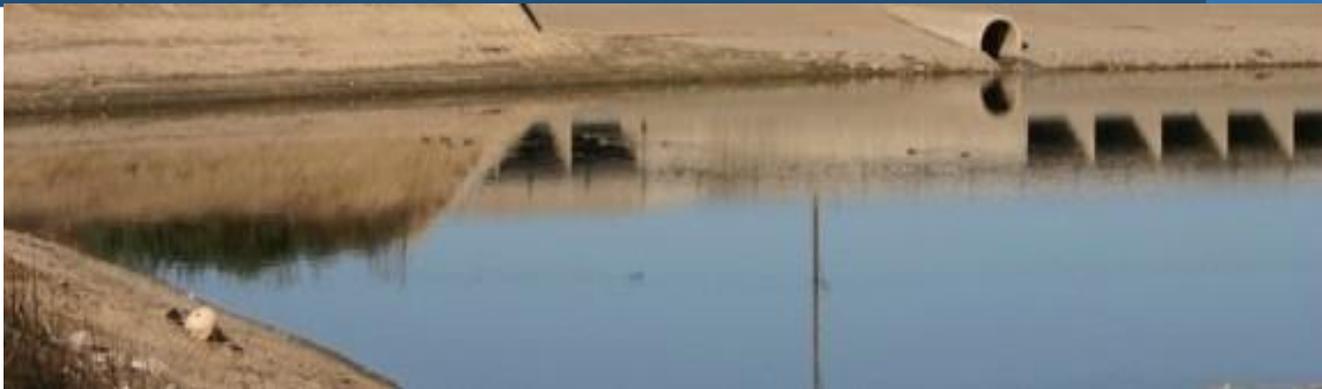


2018

Drought Resiliency Implementation:  
Wineville and Jurupa Basins Pumping and  
Conveyance System Project

WaterSMART: Drought Resiliency Project Grants  
Funding Opportunity BOR-DO-18-F008



Inland Empire Utilities Agency

Jason Gu, Grants Officer

6075 Kimball Avenue | Chino | CA 91708

[jgu@ieua.org](mailto:jgu@ieua.org)

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# Technical Proposal and Evaluation Criteria

## 1. Executive Summary

**Date:** February 13, 2018

**Applicant Name:** Inland Empire Utilities Agency

**City, County and State:** Chino, San Bernardino County, California

**Project Title:** Wineville and Jurupa Basins Pumping and Conveyance System Project

The Wineville and Jurupa Basins Pumping and Conveyance System Project (Project) is an infrastructure improvement project for the design and construction of upgrades to the existing Wineville and Jurupa Basins storage and distribution system located within the Inland Empire Utilities Agency's (IEUA) service area. By enhancing basin, pumping, and conveyance component infrastructure, the proposed Project will enable IEUA to divert, capture, and recharge up to 2,796 acre-feet per year (AFY) of stormwater and 2,190 AFY of dry-weather runoff, adding a total of 4,986 AFY of additional water supplies to the Chino Groundwater Basin. The Project is part of a regional implementation project known as Project 23a, identified within the scope of the 2013 Recharge Master Plan Update (RMPU), a local plan aimed at the long-term, sustainable management of groundwater supplies in the Chino Basin. By increasing local water supplies available to the region, the Project will meet the primary goal of the FOA by permanently increasing the reliability of the Chino Basin's water supply and improving regional water security and drought resiliency. Project design began in June 2017 and construction is expected to finish by December 2019, resulting in a 28-month project timeline. The Project is not located on a Federal facility.

## 2. Background Data

The IEUA is a municipal water district serving approximately 830,000 people in the Chino Basin, one of the largest groundwater basins in Southern California with an estimated 5,000,000 acre-feet (AF) of groundwater and 1,000,000 AF of unused basin storage capacity. The Chino Basin consists of approximately 220 square miles, where 80 percent of the basin lies within San Bernardino County, 15 percent within Riverside County, and 5 percent within Los Angeles County. Due to its sprawling geographical area that extends across multiple jurisdictions, and because groundwater from the basin is the principal water supply for 20 municipal agencies and approximately 400 agricultural and dairy operations, the Chino Basin serves as an integral part of the regional and statewide water supply system. The proposed Project, located in San Bernardino County, extends from the Wineville Basin located in the eastern portion of the City of Ontario to the Jurupa Basin located in the southwestern portion of the City of Fontana (Figure 1). Please refer to Figure 1 in the technical project description for greater specificity with regard to the Project location.

Production and storage rights in the Chino Basin are defined in the Stipulated Judgment (Judgment), issued in 1978 (Chino Basin Municipal Water District vs. the City of Chino et al. [SBSC Case No. RCV 51010]). Since that time, the basin has been sustainably managed, as required by the Judgment, under the direction of a court-appointed Chino Basin Watermaster (Watermaster). A fundamental premise of the Judgment is that all Chino Basin water users are

allowed to pump sufficient water from the basin to meet their requirements. To the extent that pumping by a party exceeds its share of the safe yield, assessments are levied by Watermaster to replace overproduction. Traditionally, overproduction has resulted in purchase of State Water Project (SWP) water through IEUA that is subsequently recharged into the Chino Basin. The current annual consumption of water within the IEUA service area is approximately 215,000 AFY, averaged from data over the last five years.

The hydrologic regime in the Chino Basin has far-reaching implications for water supply and groundwater management. The occurrence of long dry periods, characteristic of Southern California's climate, limit the recharge of precipitation and stormwater for years at a time, thus requiring collaborative and forward-thinking approaches on the part of Chino Basin water managers in order to conserve, enhance, and maximize groundwater for its highest and best use. As remaining undeveloped and agricultural lands in the Chino Basin are converted to urban areas, the need to conserve and recharge high-quality groundwater is continuing to grow in importance. Should Chino Basin groundwater supplies become permanently degraded or depleted, local communities will be at the mercy of increasingly scarce State and Federal water imports. In order to ensure that this does not happen, a wide array of stakeholder groups, including the IEUA, Jurupa Community Services District (JCSD), the Santa Ana River Water Company, the Cities of Chino, Chino Hills, Norco, and Ontario, and Western Municipal Water District (WMWD), in consultation with the Santa Ana Regional Water Quality Control Board (SA-RWQCB), continue to work closely together to design and implement comprehensive basin management programs.

One such program is the Optimum Basin Management Program (OBMP), which was developed and adopted in 2000 by Watermaster and various Chino Basin stakeholder groups who are responsible for overseeing major basin water management actions including monitoring, recharge, salt management, and production. The OBMP provides for the enhanced yield of the Chino Basin and seeks to provide long-term, reliable water supplies to the region. The OBMP is a comprehensive, long-range water management plan that includes the use of recycled water for direct reuse and artificial recharge; the treatment of poor quality groundwater through desalination; the support of regulatory efforts to improve water quality in the Chino Basin; and the implementation of strategies that result in reduced outflow of impaired groundwater to the Santa Ana River watershed, thus ensuring the protection of downstream water quality and beneficial uses.

In order to address the OBMP's call for a comprehensive recharge program, the IEUA and Watermaster completed a Recharge Master Plan (RMP) in 2002, which resulted in the modification of seventeen flood retention facilities between 2004 and 2014. The modifications increased diversion rates, storage capacities, and resulted in substantial recharge of stormwater and dry-weather runoff throughout the basin. The Wineville and Jurupa Basins, which are the focus of the proposed Project, are two of the modified basins where Watermaster has permits from the SA-RWQCB to divert surface water, recharge it into the ground, and recover it for beneficial use. By further improving diversion infrastructure at Jurupa Basin, the Project furthers the fundamental goals of the OBMP and RMP, and contributes to the ongoing collaborative effort needed to adequately address drought-proofing concerns in the Chino Basin.

Prior to 2004, recharge of stormwater and dry-weather runoff in the Chino Basin was minimal, and the recharge of recycled water was limited to approximately 500 AFY. Since the implementation of the 2002 RMP, the recharge of stormwater and dry-weather runoff has

increased to 6,000 AFY. These successes have significantly reduced reliance on SWP imports, thereby building long-term drought resiliency in the Chino Basin, especially considering recent periods when federal and state imports have not been readily available. In order to build on the provisions of the 2002 RMP, the IEUA and Watermaster prepared a Recharge Master Plan Update (RMPU) in 2010 and subsequent amendment in 2013, which was developed through a public, transparent process, involving sixty-seven steering committee meetings and workshops. Following court-approval in 2014, the RMPU has served as the backbone for a suite of stormwater recharge projects aimed at improving the basin-wide recharge program. On November 2016, the IEUA completed the preliminary design evaluation for many of these projects.

Table 1 shows the estimated capital costs of the proposed Project, which has been approved by Watermaster stakeholders for design and construction. Once completed, the Project will contribute 4,986 AFY of additional water supplies at a total cost of \$15,866,646.

*Table 1. Project Summary*

Project	Stormwater Recharge (AF/Year)	Dry Weather Runoff Recharge (AF/Year)	Total Capital Cost
Wineville and Jurupa Basins Pumping and Conveyance System Project	2,796	2,190	\$15,866,646

IEUA’s past working relationships with Reclamation can be seen below in Table 2.

*Table 2. IEUA’s Past Working Relationships with the United States Bureau of Reclamation*

Project Name	Amount	Contract Number	Award Date	Contract Termination
CEQA for Regional Water Recycling Project	\$22,608	01-FC-35-0020	Prior to 2001	11/20/2002
Chino Basin Comprehensive Water Efficiency Landscape Planning Process	\$125,000	00-FC-20-0208	6/26/2000	3/31/2003
Regional Recycled Water Program Feasibility Study	\$980,000	06-FC-35-0189	6/27/2006	3/31/2008
Chino Basin Water Efficient Irrigation Demonstration	\$50,000	05-FG-35-0170	9/12/2005	1/31/2010
Regional Recycled Water Program NE Area	\$5,938,454	R10AC35R16	12/22/2009	4/15/2011
California Friendly Water Wise Landscape Program	\$30,000	R09AP35261	8/28/2009	5/31/2011
Regional Recycled Water Program NW Area	\$7,910,000	R10AC35R17	12/22/2009	3/21/2012

<b>Turner Basin/Guasti Multi Use Beneficial Project</b>	\$406,712	R11AP35315	9/22/2011	9/30/2013
<b>Regional Residential Landscape Surveys and Retrofit Programs</b>	\$199,000	R12AP35353	9/7/2012	12/31/2014
<b>Construct Regional Recycled Water Program</b>	\$4,940,000	08-FC-35-0237-1	3/20/2009	6/30/2015
<b>Chino Creek Wellfield Development , Wells 1.2.3</b>	\$1,551,095	R11AC35306	9/29/2011	6/30/2017
<b>1010 Zone Pump Station and New Product Water Pipelines</b>	\$3,970,000	R12AC35339	9/24/2012	11/30/2016
<b>Brine Concentrate Reduction Facility</b>	\$14,523,000	R15AC00059	9/14/2015	8/31/2017
<b>Groundwater Supply Wells and Raw Water Pipelines</b>	\$5,629,652	R14AC00049	9/17/2014	12/31/2019
<b>GW Recharge Yield Enhancement Conjunctive Use Project for Storm water Capture</b>	\$750,000	R15AP00151	9/4/2015	9/28/2019
<b>Update of the Chino Basin Drought Contingency Plan</b>	\$200,000	R16AC00113	9/15/2016	9/30/2018
<b>RP 3 Basin Improvement Project</b>	\$300,000	R16AP00142	9/16/2016	9/30/2018
<b>Total</b>	<b>\$47,525,521</b>			

### 3. Technical Project Description

The Project is considered a Task A project under the FOA guidelines because the proposed basin, pumping, and conveyance component infrastructure will recharge new water supplies to the Chino Basin, thereby creating a permanent, local supply of water that can be accessed in times of drought. For the purposes of the technical proposal, the Project components have been grouped into five primary areas (Figure 2), though it is important to recognize that improvements to the Wineville Basin, Jurupa Basin, and the conveyance infrastructure that joins them, function as an interconnected system. Once complete, Project infrastructure improvements will enable the successful diversion, capture, and recharge of up to 4,986 AFY of additional water supplies that can be counted upon during dry years. The proposed improvements will add Wineville Basin to IEUA’s existing distribution system and further enhance the existing distribution system by adding a pump station at Wineville Basin; laying a new force main system to connect Wineville Basin to Jurupa Basin; expanding the pump capacity at the existing Jurupa Basin pump station; and, improving the electrical and instrumentation to automate and remotely access the flood control channel gate controls and monitor level sensors.

#### Project Components

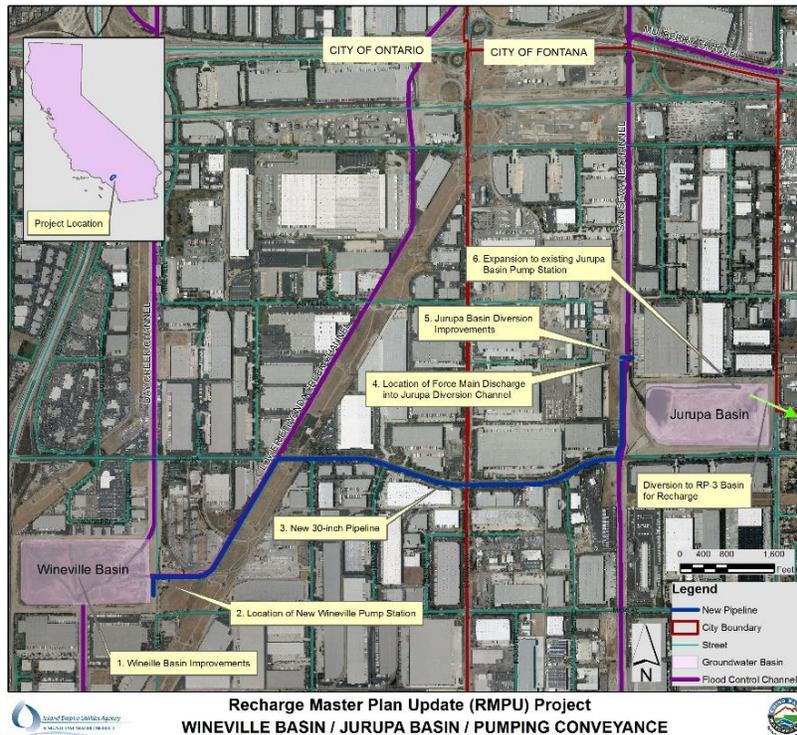


Figure 1. Project Area Map

***1 – Wineville Basin Improvements:*** Proposed modifications will achieve substantial water savings by converting the existing flood control basin into a fully operable stormwater and dry-weather runoff groundwater recharge basin. The proposed improvements include renovating the existing embankment to enable the long-term storage of water in the basin per California Division of Safety of Dams requirements; constructing a gate structure to spillway outlet to raise potential ponding depth to allow for greater recharge; adding a slide gate to the existing low-level outlet; and, regrading the basin floor to direct flows to the newly proposed pump station.

