarity.

The Project Manager will prepare and submit project completion reports in conjunction with project proponents upon completion of each project (based on proponent timeline). Once a project has been completed and all milestones are reached, the Project Manager will work with project proponents to prepare a report finalizing that project. As each project finalizes, the resultant report

will provide an overall snapshot of the work, spending, and impact of the project. This information will be aggregated and used in the grant completion report.

The Project Manager will prepare and submit the grant completion report upon completion of the final project and the closeout of the grant process. It is estimated that the grant completion report will take up to two months following the completion of the final project. The grant completion report will include the aggregated (and summarized) report of all quarterly and project completion reports to demonstrate overall impact and effectiveness of the Implementation grant.

#### *Deliverables*

- *Monthly progress report for project tracking and accountability.*
- *Quarterly reports will be prepared and submitted to DWR.*
- *Project completion reports will be prepared and submitted to DWR.*
- *Grant completion report will be prepared and submitted to DWR.*

#### Task 5. Marketing & Publicity

For the purpose of demonstrating the effectiveness of the grantee and each project proponent, the Project Manager will develop a dedicated page on the DMRC&D website for IRWMP, to include all project proponents and their work. The page will allow project proponents to reference the success of the projects and be used as a marketing and/or public relations tool to demonstrate activity. This information will also be shared directly with the Inyo-Mono IRWM Program Office and the Regional Water Management Group through meetings and presentations. Should projects require the production of signage or marketing artwork, DMRC&D will participate in the development of materials.

For any public notification or public service announcement (PSA) needs, the Project Manager and/or Administrative Assistant will prepare a communications strategy, language for PSA releases, or other materials. These materials will be produced as needed and upon request from the project proponents.

The Project Manager, with help from the Administrative Assistant, will coordinate any site visits conducted by DWR. DMRC&D recognizes the need for grantor oversight as these projects develop and will facilitate the touring of projects and the presentation of project progress by proponents.

#### *Deliverables*

- *Dedicated page on the DMRC&D website.*
- *As needed strategy outlines, PSAs, or other materials.*

## PROJECT 2: Bishop Paiute Tribe Domestic Water, Irrigation, and Wastewater Conservation Plans

### IMPLEMENTING AGENCY: BISHOP PAIUTE TRIBE

**PROJECT DESCRIPTION:** The Bishop Paiute Tribe, a disadvantaged community (DAC) and federally-recognized Native American Indian Tribe, seeks to improve management of its water resources, one of the goals of which is conservation of the Reservation's surface water flow from the Bishop Creek watershed and groundwater from area wells. Through the proposed project, a sub-contracted civil engineer who understands the Bishop Paiute Tribe's water sources and water delivery protocols will be hired to complete a comprehensive water conservation plan that will guide and prioritize long-term water resource management needs for the Tribe. This conservation plan will consist of three focal areas within the Tribe's water management system: irrigation, domestic water, and wastewater. In addition, the plan will include a rate study that will facilitate a tiered rate structure to be implemented for the Tribe's long-term management of its water resources. The conclusion of the conservation plan will propose a series of improvements needed to better manage the Tribe's water resources.

The Bishop Paiute Reservation's 70+-year-old domestic water, irrigation, and sewer systems are in need of repair and rehabilitation, and the Tribe is seeking the most efficient and cost-effective way to improve these systems in order to conserve water while providing for the Reservation's residential and business needs. Currently, the Bishop Paiute Reservation sustains 608 residential water hook-ups, which include five mobile home parks with one meter each (approximately 60 units), and 31 commercial customers, which include two apartment buildings (38 units with 13 meters), Tribal offices/ departments, a gas station, a casino, plus leaseholders such as the Owens Valley Career Development Center (six buildings with one meter), Toiyabe Indian Health Project, Inc. clinic and offices, the California Department of Motor Vehicles, and the US Forest Service/Bureau of Land Management federal building. Domestic water is provided via groundwater wells; irrigation water is provided via a ditch and pipeline system fed from the Bishop Creek watershed; and wastewater service is provided through Eastern Sierra Community Services District.

This project effectively addresses long-term drought preparedness because the usage of millions of gallons of irrigation and domestic water over the years could be reduced through conservation efforts that will result from the plan. Electricity use will be reduced because of the reduction in groundwater pumping by the Tribe and the reduction in wastewater treatment by the Eastern Sierra Community Services District.

#### **Category (a): Direct Project Administration**

##### Task 1. Project Management

The Bishop Paiute Tribe Public Works Director will oversee the request-for-proposal (RFP) process for bidding and hiring a civil engineer, follow Tribal procurement policy, oversee the contracting process, and track the progress of the project.

##### *Deliverables*

- *Request for Proposal*

##### *Current Status*

- *0% complete*

### Task 2. Labor Compliance Program

The Tribe will comply with applicable California Labor Code requirements, including preparation and implementation of a labor compliance program.

#### *Deliverables*

- *Proof of labor compliance upon request*

#### *Current Status*

- *0% complete*

### Task 3. Grant Administration

Bishop Paiute Tribe will prepare quarterly progress reports, invoices, and a final project report, including supporting documentation, all of which will be submitted to DWR via the grantee, Desert Mountain RC&D. The progress reports will describe activities undertaken and accomplishments of each task during the reporting period, and any problems encountered in the performance of the work under this contract. A final summary report will be prepared and submitted to DWR not more than 90 days after the project is complete and will describe the project's outcomes. This task also includes work associated with proposal preparation.

#### *Deliverables*

- *2015 Implementation Grant Application*
- *Quarterly Project Progress Reports and Invoices*
- *Final Project Completion Report*

#### *Current Status*

- *20% complete*

### **Category (b): Land Purchase/Easement**

No land purchase or easement application/pursuit is applicable to this project.

### **Category (c): Planning/Design/Engineering/Environmental Documentation**

#### Task 4. Environmental Documentation

This proposal is for a planning project that would not be considered a Project per the CEQA planning processes, as it does not have potential, directly or ultimately, to result in a physical change to the environment (CEQA Guidelines Section 15378).

The Bishop Paiute Tribe Public Works Administrative Assistant will submit a Tribal Environmental Protection Ordinance (TEPO) application for project. The Tribal Environmental Protection Board will review potential project impacts.

#### *Deliverables*

- *Copy of TEPO application*
- *TEPO Review sheet*

#### *Current Status*

- *0% complete*

### Task 5. Project Performance Monitoring Plan

Because this project is a planning-only project that solely benefits a disadvantaged community, it was not required to develop a project performance monitoring plan. However, the tasks of the



grant agreement work plan, together with the budget and schedule, will be used to track project progress through to completion.

