

**WaterSMART Drought Response Program: Drought
Resiliency Projects for Fiscal Year 2018**

FOA BOR-DO-18-F008

North American Basin Regional Drought
Mitigation Interties Project

PLACER AND SACRAMENTO COUNTIES, CA

Applicant

San Juan Water District
9935 Auburn Folsom Road
Granite Bay, CA 95746

Project Manager

Robert J. Swartz

Regional Water Authority
5620 Birdcage Street, Suite 180
Citrus Heights, CA 95610

rswartz@rwah2o.org

916-967-7692 Phone; 916-967-7322 FAX

February 2018

FEB 13 '18 PM 1:23

Table of Contents

SF-424 Application 1

Budget Form..... 4

SF-424 Assurances 5

Disclosure of Lobbying Activities 7

Title Page..... 8

Table of Contents..... 9

Technical Proposal and Evaluation Criteria 10

 Executive Summary 10

 Background Data 10

 Technical Project Description 15

 Performance Measures..... 18

 Evaluation Criteria..... 18

 Criterion A: Project Benefits 18

 Criterion B: Drought Planning and Preparedness 21

 Criterion C: Severity of Actual or Potential Drought Impacts to be addressed by the Project..... 23

 Criterion D: Project Implementation 25

 Criterion E: Nexus to Reclamation 26

Project Budget..... 27

 Funding Plan and Letters of Commitment 27

 Budget Proposal 28

 Budget Narrative 30

Environmental and Cultural Resources Compliance..... 33

Required Permits or Approvals 34

Existing Drought Contingency Plan 34

Letters of Project Support..... 34

Official Resolution 34

Attachment 1 – Additional Kokila Intertie Information 37

Attachment 2 – Additional Franklin Intertie Information 39

Attachment 3 – Funding Commitment Letters 41

Attachment 4 – Support Letters 43

Appendix A – North American Basin Regional Drought Contingency Plan..... 46

Technical Proposal and Evaluation Criteria

Executive Summary

Date: February 12, 2018
Applicant: San Juan Water District
City: Granite Bay
County: Placer
State: California

This is a collaborative project between two municipal water supply agencies in the Sacramento region, with the San Juan Water District (SJWD) acting as the lead applicant. The Sacramento County Water Agency (SCWA) is a partner. The proposed project will complete two interties that were identified as mitigation measures in response to drought vulnerabilities in the North American Basin Regional Drought Contingency Plan. The SJWD Kokila Intertie will have a capacity to receive up to 2 million gallons per day (mgd) from the Placer County Water Agency as an alternative supply location. The SCWA Franklin Intertie will have a capacity of up to 6.5 mgd to deliver groundwater as an alternative supply source during drought to the City of Sacramento. The projects contribute to the goals of the funding opportunity announcement by completing system modifications to increase the reliability of water supplies during drought. The project partners have committed \$322,184.98 in non-Federal cost share to be matched with the \$300,000 from the WaterSMART Drought Response Program Grant.

The project will continue for 15 months commencing by October 1, 2018 and concluding by December 31, 2019.

The project is not located on a Federal facility.

Background Data

In October 2017, water supply agencies in the greater Sacramento region completed the North American Basin Regional Drought Contingency Plan (NAB RDCP), which was prepared using United States Bureau of Reclamation's (Reclamation) recommended drought contingency planning process in its May 2015 Drought Response Planning Framework. The NAB RDCP was supported with a 2015 Drought Contingency Planning Grant to the Placer County Water Agency, which applied for the funds on behalf of the region. Development of the NAB RDCP and grant management was led by the Regional Water Authority (RWA). RWA is a joint powers authority formed in 2001 to assist in collaborative planning of the region's water agencies.

The NAB RDCP identified 39 structural mitigation actions to improve the region's resiliency with respect to current and future drought conditions. One of the most frequent and cost-effective mitigation measures identified was to construct interties between water supply agencies to allow access to alternatives supply sources and locations during drought conditions.

The entire area subject to the NAB RDCP is shown in **Figure 1**, and includes some 550 square miles, with 17 water suppliers serving a population of more than 1 million people. The RDCP partners are shown on the map in darker blue, with the remainder of the RDCP area shown in lighter blue. The RDCP area encompasses the cities of Citrus Heights, Folsom, Lincoln, Rancho Cordova, Rocklin, Roseville, and Sacramento. The focus of the RDCP is on M&I water supplies with an estimated current regional demand of 500,000 acre-feet per year (AFY) and an estimated 2030 demand of 700,000 AFY. Of the region’s supply, approximately 150,000 AFY is met by local groundwater. Most of the remaining 350,000 AFY of supply is local surface water diversions from the American River and Sacramento River. Of this total, over 98,200 AFY is Reclamation CVP contract water (Reclamation long-term water service contractors include San Juan Water District, City of Folsom, City of Roseville, and PCWA) from the American River and Folsom Reservoir. The remaining surface water is from other sources including Reclamation Settlement Contracts, and pre-1914 water rights. Finally, the region uses about 10,000 AFY of recycled water.

Upon the release of the current funding opportunity announcement (FOA BO-DO-F008), RWA reviewed proposed mitigation projects with the NAB RDCP partner agencies and identified two intertie projects that were able to be completed within the available timeframe of the FOA. The first project is the construction of an intertie by San Juan Water District (SJWD) to PCWA. The second is completion of an intertie by the Sacramento County Water Agency (SCWA) to the City of Sacramento. SJWD is acting as the lead applicant for this FOA, with SCWA acting as a sub-recipient. The two agencies are hereinafter referred to the “project partners.” The project locations are in Placer County and Sacramento County, California within the service areas of the project partners as shown in **Figure 1**. Additional detailed background information for the two project partners is provided below.

Sources of Water Supply. The average annual water supply of the project partners is shown in the table below. For the past five years through 2017, the project partners have supplied an average of 48,111 acre-feet (AF) to primarily urban users. Of this supply, SJWD relies solely on surface water. SCWA’s average supply was 30% was surface water and 70% was groundwater. The entire water supply is within the Sacramento-San Joaquin Bay-Delta watershed.

Five Year Average Water Production of Participants (AF)

	San Juan WD	SCWA	
	Surface Water	Surface Water	Groundwater
2013	14,945	12,993	29,392
2014	11,077	7,443	27,780
2015	9,666	6,416	24,652
2016	11,571	10,369	23,024
2017	11,296	17,897	22,033

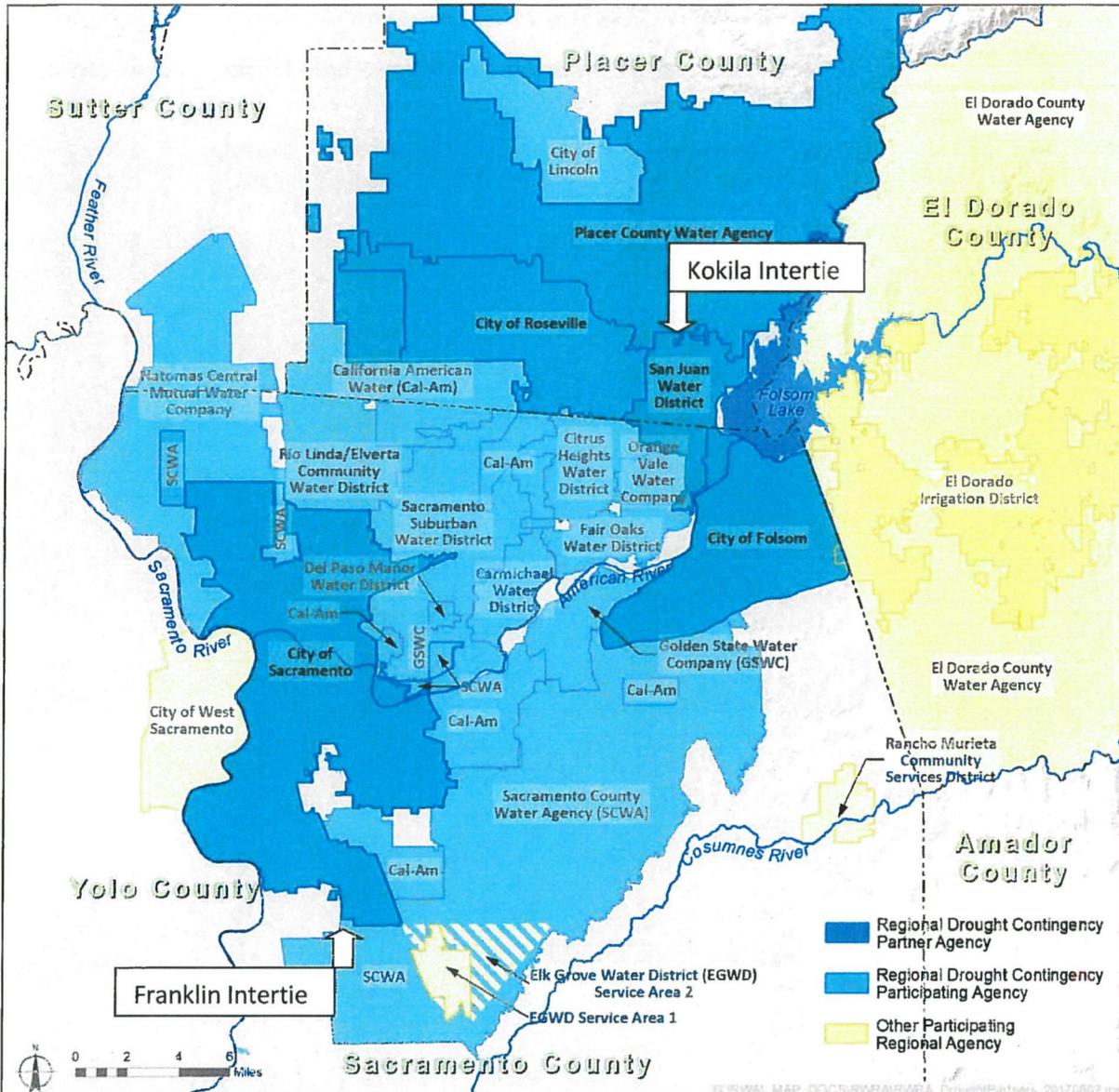


Figure 1. NAB RDCP Area with Project Locations Shown

Water Rights Involved. The sources of surface water supply for the project partners along with the nature of surface water rights are described below. Groundwater is an overlying and appropriative right, which does not require a permit in California.