***2 – New Wineville Basin Pump Station:*** Water flows will be directed to the new Wineville Basin pump station to be located near the southeastern corner of the basin. The pump station will be designed to convey a flow of 20 cubic feet per second (cfs) from the Wineville Basin to the Jurupa Basin via a 10,961-foot, 30-inch force main. The flow of 20 cfs will be conveyed by two motor-driven vertical-turbine pumps, each with pumping capacities of 10 cfs. The pumps will be housed in a new block building. The new housing will feature a pump room, a reinforced concrete wet well, and a separate room to house the control and electrical equipment. The pump room will house both 10 cfs vertical-turbine pumps. The discharge pipe will connect to a 24-inch discharge manifold with a 24-inch magnetic flowmeter. The diameter of the discharge manifold will increase to 30-inches to align with the conveyance pipeline.

***3 – New 30-Inch Pipeline:*** Water flows will be conveyed from the Wineville Basin to the Jurupa Basin via a 10,961-foot, 30-inch force main and can follow one of four alternative force main

alignments, which were investigated during the Project's preliminary design evaluation. The final alignment will be finalized by the technical consultant during the design phase by taking into consideration both cost and access.

*4 – Jurupa Basin Diversion Improvements:* The proposed improvements include an expansion of the diversion from San Sevaine Creek from 20 cfs to 200 cfs. Increasing the capture rate from San Sevaine Creek Channel is imperative in order to fully implement the planned groundwater recharge goals envisioned by the 2013 RMPU and related recharge infrastructure projects specified by the Chino Basin Facilities Improvement Project (CBFIP), a joint effort between the IEUA, Watermaster, Chino Basin Water Conservation District (CBWCD), and San Bernardino County Flood Control District (SBCFCD), to expand the stormwater, recycled, and imported water recharge capacity of the Chino Basin.

*5 – Expansion of the Existing Jurupa Basin Pump Station:* Expansion of the existing Jurupa Basin pump station from 20 cfs to 40 cfs will enable faster transfer of stormwater and dry-weather runoff from Jurupa Basin to the nearby RP-3 recharge basins, which can store approximately 75 AF and infiltrate water at a rate between 0.5 and 2.0 feet per day. The new system improvements will double the existing capacity of the Jurupa Basin pump station by adding an additional pump, which will bring the pump station's total flow capacity to 40 cfs. The existing pump station is designed with space for a spare pump and the design will include a pump base and discharge lateral piping that connects to the discharge header. Improvements required for installation of the new pump include installation of a new 9,000 gallon per minute (gpm) vertical-turbine pump with a 350 horsepower motor, a 20-inch swing check valve, 20-inch pipe spools, and a 20-inch butterfly valve. The proposed improvements will utilize the existing magnetic flowmeter and the 36-inch force main, designed for the 40 cfs flow capacity, in addition to the remote controls, which can turn the pumps on and off via operator selection.

The IEUA and the Watermaster conducted a detailed hydrologic and hydraulics analysis and determined that the proposed Project will increase average annual stormwater recharge by 2,796 AFY and average annual dry-weather runoff recharge by 2,190 AFY, thereby increasing the yield of the Chino Basin by 4,986 AFY and decreasing the future demand for SWP water by the same amount. The increase in recharge capacity of the proposed Project will enable new conjunctive use of local surface water supplies and allow IEUA to recharge and store SWP water when it is available in wet years and carry over the storage for use in dry years. The proposed Project improves regional water security and drought resiliency by increasing the water supplies available to the region, decreasing dependence on SWP water and freeing SWP water for other uses during drought, offering benefits to both the region and the State. In addition, water managers will have the ability to better manage and control stormwater and recycled water flows by having an improved flexibility to divert flows to multiple recharge sites through an added interconnected conveyance system and expanded facilities. These flows would otherwise be lost and degrade Santa Ana River water quality.

#### **4. Performance Measures**

*All Drought Resiliency Project Grant applicants are required to propose a method (performance measure) of quantifying the benefits of their proposed project once it is implemented.*

In order to quantify project performance, IEUA will compare each basin’s baseline performance data with post-project performance data. Currently, each site has monitoring sensors that measure basin water levels, which are used to estimate recharge volumes. At the completion of the Project, ongoing water level data will be compared with baseline data to measure performance. IEUA staff will prepare a detailed chart comparing pre- and post-project basin conditions and provide detailed narratives to ensure that the Project is meeting its design goals.

*Table 3: Current Capacity and Capacity After Project Completion*

Project	Current SW yield (AFY)	Additional SW Yield Post project (AFY)	Dry water Run-off (AFY)	Total SW recharge Post Project (AFY)
Jurupa/Wineville/Distribution System	867	2796	2190	5853

## 5. Evaluation Criteria

### Evaluation Criterion A – Project Benefits (40 points)

*How will the project build long-term resilience to drought? How many years will the project continue to provide benefits?*

The proposed Project will build long-term resilience to drought by recharging previously uncaptured water from local storm events and dry-weather runoff into the Chino Basin groundwater system. The new volume of recharge will increase the yield of the Chino Basin, thereby developing a permanent, local water supply and decreasing future demand for State Water Project (SWP) water imports. The supply of SWP water can vary significantly due to climate change, seismic events, and other factors, so the development of a permanent, local supply will enhance the region’s long-term resilience to drought. The stormwater expected to be recharged will help drought-proof the region by capturing water during wet periods for use during dry periods and drought, where losses due to evaporation are expected to be minimal. The proposed Project is expected to bring benefits throughout an estimated 30-year life and beyond.

*Will the project make additional water supplies available? If so, what is the estimated quantity of additional supply the project will provide and how was this estimate calculated?*

Yes. The proposed Project will increase the average annual stormwater recharge by 2,796 AFY and increase the average annual dry-weather runoff recharge by 2,190 AFY. This new recharge will increase the yield of the Chino Basin by 4,986 AFY, decreasing future demand for SWP water by 4,986 AFY. The average annual estimate of stormwater recharge is based on sophisticated and detailed surface water modeling of the drainage system in the Day and San Sevaine Creek watersheds using long-term records of daily precipitation and the routing of daily stormwater discharges throughout the drainage systems. The average dry-weather runoff recharge is based on review of measured dry-weather runoff in the watershed and observations of dry-weather runoff in the Day and San Sevaine Creeks. The estimated Project savings are presented in Table 3.

Table 4: Overall Project Additional Water Supplies

Proposed Project	Stormwater Capture (AF)	Dry Weather Runoff (AF)	Total (AF)
Total Annual Recharge	2,796	2,190	4,986
Total Recharge Over 30-Year Project Life	83,880	65,700	149,580

What percentage of the total water supply does the additional water supply represent? How was this estimate calculated?

The percentage of total additional water supplied by the Project is 2.3 percent of the total annual water consumption in the IEUA service area. The proposed Project will provide 2,796 AFY of stormwater capture and 2,190 AFY of dry-weather runoff capture. Currently, the total annual water consumption in IEUA’s service area is 215,285 AFY averaged over the past five years.

*(215,285 AF) Total Annual Supply of Water*

*(2,796 AF Stormwater + 2,190 AF Dry – Weather Runoff) = 4,986 AF Conserved*

$$(100\%) \times \frac{4,986 \text{ AF}}{215,285 \text{ AF}} = 2.32\% \text{ of Total Annual Water Consumption in IEUA's Service Area}$$

Provide a brief qualitative description of the degree/significance of the benefits associated with the additional water supplies.

The Project is an integral part of the 2013 RMPU, a local plan aimed at the long-term, sustainable management of groundwater supplies in the Chino Basin. Pursuant to the 1978 Stipulated Judgment, the Safe Yield of the Chino Basin is allocated to the Judgment parties in constant amounts from year to year whether the region is experiencing wet periods or drought. The Project’s additional water supplies will increase the average annual recharge in the Chino Basin, resulting in more water available for pumping by the Judgment parties. Watermaster intends to treat the variability of new stormwater recharge as a consistent yield and allocate new production rights to the Judgment parties based on the expected increase in average annual stormwater recharge. Coupled with additional dry-weather runoff and recycled water recharge, the proposed Project will create a new, stable water supply that will be available during periods of drought. These additional water supplies are crucial for reducing reliance on SWP water imports, thereby achieving local, regional, and statewide benefits that extend all the way to the California Bay-Delta.

Will the project improve the management of water supplies? If so, how will the project increase efficiency or operational flexibility?

Yes. The Project will improve water management by providing stable new supplies that can be relied upon during periods of drought. Coupled with infrastructure improvements, new supplies will allow water managers to better manage and control stormwater, dry-weather runoff, and recycled water flows through an improved flexibility to divert flows to multiple recharge sites via expanded facilities and an added interconnected conveyance system. The proposed Project will divert and recharge stormwater and dry-weather runoff that would otherwise be lost and degrade Santa Ana River water quality downstream. Specific project improvements at the Wineville Basin,

such as the rebuilding of an embankment, construction of a new gated spillway, construction of a controlled outlet works, and construction of a new pump station; specific improvements at the Jurupa Basin, such as the expansion of the diversion from San Sevaine Creek from 20 to 200 cfs and the expansion of a pump station to increase the capacity of the existing pump station from 20 cfs to 40 cfs; and, the construction of pipelines to convey stormwater and dry-weather runoff from the Wineville Basin to the Jurupa Basin, will increase efficiency and operational flexibility. These improvements will enable better, long-term storage and allow water managers to efficiently transfer stormwater and dry-weather flows between stormwater and recharge management facilities.

*What is the estimated quantity of water that will be better managed as a result of this project? How was this estimate calculated?*

The proposed Project will increase the average annual stormwater recharge by 2,796 AFY and increase the average annual dry-weather runoff recharge by 2,190 AFY. This new recharge will increase the yield of the Chino Basin by 4,986 AFY and decrease future demand for SWP water by 4,986 AFY. The average annual estimate of stormwater recharge is based on sophisticated and detailed surface water modeling of the drainage system in the Day and San Sevaine Creek watersheds using long-term records of daily precipitation and the routing of daily stormwater discharges throughout the drainage systems. The average dry-weather runoff recharge is based on review of measured dry-weather runoff in the watershed and observations of dry-weather runoff in the Day and San Sevaine Creeks. All of this water, or 4,986 AFY, will offset an equal volume of SWP imports, thereby resulting in better water management and drought resiliency.

*How will the project increase efficiency or operational flexibility?*

As stated above, the Project will improve water management by providing stable new supplies that can be relied upon during periods of drought. Specific infrastructure improvements at the Wineville and Jurupa Basins will allow water managers to better manage and control stormwater, dry-weather runoff, and recycled water flows through an improved flexibility to divert flows to multiple recharge sites. The proposed improvements will add Wineville Basin to IEUA's existing distribution system and further enhance the existing distribution system by adding a pump station at Wineville Basin; laying a new force main system to connect Wineville Basin to Jurupa Basin; expanding the pump capacity at the existing Jurupa Basin pump station; and, improving the electrical and instrumentation to automate and remotely access the flood control channel gate controls and monitor level sensors. All of these important changes will increase the efficiency and operational flexibility of IEUA's distribution system.

As a complimentary benefit, the Project will increase efficiency of the water supply system by reducing the energy demand and greenhouse gas (GHG) emissions necessary to deliver water to the region. By reducing SWP water imports to the Chino Basin, the Project will reduce energy demand and GHG emissions by approximately 33 million kilowatt-hours and 4,100 metric tons, respectively. Increases in local stormwater and dry-weather runoff recharge will partially offset increases in stream discharge caused by urbanizing the watershed.

*What percentage of the total water supply does the water better managed represent? How was this estimate calculated?*

Since all of the additional water supplied by the Project is considered to be water better managed, as stated above, the calculations are similar to those already presented. The percentage of water better

managed is 2.3 percent of the total annual water consumption in the IEUA service area. The proposed Project will provide 2,796 AFY of stormwater capture and 2,190 AFY of dry-weather runoff capture. Currently, the total annual water consumption in IEUA’s service area is 215,285 AFY averaged over the past five years.

$$\begin{aligned}
 & (215,285 \text{ AF}) \text{ Total Annual Supply of Water} \\
 & (2,796 \text{ AF Stormwater} + 2,190 \text{ AF Dry – Weather Runoff}) \\
 & = 4,986 \text{ AF Water Better Managed} \\
 & (100\%) \times \frac{4,986 \text{ AF}}{215,285 \text{ AF}} \\
 & = 2.32\% \text{ of Total Annual Water Consumption in IEUA's Service Area}
 \end{aligned}$$

As an additional calculation of water better managed, the existing Project infrastructure diverts, captures, and recharges 867 AFY of stormwater discharge. After the proposed improvements have been implemented, the Project is expected to recharge 3,663 AFY of stormwater discharge, resulting in a 436% improvement. Refer to the calculation below.

$$(100\%) \times \frac{3,663 \text{ AF}}{867 \text{ AF}} = 422\% \text{ increased stormwater capture for recharge}$$

*Provide a brief qualitative description of the degree/significance of anticipated water management benefits.*

The Project is essential to provide better management of stormwater and dry-weather runoff for groundwater recharge. Instead of allowing stormwater and dry-weather runoff to be discharged into the streams and rivers that flow to the ocean, the Project will ensure that these sources of water are recharged into the Chino Basin for later use. New stormwater and dry-weather runoff flows captured by the Project will help to develop sustainable local water resources that will be available in the future during periods of drought. The occurrence of long dry periods, characteristic of Southern California’s climate, limits the storage of stormwater for years at a time, thus requiring collaborative and forward-thinking approaches on the part of Chino Basin water managers in order to conserve, enhance, and maximize groundwater for its highest and best use. The stormwater, dry weather, and recycled water flows that will be recharged as a result of the Project will preserve flexible water supply management options. In particular, increasing the capture rate from San Sevaine Creek Channel is imperative in order to fully implement the planned groundwater recharge goals envisioned by the 2013 RMPU and related recharge infrastructure projects specified by the CBFIP, a joint effort between the IEUA, Watermaster, CBWCD, and SBCFCD, to expand the stormwater, recycled, and imported water recharge capacity of the Chino Basin.