*Deliverables*

- *Quarterly project reports and final project completion report*

*Current Status*

- *0% complete*

Task 6. Irrigation Conservation Plan

This task will be comprised of the development of a complete conservation plan for the existing irrigation system on the Bishop Paiute Reservation and will include:

- i. Overall assessment of existing system
- ii. Future demand and needs analysis
- iii. Project development plans for irrigation projects
  - a. Rehabilitation of existing high volume flood irrigation system
  - b. New low-volume irrigation system utilizing yard hydrants: cost-benefit and needs analysis; conceptual-level drawings; preliminary engineering analysis
  - c. Other projects
  - d. Detailed cost estimates for irrigation projects

*Deliverables*

- *Irrigation Water Conservation Plan - Overall report*
- *Irrigation project development plans*
- *Detailed cost estimates for irrigation projects*

*Current Status*

- *0% complete*

Task 7. Domestic Water Conservation Plan

This task will be comprised of the development of a complete conservation plan for the existing domestic water system on the Bishop Paiute Reservation and will include:

- i. Overall assessment of existing system
- ii. Future demand and needs analysis
- iii. Analysis of potential water savings
- iv. Project development plans for domestic water conservation projects
  - a. Water system leak survey: Preparation of leak survey plan; ultrasonic testing of the water mains and services; follow-up analysis and testing after initial survey
  - b. Water fixture replacement program: Analysis of water savings; preparation of replacement program plan
  - c. Energy conservation for domestic water system (solar energy for three well pumps): Cost-benefit and needs analysis; conceptual-level drawings; preliminary engineering analysis
  - d. Other projects
  - e. Detailed cost estimates for domestic water conservation projects

*Deliverables*

- *Domestic Water Conservation Plan - Overall Report*
- *Domestic water conservation project development plans*
- *Detailed cost estimates for domestic water conservation projects*

*Current Status*

- *0% complete*

Task 8. Wastewater Conservation Plan

This task will be comprised of the development of a complete conservation plan for the existing wastewater system on the Bishop Paiute Reservation, which will include:

- i. Overall assessment of existing system
- ii. Future demand and needs analysis
- iii. Analysis of potential water savings
- iv. Project development plans for wastewater conservation projects
  - a. Leak, infiltration and flow survey: Preparation of leak and infiltration measuring plan; preparation of flow monitoring plan; ultrasonic testing of the water mains and services; follow-up analysis and testing after initial survey; analysis of potential water savings
  - b. Manhole and sewer main survey and rehabilitation plan: Preparation of survey and rehabilitation plan
  - c. Other projects
  - d. Detailed cost estimates for wastewater conservation projects

*Deliverables*

- *Wastewater Conservation Plan - Overall Report*
- *Wastewater conservation project development plans*
- *Detailed cost estimates for wastewater conservation projects*

*Current Status*

- *0% complete*

Task 9. Rate Structure Analysis

Defining and implementing water rates to offset Public Works costs and to achieve financial sustainability of the water systems on the Reservation will occur in conjunction with the three conservation plans described in Tasks 6-8. A rate study will be conducted for the domestic water and wastewater systems on the Reservations. Elements of this analysis will include:

- Comparing cost of operations with actual water use
- Investigating potential rate structures and determining break-even point
- Projecting changes in water use with population expansion, drought, and future development on the Reservation

A proposed rate structure will be developed, and at least two public hearings will be held regarding the suggested rates. After the hearings, public comments will be summarized, adjustments will be made as needed, and a Tribal Ordinance will be prepared. Rate structures for the domestic water and wastewater systems will then be administered.

*Deliverables*

- *Domestic water rate study*
- *Wastewater rate study*
- *Written justification of new rates*
- *Sign-in sheets and minutes from at least two public hearings*
- *Summary of public comments*
- *Tribal Ordinance on water and wastewater rates*
- *Sample invoice showing implementation of new rates*

*Current Status*

- *0% complete*

**Category (d): Construction/Implementation**  
No tasks under this category

### **Project 3: June Lake Public Utility District Uranium Removal Plant**

#### **Implementing Agency: June Lake Public Utility District**

PROJECT DESCRIPTION: The June Lake Public Utility District (“District” or “PUD”) is confronted with a water quality, and in turn a significant water supply reliability, issue as it relates to the uranium content in June Lake, which is an approved surface water source for the District. Over the last three years, the District has seen uranium test results in exceedance of what the State allows, which is 20 pCi/L. Currently, uranium in the domestic water supply tests at about 24 pCi/L. District officials believe the more concentrated uranium is a result of reduced lake levels due to the ongoing drought conditions and decomposing natural materials within the lake. If the drought continues, uranium levels in June Lake would presumably continue to increase. The District has attempted to blend water from a secondary water treatment plant with the June Lake water treatment plant to reduce the uranium content. Blending has worked for the short term; however, if the secondary plant is offline for any reason, the District would be forced to use only the June Lake plant with the uranium content in exceedance of the State standard.

The June Lake Public Utility District is proposing to install an ion exchange unit that would connect to the incoming raw water supply from June Lake, process the raw water through the ion exchange filtration system and then through the normal microfiltration process, and subsequently pump the water to the storage tank for domestic use. The District is required to install an ion exchange system that can treat raw water at a rate that matches the current microfiltration rate (approximately 200 gallons per minute) in order to adequately supply domestic and commercial use within June Lake. This project requires an amended special use permit from the U.S. Forest Service to allow the District to install the 20’ x 8’ x 9.5’ container (or pod) adjacent to the existing June Lake water treatment plant. The pod is a self-contained unit that houses all of the ion exchange equipment and requires a small construction footprint and minimal setup. The District would also need to amend its current standard operating plan for the June Lake water treatment plant to include the use of the ion exchange system, for which the District would need to seek approval from the State Water Resources Control Board. It is expected that this project would be exempt from CEQA through a categorical exemption. The project is subject to NEPA since the water treatment plant is located on U.S. Forest Service land, although the project may be exempt because it would be a modification to an existing U.S. Forest Service permit.

The June Lake Public Utility District is a small water purveyor for a rural community in eastern California that is driven largely on seasonal tourism. The District must be able to provide a reliable and clean water supply during times of peak demand in the summer and the winter, regardless of drought conditions. Currently, the District relies entirely on surface water for its domestic and commercial water supply and does not have the ability to supplement with groundwater. Ensuring adequate water quantity is already a challenge. Therefore, it is important to be able to ensure that the surface water supply meets all state and federal water quality regulations.

## **Category (a): Direct Project Administration**

### Task 1. Project Management

This task includes administrative responsibilities associated with the project such as coordinating and managing consultants and contractors. District staff will be the primary interface with all contractors and construction activities. All electronic communications between the District and its contractors will be maintained on file and submitted as part of the quarterly reports.

#### *Deliverables*

- *District and Contractor Correspondence*

#### *Current Status*

- *15% complete*

### Task 2. Labor Compliance Program

June Lake PUD operates under a labor compliance program that is compliant with Labor Code §1771.5(b). Furthermore, the District will ensure measures are taken to be in compliance with applicable California Labor Code requirements for all contracted services as it applies to this project.

#### *Deliverables*

- *Statement of Compliance Labor Code §1771.5(b)*

#### *Current Status*

- *0% complete*

### Task 3. Grant Administration

June Lake PUD will prepare quarterly progress reports, invoices, and a final project report, including supporting documentation, all of which will be submitted to DWR via the grantee, Desert Mountain RC&D. The progress reports will describe activities undertaken and accomplishments of each task during the reporting period, and any problems encountered in the performance of the work under this contract. A final summary report will be prepared and submitted to DWR not more than 90 days after the project is complete and will describe the project's outcomes. This task also includes work associated with proposal preparation.

The project is expected to be complete within 18 months.

#### *Deliverables*

- *2015 Implementation Grant Application*
- *Quarterly Progress Reports and Invoices*
- *Draft and Final Project Completion Report*

#### *Current Status*

- *20% complete*

## **Category (b): Land Purchase/Easement**

There is no land purchase required for this project.