San Juan Water District. SJWD’s water supply consists of three sources of raw water. The first source is 33,000 acre-feet of senior water rights on the American River. The second source is 24,200 AF of federal Central Valley Project (CVP) water, pursuant to a long-term water service contract that expires in 2045, but which is subject to renewal. The third source is up to 25,000 AF of water pursuant to a contract with the Placer County Water Agency. All of these surface water supplies are either stored or flow through Folsom Lake and delivery is taken via Folsom Dam outlets either by gravity or pumping by the Reclamation’s Folsom Pumping Plant.

Sacramento County Water Agency. SCWA’s surface water rights consists of CVP Water and Appropriative Water Rights. In 1994 and 2006, SCWA entered into agreements with Reclamation for annual amounts of 15,000 AF and 30,000 AF of CVP water, respectively. These supplies are delivered from the Folsom Reservoir. In 1995, SCWA filed for a water right with the State of California and was granted an appropriative water right permit in 2008 to divert at the City of Sacramento diversion structure on the Sacramento River or the Freeport Regional Water Authority intake. This water right allows for diversions of up to 71,000 AFY.

Current Water Uses. Total 2015 water use of the project partners was 38,238 AF. The classification of water use of the project partners is included in the table below. The data are from 2015 Urban Water Management Plan (UWMP) updates submitted to the California Department of Water Resources.

Annual Water Use by Customer Class (AF)

Customer Category	SJWD	SCWA
Single Family Residential	6,952	16,526
Multi-Family Residential	132	729
Commercial, Industrial, Institutional	494	3,339
Landscape	580	1,510
Other	1,506	6,440
Total	9,664	28,574

Number of Water Users Served. The number of connections by customer class and total population served of the project partners is provided in the table below. All information is from 2015 UWMPs.

Current Customer Connections and Population Served

Account Type	SJWD	SCWA
Single Family Residential	10,060	46,090
Multi-Family Residential	119	232
Commercial, Industrial, Institutional	264	1,176
Landscape	236	585
Other	8	48
Total Accounts	10,687	48,131
Population Served	29,525	306,068

Current and Projected Water Demand. The current and projected demand of each of the project partners is listed in the table below. All information is from 2015 UWMPs.

Current and Projected Water Demand (AF)

Year	SJWD	SCWA
2015	9,666	29,149
2025	16,773	55,489
2035	18,509	71,145

Potential Shortfalls in Water Supply. Drought conditions from 2012 through 2016 have revealed potential shortfalls in water supply. Recently, those shortfalls have been managed through customer demand reductions. In 2014, regional customer demands were reduced by approximately 20 percent

compare to 2013 in response to enactment of Water Shortage Contingency Plans. In 2015, regional customer demand reductions were nearly 30 percent compared to 2013. Additional near-term and long-term vulnerabilities to water supply were identified during development of the NAB RDCP. The proposed project seeks to mitigate some of these potential shortfalls.

Water Delivery System. The water delivery facilities of the project partners are described further below.

San Juan Water District. Water supply for SJWD’s retail service area (RSA) is derived from Folsom Reservoir via Peterson Water Treatment Plant. SJWD’s RSA has 8 booster pump stations with a total capacity of 77.2 million per day (mgd), 8 pressure zones, and 3 water storage facilities. Total SJWD-RSA storage is approximately 6.26 million gallons (mg). Additionally, the SJWD-RSA has multiple interties with neighboring agencies for emergency supply during droughts or unexpected outages. The entire SJWD-RSA distribution system consists of approximately 206 miles of pipeline ranging from 33-inch diameter transmission mains down to 2-inch distribution laterals. Pump stations and storage are summarized in the tables below.

SJWD-RSA Booster Pump Stations, Pressure Zones and Capacities (mgd)

Bacon Pump Station	Bacon Pressure Zone	28.8
American River Canyon (ARC) North Pump Station	ARC N. Pressure Zone	10.2
ARC South Pump Station	ARC S. Pressure Zone	5.8
Sierra Pump Station	Sierra Pressure Zone	10.1
Crown Point Pump Station	Crown Point Pressure Zone	5.5
Lower Granite Bay Pump Station	Lower Granite Bay Pressure Zone	10.1
Upper Granite Bay Pump Station	Upper Granite Bay Pressure Zone	5.0
Douglas Pump Station	Bacon/Upper & Lower Granite Bay Pressure Zones	1.7

SJWD-RSA Storage Facilities and Capacities (mg)

Kokila Reservoir	4.56
Los Lagos Reservoir	1.65
Mooney Ridge Hydropneumatic Tank	0.05

Sacramento County Water Agency. SCWA operates 56 active groundwater wells with a combined pumping capacity of 46 mgd, 8 storage tanks with a combined storage capacity of 30.3 million gallons, and 12 groundwater treatment plants with a combined treatment capacity of 37.8 mgd. Additionally, SCWA maintains approximately 98 miles of transmission mains, 622 miles of distribution mains, and 23 miles of raw water transmission mains within the Sacramento County. Currently up to 12,350 AFY can be diverted, treated, and conveyed to the Laguna service area under a treat and deliver agreement with the City of Sacramento.

Past Working Relationships with Reclamation.

The applicant, SJWD, has a strong history of past successful grant partnerships with Reclamation, including:

- SJWD was the awardee for a System Optimization Review (SOR) grant for the greater Sacramento region. The Mid-Pacific Region GOTR participated in project meetings during development of the successful SOR. The project commenced in September 2010 and concluded in September 2012. The project completed on time and was under budget.
- FY2010-11, High Efficiency Clothes Washer (HECW) rebates, irrigation efficiency incentives, hot water on demand system rebates.
- FY2009-10, HECW rebates, irrigation efficiency incentives, hot water on demand system rebates.
- FY2008-09, HECW rebates, irrigation efficiency incentives, customer outreach, service line replacement.
- FY2007-08, HECW rebates, irrigation efficiency incentives, turf replacement incentives, customer conservation baseline study.
- FY2006-07, HECW rebates, irrigation efficiency incentives, hot water on demand system rebates.
- FY2005-06, HECW rebates, ET controllers, hot water on demand system rebates, customer conservation outreach.
- FY2004-05, pond irrigation efficiency program.
- FY2003-04, irrigation controller incentives, leak detector, BMP reporting.
- FY2002-03, irrigation controllers, customer information software.
- FY2001-02, irrigation controller incentives, rain sensors, water meter outreach.
- FY2000-01, demonstration water efficient garden, meter master flow recorder, conservation coordinator.
- FY1999-00, demonstration water efficient garden, school education, public information.
- FY1998-99, school education, low flow toilet rebates.
- FY1997-98, water conservation plan, CIMIS Station, school education.

Technical Project Description

This is a project to construct two interties identified as mitigation measures in the North American Basin Regional Drought Contingency Plan. The project is coordinated through the RWA, which will manage the grant-related activities. The applicant, SJWD, will construct a 2 mgd intertie with PCWA to receive water from PCWA as an alternative source location to diversions that could be limited from Reclamation's Folsom Reservoir during drought conditions. The second intertie will be constructed by SCWA, a grant sub-recipient, to construct a 6.5 mgd intertie with the City of Sacramento. The SCWA intertie will allow SCWA to deliver groundwater as an alternative supply to the City of Sacramento during drought conditions. Both project locations are shown in **Figure 1** above and are described in more detail below.

SJWD Kokila Intertie Project

The proposed Kokila Intertie Project includes the installation of approximately 800-lineal-feet of 12-inch diameter Ductile Iron Pipe, a pressure reducing control valve station, a 12-inch magnetic-type flow meter, and electrical and supervisory control and data acquisition (SCADA) communications

improvements. The proposed intertie will start at the northern end of PCWA's existing 12-inch pipeline, which was installed in 2017. The pipeline will route around the northern boundary of the existing covered Kokila Reservoir where it will connect to the existing Kokila Reservoir inlet/outlet pipeline (See the project site map in **Attachment 1**). Flow from PCWA to SJWD will be via gravity flow through the control valve station to Kokila's 24-inch common inlet/outlet pipeline. The new control valve station will include isolation and air release valves, pressure gauges, and a single 12-inch pressure reducing flow control valve (See the example schematic in **Attachment 1**). The pressure reducing flow control valve will manage flow into SJWD's RSA. Flow through the control valve will either be controlled via an orifice plate in concert with the control valve or through SCADA control in concert with measurements through the flow meter. The control valve station will be housed in a security enclosure to protect the station from being vandalized and to protect the equipment from the elements as necessary to ensure a reasonable service life. The intertie design will include two 12-inch turnouts, including valve isolation, which will daylight to the ground surface and be blind flanged or securely capped-off for protection. An electrical service connection will be located at the portable pump location to power the pump, variable frequency drive and controls. Pumped flow will be measured via the proposed project's new flow meter and SCADA communications. A new electrical service connection drop will be required for the station. Pacific Gas and Electric (PGE) provides power in this area. It is anticipated that the power drop will power the new flow meter, the control valve piloting and monitoring system, and SCADA controls and communications.

SCWA Franklin Intertie Project

The Franklin Intertie Station (Facility) is currently operated in coordination with the City of Sacramento (City) to provide approximately 6.5 million gallons per day (MGD) to the SCWA South Service Area (SSA). The station was originally constructed in 1995 to provide 2 mgd, and then upgraded in the 1999 to provide the current capacity. The Franklin Intertie Station's proposed modifications will allow water to be moved from the SCWA SSA into the City, making the intertie fully bidirectional. To allow water to flow either to the City or SCWA, an additional 16-inch discharge line will need to be installed that bypasses the existing intake along the 18-inch transmission main (See the project site and improvements schematic in **Attachment 2**). This portion of the project will cut in two new tee's and install approximately 18-linear-feet of 16-inch pipe routed underneath the existing 16-inch suction side intake. The facility also requires three new variable frequency drives, a new SCADA antenna mast, new pressure instrumentation, new chlorine analyzer, and new chlorine injection vault. The ability to switch between directions will be remotely controlled using the SCADA system. A total of three new motor actuated butterfly valves will be installed that will allow the remote operation to switch between the two modes of operation.