*Will the project make new information available to water managers? If so, what is that information and how will it improve water management?*

Data regarding the flows between the basins, including the newly connected Wineville Basin, and the amount of recycled water delivered for recharge will be available to water managers in order to make sure the blend of recycled water and other sources of water meet the requirements of IEUA’s groundwater recharge program. In addition, data gleaned from the analysis of groundwater samples collected from monitoring wells will also be available to water managers to ensure that the requirements in RWQCB Order No. R8-2007-0039 issued for the IEUA/CBWM Chino Basin recycled water groundwater recharge program are met.

*Will the project have benefits to fish, wildlife, or the environment? If so, please describe those benefits.*

Yes. The proposed Project will reduce stormwater discharge to the Santa Ana River and will virtually eliminate dry-weather runoff discharge to the Santa Ana River. This will reduce the high levels of copper, lead and pathogens which degrade the Santa Ana River habitat that support ecosystems that include, but are not limited to vegetation, fish and wildlife, including invertebrates. The reduction of stormwater discharge and elimination of dry-weather runoff will also have benefits by improving water quality as well as a reduction of greenhouse gas emissions due the ability to reduce the water imported from the SWP by the recharge benefit of this Project equal to 4,986 AFY. In addition, every drop of newly-recharged stormwater or dry-weather runoff directly offsets a drop of imported water supplies. Therefore, any new water supply or conservation project within the Chino Basin reduces the environmental, electrical, and capacity pressures on the Bay-Delta, leaving more water in the Bay-Delta for in-stream and off-stream uses that may have return flows that support the Delta flow regime. The Bay-Delta fisheries, including threatened and endangered species, will directly benefit.

*If the proposed project includes any of the following components, please provide the applicable additional information:*

*Salt Water Barriers* – Not applicable.

*Wells* – Monitoring wells may be installed as part of the Project in order to demonstrate that IEUA is compliant with the regulations established by the State of California for using recycled water to recharge groundwater. Groundwater samples will be analyzed for specific constituents outlined in RWQCB Order No. R8-2007-0039 issued for the IEUA/CBWM Chino Basin recycled water groundwater recharge program.

*New Water Marketing Tool or Program* – Not applicable.

*Metering/Water Measurement Projects* – The Project may feature new or additional meters to monitor water levels to track and control the performance of the facilities.

*Environmental/Wildlife Projects* – The proposed Project is not an environmental/wildlife project. As part of the regional implementation project known as Project 23a, identified within the scope of the 2013 RMPU, the Project has undergone extensive environmental evaluation as part of the CEQA process (Attachment A). Based on detailed biology resource evaluations, none of the Project components will have adverse impacts on endangered species. Improvements to the Wineville Basin consist mainly of physical modifications to the man-made Wineville Basin and extension of pipeline along existing disturbed rights-of way, and therefore no adverse impacts to listed or sensitive flora or wildlife will result from the Project. Improvements to the Jurupa Basin consist mainly of physical modifications to the man-made, concrete-lined San Sevaïne channel and based on the site conditions within and immediately adjacent to the proposed Project site, no adverse impacts to listed or sensitive flora or wildlife will result from construction activities.

The Jurupa and Wineville Basins are functioning flood control basins owned and operated by San Bernardino County Flood Control District. Because these basins are utilized for flood retention, San Bernardino County manages the vegetation, and sediment accumulation. Therefore these basins do not, under normal circumstances, support native habitats for wildlife. The proposed Project will enhance groundwater recharge opportunities in the basin as part of the 2013 RMPU, and is not intended to create or enhance wildlife habitat. However, these basins do experience

ponding after rain events which often serve as transient refugia for migratory birds during migration. Therefore the proposed Project may prolong the duration of ponding, and thereby extend these refugia opportunities. There are many factors that dictate the amount and duration of ponding in the basins, including but not limited to annual precipitation, time of year precipitation occurs, ambient temperatures, and San Bernardino County Flood Control District Management activities. Because of these unpredictable variables, the amount of extended refugia opportunities is unquantifiable. By and large the species utilizing these basins during migration are migratory aquatic species such as ducks and cormorants, and shoreline species such as avocets and plovers. There no specific target listed or sensitive species that would be benefitted by the additional recharge water in the basins. All species are affected by drought as well as catastrophic flooding, and the general seasonal changes in precipitation periods we are experience through climate change.

#### Evaluation Criterion B – Drought Planning and Preparedness (20 points)

*Attach a copy of the applicable drought plan, or sections of the plan, as an appendix to your application. These pages will not be included in the total page count for the application.*

In September 2016, the IEUA received a \$200,000 Drought Contingency Planning Grant award, Agreement No. R16AC0013 (Attachment B), from the U.S. Department of Interior, Bureau of Reclamation (USBR) for a Regional Drought Response Plan, which will incorporate the Agency’s existing comprehensive Integrated Water Resource Plan (IWRP) 2015-2040 (Attachment C) Recharge Master Plan Update (Attachment D), and IEUA 2009 Drought Plan (Attachment E).

*Explain how the applicable plan addresses drought.*

IEUA has been working diligently on the USBR 2016 Drought Contingency Grant funded Drought Contingency Planning Project to consolidate its existing water management plans as referenced above into a comprehensive Regional Drought Response Plan. The consolidation encompasses the first phase of the IRP, RMPU, and 2009 IEUA Drought Plan, all of which focus on extensive analyses of future projected water needs and water supply strategies under conditions of climate change, drought, and growth. Results include summaries of the recommended regional water resource strategies; options available to mitigate drought impacts to the region; corresponding ranges of costs; and a regionally developed list of potential projects with detailed project level analysis including scopes of work, water savings solutions, costs, and implementation scheduling.

The planning has been a collaborative effort and discussions continue with stakeholders, including regional technical staff, water managers, and committees. Planning is inclusive, and coordinated efforts acts as the IEUA’s blueprint for ensuring reliable, cost-effective, and environmentally responsible long-term water supplies. It will consider availability of current and future water supplies and account for possible fluctuations in demand forecasts and climate change impacts. Stakeholders in the Drought Response Plan, including cities and water agencies, will continue to work collaboratively to develop a comprehensive and detailed approach. Climate change is one of the key factors that will have a substantial impact on water supplies, and IEUA prioritizes projects that address drought conditions with available data regarding climate change trends and indications of a future of unprecedented “mega-droughts” that have the potential to last multiple decades.

*Describe how your proposed drought resiliency project is supported by an existing drought plan.*

The Project is supported through the RMPU as part of the IEUA’s water management planning. The RMPU is a comprehensive basin management plan committed to the design and construction

of groundwater recharge projects. As part of the drought planning response actions specified in the RMPU, the Project is included among the nine approved Post-2014 Stormwater recharge projects. The RMPU is one of the documents at the foundation of the IEUA's Drought Response Plan. Within the RMPU document, the Project is a priority because of its cost-effectiveness and limited barriers to implementation and compliance permitting. One of the goals IEUA's Drought Response Plan is to make water resources readily available during dry periods. The Project will provide an additional 4,986 AFY of new stormwater and dry-weather runoff recharge that can be flexibly used and is therefore considered one of the RMPU's top priority projects.

### Evaluation Criterion C – Severity of Actual or Potential Drought Impacts to be Addressed by the Project (20 points)

*Describe the severity of the impacts that will be addressed by the project.*

There are vast public and social concerns with regard to a decreased local water supply in the Project area. The concerns are generally the loss of water to support IEUA's 830,000 users, with ripple effects in residential, commercial, industrial, institutional, educational, and agricultural sectors. The region's water sources are limited, and are directly impacted by climate. If local water becomes unavailable, the region may receive a limited supply of imported water from the SWP. Imported water supply has the potential for interruption, is dependent on Metropolitan Water District of Southern California's pipelines, relies on available supply from the SWP, and supplies water to other major regions, which could result in new water rights battles between regions. If a "mega-drought" occurs as predicted, and projects such as this do not get constructed in advance, there could be limited water available in the Chino Basin. This would pose a major health concern for the region and could result in water needing to be trucked in for drinking under the worst case scenario.

*Whether there are ongoing or potential environmental impacts (e.g., impacts to endangered, threatened or candidate species or habitat).*

The drought brings varying concerns regarding maintaining suitable habitat for a variety of species, including endangered and threatened species. With wetlands, creeks, rivers, and basins in IEUA's service area, there are various endangered and threatened species that have the potential to be impacted by drought conditions. Endangered species in the Project watershed include the Santa Ana Sucker, the California Gnatcatcher, and the Delhi Sands Flower-Loving Fly, among others. Water supplies sustain the habitats and ecosystems for the various creatures who claim the region as their home. It is not only the animals of the watershed that are threatened by habitat degradation but plant life as well, which face competition from non-native species. The Chino Basin region currently discharges approximately 20,000 AFY of water to sustain habitat along various creeks and channels, including the Prado Dam Wetlands, Chino Creek Wetlands and Educational Park, and other ecological habitats. These waters help sustain habitat and wildlife in the region, making a drought-resilient water plan critical to their continued existence.

*Ongoing, past or potential, local, or economic losses associated with current drought conditions (e.g., business, agriculture, reduced real estate values).*

Potential ongoing drought losses in the Project area include but are not limited to the following:

Agriculture – The region currently produces feed crops for the dairy industry and other food crops on over 2,000 acres for consumption in Southern California, and beyond. These

practices have a high potential to be interrupted or eliminated due to water quality and supply impacted by the drought.

Industrial – The region supplies water for various types of industries, including food and beverage, steel processing, and other beneficial industries. These industries rely on the water supply to operate and provide services, which helps maintain economic growth in the region.

Urban use – IEUA’s service area currently has over 830,000 people that depend on water supplies for food, families, business, etc. The population in this area is growing, increasing demand for resources. As further drought impacts continue, decreased water quality and supply availability may result in supply interruptions for customers. The region also currently supplies water to several international and cable airports serving the region, and Southern California.

*Whether there other drought-related impacts not identified above (e.g., tensions over water that could result in a water-related crisis or conflict)?*

Yes. There are complex and real links between water and conflict. While major known water resource concerns are identified above, as drought conditions worsen there is potential that water-related tensions develop. Collaborating with the region’s water agencies and other stakeholders on a Drought Response Plan will help find projects for a sustainable water future, and reduce the risk of water-related conflicts. With decreased water supply and increased cost to supply treated water, local businesses and agencies are faced with financial impacts. As previously mentioned, the region serves residential, industrial, commercial, public, and agricultural customers. The extreme drought conditions in IEUA’s region will directly impact real estate values, businesses, and agencies financially, and has the potential to influence relocation of customers to other areas. This Project will improve the drought resiliency of the basin and, therefore, will benefit the region in terms of water sustainability and economy. State regulations related to required reduction of water usage has already impacted the local retail water agencies financially. Possible increases in water rates to make up for the financial loss caused by the regulation may have a domino effect on local business and residents with regard to profit and spending ability, respectively.

*Describe existing or potential drought conditions in the project area: is the project in an area that is currently suffering from drought or which has recently suffered from drought?*

Yes. Since January 2012, the Chino Basin region has been experiencing conditions ranging from abnormally dry to exceptional drought conditions. From July 2014 to January 2017, virtually the entire area experienced either extreme or exceptional drought conditions, which has led to many water availability challenges in Southern California. Severe conditions called for voluntary and mandatory water use reductions ordered by Governor Brown including numerous news articles about water supply conditions, and massive public outreach campaigns from water agencies across the State. Although Governor Brown declared an end to the emergency drought condition in the State, the entire Chino Basin region continues to experience abnormally dry or moderate/severe drought conditions (Attachment F). Climate change impacts have already created critical challenges for water resources management in Southern California. More intense storm events and the changing frequency and duration of drought years are becoming evident throughout the State and the West. This makes future water supplies available to the region more uncertain, particularly imported water resources that are uniquely vulnerable to changes in the State’s snowpack.

General climate change trends projected for California are that temperatures will increase and precipitation will increasingly fall as rain rather than snow. These trends will impact water supplies in two ways: higher temperatures will cause increased water demands; however, infrastructure to capture rain runoff is limited as water infrastructure in California was designed to capture slow melting snowpack not rapid stormwater. This Project is specifically designed to divert, capture, and recharge stormwater and dry weather runoff.

*Describe any projected increases to the severity or duration of drought in the project area resulting from climate change. Provide support for your response.*

Climatologists have changed the way they view drought in years past and now recognize ongoing higher temperatures and longer drought conditions may be the “new normal” for California. A study conducted by scientists at Stanford University entitled, “Anthropogenic Warming Has Increased Drought Risk in California” has linked climate change with “more frequent occurrences of high temperatures and low precipitation that will lead to increased severe drought conditions.”

Droughts are expected to occur more frequently, more intensely, and last longer. The Natural Resources Defenses Council (NRDC) estimates that if nothing is done to address the implications associated with climate change, between the years 2025 and 2100, the cost of providing water to the western United States will increase from \$200 billion to \$950 billion per year.