## **Category (c): Planning/Design/Engineering/Environmental Documentation**

### Task 4. Permitting

On May 19, 2015, the June Lake PUD submitted Form SF299 to the U.S. Forest Service requesting an amendment to the existing Use Permit for this project to allow for the installation and operation of the ion exchange unit. It is expected that there may be further discussions with the U.S. Forest Service before the amended use permit is issued.

#### *Deliverables*

- *Amended use permit*

#### *Current Status*

- *50% complete*

### Task 5. Planning/Design

Planning and design are approximately 50% complete. This task includes work with the contractor to ensure that the equipment purchased will satisfy District needs relative to required flow rates; additionally, multiple sales consultant visits will be needed for pod positioning and connection once the pod is delivered and prepared for installation.

#### *Deliverables*

- *Uranium removal ion exchange unit design standard*

#### *Current Status*

- *50% complete*

### Task 6. Environmental Documentation/CEQA

The District anticipates that these upgrades to an existing facility will be exempt from the provisions of the California Environmental Quality Act, per Public Resources Code, Section 21084 et seq. and Article 19, Section 15300 of the State CEQA Guidelines. June Lake PUD will complete a Notice of Exemption and will file it with the California State Clearinghouse in compliance with CEQA, anticipating that the PUD will use Exemption Class 1: Existing Facilities and/or Class 3: New Construction or Conversion of Small Structures. June Lake PUD will work with the U.S. Forest Service to comply with NEPA for the project. This project may be excluded from compliance with NEPA, as it would be an amendment to an existing U.S. Forest Permit currently in place. This task will include the time required to coordinate with the U.S. Forest Service in preparing the NEPA Categorical Exclusion and to file the CEQA Notice of Exemption with the State Clearinghouse.

#### *Deliverables*

- *CEQA Notice of Exemption filled with California State Clearinghouse*
- *NEPA Categorical Exclusion*

#### *Current Status*

- *0% complete*

### Task 7. Permitting/Engineering

The June Lake PUD will amend its current standard operating plan for the June Lake water treatment plant to include the use of the ion exchange system. Approval of the updated operating

plan by the State Water Resources Control Board Drinking Water Division will be required and pursued. This task will also include outside engineering consultation for connection to the existing water supply.

*Deliverables*

- *Amended Standard Operating Procedure and approval by SWRCB*

*Current Status*

- *0% complete*

**Task 8. Project Performance Monitoring Plan**

A Project Performance Monitoring Plan (PPMP) has been prepared (see Attachment 2 – Project Justification) and will be submitted to DWR prior to disbursement of grant funds for implementation of this project. The PPMP will be followed throughout the project to measure progress.

*Deliverables*

- *Project Performance Monitoring Plan*

*Current Status*

- *100% complete*

**Category (d): Construction/Implementation**

**Task 9. Construction Implementation**

The contractor has already been selected. AdEdge will provide contracting services to deliver, unload, place, install, connect the power, connect the water source, and test cycle for water sample compliance as part of the overall construction process.

*Deliverables*

- *Award of Contract*
- *Notice to Proceed*

*Current Status*

- *0% complete*

**Task 10. Construction Administration**

The June Lake PUD will have an employee on site through the duration of this project to ensure all construction/placement of equipment (ion exchange unit) is performed in accordance with expected scope of work. Any changes to the scope of work will be detailed in a daily project log so that required documentation is prepared and approved prior to moving forward with the project. Project life expectancy is 30-40 years.

*Deliverables*

- *Daily project log*
- *Notice of Completion*

*Completion Status*

- *0% complete*

## PROJECT 4 – Amargosa Basin Water, Ecosystem Sustainability, and Disadvantaged Community Project

### Implementing Agency: Amargosa Conservancy

**PROJECT DESCRIPTION:** The Amargosa River Basin of Eastern California supports a unique and diverse ecosystem, a free-flowing river, and human needs – especially in the severely economically disadvantaged Tecopa area. Groundwater and surface water in the basin sustain one of the largest arrays of endemic and rare desert plant and animal species in the United States. In the disadvantaged community of Tecopa, groundwater and springs supply municipal, domestic, agricultural, wildlife, stock-watering, mining, and other industrial uses. The recently BLM-designated (2009) Wild & Scenic flowing portion of the Amargosa River near Tecopa is a groundwater-fed surface water body, and relatively small variations in the groundwater surface elevation can have considerable effects on spring flow and surface flow in the river. Severe economic, social, and environmental impacts could occur as result of a relatively minor lowering of the groundwater surface in the area, as the local economy depends on the tourism generated by the Amargosa River, the area’s warm and hot springs, and the water-fed ecosystems, and the local community increasingly depends on local groundwater resources for domestic and irrigation water. A comprehensive water management plan for the Tecopa area is essential to ensure sustainable use of these critical water resources. However, at present there are very limited data to support the development of such a plan.

Given the importance of the issues, the following tasks will provide the greatest benefit in protecting Tecopa’s water supply by monitoring changes to the groundwater/surface water system due to regional water resource pressures, such as groundwater pumping “upstream” in the basin, proposed industrial-scale solar developments, and increasing climate variability. This project will accomplish two goals: (1) developing an improved understanding of the region’s hydrologic system in order to effectively and economically monitor and protect water resources for the benefit of the disadvantaged community, and the environment in general, by enhancing the limited monitoring currently in existence, and (2) establishing a long-term groundwater monitoring network. The work includes:

- Siting, permitting, installing and sampling up to six monitoring wells;
- Robust evaluation of evapotranspiration (ET) along the Amargosa River (essential to an understanding of the basin’s groundwater budget and water availability); and
- Continued groundwater level, spring flow, and river flow monitoring for 12 months.

It is expected that the results of this project will lead to a comprehensive water management plan for the Tecopa area as well as one or more projects to secure the quality and quantity of water supply for the community. This project will also contribute to the development of the management plan for the stretch of the Amargosa River that has been designated by the BLM as Wild & Scenic. This reach travels through Tecopa and could become an important source of ecotourism income if managed properly.

### **Category (a): Direct Project Administration**

#### **Task 1. Project Management**

The Amargosa Conservancy will coordinate the work of the project and will be the primary interface with all contractors. This task will include communications with drilling contractor, U.S. Geological Survey, analytical laboratories, and equipment vendors as needed; and receiving and processing invoices from subcontractors and vendors.

#### *Deliverables*

- *Correspondence between Amargosa Conservancy and contractors, including status updates, invoicing, and contracting*



*Current Status*

- *0% Complete*

Task 2. Labor Compliance Program

Perform labor compliance in accordance with the requirements of California Labor Code §1771.5(b).

*Deliverables*

- *Documentation furnished to DWR as requested*

*Current Status*

- *0% Complete*

Task 3. Grant Administration

The Amargosa Conservancy will prepare quarterly progress reports, invoices, and a final project report, including supporting documentation, all of which will be submitted to DWR via the grantee, Desert Mountain RC&D. The progress reports will describe activities undertaken and accomplishments of each task during the reporting period, and any problems encountered in the performance of the work under this contract. A final summary report will be prepared and submitted to DWR not more than 90 days after the project is complete and will describe the project's outcomes. This task also includes work associated with proposal preparation.