Project Tasks

Due to the similar nature and scope of these two projects, project activities are organized under the same set of project tasks as described below. By consolidating the projects into a single funding application, we are able to gain efficiencies by having the funding agreement managed (described under Tasks 1 and 6 below) by the RWA project manager, Rob Swartz. The RWA project manager has successfully managed seven previous Reclamation awards. The projects both include the following tasks:

Task 1. Project Management: The RWA project manager will oversee all aspects of the grant requirements on behalf of the participants to ensure they are in full compliance with funding agreement

terms. This will include coordination with Reclamation staff and ensuring that the participants complete their respective tasks as described below in compliance with applicable terms.

Task 2. Environmental Documentation and Permitting: Each project participant will prepare their respective environmental documentation. As the projects consist of improvements at existing facilities only, a categorical exemption filing is expected under the California Environmental Quality Act (CEQA) prior to commencement of the construction element of the project. Each participant will provide a detailed plan map of their respective project areas to Reclamation for completion of the appropriate level of National Environmental Policy Act (NEPA) compliance prior to any ground disturbing activities. There are no structures involved that would require a building permit. A Storm Water Pollution Prevention Plan (SWPPP) will be prepared following county and state requirements by staff of each project participant.

Task 3. Project Design: Each project participant will complete final project design based on the preliminary design estimates provided in this proposal. Both participants have numerous interties with other agencies, so the preliminary design in this proposal is based on past experience. For the Kokila Intertie, SJWD plans to use some in-house design partnered with consulting support. For the Franklin Intertie, SCWA plans to rely on in-house for staff for design.

Task 4. Procurement: For the Kokila Intertie, SJWD and its design consultant will prepare bid documents, advertise the project, solicit bids to construct the improvements, and identify a contractor through a competitive selection process consistent with funding agreement criteria. SJWD also intends to select a contractor to provide construction management services. SCWA will be constructing the Franklin Intertie using in-house staff, so procurement will involve purchasing the materials needed for the project.

Task 5. Project Construction: For the Kokila Intertie, SJWD will have a contractor construct the improvements. SJWD will also oversee the construction and inspection using a combination of in-house staff and a separate contractor to provide construction management services. For the Franklin Intertie, SCWA will construct the project and manage and inspect construction using in-house staff.

Task 6. Performance Reporting: RWA staff will compile information submitted by participating agencies and prepare consolidated reports for submission to Reclamation. Specific reporting includes: prepare semi-annual (or other frequency as specified by Reclamation) reports and reimbursement invoices of the combined participants for submission to Reclamation; and preparation of the final project report at conclusion of the project. SJWD staff will file reimbursement requests using the System for Award Management (SAM). SJWD is already registered with SAM.

Because the projects both involve relatively minor upgrades at facilities owned by each project partner, the construction can be completed within one year of the assumed start date of October 2018 as shown below. The assumed overall completion date at the end of December 2019 reflects the time to fully close out reporting related to the funding agreement.

Overall Project Schedule

	2018				2019											
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>Task 1</i>																
<i>Task 2</i>																
<i>Task 3</i>																
<i>Task 4</i>																
<i>Task 5</i>																
<i>Task 6</i>																

Performance Measures

Provide a brief summary describing the performance measure that will be used to quantify actual benefits upon completion of the project. Performance of the projects will be measured through calibrated flow metering stations located in-line with the intertie pipelines. A new flow meter will be installed as part of the Kokila Intertie. An existing flow meter was recently installed at the Franklin Intertie location. The flow meters will have both instantaneous flow and total volume/quantity flow output to track the current flow volume and peak values, as well as the total volume of water that is transferred through the intertie pipeline over any given time period. The data from the flow meter will be transmitted through the SCADA network connection to each agency’s central SCADA computer where the data will be logged and available in real time and at any future time. Water transferred through the interties will be reported to the regulatory agencies and other interested parties, including RWA, using established reporting systems. The information will be used in annual evaluation of the effectiveness of mitigation actions as identified in the Operational and Administrative Framework of the North American Basin Regional Drought Contingency Plan (included in **Appendix A** of this proposal).

Evaluation Criteria

Criterion A: Project Benefits

In October 2017, water supply agencies in the greater Sacramento region completed the North American Basin Regional Drought Contingency Plan (NAB RDCP). The NAB RDCP identified 39 structural mitigation actions to improve the region’s resiliency with respect to current and future drought conditions. One of the most frequent and cost-effective mitigation measures identified was to construct interties between water supply agencies to allow access to alternatives supply sources and locations during drought conditions. Interties are particularly important because the region covered by the NAB RDCP has 17 water purveyors, some of which multiple service areas. These distinct service areas represent a key vulnerability during times of drought. Interties allow the region to better distribute available water supplies to mitigate impacts to individual service areas. The two projects in this proposal, the SJWD Kokila Intertie and SCWA Franklin Intertie, were both identified as mitigation actions in the NAB RDCP to improve the region’s drought resiliency as described below.

Building long-term resilience to drought

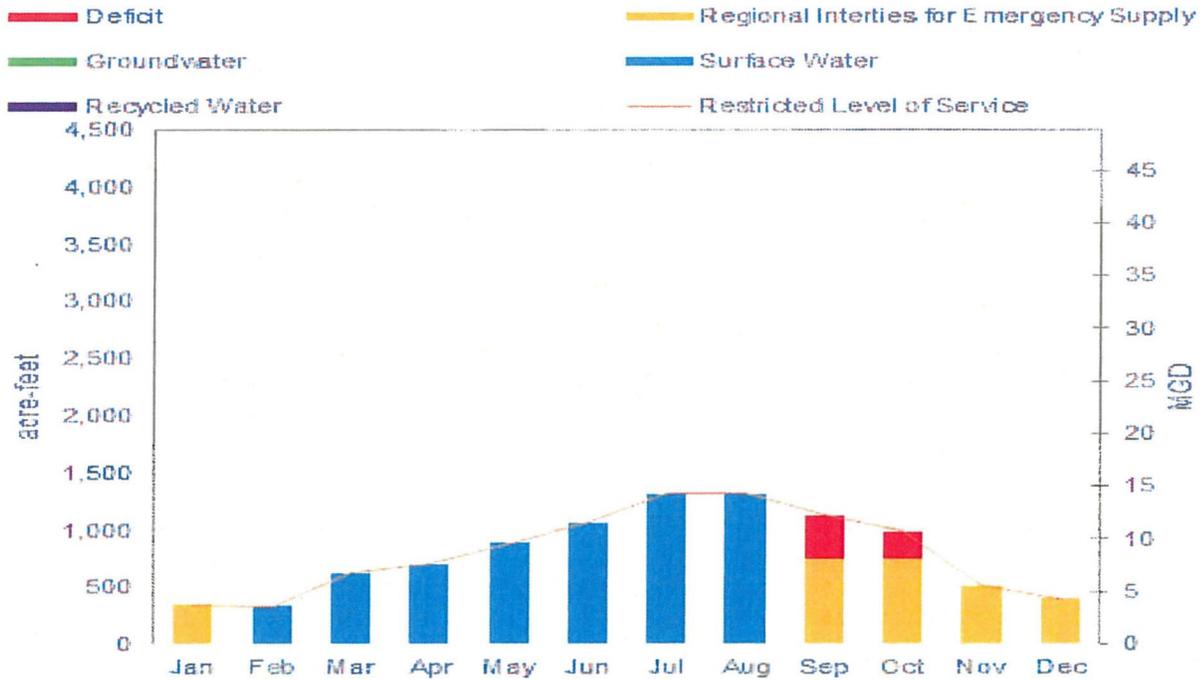
The SJWD Kokila Intertie improves long-term drought resilience by providing an additional alternative location for the diversion of surface water by SJWD. SJWD has historically relied on Folsom Reservoir for its diversion. That diversion has shown itself to be increasingly vulnerable due to low storage in Folsom during drought conditions. In 2015, Folsom Reservoir experienced the lowest storage ever at about 135,000 AF, since the reservoir was operational in 1956. In response, SJWD has been improving interties with neighboring agencies to improve drought resiliency. The project is expected to have a serviceable lifetime of 50 years.

The SCWA Franklin Intertie improves long-term drought resilience by providing an alternative supply in the form of groundwater to the City of Sacramento during drought. Over the past two decades, water agencies in the region have taken many steps to actively manage local groundwater basins sustainably. As a result, the groundwater basin has shown resiliency to drought including during the most recent extreme drought conditions experienced in California. SCWA has a well-managed groundwater system adjacent to the City of Sacramento that can be supplied into the City to improve drought resiliency. The project is expected to have a serviceable lifetime of 50 years.

Additional water supplies available

The SJWD Kokila Intertie will provide an alternative surface water source of up to 2 mgd to SJWD from PCWA. This represents a potentially significant relative benefit to SJWD's retail service area. As part of the NAB RDCP development, supply portfolios were developed for each agency. The portfolios looked vulnerabilities based on different years. While SJWD has a generally reliable water supply, the analysis revealed a potential vulnerability during highly restricted supply scenarios (e.g., multi-year drought conditions). The graph shows SJWD's demand (represented by the "Restricted Level of Service" line on the graph throughout the year in drought years. This demand already reflects a 30 percent reduction by customers as a result of triggering SJWD's Water Shortage Contingency Plan. Below the demand a summary of available supplies. This shows that in many months, SJWD will continue to have enough surface water from Folsom Reservoir to meet demands. However, following the summer months, there may not be enough surface water to meet demands. The graph shows that SJWD has already invested in interties with neighboring agencies to address this vulnerability. However, based on available capacities of the interties and demand projections, of 2 mgd to 4 mgd exist in September and October. The proposed intertie effectively closes this gap in October and addresses about 50 of the deficit in September.

Water Budget - Highly Restricted Supply Scenario



SJWD Water Demand and Supply Projections During Multi-Year Drought as Calculated during NAB RDCP Development.

The SCWA Franklin Intertie will provide additional water supply to the City of Sacramento that has already been demonstrated to be significant. As described above there is an existing intertie at the location that was constructed originally to move water from the City to SCWA that was constructed in 1995. Through the time, SCWA has improved its own supply in that part of its service, so the City has not delivered water for over a decade. At the height of the recent California drought, SCWA conducted a pilot test to see if water could be supplied in reverse (from the SCWA to the City) from January through March 2015. As shown in the table below, SCWA provided between 2 and 3 mgd throughout those months to the City. This constituted between 2 percent to 6 percent of the City’s overall supply during that period. With the proposed improvements, the Franklin Intertie can be operated for longer periods of time and at 6.5 mgd capacity. This will effectively provide greater than 10% of the City’s supply during winter months. The offset surface water use during these times can remain in Folsom Reservoir.