Climate change is one of the key factors that will have a substantial impact on water supplies. While recent droughts in California have been significant, climate change trends indicate a future of unprecedented “mega-droughts” that have the potential to last multiple decades. The California Department of Water Resources forecasts dry periods in Southern California to last longer and have lower average precipitation than historical dry periods, based on a combination of regional climate models. This further highlights the need for long-term drought planning in Southern California.

**Evaluation Criterion D – Project Implementation (10 points)**

*Describe the implementation plan of the proposed project.*

Efforts shall consist of the following phases to ensure the project implementation maintains its goals and prevents delays and cost increases during the life of the Project:

Project Phases	Start	Finish	Status
Project Development	7/1/2014	12/17/2014	Completed
Preliminary Design	12/18/2014	6/21/2017	Completed
Environmental	12/18/2014	5/17/2018	In progress
Design	6/22/2017	5/17/2018	In Progress
Permits	6/22/2017	5/17/2018	In Progress
Bid/Award	5/17/2018	9/19/2018	Not Started
Construction	9/26/2018	2/19/2020	Not Started

In order to accomplish the intended design goals, the following are the general work tasks under Wineville/Jurupa/Conveyance Improvement Project:

*Task 1: Administration and Reporting* - IEUA is required to report to the Grantor on a regular basis during the term of the grant. In addition to the preparing of the required reports, administration and reporting will include overseeing grant compliance, invoicing, preparing documentation of information that must be passed onto the contractors in the solicitation and contractor contract related to the grant, attendance at the contractor kick-off meeting to ensure contractor understands all grant requirements and State and Federal regulations that the contractor will have to meet. All staff time associated with this project can be charged directly to a specified account.

*Task 2: Labor Compliance Program* - To meet the requirements of Labor Code section 1771.5 and Davis Bacon, IEUA's labor compliance program for this project will be administered by a consultant. They will be required to certify invoices for any services that applicable the labor code.

*Task 3: Assessment and Evaluation of Performance Measures* - In order to demonstrate project performance, IEUA will use each basin's base line performance data and compare them with post-project performance data. Currently, each site has monitoring sensors that collect basin water levels and calculates recharge performance rates. At the completion of the project the ongoing data will be compared with pre-project data to confirm performance. IEUA staff will prepare a detailed chart which will compare pre and post conditions of each basin and provide detailed narratives on the project to ensure that the projects are meeting its design goals.

*Task 4: Design Phases* - The design efforts shall consist of the following phases to ensure the project maintains its design and captures all required design details to avoid delays and cost increases during construction:

Preliminary Design - The consultant shall evaluate the proposed design and submit technical memorandums to discuss alternative design options which would best implement the design and construction. The alternatives shall include a full business case evaluation to support the final design recommendations. This phase shall also confirm the construction cost estimates and required permitting before full design commences.

At the time of this application, the preliminary design report (PDR) has been completed. The PDR process was started June 2015 and completed August 2016. In addition, the design phase is underway, and expected to be completed in May 2018.

30%, 50% and 85% Design Submittal and Review - The consultant shall provide status updates, progress plans, and specifications for review to IEUA staff and other stakeholders to ensure the project's design intent is secured.

- Draft plans and specification
- Updated estimate of probable construction cost for the project.
- Design calculation package
- Design review comments with permit agencies

Final Design – The consultant shall submit for final review and approve of the design plans before construction bidding begins. This phase typically consists the following:

- Final design drawings and specifications

- Final engineer's estimate - the consultant shall update the construction cost estimate and provide an opinion of cost
- Final calculation package

*Task 5: Environmental and Cultural Resources Documentation* - IEUA will identify and prepare the relevant CEQA/NEPA and historical preservation compliance documents for this project and will provide the documents for USBR approval.

*Describe any permits that will be required, along with the process for obtaining such permits.*

*Task 6: Permitting* - Permitting documents will be provided prior to the construction of the Project. During the design and environmental tasks, IEUA and its consultants will coordinate and meet with various permitting and regulatory agencies to ensure that the Project meets all agency and potential permit requirements. The following are the anticipated permits and regulatory agencies that staff will apply for and be in compliance with:

1. Endangered Species Act (ESA) Section 7 Consultation with US Fish and Wildlife Services (FWS) and/or National Marine Fisheries Service (NMFS) Biological Opinion
2. ACOE Section 404 Permit
3. State Historic Preservation Officer Section 106 Consultation
4. Air Quality Conformity Determination
5. California Department of Fish and Wildlife 1602 Streambed Alteration Agreement (SAA)
6. California Endangered Species Act (CESA) Compliance - CDFG Incidental Take Permit and Consistency Determination
7. Regional Water Quality Control Board (RWQCB) Section 401 Permit
8. California General Construction Stormwater NPDES Permit
9. San Bernardino County Flood Control Permit (SBCFCD) construction permits

*Task 7: Construction Contracting* - IEUA will proceed with construction work after the completion of project design, CEQA and all required permits. IEUA's project manager and contracting staff will administer the construction contract of this project. As a public agency, IEUA staff follows the public works construction contracting procedures. After approval by IEUA Board of Directors, staff will advertise for bids and develop the bid package, including all the pertinent requirements and provisions for this project. After evaluation of all bid proposals submitted, IEUA staff will summarize bids and provide a recommendation to IEUA Board of Directors that the construction contract be awarded to the lowest responsible/responsive bidder. IEUA's contracting staff will verify the selected contractor's bonds and insurance, and issue a notice-to-proceed to the selected lowest bidder after approval by IEUA Board of Directors.

Construction for each project shall consist of the following activities:

*Task 8: Construction:*

*Subtask 8.1 Mobilizations and Site Preparation* - Clearing and Grubbing – To allow unimpeded basin grading and improvements the existing vegetation within a portion of the basins will need to be removed. Vegetation removal must take place prior to the bird nesting season, which typically ranges from approximately March 1<sup>st</sup> through September 15<sup>th</sup> of any given year.

In order to conduct the clearing and grubbing activities the basin will have to be dry. In order to avoid bird nesting season and flood control activities, clearing, and grubbing will likely be performed between September 15 and November 15 of a given year. The above-ground vegetation

will be cleared, followed by removal of the vegetation's root systems. Removed vegetation will be trucked off-site and used as mulch where possible. It is anticipated that some mulch will be reused by IEUA for beneficial uses on its properties. Remaining mulch will be exported from the site and made available for public sale or given away.

#### *Subtask 8.2 Project Construction-*

1. Wineville Basin Improvements – In order to achieve the substantial water saving the following construction efforts will convert the existing flood control basin into a fully operable stormwater basin:
  - Installation of a rubber dam gate along the top spillway – This will require modifying the existing concrete lined spillway and basin embankment to place an inflatable gated dam across the 45-foot spillway channel. The installing will include the inflation system and controls to operate the gated dam remotely and on site.
  - Grading the basin floor to remove deposited silts and improve the management of groundwater recharge and install require water level sensor to monitor basin performance.
  - Modify existing out piping with an automated gate system– This will allow the basin to hold and store captured stormwater for groundwater recharge. The current outlet ins non-gated.
  - Electrical and Controls – additional electrical and controls will be installed to monitor and control the new basin systems remotely and on-site.
2. New Wineville Basin Pump Station – The pump station will allow groundwater recharge staff to divert additional stormwater flows within Wineville to Jurupa and RP-3.
  - Pump Station Building Construction –This will construct the structure to house the pumps, wet well, piping, gates, and controls to direct additionally stored water within Wineville to the other recharge basin.
  - Mechanical Work – Installation of pumps and controls to convey or manage stormwater flows effective and efficiently.
  - Electrical and Controls – additional electrical and controls will be installed to monitor and control the new pumps remotely and on-site.
  - Civil Work– Pipe and earthwork activities.
3. New 30-Inch Pipeline – The pipeline will allow the conveyance of stormwater to the other recharge basins.
  - Civil Work – Pipe and earthwork activities to lay piping over public and private lands. A majority of the new pipe will be constructed along Jurupa Avenue over two cities, Ontario and Fontana.
4. Jurupa Basin Diversion Improvements – This construction will modify any existng concrete line channel to increase stormwater diversion from San Sevaine Channel into Jurupa Basin for groundwater recharge.
  - Channel Modifications – Modify existing channels to allow for effect stormwater capture.
  - Electrical and Controls – additional electrical and controls will be installed to monitor and control the new diversion remotely and on-site.
5. Expansion of the Existing Jurupa Basin Pump Station – This expansion construction will allow for additional captured stormwater from Jurupa and Wineville to be transferred to another recharge basin, RP-3.
  - Pump Station modification –The construction will install an additional pump within an existing pump room.
  - Electrical and Controls – additional electrical and controls will be installed to monitor and control the new pump remotely and onsite.

*Subtask 8.3 Performance Testing and Demobilization -*

At the conclusion of construction, after successful start-up and testing of all new mechanical systems, all equipment will be demobilized from the site.

*Task 9: Environmental Mitigation Measures for CEQA Compliance -*

- Implementing a fugitive dust control plan;
- Using equipment that meets more stringent exhaust emission criteria;
- Keeping equipment well-tuned;
- Minimizing equipment idling time;
- Clearing and grubbing outside of the bird nesting season;
- Fencing construction limits;
- Having a biological monitor present when required;
- Habitat compensation/mitigation if required;
- Implementation of a Storm Water Pollution Prevention Plan (SWPPP);
- Implementation of Water Quality Control Procedures;
- Fencing operations to prevent public access;
- Implementing fire prevention measures;
- Adhering to local noise ordinances;
- Limiting work hours as practicable and required.

*Task 10: Construction Administration -* As a public agency, IEUA staff must request an approval from IEUA Board of Directors to issue a request for proposal (RFP) for any construction management services for this project. In addition, the project design consulting firm will likely provide engineering services during the construction phase of this project. The construction administration activities will include the completion of construction tasks, compliance with regulatory and environmental regulations.

*Identify and describe any engineering or design work performed specifically in support of the proposed project.*

The Project was evaluated by an engineering contractor for the following: cost effectiveness; determining whether or not the Project would lead to significant new stormwater recharge; barriers to implementation of the Project; and determining whether the Project would be in compliance with current permitting. At the time of this application, the preliminary design report (PDR) has been completed. The PDR process was started in June 2015 and completed in August 2016. In addition, the design phase is underway, and is expected to be completed in May 2018 per the Project implementation schedule.

*Describe any new policies or administrative actions required to implement the project.*

As part of the RMPU, the implementation of the Project will require the following administrative actions:

1. *Establish a Watermaster and IEUA Yield Enhancement Project Implementation Agreement*  
– The objective of this agreement is to define the roles of Watermaster and the IEUA in the planning, permitting, design, and implementation of the yield enhancement projects, and the cost allocations pursuant to the Peace II Agreement; and,

2. *Establish a Flood Control and Water Conservation Agreement* – The parties to this agreement include SBCFCD, Watermaster, and the IEUA. The objectives of this agreement are to define the terms and conditions to jointly explore and construct new conservation works on SBCFCD and IEUA properties and to conduct flood control and water conservation activities utilizing those same conservation works on the properties. The agreement will define the project sites, facility improvements, construction and maintenance cost allocations, user or license fees, operating criteria (with flood control purposes taking priority over conservation for joint use facilities), and other conditions.

*Describe how the environmental compliance estimate was developed. Have the compliance costs been discussed with the local Reclamation office?*

IEUA has already identified and prepared the relevant CEQA/NEPA and historical preservation compliance documents for this Project and will provide the documents to State for proper filing (Attachment A).

#### Evaluation Criterion E – Nexus to Reclamation (10 points)

*How is the proposed project connected to a Reclamation project or activity?*

The proposed Project service area covers the Inland Empire region, which spans 242 square miles in San Bernardino County. Within this region, IEUA has completed dozens of Bureau of Reclamation-funded plans (Table 2). In particular, Bureau of Reclamation supports the RP-3 Basin Improvement Project (R16AP00142), which directly connects to the proposed Project's conveyance and recharge infrastructure.

*Will the project benefit any tribe(s)?* Not applicable.

*Does the applicant receive Reclamation project water?* Yes. Western, one of Watermaster's member agencies, receives water from the Colorado River, which is Reclamation water.

*Is the project on Reclamation project lands or involving Reclamation facilities?* No.

*Is the project in the same basin as a Reclamation project or activity?* Yes, there is a clear nexus between the Bureau of Reclamation and the capital improvement projects that will be detailed in the final PDR. These projects will serve the Chino Basin, where the Bureau has contributed over \$30 million of funds towards water plans and construction projects (Table 2). By ensuring a stable new water supply, this Project helps to further the broader goals of the Bureau of Reclamation to manage and develop water resources in the public interest. As stated above, Bureau of Reclamation supports the RP-3 Basin Improvement Project (R16AP00142), which directly connects to the proposed Project's conveyance and recharge infrastructure.

*Will the proposed work contribute water to a basin where a Reclamation project is located?* As stated above, Bureau of Reclamation supports the RP-3 Basin Improvement Project (R16AP00142), which directly connects to the proposed Project's conveyance and recharge infrastructure. The Project will deliver water flows directly from the Jurupa Basin to the RP-3 Basins for recharge. A substantial portion of the stormwater and dry-weather runoff captured through this Project will be delivered to the RP-3 basins for recharge into the Chino Basin.

## 6. Project Budget

### a. Funding Plan and Letters of Commitment

*Describe how the non-Federal share of project costs will be obtained. Reclamation will use this information in making a determination of financial capability.*

The total project cost for the proposed combined Wineville Basin, and Jurupa Basin Improvement project is \$15,866,646.

The Project is part of the 2013 Recharge Master Plan Upgrade Program approved by the Inland Empire Utilities Agency and the Chino Basin Water Master Board of Directors. The non-Federal share funding for the Project will be derived from the following sources:

1. 50% of total project costs, or \$7.9 million is committed by the SWRCB under the Proposition 1 Stormwater Grant agreement (Attachment G).
2. The remaining 50% will be funded by a California Clean Water State Revolving Fund (SRF) loan, which is expected to be funded by September, 2018. If IEUA receives the \$750,000 award from Reclamation, this will lower the amount of the loan and reduce the burden for local ratepayers.