*Deliverables*

- *2015 Implementation Grant Application*
- *Quarterly Project Progress Reports and Invoices*
- *Final project completion report*

*Current Status*

- *20% Complete*

**Category (b): Land Purchase / Easement**

There are no tasks applicable to this budget category.

**Category (c): Planning / Design / Engineering / Environmental Documentation**

Task 4. Permitting and Environmental Documentation

Well construction will be in accordance with California well standards and under permit from Inyo County, under a pre-existing encroachment permit for CalTrans (for South of Eagle Mountain well) and under agreement with the U.S. Bureau of Land Management (BLM). As with previous monitoring wells installed on BLM lands, a NEPA exemption is anticipated to be completed by BLM for the proposed monitoring wells and is anticipated to take approximately 60 days to receive. Evapotranspiration work by the U.S. Geological Survey will require access agreements with BLM, and documentation of those agreements will be provided. The BLM has supported the well installation program, and an access agreement already exists for the South of Eagle Mountain Well.

*Deliverables*

- *NEPA categorical exemption*
- *Access agreements with BLM*
- *Inyo County Well Permits*
- *CalTrans Encroachment Permit*

*Current Status*

- *5% Complete*

#### Task 5. Project Performance Monitoring Plan

Because this project is a non-construction project that solely benefits a disadvantaged community, it was not required to develop a project performance monitoring plan. However, the tasks of the grant agreement work plan, together with the budget and schedule, will be used to track project progress through to completion.

#### *Deliverables*

- *Quarterly project reports and final project completion report*

#### *Current Status*

- *0% complete*

#### Task 6. Hydrologic Monitoring

Hydrologic monitoring will consist of (1) continuing and extending the existing ongoing hydrologic monitoring and (2) monitoring up to six new wells that will be installed as part of this study (Task 7).

This project would extend and enhance ongoing hydrologic monitoring for a 12-month period (conducted in three discrete events). Hydrologic monitoring consists of spring flow discharge and groundwater elevation measurements collected on a seasonal basis from a select group of springs and wells within the Central Amargosa River Basin. Seepage run monitoring (i.e., the measurement of flow simultaneously at several distinct locations) is currently being conducted at five points along the Wild and Scenic reach of the Amargosa River. Additional monitoring will include following the movement (progression and regression) of the leading edge of the River and seepage run monitoring of Willow Creek just upstream of the confluence with the Amargosa River.

The three objectives of the discharge, water level, and seepage run monitoring are as follows:

- Quantify spring discharge rates, groundwater elevations, and river surface flow which will provide estimates of seasonal variations;
- Establish a record of discharge from the springs and wells selected for monitoring, including seasonal trend information in order to provide a more robust baseline for future comparisons; and
- Establish flow gains and losses along the perennially flowing portion of the Amargosa River, including seasonal trend information, again in order to provide a more robust baseline for future comparisons.

Startup monitoring for newly-installed wells will follow the completion of all wells and installation of transducers to record water levels electronically. The transducers will be checked and downloaded monthly for the first two months following their installation. Thereafter, bimonthly monitoring will continue for one year. After that period, transducers will be field-checked during the seasonal hydrologic monitoring. All hydrologic monitoring is conducted by a California Professional Geologist and Certified Hydrogeologist accompanied by a field technician. Activities are conducted under a project-specific health and safety plan. All field equipment, including pH/ conductivity/ temperature meters, is calibrated prior to visiting the field and is field-checked daily during field activities. Hydrologic monitoring is a non-invasive activity and will be conducted under agreement with the BLM, The Nature Conservancy, Amargosa Conservancy and with permission from private landowners as appropriate. NEPA/CEQA documentation is not anticipated to be required for this activity.

The partners involved in the hydrologic monitoring in this task (Amargosa Conservancy, The Nature Conservancy, BLM) are committed to continuing this monitoring after the project completion date pending available funding. If there is a gap in funding, transducers will be removed from the groundwater wells, and wells will be capped until monitoring can resume. Although monitoring results may be actionable after a year, the project partners are committed to long-term adaptive management of water resources in the region.

Data Management: Data collected in this task will include groundwater-level measurements, Amargosa River flow data, and estimated spring flow data. Additionally, field water-quality samples will be collected for chemical analyses. Once checked for quality assurance/quality control, all data will be made available for public use via the Inyo-Mono IRWM website or the appropriate state or national database. Data distribution will take place only once metadata standards are met to ensure a reputable data source to other organizations and IRWM regions.

*Deliverables*

- *A report describing background, work completed, and results including groundwater-level measurements, Amargosa River flow data, and spring flow information.*

*Current Status*

- *20% Complete*

**Category (d): Construction / Implementation**

Task 7. Groundwater Monitoring Wells

Up to six new groundwater monitoring wells will be installed in locations where significant groundwater data gaps exist in the region in order to:

- Further evaluate the conceptual model of the Middle Amargosa River Basin with an emphasis on understanding groundwater flow paths
- Fill substantial data gaps in areas where baseline groundwater conditions need to be established to identify future impacts to groundwater levels
- Initiate baseline groundwater level records for regionally distributed areas in this portion of Inyo County

It is anticipated that the wells will be completed to varying depths dependent on local conditions. Anticipated well depths range from approximately 20 feet below ground surface (ft bgs) to more than 150 ft bgs. The uncertainty attached to the ultimate well depths at each location is due to the lack of pre-existing data in the area. Anticipated well depths have been based on extrapolation from the groundwater surface map from the 2011 State of the Basin Report and ground surface based on U.S.G.S. topographic maps, along with previous experience with monitoring well installation in the area as described earlier. Wells will have transducers installed for continuous data collection, and well development will be completed to prepare those wells for sampling. Following development, water samples will be collected from each well and analyzed for metals, cations, anions, and other parameters.

All monitoring well installations will be conducted by a California licensed well driller (C-57 license), and drilling oversight and logging will be performed by a Professional Geologist and Certified Hydrogeologist. All laboratory analyses will be conducted by a California-certified analytical laboratory. All field equipment, including pH /conductivity/temperature meters, is calibrated prior visiting the field and field-checked daily during field activities. Well logs will be prepared for each monitoring well.

Data Management: Data collected in this task will include well construction data including well location information, lithologic data from boreholes, groundwater-level measurements, and results of groundwater quality analyses. Once checked for quality assurance/quality control, all data will be made available for public use via the Inyo-Mono IRWM website or the appropriate state or national database. Data distribution will take place only once metadata standards are met to ensure a reputable data source to other organizations and IRWM regions.

*Deliverables*

- *Final report comprising all new data including the well logs from the newly-installed wells as well as data collected from previous investigations.*

#### *Current Status*

- *5% Complete*

#### **Task 8: Evapotranspiration Investigation (to be conducted by U.S. Geological Survey)**

The approach proposed for refining previous estimates of annual groundwater discharge by ET is (1) measuring groundwater discharge rates in proportionally larger ET units, and (2) applying these rates to groundwater discharge areas delineated using high-resolution remotely-sensed imagery. Since ET is sustained by groundwater, local precipitation, and surface water flooding, local precipitation and surface water flooding are subtracted from the measured ET resulting in ET only from the groundwater system.