Water Provided During 2015 Pilot Testing at Franklin Intertie

	January	February	March
City Surface Water Production (mgd)	38	38	53
City Groundwater Production (mgd)	14	15	13
SCWA Groundwater from Intertie (mgd)	3	2	2
Total City Water Supply (mgd)	55	55	68
Percent of Supply from SCWA Groundwater	6%	4%	2%

An additional water quality benefit of the Franklin Intertie occurs during drought conditions. During drought, there is less customer demand for water. The Franklin Intertie is on the far south end of the City's distribution system. When customer demands go down, water tends to remain in the pipes for a longer period of time resulting in water quality concerns with the formation of trihalomethanes (THMs) as disinfection byproducts. The infusion of the SCWA groundwater, which is disinfected at the groundwater source location just south of the City, helped reduce THMs in the City's system.

Improve the management of water supplies

Both the SJWD Kokila Intertie and the Franklin Intertie will result in improved management of water supplies. The relative benefits to supply are described above. Both facilities will be automated and controlled via SCADA resulting in more efficient operations as well as flexibility of operations. Real-time decisions can be made based on the SCADA flow information provided that can be implemented quickly (e.g., the sites will not require staff to go the locations to manually operate valves) through the automation of the controls that can be managed through operations centers of the respective project partners. The continuous information provided by the SCADA systems will provide new information to water managers in the form of flow across the interties.

Benefits to fish, wildlife, or the environment

The Franklin Intertie may also provide benefit to fish. As described in the NAB RDCP, the region's water purveyors entered into the Water Forum Agreement in April 2000. As part of that agreement, local agencies committed to expending conjunctive use operations that result in groundwater being used preferentially during dry periods to preserve surface water for fish species in the Lower American River. The project can provide up to 6.5 mgd of groundwater in lieu of surface water. Surface water can then be preserved to benefit Lower American River flows, which support more than 40 native and non-native fish species, including fall-run Chinook Salmon and Central Valley steelhead trout.

Criterion B: Drought Planning and Preparedness

The projects in this proposal are supported by the existing North American Basin Regional Drought Contingency Plan (NAB RDCP). The NAB RDCP was prepared using Reclamation's Drought Response Program Framework and was supported by a 2015 Reclamation Regional Drought Contingency Planning Grant (Agreement R15AC00078). Five agencies with Reclamation contracts in the North American Basin (PCWA, SJWD, cities of Folsom, Roseville, and Sacramento) and RWA served as the planning leads for development of the plan. The Reclamation Drought Response Program Coordinator verified that the NAB RDCP was in accordance with Drought Response Program requirements on November 17, 2017. A copy of the NAB RDCP is attached as **Appendix A** at the end of this proposal.

How the applicable plan addresses drought

The NAB RDCP was prepared to address drought. All components of Reclamation's Drought Response Program Framework were developed including:

- Drought Monitoring Framework
- Vulnerability Assessment
- Mitigation Actions
- Response Actions

- Operational and Administrative Framework
- Plan Update Process

The NAB RDCP was developed with multiple stakeholders on a Drought Planning Task Force (DPTF) that participated in eight public workshops throughout plan development. Stakeholder outreach and input was further encouraging by using a web page to post information throughout plan development at: <http://rwah2o.org/regional-water-reliability-and-drought-contingency-plan/>. The planning leads invited the remaining water agencies in the North American Basin as well as the California Department of Water Resources and the Sacramento Water Forum (representing environmental water interests). The following agencies participated in the DPTF:

- California Department of Water Resources
- California American Water
- Carmichael Water District
- Citrus Heights Water District
- City of Folsom
- City of Lincoln
- City of Roseville
- City of Sacramento
- Del Paso Manor Water District
- Fair Oaks Water District
- Golden State Water Company
- Orange Vale Water Company
- Placer County Water Agency
- Regional Water Authority
- Rio Linda/Elverta Community Water District
- Sacramento County Water Agency
- Sacramento Suburban Water District
- Sacramento Water Forum
- San Juan Water District

To ensure a collaborative process, the NAB RDCP planning leads developed, and subsequently implemented, a Communications and Outreach Plan that was approved by Reclamation. The initial DPTF meeting was used to refine the purpose, goals, and objectives for the RDCP; confirm roles and responsibilities; discuss potential constraints for planning purposes; agree on protocols for communications and interactions with elected officials and other organizations/agencies that may be become involved in this process; and agree on the outlined RDCP schedule and milestones.

The NAB RDCP qualitatively considered the impacts of climate change by reviewing the results of the 2014 Reclamation Sacramento and San Joaquin Basins Climate Impact Assessment and the 2016 Sacramento San Joaquin River Basins Study that outlined major effects of climate change on temperature, precipitation, and runoff. A key mitigation measure to address climate change that is still

undergoing development is the establishment of a regional groundwater bank as a key storage reserve to address long-term water reliability. A more quantitative assessment of climate change is currently underway through the American River Basin Study, which is being conducted under a memorandum of agreement between Reclamation, PCWA, El Dorado County Water Agency, the cities of Folsom, Roseville, and Sacramento, and RWA.

How the proposed drought resiliency project is supported by an existing drought plan

Priority structural mitigations actions of the NAB RDCP include the construction of interties to better distribute water between agencies to increase water supply reliability. The projects, SJWD Kokila Intertie (Project ID S-18) and SCWA Franklin Intertie (Project ID S-32) are identified in the NAB RDCP. The established goal of the NAB RDCP is to increase the resiliency of the region's water resources in the face of future climate and drought conditions. The ability to redistribute water throughout the region, particularly during drought conditions, is supportive of this goal. The proposed projects directly help achieve this.

The SJWD Kokila Intertie was prioritized as High for drought resiliency in the NAB RDCP, but considered a low priority for short term implementation. This was due to SJWD not planning to construct the project for somewhere between 5-10 years. However, the grant funding opportunity has incentivized SJWD's commitment to accelerate the project. The SCWA Franklin Intertie is prioritized as Moderate for drought resiliency and Moderate for short term implementation. As the conceptual design for the SCWA Franklin project has advanced, both SCWA and the City of Sacramento have realized that the project has significantly more value for drought protection and at a lower cost than originally considered. As a result, these agencies have committed to moving forward more aggressively with the project.

Criterion C: Severity of Actual or Potential Drought Impacts to be addressed by the Project

Ongoing or potential drought impacts to specific sectors in the project area if no action is taken

During development of the NAB RDCP, all water sectors were considered. Impacts to public water supply and environmental water sectors were substantially greater than all of the other sectors given the makeup of the region. As described in the project benefits section above, SJWD projects supply deficits near the end of the summer period that can be mostly mitigated by the Kokila Intertie. The project will help allow maintaining minimal outdoor watering to allow for keeping landscaping alive. Without additional improvements, additional restrictions could be necessary to reduce demand to health and safety levels only.

The SCWA Franklin Intertie can help environmental flows by providing an alternative groundwater supply in place of surface water. The 6.5 mgd capacity translates to 10 cubic feet per second of surface flow. This can provide a direct benefit to fish in the Lower American River, which supports fall-run Chinook Salmon and Central Valley steelhead trout. The water quality benefit is that the groundwater will reduce THMs that develop in the City of Sacramento southern service area when distribution system flows are reduced during drought periods. The City's south service area is a disadvantaged community, so the reduction of THMs health address both public health and social inequity concerns.

The threats from drought are significant in the North American Basin. The 2012 through 2016 was the driest period in modern recorded history. The drought resulted in the lowest ever storage levels in December 2014 at about 135,000. At these levels, the lake was nearing the lowest storage intakes for SJWD, and the cities of Roseville and Folsom. The situation was so dire that temporary barges with pumps were placed in Folsom Reservoir by Reclamation to provide an emergency intake for the City of Folsom, which had no other supply options. Fortunately, winter rains started in the second week of December that brought storage levels up such that the emergency pumps were never used. However, more than \$3 million was expended for that temporary measure.

Recent conditions have water managers concerned that we may again be heading towards drought conditions. The February 2018 snow survey conducted by the California Department of Water Resources shows the Central Sierra Snowpack (which feeds the American River and Folsom Reservoir) at just 27% of normal. The overall snowpack is at levels near the height of the drought in 2014 and 2015. While there may be enough water stored in California's reservoirs for a relatively normal supply year in 2018, it is prudent to prepare for dry conditions looking into 2019. The proposed projects will be operational by the end of summer 2019, which is a period in which deficits are commonly projected.

The 2014 Reclamation Sacramento and San Joaquin Basins Climate Impact Assessment and the 2016 Sacramento San Joaquin River Basins Study outlined major effects of climate change on temperature, precipitation, and runoff:

- Temperatures are projected to increase steadily during this century, with generally greater changes occurring farther inland. In the Sacramento region, warming increases by about 1 degree Celsius (°C) to 3°C (1.8°F to 5.4°F) at mid-21st century (2055) and about 2°C to 5°C (3.6°F to 9°F) at end-of-century (2084) (Reclamation, 2014).
- Projections of future precipitation have a much greater range of variability than those for temperature. In the northern part of the Sacramento Valley, projections indicate a slight increase of about 2 percent in precipitation around the mid-century period with increases continuing into the late century (Reclamation, 2016).
- Snowpack, as measured by April 1st snow water equivalent (SWE), is projected to decrease continuously throughout the 21st century. Snowmelt from the Sierra Nevada currently provides an annual average of 15 million acre-feet of water, slowly released between April and July each year. The greatest changes will occur in the lower elevations of the basins. By 2025, the Sacramento Valley watershed is projected to experience decreases in the April 1st SWE in the range from 10 percent in the higher portions of the watershed to 70 percent in the lower elevations. By the end of the century, even the highest elevations may see a decrease of 70 percent (Reclamation, 2016).
- Evapotranspiration is projected to increase continuously during the 21st century due to warmer temperatures. This would result in longer growing season lengths, thus increasing the amount of water needed for the irrigation of many crops, urban landscaping, and environmental water (Reclamation, 2016).
- Projected runoff in the Sacramento Region varies by climate scenario. Under the no climate change scenario, average annual runoff was about 22,739 thousand acre-feet (TAF)/year in the Sacramento Region. Across the range of all climate scenarios, average annual runoff ranged from 17,993 to 31,899 TAF/year for 2012-2040; 16,989 to 29,129 TAF/year for 2041-2070; and

18,372 to 28,695 TAF/year for 2071-2099 (Reclamation, 2014). In the median climate scenario, average annual runoff was only slightly higher than the no climate change scenario.