*Project funding provided by a source other than the applicant shall be supported with letters of commitment from these additional sources. Letters of commitment shall identify the following elements: The date the funds will be available to the applicant; any time constraints on the availability of funds any other contingencies associated with the funding commitment*

*Commitment letters from third party funding sources should be submitted with your application. If commitment letters are not available at the time of the application, please provide a timeline for submission of all commitment letters. Cost-share funding from sources outside the applicant's organization (e.g., loans or State grants) should be secured and available to the applicant prior to award.*

*Reclamation will not make funds available for an award under this FOA until the recipient has secured non-Federal cost-share. Reclamation will execute a financial assistance agreement once non-Federal funding has been secured or Reclamation determines that there is sufficient evidence and likelihood that non-Federal funds will be available to the applicant subsequent to executing the agreement.*

See Attachment H for the required letter of commitment.

*The funding plan must include all Project costs, as follows:*

*How you will make your contribution to the cost-share requirement, such as monetary and/or in-kind contributions and source funds contributed by the applicant (e.g., reserve account, tax revenue, and/or assessments).*

The cost-share requirement will be covered by

1. The Proposition 1 Stormwater grant (\$7.9 million)
2. SRF loan (\$7.9 million): as a condition of accepting the SRF loan, the Agency committed to providing initial cash flow to pay for contractors and in-kind expenses, which will be reimbursed by the loan.
3. Repayment for the loan will be covered by tax levies, property tax and revenues and has been authorized by the Agencies and by Task Order 9 (Attachment I) Please also refer to the Letter of Commitment from CBWM (Attachment H) and the three party financing agreement between IEUA, CBWM and CBRFA (Attachment J). If there is any delay in SRF loan funding, the agencies have agreed to move forward with the Project.

*Describe any donations or in-kind costs incurred before the anticipated Project start date that you seek to include as project costs. For each cost, identify:*

- *The project expenditure and amount*
- *The date of cost incurrence*
- *How the expenditure benefits the Project*
- *Provide the identity and amount of funding to be provided by funding partners, as well as the required letters of commitment.*

There are some initial in-kind costs incurred prior to the Project start date. However, the Agency does not plan to seek to include those as project costs. There are sufficient eligible costs to complete the project.

*Describe any funding requested or received from other Federal partners. Note: other sources of Federal funding may not be counted towards the required cost share unless otherwise allowed by statute.*

IEUA is not seeking additional Federal funding for this project.

*Describe any pending funding requests that have not yet been approved, and explain how the project will be affected if such funding is denied.*

Funds for this project have been requested from the California State Water Resources Control Board (SWRCB). An SRF loan application is in the final stages and is expected to be funded by September 2018.

If the SRF loan funding is delayed significantly, the Agencies will still proceed with the project construction and the costs will be paid for the Agencies' approved budget.

Please include the following chart (Table 1) to summarize all funding sources. Denote in-kind contributions with an asterisk (\*).

Table 6: Summary of Non-Federal Funding Sources

<b>Funding Sources</b>	<b>Funding Amount</b>
<b>Non-Federal Entities</b>	
1. State Grant	\$7,933,323
2. SRF Loan (application pending)	\$7,933,323
3.	
<b>Non-Federal Subtotal</b>	<b>\$15,866,646</b>
<b>Funding Sources</b>	<b>Funding Amount</b>
Other Federal Entities	None
<b>Other Federal Subtotal</b>	<b>\$0</b>
<b>Requested Reclamation Funding</b>	<b>\$750,000<sup>1</sup></b>
<b>Total Funding</b>	<b>\$15,866,646</b>
<sup>1</sup> If \$750,000 is awarded to IEUA, the amount of the loan will be lowered accordingly. This will reduce the burden for local ratepayers.	

## **b. Budget Proposal**

*The budget proposal should include detailed information on the categories listed below and must clearly identify all Project costs, including those that will be contributed as non-Federal cost share. Unit costs must be provided for all budget items including the cost of work to be provided by contractors. The budget proposal should also include any in-kind contributions or donations of goods and services that will be provided to complete the project. It is strongly advised that applicants use the budget proposal format shown below on Table 2 or a similar format that provides this information. If selected for award, successful applicants must submit detailed supporting documentation for all budgeted costs.*

Table 7: Project Budget Proposal

Budget Item Description	COMPUTATION		Quantity Type	Total Cost
	\$/Unit	Quantity		
<b>Salaries and Wages</b>				
Manager of Engineering - Shaun Stone	\$ 87.33	100	Hours	\$ 8,733
Senior Engineer - Joel Ignacio	\$ 66.76	1000	Hours	\$ 66,760
Assistant Engineer	\$ 51.04	900	Hours	\$ 45,936
Construction Project Manager - PE	\$ 74.29	1500	Hours	\$ 111,435
Senior Associate Engineer	\$ 55.43	800	Hours	\$ 44,344
Administrative Assistant I	\$ 33.90	1000	Hours	\$ 33,900
Grant Accountant	\$ 46.14	400	Hours	\$ 18,456
Grant Administrator	\$ 41.99	300	Hours	\$ 12,597
Manager of Grants - Jason Gu	\$ 65.20	150	Hours	\$ 9,780
Engineering Intern	\$ 15.00	1000	Hours	\$ 15,000
<i>Total</i>				\$ 366,941
<b>Fringe Benefits (75% of base salary)</b>				
Manager of Engineering - Shaun Stone	\$ 6,549.75			\$ 6,550
Senior Engineer - Joel Ignacio	\$ 50,070.00			\$ 50,070
Assistant Engineer	\$ 34,452.00			\$ 34,452
Construction Project Manager - PE	\$ 83,576.25			\$ 83,576
Senior Associate Engineer	\$ 33,258.00			\$ 33,258
Administrative Assistant I	\$ 25,425.00			\$ 25,425
Grant Accountant	\$ 13,842.00			\$ 13,842
Grant Administrator	\$ 9,447.75			\$ 9,448
Manager of Grants - Jason Gu	\$ 7,335.00			\$ 7,335
Engineering Intern	\$ -			\$ -
<i>Total</i>				\$ 263,956
<b>Travel</b>				
Not Applicable				\$ -
<b>Equipment</b>				
Not Applicable				\$ -
<b>Supplies and Materials</b>				
Not Applicable				\$ -
<i>Total</i>				\$ -
<b>Contractual/Construction</b>				
Contractor				\$ 12,750,000

Preliminary Design Consultant - Stantec				\$ 416,760
Design Consultant - Carollo				\$ 1,250,280
Construction Project Inspector				\$ 156,223
<i>Total</i>				\$ 14,573,263
<b>Other</b>				
Environmental Compliance: Permitting				\$ 186,480
Environmental Compliance Consultant: Tom Dodson				\$ 373,520
<i>Total</i>				\$ 560,000.00
<b>TOTAL DIRECT COSTS</b>				<b>\$ 15,764,160</b>
<b>Indirect Costs</b>				
Modified Total Direct Cost	27.93%	\$ 366,941		\$ 102,486.62
<b>TOTAL ESTIMATED PROJECT COSTS</b>				<b>\$ 15,866,646</b>

### c. Budget Narrative

*Submission of a budget narrative is mandatory. An award will not be made to any applicant who fails to fully disclose this information. The budget narrative provides a discussion of, or explanation for, items included in the budget proposal. Include the value of in-kind contributions or donations of goods and services and sources of funds provided to complete the Project. The types of information to describe in the narrative include, but are not limited to, those listed in the following subsections. Costs, including the valuation of in-kind contributions and donations, must comply with the applicable cost principles contained in 2 CFR Part §200, available at the Electronic Code of Federal Regulations ([www.ecfr.gov](http://www.ecfr.gov)).*

#### **Administrative Costs**

Costs associated with IEUA project management, coordination with stakeholders, developing the Request for Proposal for consultants and contractors, soliciting proposals, consultant/contractor selection, award, monitoring plan development, reporting and grant administration. The services provided by IEUA staff are in-kind services. The rates that will be charged are salary rates in addition to fringe benefits. Salary increases are generally awarded each year along with each employee's performance evaluation on their anniversary date. Many of IEUA's employees are represented by an Association Bargaining Unit. A MOU was negotiated which requires that staff receive cost of living adjustments (COLA) during the time period of this grant. The COLA effective 7/1/2018 is 2.0% of the base salary. Both represented and non-represented staff will receive the COLA. New COLA's may be negotiated when a successor MOU is adopted. The 2.0% COLA was included in the hourly rates, shown in the budget table above. All staff, including grant administration staff, are able to directly charge the actual amount of time spent working on this project. A project number will be set up in the financial system to specifically track these costs. The legal expenses, if needed, are for obtaining permits and right-of way.



<i>Assistant Engineer</i>	\$51.40	900 hrs	\$79,848
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Assists in planning and developing engineering design projects; prepares requests for proposal from engineering consultants and assists in evaluating proposals; prepares engineering plans, specifications, designs and project cost estimates for CIP projects; establishes progress schedules; reviews consultant or in-house designs/specifications for compliance with Agency standards; troubleshoots design problems; may assist with environmental reviews for projects. Monitors and provides design engineering support for capital construction work in progress; attends necessary construction meetings; conducts field investigations and site visits; prepares responses to RFIs and RFDs; participates in site acceptance testing.

<i>Construction Project Manager(PE)</i>	\$74.29	1500 hrs	\$195,011
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Oversees and performs inspections of engineering projects to determine complete conformance to the plans and specifications and compliance with local, state and federal standards of construction and safety. Reviews construction plans, submittals, specifications, reports, work logs, permits and files with engineering staff; Attends pre-construction meetings; explains the construction inspection program to affected contractors and other parties; coordinates construction projects with the Agency operations departments. Resolves design/construction problems and performs in-field redesigns (in conjunction with Agency's engineering staff) to accommodate conditions which are not as shown on plans; reviews and recommends change order approvals submitted by construction project coordinators; negotiates and mediates contract disputes between the Agency and contractors. Sets work priorities, coordinates and schedules assignments, and maintains records of activities for the department; Ensures site safety of construction projects; makes final acceptance inspections and closes projects; oversees the preparation of completion notices, payments to contractors and engineering consultants and bond release letters.

<i>Senior Associate Engineer</i>	\$55.43	800 hrs	\$77,602
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Plans and develops engineering design projects; prepares requests for proposal; directs and oversees the preparation of engineering plans, specifications, designs and project cost estimates; establishes progress schedules; reviews consultant or in-house designs/specifications for compliance with Agency standards; troubleshoots design problems; oversees environmental reviews for projects. Provides frontline technical guidance and consulting assistance to plant management/operators to troubleshoot and resolve myriad operations and maintenance issues; Monitors and provides design engineering support for capital construction work in progress; attends all necessary construction meetings; conducts field investigations and site visits; prepares responses to RFIs and RFDs; participates in site acceptance testing.

<i>Administrative Assistant I</i>	\$33.90	1000 hrs	\$59,325
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Provides administrative project support including developing, tracking and reporting metrics, plans and documents using computer systems; provides administrative support and oversight throughout the bid process; schedules project meetings; creates and maintains electronic and physical filing systems; obtains and validates accuracy of technical and specialized contractor and vendor documentation including financial and insurance-related bonds, endorsements, coverage and certified payroll.

<i>Grant Accountant</i>	\$46.14	400 hrs	\$32,298
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Maintains and reconciles grant revenue and expenditures to the financial system and general ledger; prepares adjusting journal entries; prepares billings and invoices for reimbursement from local, state and federal grantor agencies; prepares journal entries to record grant credits and grant match charges; maintains detailed grants accounting documentation and records. Monitors the status of grant account balances; follows up with departments to ensure grant funds are expended in accordance with grant agreements.

<i>Grant Administrator</i>	\$41.99	300 hrs	\$22,045
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Provides technical support to project managers, contractors and consultants regarding laws, regulations and contractual requirements as they relate to grants and loans; researches and analyzes changes in legislation and the impacts on the Agency.

<i>Engineering Intern</i>	\$15.00	1000 hrs	\$15,000 (no fringe)
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Support Senior Engineer and Construction Project Manager on the project – track documents for reports, verify agreements for invoices, prepare maps and plans, work with grants on compliance requests.

**Fringe Benefits**

*Identify the rates/amounts, what costs are included in this category, and the basis of the rate computations. Indicate whether these rates are used for application purposes only or whether they are fixed or provisional rates for billing purposes. Federally approved rate agreements are acceptable for compliance with this item.*

The fringe benefit rate of 75% are calculated by IEUA for budgeting purpose based on the prior year actuals. Costs used in the calculation include such items as employee insurance, taxes and retirement, paid leaves, employee incentive programs, uniforms, safety shoe and auto allowances. These rates are fixed rates for billing. See Attachment K for IEUA’s overhead rates.

**Travel**

Not applicable

**Equipment**

Not applicable

**Materials and Supplies**

Not applicable

**Contractual**

*Identify all work that will be accomplished by subrecipients, consultants, or contractors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. Identify how the budgeted costs for subrecipients, consultants, or contractors were determined to be fair and reasonable. Note: If a sub-*

*recipient, consultant, or contractor is proposed and approved at the time of award, no other approvals will be required. Any changes or additions will require a request for approval.*

The contractual services with Consultants and contractors under this project will provide the support to meet the noted tasks as identified in the project implementation plan.

Contractual Services	Contractor(s)/Consultant(s)	Provided Services by Task
Construction Contractor	(Pending)	Task 8
Preliminary Design Consultant	Stantec Consulting, Inc.	Task 3 and Task 4
Design Consultant	Carollo Engineering, Inc.	Task 4
Construction Project Inspector	GK and Associates or Wallace and Associate, Inc.	Tasks 7, 8, 9, and 10
Environmental Compliance Consultant	Tom Dodson and Associates or ESA	Task 5
Environmental Permitting Consultant	Tom Dodson and Associates or ESA	Task 6
Labor Compliance Consultant	Golden State Labor Compliance or other	Task 2
Surveying Consultant	CASC Engineering and Consulting	Task 10

The selection of consulting services will be based on competitive proposal process where experience, knowledge and understanding of the project scope and goal will be evaluated to determine the most qualified to perform the contract work. Qualifications-Based Selection (QBS) is a procurement process for the competitive selection of engineering services where the most appropriate professional or firm is selected based on qualifications such as knowledge, skill, experience, and other project-specific factors, rather than on fees. The fair and reasonable fees are negotiated with the top-ranked firm for an agreed-upon scope of services. The hourly rates for the consultant’s estimates are based on local consultant billing rates for similar services performed on past projects.