Annual groundwater discharge rates will be quantified at a minimum of two sites by concurrently measuring ET, precipitation, groundwater levels, and soil moisture. Each site will contain a micrometeorological station collecting eddy-covariance ET and energy-budget data, a bulk precipitation gage to accurately measure precipitation, a tipping bucket rain gage to record event timing and intensity, two soil-water-content sensors to measure soil moisture in the upper 25 cm of soil, and an observation well equipped with a pressure transducer to monitor daily and seasonal fluctuations in groundwater levels. Additionally, soil cores will be collected monthly and analyzed for soil-water content to document seasonal changes in soil-water storage in the upper one meter of soil that occurs in response to precipitation and ET.

A second approach to evaluate the relative proportion of source waters contributing to measured ET will consist of the collection and analysis of isotope data to be used as an environmental tracer. Local precipitation, Amargosa River water, plant-stem water, soil, and local groundwater will be sampled at each ET site and analyzed for stable hydrogen- and oxygen-isotope concentrations. High-resolution remotely-sensed imagery will be used to (1) define the potential area of groundwater discharge (PAGD), and (2) classify ET units. The combination of approaches will result in an improvement in PAGD boundaries and ET unit classification. The accuracy of mapped boundaries will be validated with field-based observations.

Data Management: Data collected in this task will include groundwater-level measurements, evapotranspiration data, geochemical data, and lithologic information from boreholes and associated monitoring well construction data. Once checked for quality assurance/quality control, all data will be made available for public use via the Inyo-Mono IRWM website or the appropriate state or national database. Data distribution will take place only once metadata standards are met to ensure a reputable data source to other organizations and IRWM regions. Data collected will also be accessible on the web through the U.S.G.S.

#### *Deliverables*

- *A USGS Scientific Investigations Report documenting groundwater discharge by ET from the study area and methods used will be published following the two years of data collection*
- *All ET data will be archived in National Water Information System (NWIS) and made available to the public. Progress will be documented with quarterly updates that detail ongoing activity.*
- *Quarterly Updates*

#### *Current Status*

- *10% Complete*

## Project 5: Big Pine Tribal Fire Hydrant Replacement Project

### Implementing Agency: Big Pine Paiute Tribe of the Owens Valley

**Project Description:** The Big Pine Paiute Tribe of the Owens Valley (Tribe) is a federally recognized tribe located on the Big Pine Indian Reservation in Inyo County. The Tribe is considered a disadvantaged community with an annual median household income (MHI) of \$32,778 (American Community Survey 5-year data ending in 2013 for Big Pine Reservation). The Big Pine Indian Reservation has a population of 500 people of which 400 are tribal members. The Reservation exists along a wildland-urban interface on the eastern slope of the Sierra Nevada Mountains. Isolated residential fires have caused extensive destruction of homes over the past decade on the Reservation, and the potential for wildland fire is a great risk to the community. In 2012, the Big Pine FireSafe Council was formed to protect the homes, communities, and environments from wildfire in the Big Pine area. The Tribe is a partner in the Council and through this proposal is working to protect the Big Pine area by replacing fire hydrants on the Reservation.

The Tribe has experienced eight catastrophic household fires (one as recently as June 2015) in the past ten years that could have posed less of a danger to the rest of the community if fire hydrants were able to function at their peak performance. Reasons for the catastrophic nature of these household fires have been noted as a lack of working fire hydrants within the proximity of the homes (Big Pine Volunteer Fire Department Chief personal communication). The Tribe operates an independent public water system that is in need of fire protection infrastructure upgrades for improved access to water at fire hydrants to assist the local volunteer fire department and other fire agencies in extinguishing fires within the tribal community.

This project will replace 38 hydrants on the Tribe's public water system that have reached the end of their useful lives, or for which hydrant parts are no longer available for purchase. The Big Pine Tribal Fire Hydrant Replacement Project shall replace obsolete fire hydrants throughout the distribution system to increase the safety of the residents, prevent property and infrastructure damage and loss, prevent fire from spreading to neighboring wildland areas, and reduce the likelihood of sedimentation and water quality impacts to Big Pine Creek, which runs through the Reservation.

#### **Category (a): Direct Project Administration**

##### Task 1. Project Management

The Tribe will oversee the progress and completion of the project and will coordinate with partner agencies as needed.

##### *Deliverables*

- *Project correspondence*

##### *Current Status*

- *25% complete*

##### Task 2. Labor Compliance Program

The Tribe will abide by the Tribal Employment Rights Ordinance for project activities on the Big Pine Indian Reservation to satisfy labor compliance. The Tribe will also comply as necessary with California Labor Code requirements and will be utilizing the general prevailing wage determinations that have been set by California Department of Industrial Relations.

#### *Deliverables*

- *Proof of labor compliance upon request*

#### *Current Status*

- *0% complete*

#### Task 3. Grant Administration

Big Pine Paiute Tribe will prepare quarterly progress reports, invoices, and a final project report, including supporting documentation, all of which will be submitted to DWR via the grantee, Desert Mountain RC&D. The progress reports will describe activities undertaken and accomplishments of each task during the reporting period, and any problems encountered in the performance of the work under this contract. A final summary report will be prepared and submitted to DWR not more than 90 days after the project is complete and will describe the project's outcomes. This task also includes work associated with proposal preparation.

#### *Deliverables*

- *2015 Implementation Grant Application*
- *Quarterly Project Progress Reports and Invoices*
- *Final Project Completion Report*

#### *Current Status*

- *20% complete*

#### **Category (b): Land Purchase/Easement**

The Big Pine Tribal Fire Hydrant Replacement Project involves the replacement of fire hydrants along the Tribe's water distribution system; therefore, this project does not require the purchase or lease of land.

#### **Category (c): Planning/Design/Engineering/Environmental Documentation**

The Tribe has previously conducted an inventory of its water distribution system to identify fire hydrant replacement needs. As a result, 38 fire hydrants were identified as obsolete or at the end of their useful lives.

#### Task 4. Environmental Documentation

The Tribe is located on federal land and is therefore not under the jurisdiction of the California Environmental Quality Act. Typically, the National Environmental Policy Act (NEPA) applies on federal land, but BPPT asserted its tribal sovereignty to approve a Tribal Environmental Policy Ordinance which is stricter than NEPA and applies on Big Pine Indian Reservation lands (the Ordinance is available to DWR if needed). Prior to project implementation, a categorical exclusion will be filed through the Tribe's Environmental Policy Ordinance.

#### *Deliverables*

- *Approved and adopted Categorical Exclusion pursuant to the Tribe's Environmental Policy Ordinance*

#### *Current Status*

- *0% complete*

#### Task 5. Permitting

An Inyo County Encroachment Permit and Bureau of Indian Affairs Encroachment Permit will be acquired to be allowed to work in County and Bureau of Indian Affairs easements.

*Deliverables*

- *Approved Inyo County and Bureau of Indian Affairs Encroachment Permits*

*Current Status*

- *0% complete*

Task 6. Design

Designs for fire hydrant installation were created by Indian Health Service, the Tribe's engineering consultants, so minimal preparation of final design and specifications are needed to commence the project. The final design will be completed following grant agreement execution (or after a grant award notification from DWR). Preceding project commencement, final plan and specification documents will be produced. The documents will identify the precise fire hydrant locations and provide drawings of fire hydrant installation specifications. All installed fire hydrants will comply with design and accuracy specifications of the American Water Works Association (AWWA) Standard C-502. Additionally, Occupational Safety & Health Administration (OSHA) regulations and industry standard practices will be used as health and safety standards.