- Higher temperatures during winter are projected to cause more precipitation to occur as rainfall causing increased runoff, less snowpack water storage and earlier spring snowmelt runoff with reduced volume. This seasonal shift is greater in basins where the elevations of the historical snowpack areas are relatively low and, therefore, more susceptible to warming induced changes in precipitation from snow to rain (Reclamation, 2014).

Criterion D: Project Implementation

Implementation plan of the proposed project

Both project partners have implemented projects of a similar nature and have received past Reclamation grant awards, so the implementation plan for the proposed project is well defined including components related to working with grant fund requirements. Because the interties are relatively small projects to be constructed at existing facilities, project construction is scheduled to be completed within one year of an assumed start date of October 2018 as shown in the schedule below. Project management tasks would commence immediately upon award notification and continue throughout the duration of the project schedule. Upon award recommendation, all participants will provide information necessary for Reclamation to prepare a NEPA analysis and each participant will complete CEQA by November 2018. The project partners will complete final design by the end December 2018 and procure contractors or materials by the end of February 2019. Construction will occur between March and September 2019. Semi-annual reports and invoices would begin in March 2019 and continue every six months for the duration of the project. A draft final project report would be submitted in November 2019 and the final project report would be submitted in December 2019 to close out the project.

Project Schedule

	2018				2019												
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<i>Task 1 Project Management</i>																	
<i>Task 2 Environmental Documentation and Permitting</i>																	
<i>Task 3 Project Design</i>																	
<i>Task 4 Procurement</i>																	
<i>Task 5 Project Construction</i>																	
<i>Task 6 Performance Monitoring</i>																	

The schedule assumes that NEPA will be completed by the end of November 2018. This estimate is based on our experience with Reclamation on the American Recovery and Reinvestment Act grant in

2009, the FY12, FY 13, FY14 Bay-Delta Restoration Program Grants, and an FY14 WaterSMART Water and Energy Efficiency Grant awarded to Sacramento Suburban Water District and managed by RWA. The previous projects are all similar in nature to the current proposed project in that they are improvements at existing facilities. However, sufficient flexibility exists in the project to ensure that construction activities will be completed within the 24-month project duration, even in the event that NEPA compliance were to take longer than anticipated.

Permits that will be required

Both projects are located on property owned by the project partner agencies. As such, limited permitting is anticipated. The State Water Resources Control Board oversees the State's General Permit for Discharges of Storm Water Associated with Construction and Land Disturbance Activities (known as the "Construction General Permit"), and this is the regulatory mandate that may require the projects to comply with a project specific Storm Water Pollution Prevention Plan (SWPPP). The projects will register with the State at the following URL: <https://smarts.waterboards.ca.gov/> for the State's Storm Water Multiple Application and Report Tracking System.

The only other approval would be to install the portion of the Kokila Intertie pipeline with the existing PCWA pipeline, which is not on SJWD property. PCWA will allow the work to be completed on that segment with an existing easement, so no encroachment permits will be needed.

Engineering or design work performed specifically in support of the proposed project

Engineering/design work performed for the SJWD Kokila Intertie has been by the SJWD Engineering Services Manager. SJWD has put together probable construction cost estimate (included in **Attachment 1**) based on past experience with other interties with PCWA, knowledge operating pressures of the two systems, and existing pipeline sizes of PCWA and SJWD at the existing Kokila Reservoir.

Engineering/design work performed for the SCWA Franklin Intertie has been by an SCWA Assistant Engineer overseen by an SCWA Associate Engineer. SCWA has developed a materials and in-house construction cost estimate (included in **Attachment 2**) based on past experience with other interties and pilot testing in 2015 of the existing intertie. The upgrades are needed to operate the intertie on a permanent, long-term basis.

Environmental compliance estimate

This estimate is based on our experience with Reclamation on several grant-funded projects (the American Recovery and Reinvestment Act grant in 2009, the FY12, FY 13, FY14 Bay-Delta Restoration Program Grants, and an FY14 WaterSMART Water and Energy Efficiency Grant) awarded to Sacramento Suburban Water District and managed by RWA. We attempted to reach Reclamation Mid-Pacific Region staff during development of this application but were unable to do so. Past projects for improvements at existing facilities with no sensitive species, wetlands, eligible structures or archaeological sites have resulted in a NEPA Categorical Exemption Checklist. Recent past expenses for that analysis were \$1,500. We assumed \$3,000 as a conservative estimate for NEPA analysis by Reclamation for the current proposed project.

Criterion E: Nexus to Reclamation

Describe the nexus between the proposed project and a Reclamation project or activity, including:

How is the proposed project connected to a Reclamation project or activity? This project is integrally linked to Reclamation Mid-Pacific Region facilities and activities at Folsom Reservoir. The alternative locations and groundwater source have the potential to provide benefit to these facilities during drought conditions. All surface water diversions of the collaborative partners in this application are taken primarily from the American River with additional diversions from the Sacramento River.

Will the project benefit any tribe(s)? There are no tribes in the project, so tribes are not expected to benefit from the project.

Does the applicant receive Reclamation project water? The applicant (SJWD) has a contract for up to 24,200 AF of CVP water, pursuant to a long-term water service contract that expires in 2045, but which is subject to renewal. In 1994 and 2006, SCWA entered into agreements with Reclamation for annual amounts of 15,000 AF and 30,000 AF of CVP water, respectively.

Is the project on Reclamation project lands or involving Reclamation facilities? The project is not located on Reclamation project lands, but the surface water diversions for the collaborative partners in this application are integrally linked to operations at Folsom Reservoir.

Is the project in the same basin as a Reclamation project or activity? The project is located entirely within the lower American River Basin, which is a integrally linked to Reclamation Mid-Pacific Region facilities and activities.

Will the proposed work contribute water to a basin where a Reclamation project is located? The proposed project will contribute water benefits both within the lower American River Basin and to the California Bay-Delta during drought conditions through the alternative groundwater supply, which provides benefit to Reclamation.

Project Budget

Funding Plan and Letters of Commitment

Funding for the non-Federal share of project costs will come directly from the project participants, SJWD and SCWA. The cost share will be in the form of both direct and in-kind contributions as identified in the summary table below. Additionally, RWA will serve as the funding agreement project providing in-kind cost share. Specific questions from the FOA are answered below.

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. SJWD will acquire its cost share from its CIP budget approved by its Board of Directors and funded by customer water rates. The cost-share funds will be expended on the purchase and installation of the meters that are planned for installation as part of this project. Nearly all of the cost share is direct monetary contribution with a small amount of in-kind sources for project design and inspection as noted in the summary of funding sources table below.

Describe any in-kind costs incurred before the anticipated project start date that you seek to include as project costs. There are no costs included before the project start date.

Provide the identity and amount of funding to be provided by funding partners, as well as the required letters of commitment. The SCWA and RWA are funding partners, and their direct and in-kind contributions are noted in the summary of funding sources below. The required letters of commitment are included in this application as **Attachment 3**.

Describe any funding requested or received from other Federal partners. There is no funding requested or received from other Federal partners for the proposed 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. There are no pending funding requests for the proposed project.

Summary of Non-Federal and Federal Funding Sources.

Funding Sources	Funding Amount
Non-Federal Entities	
San Juan Water District	\$ 220,195.00
San Juan Water District (In-Kind)*	\$ 8,142.98
Sacramento County Water Agency	\$ 44,304.70
Sacramento County Water Agency (In-Kind)*	\$ 42,226.46
Regional Water Authority	\$ -
Regional Water Authority (In-Kind)*	\$ 7,315.84
Non-Federal Subtotal	\$ 322,184.98
Other Federal Entities	
None	\$ -
Other Federal Subtotal	\$ -
Requested Reclamation Funding	\$ 300,000.00
Total Study Funding	\$ 622,184.98

Budget Proposal

A detailed budget proposal following Reclamation’s suggested format is included on the following page. Additional detail for the budget is provided in the Budget Narrative section below. In the SF424C Budget Information table at the beginning of the proposal, project tasks were assigned to Cost Classification categories as follows: Task 1 and Task 6 were assigned to “Administrative and legal expenses”; Task 2 was assigned to “Miscellaneous”; Task 3 and Task 4 were assigned to “Architectural and engineering fees”; Task 5 was assigned to “Construction” with the exception of the SJWD Construction Inspector, which was assigned to “Project inspection fees.”