Lastly, the Contracting work will mainly perform services to implement the construction of the proposed project improvements. The scope shall include the construction of the proposed improvement as defined and specified with the prepared bidding and construction documents. The contract is required to provide within its cost and efforts all services and materials to implement the proposed design. All provided permits and required permits shall be the responsibility of the contractor to comply and adhere to. The Contractor shall perform project management and coordination services. The Contractor’s Project Management responsibilities include, but are not limited to: (a) Overall management of the Work in accordance with the Contractor’s Project

Execution Plan; (b) Planning, controlling and equipment/material submittals, procurement, installation, electrical, instrumentation, construction, testing and training, to the extent necessary to achieve performance of the Work; and, Producing and updating Project Schedules in compliance with Scheduling and Reporting Requirements

The contractual efforts to award services with contractors shall conform to the requirements under the Public Contract Code sections (20161 and 20162) that mandate that California public works projects be competitively bid. The public works competitive bidding laws are intended to eliminate favoritism, fraud and corruption in the awarding of public contracts. A responsible bidder will be required to be a licensed contractor who has not been barred from government contracts for prior misconduct. In addition, a responsible bidder must have the equipment and skills necessary to perform the work in question or have a subcontractor who has those skills. If the bidder is deemed not responsible because it does not

The following are the details for each task (as mentioned in the Project Implementation of Evaluation Criterion D):

*Task 1: Administration and Reporting* - IEUA is required to report to the Grantor on a regular basis during the term of the grant. In addition to the preparing of the required reports, administration and reporting will include overseeing grant compliance, invoicing, preparing documentation of information that must be passed onto the contractors in the solicitation and contractor contract related to the grant, attendance at the contractor kick-off meeting to ensure contractor understands all grant requirements and State and Federal regulations that the contractor will have to meet. All staff time associated with this project can be charged directly to a specified account.

*Task 2: Labor Compliance Program* - To meet the requirements of Labor Code section 1771.5 and Davis Bacon, IEUA's labor compliance program for this project will be administered by a consultant. They will be required to certify invoices for any services that applicable the labor code.

*Task 3: Assessment and Evaluation of Performance Measures* - In order to demonstrate project performance, IEUA will use each basin's base line performance data and compare them with post-project performance data. Currently, each site has monitoring sensors that collect basin water levels and calculates recharge performance rates. At the completion of the project the ongoing data will be compared with pre-project data to confirm performance. IEUA staff will prepare a detailed chart which will compare pre and post conditions of each basin and provide detailed narratives on the project to ensure that the projects are meeting its design goals.

*Task 4: Design Phases* - The design efforts shall consist of the following phases to ensure the project maintains its design and captures all required design details to avoid delays and cost increases during construction:

Preliminary Design - The consultant shall evaluate the proposed design and submit technical memorandums to discuss alternative design options which would best implement the design and construction. The alternatives shall include a full business case evaluation to support the final design recommendations. This phase shall also confirm the construction cost estimates and required permitting before full design commences.

At the time of this application, the preliminary design report (PDR) has been completed. The PDR process was started June 2015 and completed August 2016. In addition, the design phase is underway, and expected to be completed in May 2018.

30%, 50% and 85% Design Submittal and Review - The consultant shall provide status updates, progress plans, and specifications for review to IEUA staff and other stakeholders to ensure the project's design intent is secured.

- Draft plans and specification
- Updated estimate of probable construction cost for the project.
- Design calculation package
- Design review comments with permit agencies

Final Design – The consultant shall submit for final review and approve of the design plans before construction bidding begins. This phase typically consists the following:

- Final design drawings and specifications
- Final engineer's estimate - the consultant shall update the construction cost estimate and provide an opinion of cost
- Final calculation package

*Task 5: Environmental and Cultural Resources Documentation* - IEUA will identify and prepare the relevant CEQA/NEPA and historical preservation compliance documents for this project and will provide the documents for USBR approval.

*Task 6: Permitting* - Permitting documents will be provided prior to the construction of this project. During the design and environmental tasks IEUA and its consultants will coordinate and meet with various permitting and regulatory agencies to ensure the project meets all agency and potential permit requirements. The following are the anticipated permits and regulatory agencies that staff will apply for and be in compliance with:

1. Endangered Species Act (ESA) Section 7 Consultation with US Fish and Wildlife Services (FWS) and/or National Marine Fisheries Service (NMFS) Biological Opinion
2. ACOE Section 404 Permit
3. State Historic Preservation Officer Section 106 Consultation
4. Air Quality Conformity Determination
5. California Department of Fish and Wildlife 1602 Streambed Alteration Agreement (SAA)
6. California Endangered Species Act (CESA) Compliance- CDFG Incidental Take Permit/Consistency Determination
7. Regional Water Quality Control Board (RWQCB) Section 401 Permit
8. California General Construction Stormwater NPDES Permit
9. San Bernardino County Flood Control Permit (SBCFCD) construction permits

*Task 7: Construction Contracting* - IEUA will proceed with construction work after the completion of project design, CEQA and all required permits. IEUA's project manager and contracting staff will administer the construction contract of this project. As a public agency, IEUA staff follows the public works construction contracting procedures. After approval by IEUA Board of Directors, staff will advertise for bids and develop the bid package, including all the pertinent requirements

and provisions for this project. After evaluation of all bid proposals submitted, IEUA staff will summarize bids and provide a recommendation to IEUA Board of Directors that the construction contract be awarded to the lowest responsible/responsive bidder. IEUA's contracting staff will verify the selected contractor's bonds and insurance, and issue a notice-to-proceed to the selected lowest bidder after approval by IEUA Board of Directors.

*Task 8: Construction* - Construction for each project shall consist of the following activities:

#### *Subtask 8.1 Mobilizations and Site Preparation*

Clearing and Grubbing – To allow unimpeded basin grading and improvements the existing vegetation within a portion of the basins will need to be removed. Vegetation removal must take place prior to the bird nesting season, which typically ranges from approximately March 1<sup>st</sup> through September 15<sup>th</sup> of any given year.

In order to conduct the clearing and grubbing activities the basin will have to be dry. In order to avoid bird nesting season and flood control activities, clearing, and grubbing will likely be performed between September 15 and November 15 of a given year. The above-ground vegetation will be cleared, followed by removal of the vegetation's root systems. Removed vegetation will be trucked off-site and used as mulch where possible. It is anticipated that some mulch will be reused by IEUA for beneficial uses on its properties. Remaining mulch will be exported from the site and made available for public sale or given away.

#### *Subtask 8.2 Project Construction*

1. Wineville Basin Improvements – In order to achieve the substantial water saving the following construction efforts will convert the existing flood control basin into a fully operable stormwater basin:
  - Installation of a rubber dam gate along the top spillway – This will require modifying the existing concrete lined spillway and basin embankment to place an inflatable gated dam across the 45-foot spillway channel. The installing will include the inflation system and controls to operate the gated dam remotely and on site.
  - Grading the basin floor to remove deposited silts and improve the management of groundwater recharge and install require water level sensor to monitor basin performance.
  - Modify existing out piping with an automated gate system– This will allow the basin to hold and store captured stormwater for groundwater recharge. The current outlet ins non-gated.
  - Electrical and Controls – additional electrical and controls will be installed to monitor and control the new basin systems remotely and on-site.
2. New Wineville Basin Pump Station – The pump station will allow groundwater recharge staff to divert additional stormwater flows within Wineville to Jurupa and RP-3.
  - Pump Station Building Construction –This will construct the structure to house the pumps, wet well, piping, gates, and controls to direct additionally stored water within Wineville to the other recharge basin.

- Mechanical Work – Installation of pumps and controls to convey or manage stormwater flows effective and efficiently.
  - Electrical and Controls – additional electrical and controls will be installed to monitor and control the new pumps remotely and on-site.
  - Civil Work– Pipe and earthwork activities.
3. New 30-Inch Pipeline – The pipeline will allow the conveyance of stormwater to the other recharge basins.
    - Civil Work – Pipe and earthwork activities to lay piping over public and private lands. A majority of the new pipe will be constructed along Jurupa Avenue over two cities, Ontario and Fontana.
  4. Jurupa Basin Diversion Improvements – This construction will modify any existing concrete line channel to increase stormwater diversion from San Sevaine Channel into Jurupa Basin for groundwater recharge.
    - Channel Modifications – Modify existing channels to allow for effect stormwater capture.
    - Electrical and Controls – additional electrical and controls will be installed to monitor and control the new diversion remotely and on-site.
  5. Expansion of the Existing Jurupa Basin Pump Station – This expansion construction will allow for additional captured stormwater from Jurupa and Wineville to be transferred to another recharge basin, RP-3.
    - Pump Station –The construction will install an additional pump within an existing pump room.
    - Electrical and Controls – additional electrical and controls will be installed to monitor and control the new pump remotely and onsite.

### *Subtask 8.3 Performance Testing and Demobilization*

At the conclusion of construction, after successful start-up and testing of all new mechanical systems, all equipment will be demobilized from the site.

### *Task 9: Environmental Mitigation Measures for CEQA Compliance Include the Following -*

- Implementing a fugitive dust control plan;
- Using equipment that meets more stringent exhaust emission criteria;
- Keeping equipment well-tuned;
- Minimizing equipment idling time;
- Clearing and grubbing outside of the bird nesting season;
- Fencing construction limits;
- Having a biological monitor present when required;
- Habitat compensation/mitigation if required;
- Implementation of a Storm Water Pollution Prevention Plan (SWPPP);
- Implementation of Water Quality Control Procedures;
- Fencing operations to prevent public access;
- Implementing fire prevention measures;
- Adhering to local noise ordinances;

- Limiting work hours as practicable and required.

*Task 10: Construction Administration* - As a public agency, IEUA staff must request an approval from IEUA Board of Directors to issue a request for proposal (RFP) for any construction management services for this project. The construction administration activities will include daily inspection of all field work, documenting field questions and forwarding to the engineer of record for response, and providing material inspection during construction. In addition to this surveying services are also included under this to provide location and elevation of proposed improvement, equipment and structures.

## **Environmental and Regulatory Compliance Costs**

*Applicants must include a line item in their budget to cover environmental compliance costs. "Environmental compliance costs" refer to costs incurred by Reclamation and the recipient in complying with environmental regulations applicable to an award under this FOA, including costs associated with any required documentation of environmental compliance, analyses, permits, or approvals. Applicable Federal environmental laws could include the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Clean Water Act (CWA), and other regulations depending on the project. Such costs may include, but are not limited to:*

*The cost incurred by Reclamation to determine the level of environmental compliance required for the project*

No cost has been incurred by Reclamation for this Project.

*The cost incurred by Reclamation, the recipient, or a consultant to prepare any necessary environmental compliance documents or reports.*

Environmental costs incurred to date: \$75,306.74

*The cost incurred by Reclamation to review any environmental compliance documents prepared by a consultant*

No cost has been incurred by Reclamation for this Project.

*The cost incurred by the recipient in acquiring any required approvals or permits, or in implementing any required mitigation measures*

Permitting costs incurred to date: \$21,618.67

*The amount of the line item should be based on the actual expected environmental compliance costs for the project, including Reclamation's cost to review environmental compliance documentation.*

*How environmental compliance activities will be performed (e.g., by Reclamation, the applicant, or a consultant) and how the environmental compliance funds will be spent, will be determined pursuant to subsequent agreement between Reclamation and the applicant. The amount of funding required for Reclamation to conduct any environmental compliance activities, including Reclamation's cost to review environmental compliance documentation, will be withheld from the*

*Federal award amount and placed in an environmental compliance account to cover such costs. If any portion of the funds budgeted for environmental compliance is not required for compliance activities, such funds may be reallocated to the project, if appropriate.*

Please see Attachment A for the Environmental package, completed per the requirement of the SRF loan application.

### **Other Expenses**

*Any other expenses not included in the above categories shall be listed in this category, along with a description of the item and why it is necessary. No profit or fee will be allowed.*

Not applicable

### **Indirect Costs**

*Indirect costs that will be incurred during the development or construction of a project, which will not otherwise be recovered, may be included as part of the applicant's project budget. Show the proposed rate, cost base, and proposed amount for allowable indirect costs based on the applicable cost principles for the recipient's organization. It is not acceptable to simply incorporate indirect rates within other direct cost line items.*

*If the applicant has never received a Federal negotiated indirect cost rate, the budget may include a de minimis rate of up to 10 percent of modified total direct costs. For further information on modified total direct costs, refer to 2 CFR §200.68 available at [www.ecfr.gov](http://www.ecfr.gov).*

*If the applicant does not have a federally approved indirect cost rate agreement and is proposing a rate greater than the de minimis 10 percent rate, include the computational basis for the indirect expense pool and corresponding allocation base for each rate. Information on "Preparing and Submitting Indirect Cost Proposals" is available from Interior, the National Business Center, and Indirect Cost Services, at [www.doi.gov/ibc/services/finance/indirect-cost-services](http://www.doi.gov/ibc/services/finance/indirect-cost-services).*

The U.S. Department of Interior National Business Center (IBC) approved provisional indirect cost rate for IEUA is 27.93% for FY 2015. See the attached Indirect Cost Rate Agreement Letter for the FY 2015.

### **Total Costs**

*Indicate total amount of project costs, including the Federal and non-Federal cost share amounts.*

The total estimated cost for this project is \$15,866,646. 95.3% or 15,116,646 of which will be funded through State grants and loans. \$750,000 or 4.7% is the requested Federal share.