*Deliverables*

- *Final plans and specifications for the Fire Hydrant Replacement Project*

*Current Status*

- *50% complete*

Task 7. Project Performance Monitoring Plan

A Project Performance Monitoring Plan (PPMP) has been prepared (see Attachment 2 – Project Justification) and will be submitted to DWR prior to disbursement of grant funds for implementation of this project. Project progress will be monitored through the duration of the project.

*Deliverables*

- *Project Performance Monitoring Plan*

*Current Status*

- *100% Complete*

**Category (d): Construction/Implementation**

Task 8. Construction Team Hiring

Construction of the Big Pine Tribal Fire Hydrant Replacement Project is expected to begin by March 2016 and be completed by August 2017. The Tribe will utilize the Tribal Employment Rights Ordinance skills bank to interview and hire a force account crew to implement construction activities associated with the replacement of fire hydrants. The Tribe regularly uses a force account crew to complete construction activities for projects funded with federal dollars.

*Deliverables*

- *Copy of Tribal Employment Rights Ordinance*

*Current status*

- *0% complete*

Task 9. Project Construction

This task is divided into three categories: mobilization and site preparation, project construction,

and performance testing and demobilization, as described in the following sections.

*Mobilization and Site Preparation*

BPPT will mobilize equipment and crew to their respective, designated staging areas. Some of the equipment that will be required for implementation of the Fire Hydrant Replacement Project will include: backhoe, jackhammer, and crew truck. Site preparation shall include turning off water to fire hydrants being replaced and clearing areas of vegetation encroaching on site.

*Hydrant Removal and Installation*

During project construction, 38 fire hydrants will be removed and recycled as scrap metal. New fire hydrants will be installed to replace the removed fire hydrants, and the GIS database will be updated to reflect installation. The laborers will perform the installations within OSHA and any other applicable codes, regulations, and ordinances during construction.

*Hydrant Installation Evaluation and Demobilization*

BPPT will perform post-construction inspections to verify proper fire hydrant installation. After installation, the 38 hydrants will be checked for leaks, sprayed on the inside with a chlorine/water mix for disinfecting, and properly flushed before being brought into service. Additionally, as part of this work item, demobilization and site restoration (if required) by the force account crew will be completed. Site restoration activities may include replacement of any disturbed turf areas, damaged shrubs, or damaged trees. Post-project activities funded through the Operation and Maintenance budget of BPPT shall include regular fire hydrant flushing to exercise valves and record any deficiencies.

*Deliverables*

- *Records of fire hydrant performance testing*
- *Photographic documentation*
- *Map of exact locations of new fire hydrants*

*Current Status*

- *0% complete*

*Task 10. Construction Administration*

This task includes construction management services. Construction management for this project will include the following work items:

- Review force account crew schedule and make recommendations
- Manage and coordinate all project inquiries
- Manage and coordinate all correspondence
- Maintain detailed project records
- Receive, log, and distribute all submittals for review
- Inspect completed construction

*Deliverables*

- *Final Report of Construction Activities*

*Current Status*

- *0% complete*



## **PROJECT 6: Ridgecrest Cash-for-Grass Landscape Rebate Incentive Program**

### **IMPLEMENTING AGENCY: Indian Wells Valley Water District**

PROJECT DESCRIPTION: Only one source of potable water exists in the Indian Wells Valley (I WV) of California – an aquifer. Multiple users draw upon this aquifer, including Indian Wells Valley Water District (I WVWD, serving Ridgecrest), China Lake Naval Air Weapons Station, Searles Valley Minerals, Inyokern Community Services District, and private residential and agricultural well owners. Combined usage is about 30,000 acre feet per year, and I WVWD customers are responsible for about 29 percent of that total. However, replenishment off the eastern face of the southern Sierra Nevada has been shown to be only about 9,000 acre feet per year. Water levels are exhibiting a downward trend through time without recovery even as California’s “20 x 2020” is demanding a per capita water use reduction of 20 percent by the year 2020. Therefore, real headway in water efficiency and water conservation is imperative.

The Indian Wells Valley Water District is implementing a cash-for-grass landscape rebate incentive program. It is believed that such a program will achieve measurable results within a reasonable time period. According to a five-year, multi-million-dollar study conducted by the Southern Nevada Water Authority, grass in a similar desert environment to Ridgecrest requires 73 gallons of water per square foot per year to thrive while xeriscape only needs 17 gallons per square foot – a significant savings. By converting a mere 1,000 square feet of grass to xeriscape, a single homeowner could save the Valley one acre foot of water in less than six years, and if all customers followed suit, the District could save nearly 650 million gallons of water in just one year. A program of this nature requires adequate financial incentive to produce enough living turf conversion to substantially reduce water usage in the Indian Wells Valley. An attractive buy-back price per square foot of turf is \$1.00.

This project is a rebate incentive program to promote living turf removal at residential, multi-family, commercial, industrial, and institutional properties located within the boundaries of the Indian Wells Valley Water District service area to conserve water in the Indian Wells Valley groundwater basin.

#### **Category (a): Direct Project Administration**

The proposed project involves planning and administration work and does not include work or trades subject to labor compliance, nor will contractors be hired as part of this effort.

#### Task 1. Project Management

This project will be coordinated by a project manager employed by Indian Wells Valley Water District. The project manager will be the point of contact for the project’s duration and be responsible for the day-to-day activities conducted by District staff and all reporting outside of grant administration. This project does not involve any partner agencies or organizations.

#### *Deliverables*

- *Financial Statements*

- *Groundwater Monitoring Reports*

*Current Status*

- *5% complete*

Task 2. Grant Administration

IWVWD will prepare quarterly progress reports, invoices, and a final project report, including supporting documentation, all of which will be submitted to DWR via the grantee, Desert Mountain RC&D. The progress reports will describe activities undertaken and accomplishments of each task during the reporting period, and any problems encountered in the performance of the work under this contract. A final summary report will be prepared and submitted to DWR not more than 90 days after the project is complete and will describe the project's outcomes. This task also includes work associated with proposal preparation

*Deliverables*

- *2015 Implementation Grant Application*
- *Quarterly Project Progress Reports and Invoices*
- *Final Project Completion Report*

*Current Status*

- *20% complete*

**Category (b): Land Purchase/Easement**

Not Applicable. No land purchases or right-of-way easements are required.

**Category (c): Planning/Design/Engineering/Environmental Documentation**

The Project incentivizes landscape conversions from high water-using turf with desert- and drought-adaptive plants. The on-site work takes place on private property and is the responsibility of the applicant, so no environmental documentation or permitting is required. In addition, no work occurs on Native American Tribal land, so tribal notification is not applicable.

Task 3. Assessment and Evaluation

IWVWD has reviewed several cash-for-grass programs that have been implemented in California and Nevada that confirm significant water savings will be achieved. IWVWD has designed its Cash-for-Grass Landscape Rebate Incentive Program based on existing programs. Water savings estimates for the proposed program are based on projections and savings experienced in similar programs throughout the West. The technical feasibility of living turf replacement programs have long been documented and are a key element to the "New Normal in California landscapes," which promotes an integrated approach to landscaping, defined and promoted by DWR and the CUWCC. No additional design reports or investigations are needed.