Budget Item	\$/Unit	Unit	Quantity	Local Funding	Reclamation Funding	Total Cost
Salaries and Wages						
Manager of Technical Services, RWA	96.79	Hour	56	\$ 5,420.24	\$ -	\$ 5,420.24
Engineering Services Manager, SJWD	69.92	Hour	56	\$ 3,915.52	\$ -	\$ 3,915.52
Director of Finance, SJWD	81.33	Hour	6	\$ 487.98	\$ -	\$ 487.98
Constructor Inspector, SJWD	41.99	Hour	35	\$ 1,469.65	\$ -	\$ 1,469.65
Assistant Engineer, SCWA	45.21	Hour	48	\$ 2,170.08	\$ -	\$ 2,170.08
Associate Civil Engineer, SCWA	54.92	Hour	10	\$ 549.20	\$ -	\$ 549.20
Water Quality Control System Supervisor, SCWA	49.41	Hour	20	\$ 988.20	\$ -	\$ 988.20
Sr Water Quality Control System Tech, SCWA	44.91	Hour	34	\$ 1,526.94	\$ -	\$ 1,526.94
Water Quality Control System Tech, SCWA	33.37	Hour	17	\$ 567.29	\$ -	\$ 567.29
Water Treatment Operations Supervisor, SCWA	44.93	Hour	50	\$ 2,246.50	\$ -	\$ 2,246.50
Sr Water Treatment Operator, SCWA	38.97	Hour	104	\$ 4,052.88	\$ -	\$ 4,052.88
Water System Operator, SCWA	33.75	Hour	108	\$ 3,645.00	\$ -	\$ 3,645.00
Electrician, SCWA	39.82	Hour	208	\$ 8,282.56	\$ -	\$ 8,282.56
Senior Engineering Technician, SCWA	33.03	Hour	4	\$ 132.12	\$ -	\$ 132.12
Senior Distribution Operator, SCWA	37.14	Hour	100	\$ 3,714.00	\$ -	\$ 3,714.00
Fringe Benefits						
Manager of Technical Services, RWA	33.85	Hour	56	\$ 1,895.60	\$ -	\$ 1,895.60
Engineering Services Manager, SJWD	24.92	Hour	56	\$ 1,395.52	\$ -	\$ 1,395.52
Director of Finance, SJWD	28.06	Hour	6	\$ 168.36	\$ -	\$ 168.36
Constructor Inspector, SJWD	20.17	Hour	35	\$ 705.95	\$ -	\$ 705.95
Assistant Engineer, SCWA	19.80	Hour	48	\$ 950.40	\$ -	\$ 950.40
Associate Civil Engineer, SCWA	22.01	Hour	10	\$ 220.10	\$ -	\$ 220.10
Water Quality Control System Supervisor, SCWA	20.76	Hour	20	\$ 415.20	\$ -	\$ 415.20
Sr Water Quality Control System Tech, SCWA	17.91	Hour	34	\$ 608.94	\$ -	\$ 608.94
Water Quality Control System Tech, SCWA	14.65	Hour	17	\$ 249.05	\$ -	\$ 249.05
Water Treatment Operations Supervisor, SCWA	19.52	Hour	50	\$ 976.00	\$ -	\$ 976.00
Sr Water Treatment Operator, SCWA	18.38	Hour	104	\$ 1,911.52	\$ -	\$ 1,911.52
Water System Operator, SCWA	17.19	Hour	108	\$ 1,856.52	\$ -	\$ 1,856.52
Electrician, SCWA	25.48	Hour	208	\$ 5,299.84	\$ -	\$ 5,299.84
Senior Engineering Technician, SCWA	17.03	Hour	4	\$ 68.12	\$ -	\$ 68.12
Senior Distribution Operator, SCWA	17.96	Hour	100	\$ 1,796.00		\$ 1,796.00
Travel	NA					
Equipment	NA					
Supplies (1)	Varies			\$ 44,304.70	\$ 90,000.00	\$ 134,304.70
Contractual (2)	Varies	Each	2	\$ 61,295.00	\$ -	\$ 61,295.00
Construction (3)	Varies	Each	1	\$ 158,900.00	\$ 207,000.00	\$ 365,900.00
Environmental/Regulatory	\$3,000/ analysis	Each	1		\$ 3,000.00	\$ 3,000.00
Other	NA					
Total Direct Charges				\$ 322,184.98	\$ 300,000.00	\$ 622,184.98
Indirect Charges	NA					
Totals				\$ 322,184.98	\$ 300,000.00	\$ 622,184.98

- (1) Supplies are for SCWA Franklin Intertie. A detailed list of supplies based on the engineer's estimate of costs is included in **Attachment 2**.
- (2) Contractual support for SJWD Kokila Intertie. SJWD anticipates one contractor for design and bidding support and one contractor for construction management.
- (3) Construction is for SJWD Kokila Intertie. SJWD engineer's estimate is included in **Attachment 1**.

Budget Narrative

Salaries and Wages. Overall management of the grant award will be provided by Rob Swartz, Manager of Technical Services for RWA. Rob has managed seven previous grant awards from Reclamation on behalf of RWA member agencies. The primary point person for the SJWD Kokila Intertie will be Rob Watson, Engineering Services Manager. The primary point person for the SCWA Franklin Intertie will be Nikolas Werner, Assistant Engineer. A detailed breakdown of estimated hours and wages by task for RWA and the project partners is provided in the **Summary Table of Wages and Fringe Benefits** table below. These wages are being provided as local cost share only.

RWA will act as the overall project manager coordinating the participants and Reclamation, and preparing interim reports, reimbursement invoices, and final project reporting (project **Tasks 1 and 6**). RWA will conduct a kickoff meeting at the start of the project with the primary contacts of the project partners to review the terms of the funding agreement (**Task 1**). SJWD and SCWA will provide in-house engineers to prepare CEQA, provide information to Reclamation for NEPA, and prepare Storm Water Pollution Prevention Plans (SWPPP) (**Task 2**). SJWD will provide in-house engineering for project design with contractor support (**Task 3**). SCWA complete final design using in-house staff only (**Task 3**). SJWD will complete bid specifications and construction contractor selection using in-house engineering with contractor support (**Task 4**). SCWA will procure material materials for the project using in-house engineering staff (**Task 4**). SJWD will oversee construction and construction inspection with in-house and construction management services provided by a contractor (**Task 5**). SCWA will complete all construction activities using in-house staff as detailed in the table below (**Task 5**). The SJWD and SCWA primary contacts will provide updates and invoices to the RWA project manager for reporting and reimbursement requests (**Task 6**). The SJWD Director of Finance will submit reimbursement request through the SAM system and distribute payment to SCWA as a sub-recipient (**Task 6**).

Fringe Benefits. Fringe benefits for full time permanent employees and their families include taxes, Social Security, Medicare, medical insurance, vision insurance, dental insurance, retirement contributions, and workers compensation. The value of hourly fringe benefit will vary by the employee. The actual calculated hourly fringe benefit rate for each assigned employee is shown in the **Summary Table of Wages and Fringe Benefits** table below. These benefits are being provided as local cost share only.

Travel. No travel is required for the project.

Equipment. No equipment is anticipated to be purchased or leased for the project. Equipment for the SJWD Kokila Intertie will be provided by the construction contractor. Equipment for the SCWA Franklin Intertie project is already owned by SCWA.

Supplies/Materials. Supplies/materials for the SJWD Kokila Intertie will be provided by the construction contractor. A list of the expected materials for the Kokila Intertie is included in **Attachment 1**. SCWA will procure all supplies/materials for the project. A detailed list of the Franklin Intertie supplies/materials is included in **Attachment 2**. Estimates and costs of materials for both projects were developed by in-house engineers during the preliminary design phase within the past month.

Summary Table of Wages and Fringe Benefits

Task 1	Project Management	Total Hours	Wages	Fringe Benefits	Total Cost
RWA	Manager of Technical Services	24	96.79	33.85	\$ 3,135.36
SJWD	Engineering Services Manager	4	69.92	24.92	\$ 379.36
SCWA	Assistant Engineer	4	45.21	19.80	\$ 260.04
Task 2	Environmental Documentation and Permitting				
SJWD	Engineering Services Manager	8	69.92	24.92	\$ 758.72
SCWA	Associate Civil Engineer	2	54.92	22.01	\$ 153.86
SCWA	Assistant Engineer	8	45.21	19.80	\$ 520.08
Task 3	Project Design				
SJWD	Engineering Services Manager	8	69.92	24.92	\$ 758.72
SCWA	Associate Civil Engineer	3	54.92	22.01	\$ 230.79
SCWA	Assistant Engineer	13	45.21	19.80	\$ 845.13
Task 4	Procurement				
SJWD	Engineering Services Manager	8	69.92	24.92	\$ 758.72
SCWA	Associate Civil Engineer	3	54.92	22.01	\$ 230.79
SCWA	Assistant Engineer	13	45.21	19.80	\$ 845.13
Task 5	Project Construction				
SJWD	Engineering Services Manager	20	69.92	24.92	\$ 1,896.80
SJWD	Constructor Inspector	35	41.99	20.17	\$ 2,175.60
SCWA	Assistant Engineer	2	45.21	19.80	\$ 130.02
SCWA	Associate Civil Engineer	2	54.92	22.01	\$ 153.86
SCWA	Water Quality Control System Supervisor	20	49.41	20.76	\$ 1,403.40
SCWA	Sr Water Quality Control System Tech	34	44.91	17.91	\$ 2,135.88
SCWA	Water Quality Control System Tech	17	33.37	14.65	\$ 816.34
SCWA	Water Treatment Operations Supervisor	50	44.93	19.52	\$ 3,222.50
SCWA	Sr Water Treatment Operator	104	38.97	18.38	\$ 5,964.40
SCWA	Water System Operator	108	33.75	17.19	\$ 5,501.52
SCWA	Electrician	208	39.82	25.48	\$ 13,582.40
SCWA	Senior Engineering Technician	4	33.03	17.03	\$ 200.24
SCWA	Senior Distribution Operator	100	37.14	17.96	\$ 5,510.00
Task 6	Performance Monitoring				
RWA	Manager of Technical Services	32	96.79	33.85	\$ 4,180.48
SJWD	Engineering Services Manager	8	69.92	24.92	\$ 758.72
SJWD	Director of Finance	6	81.33	28.06	\$ 656.34
SCWA	Assistant Engineer	8	45.21	19.80	\$ 520.08

Contractual/Construction. For the SJWD Kokila Intertie, SJWD will require three contractors: 1) a contractor to complete design (**Task 3**) and prepare bid specifications for procurement purposes (**Task 4**); 2) a construction contractor to build the intertie and associated components (**Task 5**); and 3) a construction management contractor to oversee the construction phase of the project (**Task 5**). Costs associated with professional services contractors are based on past experience on projects of a similar scope. The cost for the SJWD Kokila Intertie construction is based on the in-house engineer's estimate as detailed in **Attachment 1**. SJWD will ensure that contractor costs are fair and reasonable by completing procurement in compliance with requirements of the funding agreement with Reclamation. The SCWA Franklin Intertie does not require any contractor support.

Environmental and Regulatory Compliance. Environmental compliance will include preparing a CEQA categorical exemption by each participant. Those costs are captured in salaries and wages above. The final assumed environmental cost is for NEPA compliance. NEPA costs were estimated at \$3,000 for Reclamation expenses acting as the lead agency. This is consistent with costs from previous awards from Reclamation that RWA staff managed (an American Recovery and Reinvestment Act grant in 2009, the FY12, FY 13, FY14 Bay-Delta Restoration Program Grants, and an FY14 WaterSMART Water and Energy Efficiency Grant. There are no other regulatory expenses except for the preparation costs of the SWPPP as described under salaries and wages above.

Other Expenses. There are no other assumed expenses for the project.

Indirect Costs. There are no assumed indirect costs for the project.

Total Costs. The total cost for the project is \$622,184.98, with \$300,000 in Federal share and \$322,184.98 in non-Federal share. This equates to 48 percent Federal share and 52 percent non-federal share.

Environmental and Cultural Resources Compliance

Will the 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. The proposed work will be conducted at existing facilities of each agency. Earth-disturbing work will be limited to linear trench excavations to a maximum of 10 feet to install pipeline and electrical and control conduits at the Franklin Intertie location and a maximum depth of 5 feet at the Kokila Intertie location. There will be minimal dust associated with the excavation and will not disturb the air except for minor dust typically associated with excavations. There are no bodies of water or animal habitat within either project area.