Total Costs – The total Project cost is \$15,866,646

## **7. Environmental and Cultural Resources Compliance**

*To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants must respond to the following list of questions focusing on NEPA, ESA, and NHPA requirements. Please answer the following*

questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

*Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.*

This project will have earth disturbing components. During the environmental review air quality studies will be conducted to forecast Greenhouse Gas (GHG) emission and recommend mitigation measures. The IEUA is required to comply with the South Coast Air Quality Management District (SCAQMD) Rule 403 to minimize dust during construction.

The general project area was previously disturbed and contains minimal vegetation. The diversion structures that will be modified are in concrete-lined channels. Most of the area is already operated and maintained by the IEUA and SBCFCD for flood control and water conservation through groundwater recharge. The IEUA has operational and maintenance permits for these activities from the Army Corps of Engineers, the Santa Ana Regional Water Quality Control Board, the Department of Fish and Game, and the SBCFCD. The IEUA avoids impacts to animal habitat by performing any vegetation removal outside of the nesting season and performing animal surveys to identify areas that need to be avoided.

• *Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?*

The specific project areas are known to provide a habitat for federally-listed endangered, threatened or special status species. The following is a listing per site of potential species:

<u>Location</u>	<u>Potential Species</u>
Lower Day Basin	SBKR,CAGN,BUOW
San Sevaine Basins (1-5)	SBKR
Southeast of Jurupa Basin	DSFLF

SBKR=Merriam's San Bernardino Kangaroo Rat CAGN=California Gnatcatcher;  
BUOW=Burrowing Owl; DSFLF=Delhi Sands Flower-Loving Fly

However, it is not anticipated that there will be any impacts on such species. Regardless IEUA will conduct a thorough evaluation to ensure no harm or impacts come to these species. A series of biological survey will be conducted. The following biological study will be made a part of the environmental efforts under this project: Compiling a General Biological Resources Survey conducting a Coastal California Gnatcatcher Survey (CAGN breeding season survey for six site visits); and a San Bernardino Kangaroo Rat survey SBKR, 5 trapping nights. A burrowing owl survey will be conducted during the CAGN survey site visits. All required mitigation based on the environmental review and biological survey will be complied with fully.

Agency staff is familiar with working in this general area to operate and maintain the existing recharge basins and IEUA has O&M permits for the existing basins from the Army Corps of

Engineers, the Regional Water Quality Control Board, the Flood Control District, and the Department of Fish & Game.

*Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as “Waters of the United States?” If so, please describe and estimate any impacts the proposed project may have.*

The San Sevaine Creek Channel, which is adjacent to Jurupa Basin, is a concrete-lined flood control channel with no detectable vegetation. It is considered to be a United States Waterway. Appropriate construction methods and designs will be used to avoid “discharging fill” or discharging pollutants during construction. An Army Corps permit will be required for the construction of the new drop inlet structure from the channel to the Jurupa Basin. Both Deer Creek and Cucamonga Channel, which border and traverse the project site, are concrete-lined flood control channels with no detectable vegetation, but are considered to be U.S. Waterways. Appropriate construction methods and designs will be used to avoid “discharging fill” or discharging pollutants during construction. However, a determination will need to be made whether the construction of a rubber dam, itself, is considered “discharge of fill” under Section 404 of the Clean Water Act.

*When was the water delivery system constructed?*

The IEUA is a member of the Metropolitan Water District of Southern California (MWDSC) and thus acts as a supplemental water provider. One-fourth of the water used in the region is imported from the MWDSC through the SWP. The water delivery system within the IEUA’s 242-square mile service area was constructed in stages between 1940 through 2009.

*Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.*

No.

*Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.*

There are structures listed on the National Register of Historic Places in the IEUA’s service area. They are not located near the Project site.

*Are there any known archeological sites in the proposed project area?*

No.

*Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?*

No.

*Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?*

No.

*Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?*

No.

## **8. Required Permits or Approvals**

*Applicants must state in the application whether any permits or approvals are required and explain the plan for obtaining such permits or approvals.*

*Note that improvements to Federal facilities that are implemented through any project awarded funding through this FOA must comply with additional requirements. The Federal government will continue to hold title to the Federal facility and any improvement that is integral to the existing operations of that facility. Please see P.L. 111-11, Section 9504(a)(3)(B). Reclamation may also require additional reviews and approvals prior to award to ensure that any necessary easements, land use authorizations, or special permits can be approved consistent with the requirements of 43 CFR Section 429, and that the development will not impact or impair project operations or efficiency.*

Permitting documents will be provided prior to the construction of this project including the following:

1. Endangered Species Act (ESA) Section 7 Consultation with US Fish and Wildlife Services (FWS) and/or National Marine Fisheries Service (NMFS) Biological Opinion. The outcome of the biological assessment determines what level of consultation is necessary. This consultation will conclude either informally with written concurrence from the FWS and/or NMFS or through formal consultation with a biological opinion provided to the ACOE.
2. ACOE Section 404 Permit. A permit will be required from the ACOE Regulatory Branch (Los Angeles District Office) should improvements associated with the project result in the discharge of material within the ACOE jurisdiction.
3. State Historic Preservation Officer Section 106 Consultation.
4. Air Quality Conformity Determination.
5. California Department of Fish and Wildlife 1602 Streambed Alteration Agreement (SAA). Areas within this project site are considered jurisdictional by the CDFG. Therefore, a 1602 SAA must be obtained prior to any CDFG jurisdictional impacts. CDFG has the duty to propose avoidance or mitigation measures that limit the project as necessary to prevent adverse impacts to fish and wildlife resources.
6. California Endangered Species Act (CESA) Compliance- CDFG Incidental Take Permit/Consistency Determination. Measures to minimize the take of species covered by the permit (Covered Species) and to mitigate the impacts caused by the take will be set forth in one or more attachments to the permit. This attachment will generally be a mitigation plan (possibly a Habitat Conservation Plan) prepared and submitted by the Permittee in coordination with CDFG staff.
7. Regional Water Quality Control Board (RWQCB) Section 401 Permit.
8. California General Construction Storm Water NPDES Permit.

9. San Bernardino County Flood Control Permit (SBCFCD) construction permits. The permit will allow SBCFCD to review and approve all proposed improvements within basins owned by the District. The permit typically entails special and standard provisions to protect the primary function of each basin which is flood control.

#### **9. Existing Drought Contingency Plan (if applicable)**

*If there is an existing drought contingency plan addressing the relevant geographic area, please attach a copy (or relevant sections) of the existing plan. (Note, this will not count against the application page limit.)*

In September 2016, the IEUA received a \$200,000 Drought Contingency Planning Grant award, Agreement No. R16AC0013, from the U.S. Department of Interior, Bureau of Reclamation (USBR) for a Regional Drought Response Plan (Attachment B), which will incorporate the Agency's existing comprehensive Integrated Water Resources Plan (IWRP) 2015-2040 (Attachment C), Recharge Master Plan Update (RMPU) (Attachment D), Urban Water Management Plan (UWMP) (Attachment L), 2016 Chino Basin Storm Water Resources Plan and IEUA 2009 Drought Plan. These plans as well as the Drought Contingency Planning Grant award (Attachment A) have been provided in the Attachments section.

#### **10. Letters of Support**

*Please include letters from interested stakeholders supporting the proposed project. To ensure your proposal is accurately reviewed, please attach all letters of support/ partnership letters as an appendix. (Note: this will not count against the application page limit.) Letters of support received after the application deadline for this FOA will not be included with your application.*

Please see Attachment M provided as support of the proposed project described within.

#### **11. Official Resolution**

The draft Board Resolution is provided in Attachment N. A final version will be sent after it is signed on February 21, 2018.

# Attachment H



## CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, Ca 91730  
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

PETER KAVOUNAS, P.E.  
General Manager

January 24, 2018

Bureau of Reclamation  
Financial Assistance Operations  
Attn: Mr. Kevin Connolly  
PO Box 25007, MS 84-27814  
Denver, CO 80225

Re: Funding Opportunity Announcement No. BOR-DO-18-F008  
WaterSMART: Drought Response Program: Drought Resiliency Project for FY 2018

To the Selection Committee:

Chino Basin Watermaster (CBWM) is pleased to support the Inland Empire Utilities Agency (IEUA) in its submission of a grant application to the U.S. Bureau of Reclamation (USBR) in response to the Funding Opportunity Announcement No. BOR-DO-18-F008 WaterSMART: Drought Response Program: Drought Resiliency Project for FY 2018. If awarded, the grant would contribute to costs associated with the Wineville Basin, Jurupa Basin Improvements and Pumping and Conveyance System Project (Project).

CBWM has committed \$16,482,900 for the Project as indicated by Task Order No. 9: RMPU Improvement Project 23a, and as outlined in Master Agreement Regarding the Management of Collaborative Recharge Projects between IEUA and CBWM and all amendments hereto; and the Master Recharge Facilities Financing Agreement By and Among Chino Basin Regional Financing Authority, Inland Empire Utilities Agency and Chino Basin Watermaster (Dated as of June 1, 2016); and the 2013 Recharge Master Plan Update Amendment Proposed Yield Enhancement Projects approved by the CBWM Board of Directors on November 17, 2016, which is specific to these projects. The funding provided by CBWM will be made available in increments as each task during the implementation of the Project is commenced. There are no additional time constraints on this funding or any other contingencies associated with the funding commitment.

We are pleased to be a part of this important program, and we look forward to providing assistance to IEUA in gathering and developing the Grant's required reporting documents to monitor the Projects' performance measures.

Sincerely,

A handwritten signature in blue ink, appearing to read 'P. Kavounas', with a horizontal line underneath.

Peter Kavounas, P.E.  
General Manager

cc: Halla Razak, General Manager, IEUA  
Kathy Besser, External Manager of External Affairs and Policy Development, IEUA  
Jason Gu, Manager of Grants, Inland Empire Utilities Agency



# Attachment K

United States Department of the Interior

INTERIOR BUSINESS CENTER  
Indirect Cost Services  
2180 Harvard Street, Suite 430  
Sacramento, CA 95815



May 18, 2015

Ms. Christina Valencia, Chief Financial Officer/  
Assistant General Manager  
Inland Empire Utilities Agency  
P.O. Box 9020  
Chino Hills, CA 91709

Dear Ms. Valencia:

Enclosed is the signed original Negotiated Indirect Cost Rate Agreement that was processed by our office. If you have any questions concerning this agreement, please refer to the signature page for the name and contact number of the negotiator.

As a recipient of federal funds, the regulations require you to maintain a current indirect cost rate agreement. For provisional/final indirect cost rates, Indirect Cost Proposals should be submitted on an annual basis, and they are due within six (6) months after the close of your fiscal year. For predetermined rates and approved rate extensions, proposals are due in our office six (6) months prior to the expiration of your current rate agreement. Please note that proposals are processed on a first-in, first-out basis.

**Common fiscal year end dates and proposal due dates are listed below:**

<b>Fiscal Year End Date</b>	<b>Proposal Due Date</b>
September 30 <sup>th</sup>	March 31 <sup>st</sup>
December 31 <sup>st</sup>	June 30 <sup>th</sup>
June 30 <sup>th</sup>	December 31 <sup>st</sup>

Please visit our Web site at [http://www.doi.gov/ibc/services/Indirect\\_Cost\\_Services](http://www.doi.gov/ibc/services/Indirect_Cost_Services) for guidance and updates on submitting future indirect cost proposals. The website includes helpful tools such as a completeness checklist, indirect cost and lobbying certificates, sample proposals, Excel worksheet templates, and links to other Web sites.

Sincerely,

Deborah A. Moberly  
Office Chief

Enclosure:

cc: Wilson Orvis, Grants Management Analyst, BOR

Ref: J:\States & Local Gov\Local Gov't & Water Districts\Inland Empire Utilities Agency (Ieucw726)\FY 13F 15P\Ieuc-IssueLtr.13F&15P.docx

Phone: (916) 566-7111  
Fax: (916) 566-7110

Email: [ICS@ibc.doi.gov](mailto:ICS@ibc.doi.gov)  
Internet: [http://www.doi.gov/ibc/services/Indirect\\_Cost\\_services](http://www.doi.gov/ibc/services/Indirect_Cost_services)

**State and Local Governments  
Indirect Cost Negotiation Agreement**

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EIN: 95-6004609

**Organization:**

Inland Empire Utilities Agency  
P.O. Box 9020  
Chino Hills, CA 91709

**Date:** May 18, 2015

**Report No(s) .:** 15-A-0677(13F)  
15-A-0678(15P)

**Filing Ref.:**

Last Negotiation Agreement  
dated November 4, 2013

The indirect cost rates contained herein are for use on grants, contracts, and other agreements with the Federal Government to which 2 CFR Part 200 applies for fiscal years beginning on or after December 26, 2014 subject to the limitations in Section II.A. of this agreement. Applicable OMB Circulars and the regulations at 2 CFR 225 will continue to apply to federal funds awarded prior to December 26, 2014. The rates were negotiated by the U.S. Department of the Interior, Interior Business Center, and the subject organization in accordance with the authority contained in applicable regulations.

**Section I: Rates**

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Type	Effective Period		Rate*	Locations	Applicable To
	From	To			
Final	07/01/12	06/30/13	19.39%	All	All Programs
Provisional	07/01/14	06/30/15	27.93%	All	All Programs

**\*Base:** Total direct costs, less capital expenditures and passthrough funds but including subcontract costs that receive full administrative benefits from IEUA.

**Treatment of fringe benefits:** Fringe benefits applicable to direct salaries and wages are treated as direct costs; fringe benefits applicable to indirect salaries and wages are treated as indirect costs.

**Section II: General**

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Page 1 of 3

**A. Limitations:** Use of the rate(s) contained in this agreement is subject to any applicable statutory limitations. Acceptance of the rate(s) agreed to herein is predicated upon these conditions: (1) no costs other than those incurred by the subject organization were included in its indirect cost rate proposal, (2) all such costs are the legal obligations of the grantee/contractor, (3) similar types of costs have been accorded consistent treatment, and (4) the same costs that have been treated as indirect costs have not been claimed as direct costs (for example, supplies can be charged directly to a program or activity as long as these costs are not part of the supply costs included in the indirect cost pool for central administration).