The 2005 Southern Nevada Water Authority's (SNWA) Xeriscape Conversion Study shows an average water savings of 55.8 gal/ft<sup>2</sup> by converting grass to a water-smart landscape ([http://www.snwa.com/assets/pdf/about\\_reports\\_xeriscape.pdf](http://www.snwa.com/assets/pdf/about_reports_xeriscape.pdf)). According to the IWVWD 2011 Urban Water Management Plan, the average evapotranspiration (ET) and rainfall in the Indian Wells Valley is 66 inches and less than 5 inches per year, respectively, which is similar to the

conditions in the SNWA service area at the time of the 2005 SNWA Study. The project's water savings is therefore calculated with a standard coefficient of 56 gal/ft<sup>2</sup> of turf replaced.

#### *Deliverables*

- *IWVWD Cash-for-Grass Landscape Rebate Incentive Program description*

#### *Current Status*

- *100% Complete*

#### Task 4. Design/Engineering

The Indian Wells Valley Water District Cash-for-Grass Landscape Rebate Incentive Program will replace at least 382,000 square feet of turf with low-water-using-landscaping, providing rebates of \$1/ft<sup>2</sup> of turf replaced. The program is designed for consistency with the "new normal." Design requirements include the following: 1) a minimum living plant coverage may be required; 2) living plants used in the xeriscape landscape must comply with the Approved Plant list; 3) remaining lawn areas are not considered as plant or ground cover; 4) it is recommended that converted areas be covered by a minimum two (2)-inch layer of permeable mulch including but not limited to bark, rock, un-grouted stepping stones, and permeable artificial turf; and 5) if a spray irrigation system is currently being used, it must be converted to a low-volume drip system equipped with a pressure regulator, filter, and emitters providing irrigation to new plantings, and each drip emitter must be rated at less than 20 gallons per hour (gph). Spray irrigation is not permitted in the landscape conversion area and must be capped off if not converted to drip irrigation. If part of a lawn is converted, the sprinkler system must be properly modified to provide adequate coverage to the remaining lawn without spraying the converted area.

Any construction and on-site work is the responsibility of the rebate applicant; no engineering or design work is required on the part of IWVWD for implementation of the rebate program. Pre-inspection services and customer support will be provided by IWVWD staff.

IWVWD advertised the Cash-for-Grass Landscape Rebate Incentive Program and has received 191 applications to date.

#### *Deliverables*

- *IWVWD Cash-for-Grass Landscape Rebate Incentive Program description*
- *Program Notification Announcement*

#### *Current Status*

- *100% Complete*

#### Task 5. Project Performance Monitoring Plan

A Project Performance Monitoring Plan (PPMP) has been prepared (see Attachment 2 – Project Justification) and will be submitted to DWR prior to disbursement of grant funds for implementation of this project. The project will be monitored to measure progress throughout the project's duration.

### *Deliverables*

- *Project Performance Monitoring Plan*

### *Current Status*

- *100% Complete*

## **Category (d): Construction/Implementation**

### Task 6. Construction/Implementation

Effective June 8, 2015, the District staff is working with owners of residential, multi-family, commercial, industrial, and institutional properties within the Indian Wells Valley Water District's boundaries to reimburse \$1 per square foot up to 2,000 square feet of living turf removal.

To date, the District has received 191 applications, and 26 contracts have been signed with ratepayers, representing about 5% of the total possible square footage of turf to be converted. Applicants can continue to apply at the IWWWD office or acquire an application from the District's website ([www.iwwwd.com](http://www.iwwwd.com)). District staff must conduct a pre-inspection before work commences at which time a "before" photo will be taken. The application must be approved after the pre-inspection before removing any lawn and beginning a conversion. The applicant has up to six months to complete the project. Applicants must agree to a post-conversion inspection to ensure project compliance and agree to remain in compliance with all program conditions for a period of ten (10) years. If the landscaping is altered during this ten (10)-year period, the applicant may be required to refund some or the entire rebate if this requirement is violated.

Actual landscape conversions are the responsibility of the property owner. They have the option of completing the project themselves or hiring a landscaper. The District will not participate in the conversion process, and the IWWWD makes no representations or warranties as to the condition, quality, effectiveness, operability, or cost of installing or maintaining residential, multi-family, commercial, industrial, or institutional landscapes subject to this program, or of removing or disposing of any landscape or irrigation equipment debris in connection therewith and, to the extent not prohibited by law, disclaims all express and implied conditions, representations, and warranties related thereto, including without limitation, any implied warranty of merchantability or fitness for a particular purpose.

Once the landscape conversion project is finished, the property owner is responsible for notifying the District of completion. The post-conversion inspection includes taking photos of the converted landscape, obtaining converted landscape area measurements, inspecting the irrigation system, reviewing plant eligibility for program compliance, and verifying rebate eligibility. If the converted landscape or irrigation system fails inspection, the property owner is allowed 60 days or the remainder of the six-month period, whichever is greater, to fully comply with the program conditions.

Rebates of \$1/ft<sup>2</sup> will be offered to property owners. Pre-inspection, post-inspection, and customer support services will be provided by IWWWD staff. IWWWD staff will perform all rebate processing.

*Deliverables*

- *Application approvals for up to 382,000 square feet of permanent living turf removal over four years (project completion by December 2018)*
- *Documentation and processing of applications*
- *Post-conversion inspection report(s)*

*Current Status*

- *5% Complete*

Task 7. Construction Administration

IWVWD will administer the Cash-for-Grass Landscape Rebate Incentive Program. Activities include tracking costs, maintaining financial records, and making all rebate payments to program participants. Also, IWVWD staff will conduct the implementation, work with the participants, and provide program auditing support.

*Deliverables*

- *Pre- and post-inspection reports*
- *Summary of rebates to participants*

*Current Status*

- *0% Complete*

## Project 7: Recycled Water for Restoration and Community Projects in Big Pine

### Implementing Agency: Inyo County

**PROJECT DESCRIPTION:** The County of Inyo proposes completing Phase I of a project to establish a wastewater recycling facility in the town of Big Pine. Phase I will consist of a planning study (comprised of a feasibility study and an improvement plan) to produce and distribute non-potable recycled water. Upon completion, it is anticipated Phase II will be implemented, thereby constructing a facility for recycled water to be produced in conformance with California's Water Recycling Criteria. Phase II would provide water for landscaping, agriculture, and environmental restoration in the Big Pine area that would otherwise be supplied with an already-limited potable water supply that serves two disadvantaged communities. The study proposed in this project will also assess the feasibility of using solar energy to supply power to operate the treatment plant and water pumps.

With the current drought and water shortages facing California, and local water availability strained by year-after-year low runoff, water recycling needs to be part of the mix of the communities' water supply. This would be the first of its kind water recycling project in Inyo County and would serve to demonstrate the potential for similar systems. This carefully designed and executed system would serve as a blueprint for similar projects that could be built in the Inyo-Mono IRWM planning area.

California Recycled Water Policy actively promotes the development of water saving environmentally beneficial projects as expressed in this quote from the State Water Board's Resolution 2013-0003.