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? There is no critical habitat on the existing pump site nor adjacent to the existing pump site in either project area.

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 project may have. There are no wetlands or other surface waters inside the project boundaries that fall under CWA jurisdiction.

When was the water delivery system constructed? The SJWD Kokila facility was constructed in 1983. The PCWA pipeline that runs to the Kokila property was constructed in 2017. The SCWA Franklin facility began operation in 1995 and had a major upgrade to a larger capacity in 1999.

Will the 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. The projects include only construction and improvements to interties between systems at existing facilities, constructed in 1983 and 1995. No other modifications to the systems will occur as a result of the projects.

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. No listed or eligible structures are associated with either project.

Are there any known archeological sites in the proposed project area? There are no known archeological sites in either project area.

Will the project have a disproportionately high and adverse effect on low income or minority populations? The projects will not adversely impact low income or minority populations.

Will the project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands? The projects will have no impacts on tribes or tribal lands.

Will the project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area? The projects will have no impacts related to invasive species.

Required Permits or Approvals

Both projects are located on property owned by the project partner agencies. As such, limited permitting is anticipated. The State Water Resources Control Board oversees the State's General Permit for Discharges of Storm Water Associated with Construction and Land Disturbance Activities (known as the "Construction General Permit"), and this is the regulatory mandate that may require the projects to comply with a project specific Storm Water Pollution Prevention Plan (SWPPP). The projects will register with the State at the following URL: <https://smarts.waterboards.ca.gov/> for the State's Storm Water Multiple Application and Report Tracking System.

The only other approval would be to install the portion of the Kokila Intertie pipeline with the existing PCWA pipeline, which is not on SJWD property. PCWA will allow the work to be completed on that segment with an existing easement, so no encroachment permits will be needed.

Existing Drought Contingency Plan

A copy of the North American Basin Regional Drought Contingency Plan is attached as **Appendix A** at the end of this proposal.

Letters of Project Support

The project is broadly supported by all agencies involved. Letters of support from the Regional Water Authority, Placer County Water Agency, and the City of Sacramento are included as **Attachment 4**.

Official Resolution

A resolution is scheduled for adoption by the SJWD Board of Directors at its regular meeting on Wednesday, February 28, 2018 and will be submitted to Reclamation the following day. A draft of the resolution as it is being presented to the SJWD is included on the following pages.

DRAFT
RESOLUTION NO. 18-02

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SAN JUAN WATER DISTRICT
AUTHORIZING AN APPLICATION FOR FUNDING ASSISTANCE
THROUGH THE BUREAU OF RECLAMATION'S WATERSMART
DROUGHT RESPONSE GRANT PROGRAM**

WHEREAS, the United States Bureau of Reclamation ("Reclamation") has implemented the WaterSMART Program to provide eligible agencies and organizations with grants to encourage water conservation and water use efficiency, increase the use of renewable energy and improve energy efficiency, benefit endangered and threatened species, facilitate water markets, and carry out activities to address climate-related impacts on water or prevent any water-related crisis or conflict;

WHEREAS, Reclamation has solicited proposals from public water suppliers and other water users for a new round of grant funding under the WaterSMART Program to construct drought resiliency projects, which proposals were due on or before February 13, 2018;

WHEREAS, the Board of Directors of the San Juan Water District ("SJWD") has identified itself as an eligible applicant under Reclamation's WaterSMART Drought Response Program; and

WHEREAS, SJWD is pursuing grant funding assistance under the WaterSMART Program in an amount of up to \$300,000 for a regionally-collaborated effort to expand intertie capacities as a priority drought response mitigation measure.

NOW, THEREFORE, be it resolved by the Board of Directors as follows:

1. The General Manager of the SJWD has reviewed and supports submission of the application. Furthermore, the Board has been briefed on the scope and purpose of SJWD's funding application, and, on that basis, supports staff's submittal of the financial assistance application to Reclamation.
2. SJWD is capable of funding the minimum 50-percent cost share required to obtain grant funding under the WaterSMART Drought Contingency Planning Grant Program. Collaborating agencies have verified their funding capabilities through letters of commitment included with the application.
3. The Board hereby ratifies the action of its General Manager or his designee of SJWD in applying for financial assistance from Reclamation's WaterSMART Program as part of a regional collaborative effort and authorizes the General Manager or his designee to execute any related documents, including a cooperative financial assistance agreement with Reclamation.

4. The General Manager and staff are directed to take all other actions necessary to secure funding for the Project under the WaterSMART Drought Response Program, including working with Reclamation to meet established deadlines for entering into a cooperative financial assistance agreement.

PASSED AND ADOPTED by the Board of Directors of the San Juan Water District on the 28th day of February 2018, by the following vote:

AYES:

NOES:

ABSENT:

By: _____

MARTIN HANNEMAN

President, Board of Directors
San Juan Water District

ATTEST:

By: _____

TERI GRANT

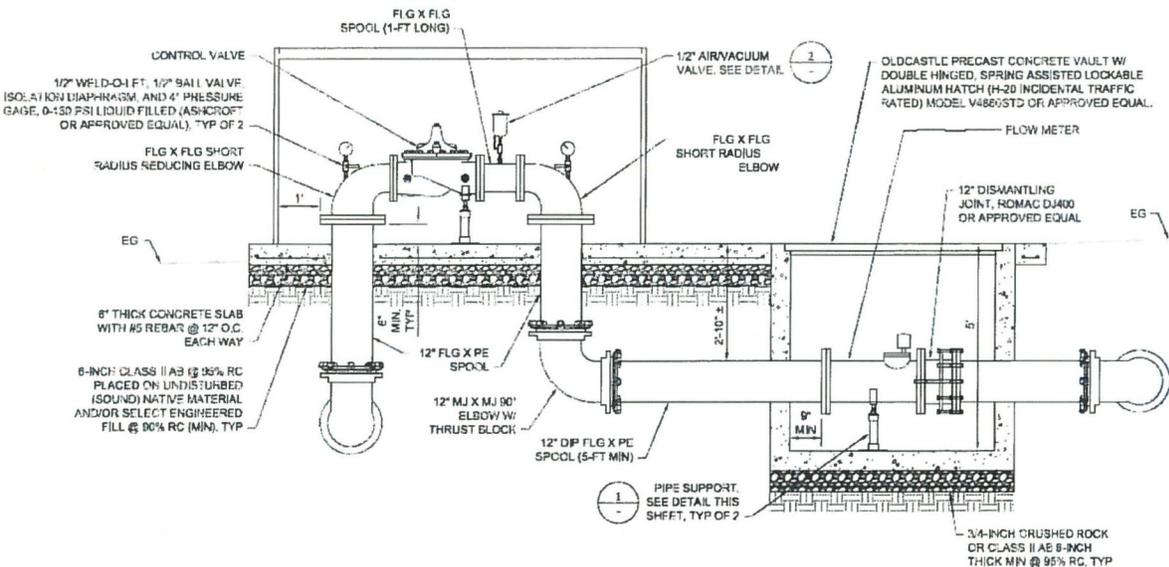
Board Secretary

San Juan Water District

Attachment 1 – Additional Kokila Intertie Information



Project site map showing existing covered Kokila Reservoir, existing pipelines, and proposed alignment for new pipeline and control valve station.



Example schematic of control valve station based on design of existing station at a different SJWD location.

Kokila Intertie SJWD Engineer Probable Construction Cost Estimate

Line Item	Description	Unit	Quantity	Unit Cost	Total
1	Construction				
2	Contractor OH's, Mob/Demob	LS	1	\$ 18,000	\$ 18,000
3	Materials Testing	LS	1	\$ 1,700	\$ 1,700
4	Site Work	LS	1	\$ 3,500	\$ 3,500
5	Surveying	LS	1	\$ 2,500	\$ 2,500
6	SWPPP, Dust, & Envir	LS	1	\$ 6,500	\$ 6,500
7	12-in Interconnection Pipeline & Fittings	LF	800	\$ 175	\$ 140,000
8	Tie-ins to Existing Pipes at PCWA & SJWD	EA	2	\$ 7,500	\$ 15,000
9	Control Valve & Appurtenances	LS	1	\$ 85,000	\$ 85,000
10	Flowmeter & Vault	LS	1	\$ 25,000	\$ 25,000
11	Portable Pump Connections	EA	2	\$ 5,500	\$ 11,000
12	Corrosion Control	LS	1	\$ 5,000	\$ 5,000
13	Electrical Power Service	LS	1	\$ 25,000	\$ 25,000
14	Electrical & Instrumentation	LS	1	\$ 12,000	\$ 12,000
15	SCADA Integration	LS	1	\$ 6,500	\$ 6,500
16	Hydrostatic Testing	LS	1	\$ 500	\$ 500
17	Disinfection & Testing	LS	1	\$ 700	\$ 700
18	Site Restoration	SF	1600	\$ 5	\$ 8,000
19	Total Estimated Construction Cost				\$ 365,900