**B. Audit:** All costs (direct and indirect, federal and non-federal) are subject to audit. Adjustments to amounts resulting from audit of the cost allocation plan or indirect cost rate proposal upon which the negotiation of this agreement was based will be compensated for in a subsequent negotiation.

**C. Changes:** The rate(s) contained in this agreement are based on the organizational structure and the accounting system in effect at the time the proposal was submitted. Changes in organizational structure, or changes in the method of accounting for costs which affect the amount of reimbursement resulting from use of the rate(s) in this agreement, require the prior approval of the responsible negotiation agency. Failure to obtain such approval may result in subsequent audit disallowance.

**D. Rate Type:**

1. **Fixed Carryforward Rate:** A fixed carryforward rate is based on an estimate of the costs that will be incurred during the period for which the rate applies. When the actual costs for such periods have been determined, an adjustment will be made to the rate for future periods, if necessary, to compensate for the difference between the costs used to establish the fixed rate and the actual costs.

2. **Provisional/Final Rates:** Within six (6) months after year end, a final indirect cost rate proposal must be submitted based on actual costs. Billings and charges to contracts and grants must be adjusted if the final rate varies from the provisional rate. If the final rate is greater than the provisional rate and there are no funds available to cover the additional indirect costs, the organization may not recover all indirect costs. Conversely, if the final rate is less than the provisional rate, the organization will be required to pay back the difference to the funding agency.

3. **Predetermined Rate:** A predetermined rate is an indirect cost rate applicable to a specified current or future period, usually the organization's fiscal year. The rate is based on an estimate of the costs to be incurred during the period. A predetermined rate is not subject to adjustment. (Because of legal constraints, predetermined rates are not permitted for Federal contracts; they may, however, be used for grants or cooperative agreements.)

4. **Rate Extension:** Only final and predetermined rates may be eligible for consideration of rate extensions. Requests for rate extensions of a current rate will be reviewed on a case-by-case basis. If an extension is granted, the non-Federal entity may not request a rate review until the extension period ends. In the last year of a rate extension period, the non-Federal entity must submit a new rate proposal for the next fiscal period.

**E. Agency Notification:** Copies of this document may be provided to other federal offices as a means of notifying them of the agreement contained herein.

**F. Record Keeping:** Organizations must maintain accounting records that demonstrate that each type of cost has been treated consistently either as a direct cost or an indirect cost. Records pertaining to the costs of program administration, such as salaries, travel, and related costs, should be kept on an annual basis.

**G. Reimbursement Ceilings:** Grantee/contractor program agreements providing for ceilings on indirect cost rates or reimbursement amounts are subject to the ceilings stipulated in the contract or grant agreements. If the ceiling rate is higher than the negotiated rates in Section I of this agreement, the negotiated rates will be used to determine the maximum allowable indirect cost.

H. Use of Other Rates: If any federal programs are reimbursing indirect costs to this grantee/contractor by a measure other than the approved rate(s) in this agreement, the grantee/contractor should credit such costs to the affected programs, and the approved rate(s) should be used to identify the maximum amount of indirect cost allocable to these programs.

I. Central Service Costs: If the proposed central service cost allocation plan for the same period has not been approved by that time, the indirect cost proposal may be prepared including an amount for central services that is based on the latest federally-approved central service cost allocation plan. The difference between these central service amounts and the amounts ultimately approved will be compensated for by an adjustment in a subsequent period.

J. Other:

1. The purpose of an indirect cost rate is to facilitate the allocation and billing of indirect costs. Approval of the indirect cost rate does not mean that an organization can recover more than the actual costs of a particular program or activity.

2. Programs received or initiated by the organization subsequent to the negotiation of this agreement are subject to the approved indirect cost rate(s) if the programs receive administrative support from the indirect cost pool. It should be noted that this could result in an adjustment to a future rate.

3. Indirect cost proposals must be developed (and, when required, submitted) within six (6) months after the close of the governmental unit's fiscal year, unless an exception is approved by the cognizant agency for indirect costs.

Section III: Acceptance

Listed below are the signatures of acceptance for this agreement:

By the State & Local Government:

By the Cognizant Federal Government Agency:

Inland Empire Utilities Agency  
State/Local Government

U.S. Department of the Interior  
Agency

Signature

Signature

Name (Type or Print)

Name

Title

Office Chief  
Office of Indirect Cost Services  
Title

Date

U.S. Department of the Interior  
Interior Business Center  
Agency

Date

Negotiated by Elena Chan  
Telephone (916) 566-7102

*Christina Valencia*

Christina Valencia

CFO / AGM

5-6-15

*Deborah A. Moberly*

Deborah A. Moberly

MAY 18 2015

**Inland Empire Utilities Agency  
Department Overhead Rates**

							FY 2017/18		
Cost Ctr	F A	Wage	Burden	OH	Gen Alloc	Payroll Burden	Overhead Rate		
<b>AGENCY MANAGEMENT DIVISION</b>									
107 / 111100 Internal Audit	111100	100000	701001	702004	703004	710000	75.00%	23.00%	
110 / 112100 Agency Management	112100	100000	701001	702004	703004	710000	75.00%	23.00%	
<b>FINANCE AND ADMINISTRATION DIVISION</b>									
210 / 114100 Finance and Administration	114100	100000	701001	702004	703004	710000	75.00%	23.00%	
220 / 115100 Contracts & Facilities Services	115100	100000	701001	702004	703004	710000	75.00%	23.00%	
230 / 117100 Accounting	117100	100000	701001	702004	703004	710000	75.00%	23.00%	
238 / 171100 Finance & Grants Admin	171100	100000	701001	702004	703004	710000	75.00%	23.00%	
240 / 118100 Business Information Systems	118100	100000	701001	702004	703004	710000	75.00%	23.00%	
250 / 119100 Human Resources	119100/121100/122100	100000	701001	702004	703004	710000	75.00%	23.00%	
<b>EXTERNAL AFFAIRS AND POLICY MANAGEMENT</b>									
115 / 113100 Public Information	113100	100000	701001	702004	703004	710000	75.00%	23.00%	
116 / 162100 Grants HQ	162100	100000	701001	702004	703004	710000	75.00%	23.00%	
117 / 123100 Records Management	123100	100000	701001	702004	703004	710000	75.00%	23.00%	
312 / 139100 Policy Development	139100	100000	701001	702004	703004	710000	75.00%	23.00%	
<b>ENGINEERING DIVISION</b>									
111 / 125100 Engineering, Planning & Science Admin	125100	100000	701001	702004	703004	710000	75.00%	23.00%	
112 / 124100 Planning & Water Resources	124100	100000	701001	702004	703004	710000	75.00%	23.00%	
112 / 130100 Environmental Compliance	130100	100000	701001	702004	703004	710000	75.00%	23.00%	
113 / 135100 Source Control HQ	135100	100000	701001	702004	703004	710000	75.00%	23.00%	
420 / 127100 Engineering & Construction Mgmt.	127100	100000	701001	702004	703004	710000	75.00%	23.00%	
525 / 131151 Laboratory	131151	100000	701001	702004	703004	710000	75.00%	23.00%	
<b>OPERATIONS DIVISION</b>									
220 / 116100 Facilities Management	116100	100000	701001	702004	703004	710000	75.00%	23.00%	
510 / 128100 Operations Administration	128100	100000	701001	702004	703004	710000	75.00%	23.00%	
515 / 129100 Sewer Collection	129100	100000	701001	702004	703004	710000	75.00%	23.00%	
517 / 160100 Technical Services	160100	100000	701001	702004	703004	710000	75.00%	23.00%	
524 / 161100 Groundwater Recharge	158100/159100/161100	100000	701001	702004	703004	710000	75.00%	23.00%	
540 / 151151 RP-1 Operations	151100	100000	701001	702004	703004	710000	75.00%	23.00%	
541 / 140151 Energy Maintenance RP1	140100	100000	701001	702004	703004	710000	75.00%	23.00%	
542 / 141151 North Maintenance RP1	141151	100000	701001	702004	703004	710000	75.00%	23.00%	
546 / 156110 Material Management	156110	100000	701001	702004	703004	710000	75.00%	23.00%	
550 / 152156 CCWRP Operations	152100	100000	701001	702004	703004	710000	75.00%	23.00%	
552 / 144155 South Plant Maintenance RP5	144100/167100/168100	100000	701001	702004	703004	710000	75.00%	23.00%	
554 / 146100 Integrated System Services	146100	100000	701001	702004	703004	710000	75.00%	23.00%	
555 / 157111 Desalter Operations	157111	100000	701001	702004	703004	710000	75.00%	23.00%	
570 / 153154 RP-4 Operations	153100	100000	701001	702004	703004	710000	75.00%	23.00%	
580 / 154155 RP 5 Operations	154100	100000	701001	702004	703004	710000	75.00%	23.00%	
585 / 180152 RP2 Operations	180152	100000	701001	702004	703004	710000	75.00%	23.00%	
590 / 132112 Organics Management RCA	132112	100000	701001	702004	703004	710000	75.00%	23.00%	

# Attachment M



## CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, Ca 91730  
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

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**PETER KAVOUNAS, P.E.**  
General Manager

January 4, 2018

Bureau of Reclamation  
Financial Assistance Support Section  
Attn: Mr. Kevin Connolly  
P.O. Box 25007, MS 84-27814  
Denver, CO 80225

Re: Funding Opportunity Announcement No: BOR-DO-18-F008  
WaterSMART: Drought Response Program: Drought Resiliency Project for FY 2018

To the Selection Committee:

Chino Basin Watermaster is pleased to support the Inland Empire Utilities Agency (IEUA) in its submission of a grant application to the U.S. Bureau of Reclamation (USBR) in response to the Funding Opportunity Announcement No: BOR-DO-18-F008, WaterSMART: Drought Resiliency Project Grants for Fiscal Year 2018. If awarded, the grant would allow IEUA to implement the Wineville-Jurupa Basin Improvements, Pumping, and Conveyance System project.

Chino Basin Watermaster is particularly supportive of this project as it will support the continued drought planning efforts through the implementation of projects to increase the amount of storm water recharge to enhance resiliency. The impact of such projects is critical for effective local sustainability planning for this region, which Chino Basin Watermaster supports as well.

We are excited to be a part of this important program, and we look forward to providing assistance to IEUA's staff in gathering and developing the grant's required reporting documents to monitor the projects' performance measures.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Kavounas', with a long horizontal flourish extending to the right.

Peter Kavounas, P.E.  
General Manger

Cc: Halla Razak, Inland Empire Utilities Agency  
Jason Gu, Inland Empire Utilities Agency

# Attachment N

## RESOLUTION NO. 2018-2-4

**THE BOARD OF DIRECTORS OF THE INLAND EMPIRE UTILITIES AGENCY\*, SAN BERNARDINO COUNTY, CALIFORNIA, AUTHORIZING THE INLAND EMPIRE UTILITIES AGENCY TO ENTER INTO A FINANCIAL ASSISTANCE AGREEMENT UNDER THE WATERSMART: DROUGHT RESPONSE PROGRAM: DROUGHT RESILIENCY PROJECTS FOR FISCAL YEAR 2018 WITH THE U.S. DEPARTMENT OF INTERIOR - BUREAU OF RECLAMATION AND DESIGNATING A REPRESENTATIVE TO EXECUTE THE FINANCIAL ASSISTANCE AGREEMENT, AND ANY AMENDMENTS THERETO**

**WHEREAS**, the United States Department of the Interior, Bureau of Reclamation under the WaterSMART: Drought Response Program: Drought Resiliency Projects for Fiscal Year 2018 will make funding available to qualifying applicants;

**WHEREAS**, the Board of Directors of the Inland Empire Utilities Agency\* has approved a project that exemplifies the objectives of the WaterSMART Drought Response Program: Drought Resiliency Project Grants FY 2018 No. BOR-DO-18-F008;

**WHEREAS**, that the Inland Empire Utilities Agency\* is authorized to enter into a financial assistance agreement under the WaterSMART: Drought Response Program: Drought Resiliency Projects for Fiscal Year 2018;

**WHEREAS**, the General Manager has reviewed and supports the application being submitted;

**WHEREAS**, that the Inland Empire Utilities Agency, along with project partner Chino Basin Watermaster are capable of providing the amount of funding and/or in-kind contributions specified in the grant application funding plan; and

**WHEREAS**, that the Inland Empire Utilities Agency will work with the Bureau of Reclamation to meet established deadlines for entering into a cooperative agreement;

**BE IT RESOLVED**, that the Board of Directors hereby agrees and further does authorize the General Manager to provide the assurances, certifications and commitments required for the financial assistance applications, including executing a financial assistance agreement from the USBR and any amendments or changes thereto; and

**BE IT FURTHER RESOLVED**, that the General Manager is authorized to represent the Agency in carrying out the Agency's responsibilities under the financing agreement, including

certifying disbursement requests on behalf of the Agency and compliance with applicable state and federal laws.

**ADOPTED** this 21<sup>st</sup> day of February, 2018.

---

Steven J. Elie  
President of the Inland Empire  
Utilities Agency\* and of the  
Board of Directors thereof

ATTEST:

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Jasmin A. Hall, Secretary/Treasurer of the  
Inland Empire Utilities Agency\* and of the  
Board of Directors thereof

\*A Municipal Water District

STATE OF CALIFORNIA )  
COUNTY OF ) SS  
SAN BERNARDINO )

I, Jasmine A. Hall, Secretary/Treasurer of the Inland Empire Utilities Agency\*, DO  
HEREBY CERTIFY that the foregoing Resolution being No. 2018-2-4, was adopted at a regular  
Board Meeting on February 21, 2018, of said Agency by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

---

Jasmin A. Hall, Secretary/Treasurer of the  
Inland Empire Utilities Agency\* and of the  
Board of Directors thereof

(SEAL)

\*A Municipal Water District