*"...We strongly encourage local and regional water agencies to move toward clean, abundant, local water for California by emphasizing appropriate water recycling, water conservation, and maintenance of supply infrastructure and the use of stormwater (including dry-weather urban runoff) in these plans; these sources of supply are drought-proof, reliable, and minimize our carbon footprint and can be sustained over the long-term."*

This recycled water planning study is proposed in the spirit of supporting the Water Board's resolve.

The project service area, the town of Big Pine and the Big Pine Paiute Tribe (BPPT) Indian Reservation, are wholly within the Big Pine Census Designated Place Disadvantaged Community (DAC) as viewed on the California Department of Water Resources DAC Map (<https://gis.water.ca.gov/app/dacs/>), and both entities would benefit from the development and application of treated recycled wastewater.

The feasibility study will evaluate using effluent from the Big Pine Community Services District (BPCSD) and BBPT wastewater treatment plants to serve irrigation needs at a number of locations within the community of Big Pine and on the Reservation. The BPCSD serves approximately 340

residences and 20 commercial properties. Their 150,000 gallons/day wastewater facility provides primary treatment at an average flow of 90,000 gallons/day (100 acre-foot/year). The plant currently has an aeration channel, two oxidation ponds, and four percolation ponds. Nearby (0.21 miles), the BPPT wastewater facility treats 20,000 gallons/day (22.4 acre-foot/year). The BPPT system serves 462 members.

The feasibility study will investigate potential uses for recycled water in Big Pine. The scope of work for the study will be developed by a planning committee composed of Council representatives and environmental staff from the Big Pine Paiute Tribe, representatives from the Los Angeles Department of Water and Power, Big Pine Community Service District Board members, Inyo County Supervisors, and Inyo County staff from the Water Department, Public Works, and Environmental Health offices. Projects under discussion include: providing water to revegetate, with native vegetation, up to 180 acres of abandoned agricultural land that is a source of dust affecting the town and Reservation; irrigating pastureland for re-greening a barren parcel; providing landscape irrigation to a park and associated ballfields; providing water to the BPPT Development Corporation to serve a planned commercial park; serving a community agriculture program.

The feasibility study will look at the potential for supplying these alternative uses. The report resulting from the study will consider the quantity and quality of effluent available, reuse regulations, public health, and the level of treatment required. The feasibility study will present draft alternatives that will be the subject of an environmental review. The planning committee and the public will review the projects, and the project or projects chosen to move forward will be the subject of an improvement plan developed by the consultant. The improvement plan will include engineering design and will take the project through permitting. At the end of the *Recycled Water for Restoration and Community Projects* project there will be up to three shovel-ready recycled water projects in the Big Pine area. Construction and operations and maintenance funding for the chosen projects will be obtained by the recycled water recipient.

### **Category (a): Direct Project Administration**

#### **Task 1. Project Management**

This task includes administrative responsibilities associated with the project such as hiring, coordinating and managing contractors, and receiving and processing contractor invoices. County staff will be the primary interface with all contractors. All electronic communications between the County and its contractors will be maintained on file and submitted as part of the quarterly reports.

#### *Deliverables*

- *RFP for project consultant*
- *Communications between County staff and contractors*

#### *Current Status*

- *0% complete*

#### **Task 2. Labor Compliance Program**

Inyo County maintains compliance with the requirements of California Labor Code §1771.5(b). Consultants are, under contract, required to comply with all California Labor Code requirements.

#### *Deliverables*

- *Proof of labor code compliance*

#### *Current Status*

- *0% complete*

#### Task 3. Grant Administration

Inyo County will prepare quarterly progress reports, invoices, and a final project report, including supporting documentation, all of which will be submitted to DWR via the grantee, Desert Mountain RC&D. The progress reports will describe activities undertaken and accomplishments of each task during the reporting period, and any problems encountered in the performance of the work under this contract. A final summary report will be prepared and submitted to DWR not more than 90 days after the project is complete and will describe the project's outcomes. This task also includes work associated with proposal preparation.

It is expected that this project will be completed in 32 months.

#### *Deliverables*

- *2015 Implementation Grant Application*
- *Quarterly Project Progress Reports and Invoices*
- *Final Project Completion Report*

#### *Current Status*

- *20% complete*

#### **Category (b) - Land Purchase/Easement**

There will be no land purchase required for this project.

#### **Category (c) Planning/Design/Engineering/Environmental Documentation**

Feasibility studies, planning, design, engineering diagrams, and all environmental compliance will be funded under this project. The County, through an RFP, will hire a qualified contractor to conduct a feasibility study and an improvement plan contingent on the selection of one or more alternatives.

#### Task 4. Feasibility Study

The purpose of the feasibility study is to investigate potential reuse of effluent water in the community of Big Pine that will benefit the community and the BPPT Reservation. The scope of work for the consultant includes gathering information, investigating potential destinations, characterizing the existing effluent, and developing conceptual alternatives to treat and reuse effluent. The conceptual alternatives will be evaluated and final alternatives developed, including an estimate of construction and operations and maintenance costs. Following discussion and comments, the feasibility study will be finalized, and the final alternatives will move forward into environmental review (Task 5) and agency, stakeholder, and public review (Task 6).



#### *Deliverables*

- *Feasibility study report*

#### *Current Status*

- *0% complete*

#### Task 5. CEQA/NEPA Documentation

Alternative projects (actions) developed in the Feasibility Study, and chosen to proceed, will be the subject of CEQA/NEPA environmental review. Lahontan Regional Water Quality Control Board will be one of the reviewing agencies. The County anticipates that a Mitigated Negative Declaration/ Mitigated Finding of No Significant Impact will be prepared.

#### *Deliverables*

- *Appropriate CEQA/NEPA documentation produced, reviewed, and adopted*

#### *Current Status*

- *0% complete*

#### Task 6. Agency, Stakeholder, and Public Review

Initial stakeholder meetings will be held to refine the full scope of work for the feasibility study, including potential destinations and water recipients. The final alternatives presented by consultants in the feasibility study will be reviewed by Inyo County, Los Angeles Department of Water and Power (LADWP), BPPT, stakeholders, and the general public. From this review one or more community recycled water projects may be selected to move forward to an improvement plan.

#### *Deliverables*

- *Summary of comments and response to comments, including conclusions.*

#### *Current Status*

- *10% complete*

#### Task 7. Improvement Plan

The selected project(s) from Task 3 will undergo an Improvement Plan, which includes an engineering report with design specifications and engineering drawings for the plant, plant connections, distribution system, and a solar power system. Contractor(s) will estimate costs for operations and maintenance, obtain applicable permits, and provide a list of required contract documents.

#### *Deliverables*

- *Engineering drawings*
- *Contract documents*
- *Permits*

#### *Current Status*

- *0% complete*

### Task 8. Project Performance Monitoring Plan

Because this project is a planning-only project that solely benefits a disadvantaged community, it was not required to develop a project performance monitoring plan. However, the tasks of the grant agreement work plan, together with the budget and schedule, will be used to track project progress through to completion.

#### *Deliverables*

- *Quarterly project reports and final project completion report*

#### *Current Status*

- *0% complete*

### **Category (d) Construction Implementation**

Construction/implementation is expected to take place in a Phase II project. Completion of a feasibility study, CEQA/NEPA documentation, and the improvement plan will enable water recipients to seek implementation grants from various state and federal agencies.