Franklin Booster Station Modifications for Regional Water Sharing

Task 1: Project Management					
Position	Hours	Hours	Base Rate	Benefits	Total
1 Assistant Engineer		4	\$ 45.21	\$ 19.80	\$ 260.04
					TOTAL FOR TASK 1
					\$ 260.04
Task 2: Environmental Documentation and Permitting					
Labor					
Quantity	Position	Hours	Base Rate	Benefits	Total
1	Associate Civil Engineer	2	\$ 54.92	\$ 22.01	\$ 153.86
1	Assistant Engineer	8	\$ 45.21	\$ 19.80	\$ 520.08
					TOTAL FOR TASK 2
					\$ 673.94
Task 3: Project Design					
Labor					
Quantity	Position	Hours	Base Rate	Benefits	Total
1	Associate Civil Engineer	3	\$ 54.92	\$ 22.01	\$ 230.79
1	Assistant Engineer	13	\$ 45.21	\$ 19.80	\$ 845.13
					TOTAL FOR TASK 3
					\$ 1,075.92
Task 4: Procurement					
Labor					
Quantity	Position	Hours	Base Rate	Benefits	Total
1	Associate Civil Engineer	3	\$ 54.92	\$ 22.01	\$ 230.79
1	Assistant Engineer	12	\$ 45.21	\$ 19.80	\$ 780.12
					TOTAL FOR TASK 4
					\$ 1,010.91
Task 5: Project Construction					
Labor					
Quantity	Position	Hours	Base Rate	Benefits	Total
2	Water Quality Control System Supervisor	10	\$ 49.41	\$ 20.76	\$ 1,403.40
2	Sr Water Quality Control System Tech	17	\$ 44.91	\$ 17.91	\$ 2,135.88
1	Water Quality Control System Tech	17	\$ 33.37	\$ 14.65	\$ 816.34
1	Water Treatment Operations Supervisor	50	\$ 44.93	\$ 19.52	\$ 3,222.50
2	Sr Water Treatment Operator	52	\$ 38.97	\$ 18.38	\$ 5,964.40
2	Water System Operator	54	\$ 33.75	\$ 17.19	\$ 5,501.52
2	Electrician	104	\$ 39.82	\$ 25.48	\$ 13,582.40
1	Associate Civil Engineer	2	\$ 54.92	\$ 22.01	\$ 153.86
1	Assistant Engineer	3	\$ 45.21	\$ 19.80	\$ 195.03
1	Senior Engineering Technician	4	\$ 33.03	\$ 17.03	\$ 200.24
2	Senior Distribution Operator	50	\$ 37.14	\$ 17.96	\$ 5,510.00
					Task 5 Labor Total
					\$ 38,685.57
Task 5 Parts Total					
Parts					
Quantity	Item Description	Unit Cost			Total Cost
1	16" Motor Actuated Butterfly Valve	\$ 15,000.00			\$ 15,000.00
2	18" Motor Actuated Butterfly Valve	\$ 18,000.00			\$ 36,000.00
2	16" Class 350 Ductile Iron Pipe (1 Stick)	\$ 500.00			\$ 1,000.00
1	18" x 18" x 16" Tee	\$ 2,800.00			\$ 2,800.00
1	16" x 16" x 16" Tee	\$ 2,000.00			\$ 2,000.00
4	16" x 16" Flanged 90 DI	\$ 1,300.00			\$ 5,200.00
6	16" Restrained FL x MJ Adapter	\$ 110.00			\$ 660.00
2	18" Megalug Kit	\$ 540.00			\$ 1,080.00
2	18" US Gasket Kit	\$ 205.00			\$ 410.00
2	18" Bolt Kit	\$ 100.00			\$ 200.00
6	16" MJ Megalug Kit	\$ 400.00			\$ 2,400.00
8	16" US Gasket Kit	\$ 204.00			\$ 1,632.00
8	16" Bolt Kit	\$ 80.00			\$ 640.00
3	Variable Frequency Drives and Associated Accessories	\$ 8,527.57			\$ 25,582.70
3	12" Valve Gate Valve	\$ 1,200.00			\$ 3,600.00
1	Chemical Injection Vault	\$ 26,400.00			\$ 26,400.00
1	SCADA Mast and Antenna	\$ 1,200.00			\$ 1,200.00
1	Portable Chlorine Analyzer	\$ 5,500.00			\$ 5,500.00
1	Pressure Instrumentation	\$ 3,000.00			\$ 3,000.00
					Task 5 Parts Total
					\$ 134,304.70
					TOTAL FOR TASK 5
					\$ 172,990.27
Task 6: Performance Reporting					
Labor					
Quantity	Position	Hours	Base Rate	Benefits	Total
1	Assistant Engineer	8	\$ 45.21	\$ 19.80	\$ 520.08
					TOTAL FOR TASK 6
					\$ 520.08
Total Project Costs					\$ 176,531.16

Attachment 3 – Funding Commitment Letters

Department of Water Resources
Michael L. Peterson, Director



Including service to the Cities of
Elk Grove and Rancho Cordova

February 8, 2018

Paul Helliker
San Juan Water District
9935 Auburn Folsom Road
Granite Bay, CA 95746
VIA EMAIL rswartz@rwah2o.org

Dear Mr. Helliker:

SUBJECT: Funding Commitment for the Franklin Road Booster Station Upgrades Component of the North American Basin Regional Drought Mitigation Interties Project

On behalf of the Sacramento County Water Agency (SCWA), I am writing to confirm our funding commitment and support for the North American Basin Regional Drought Mitigation Interties Project. We appreciate San Juan Water District acting as the lead applicant in this collaborative effort implement mitigation measures to increase water supply reliability during drought conditions.

SCWA has budgeted up to \$225,000 for Franklin Intertie Project. If selected for the grant, SCWA is committed to providing its portion of the local funding match. SCWA's cost share will be available as direct funding from our capital infrastructure program budget enterprise fund and through in-kind staff implementation of the project as detailed in the grant application funding plan. Funds will be available upon execution of a Reclamation funding agreement and there are no other contingencies associated with the availability of funds.

If you have any questions please feel free to call Dave Underwood at (916) 875-6947, or Mike Huot at (916) 874-7199. Thank you.

Very truly yours,



Michael Peterson, P.E.
Director Water Resources

Cc: file
Kerry Schmitz, SCWA
Mike Huot, SCWA
Dave Underwood, SCWA

"Managing Tomorrow's Water Today"
Main Office: 827 7th St., Rm. 301, Sacramento, CA 95814 • (916) 874-8851 • Fax (916) 874-8693 • www.scwa.net



February 8, 2018

Marcus Yasutake,
Chair
Paul Schubert, Vice
Chair

Paul Helliker
San Juan Water District
9935 Auburn Folsom Road
Granite Bay, CA 95746

Members

California American Water
Carmichael Water District
Citrus Heights Water District
Del Paso Manor Water District
El Dorado Irrigation District
Elk Grove Water District
Fair Oaks Water District
Folsom, City of
Golden State Water Company
Lincoln, City of
Orange Vale Water Company
Placer County Water Agency
Rancho Marieta Community
Services District
Roseville, City of
Rio Linda / Elvertz Community
Water District
Sacramento, City of
Sacramento County Water
Agency
Sacramento Suburban Water
District
San Juan Water District
West Sacramento, City of
Yuba City, City of

Associates

County of Placer
El Dorado County Water
Agency
Sacramento Municipal Utility
District
Sacramento Regional County
Sanitation District
Sacramento Area Flood
Control Agency

Subject: Funding Commitment for the North American Basin Regional
Drought Mitigation Interties Project

Dear Mr. Helliker:

On behalf of the Regional Water Authority (RWA), I am writing to confirm our funding commitment for your proposal that will result in constructing two key interties to increase the North American Basin's drought resiliency. To show our commitment to the project, RWA is committing a minimum of \$7,316 through in-kind grant management support to meet the non-federal cost-share requirements for the project. The cost-share is immediately available and will be in place for the duration of the project. There are no other constraints or contingencies associated with our cost-share commitment.

Sincerely,

John K. Woodling
Executive Director

Attachment 4 – Support Letters



PLACER COUNTY WATER AGENCY

Gray Allen, District 1 144 Ferguson Road
Primo Santini, District 2 P.O. Box 6570
Mike Lee, District 3 Auburn, CA 95604
Robert Dupan, District 4
Joshua Atgline, District 5 (530) 833-1850
Einar March, General Manager (800) 464-0030

February 9, 2018

Paul Helliker
San Juan Water District
9935 Auburn Folsom Road
Granite Bay, CA 95746

Subject: Support for the North American Basin Regional Drought Mitigation Interties Project

Dear Mr. Helliker:

I am writing to express support for the San Juan Water District's (SJWD) Kokila Intertie Project with the Placer County Water Agency (PCWA). The project will expand the current ability to move water from PCWA to SJWD, providing additional alternative supply during drought emergency conditions. The proposed project represents a key mitigation measure identified during the North American Basin Regional Drought Contingency Plan development in which PCWA and SJWD have been active partners.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Brent Smith".

R. Brent Smith, P.E.
Director of Technical Services

RBS:sw

Z:\SW\Cor\2018\North American Basin Regional Drought Mitigation Interties Project 2.9.2018 RBS

City of
SACRAMENTO
Department of Utilities

February 8, 2018

Mr. Paul Helliker
San Juan Water District
9935 Auburn Folsom Road
Granite Bay, CA 95746

SUBJECT: Support for the North American Basin Regional Drought Mitigation Interties
Project

Dear Mr. Helliker:

I am writing to express support for the Sacramento County Water Agency's Franklin Intertie Project. We understand and appreciate that San Juan Water District is acting as the lead grant applicant in a collaborative effort in seeking assistance for the proposed project.

If the project proceeds, we look forward to being an active participant. We believe that the operational and facility improvements that will be realized to the City of Sacramento will provide broad benefit by improving the resiliency of our system during drought conditions by providing an alternative source of water supply during dry conditions.

Sincerely,



Dan Sherry, PE
Engineering Services Manager
Engineering & Water Resources
Department of Utilities

cc: Brett Ewart, Senior Engineer

DS / rc

City of Sacramento Department of Utilities
916-808-1400
1395 36th Avenue
Sacramento, CA 95822

Doc. ID# 180048



February 8, 2018

Marcus Yasutake,
Chair
Paul Schubert, Vice
Chair

Paul Helliker
San Juan Water District
9935 Auburn Folsom Road
Granite Bay, CA 95746

Members

California American Water
Cannichael Water District
Citrus Heights Water District
Del Paso Manor Water District
El Dorado Irrigation District
Elk Grove Water District
Fair Oaks Water District
Folsom, City of
Golden State Water Company
Lincoln, City of
Orange Vale Water Company
Placer County Water Agency
Rancho Marieta Community
Services District
Roseville, City of
Rio Linda / Elverta Community
Water District
Sacramento, City of
Sacramento County Water
Agency
Sacramento Suburban Water
District
San Juan Water District
West Sacramento, City of
Yuba City, City of

Subject: Support for the North American Basin Regional Drought
Mitigation Interties Project

Dear Mr. Helliker:

On behalf of the Regional Water Authority (RWA), I am writing to express support for your grant proposal that will result in constructing two key interties to increase the North American Basin's drought resiliency. RWA led the effort to develop a Regional Drought Contingency Plan and is excited to see some of the identified mitigation measures move forward with implementation.

Your coordinated proposal with a Sacramento County Water Agency project is a positive example of the value of regional collaboration. We appreciate San Juan Water District's lead role in this effort.

Sincerely,

John K. Woodling
Executive Director

Associates

County of Placer
El Dorado County Water
Agency
Sacramento Municipal Utility
District
Sacramento Regional County
Sanitation District
Sacramento Area Flood
Control Agency