Attachment 3
Work Plan

Introduction

The work plan for this proposal includes specific tasks for four projects that will address the region's needs. Those projects are: the City of Firebaugh Well Replacement Project, the City of San Joaquin's Water Meter Installation Project, the City of Tracy Recycled Water Distribution System Project, and the West Stanislaus Irrigation District and Del Puerto Water District Water Supply Enhancement Project. It should be noted that the proposal is to fund Phase I of the Tracy, San Joaquin, and WSID/DPWD projects and that information on Phase II of these projects is included only for contextual purposes. It is anticipated that grant funds for Phase II of the projects will be applied for in a future Implementation PSP round. Descriptions of those projects and implementation details are included below.

Goals and Objectives –

Consistent with the WIWRP, the goal of the projects in the proposal is to reduce the imbalance between water demand and supply by addressing two of the most problematic sources of regional tension: water supply and water quality.

Specific objectives that will measure success in meeting the proposal goal are listed below.

1. City of Firebaugh Project will:
    a. Complete construction of a new well by end of 2012
    b. The project will be completed in accordance with task list below
2. City of San Joaquin Project will:
    a. Complete installation of 640 residential water meters by end of 2012
    b. The project will be completed in accordance with the task list below
3. City of Tracy Recycled Water Project will:
    a. Complete construction of the recycled water distribution system Phase I by end of 2012
    b. The project will be completed in accordance with the task list below
4. West Stanislaus Water District and Del Puerto Water District Water Supply Enhancement Project will:
    a. Complete project construction by end of 2013
    b. The project will be completed in accordance with the task list below
    c. When constructed the fish screen will effectively prevent fish from entering the WSID distribution system

An introduction and more specific goals and objectives for each of the projects are identified below.

Purpose and Need –

The purpose of this proposal is to address a range of goals included in the current WIWRM. That includes reducing the imbalance between water demand and supply while improving environment and socio-economic status of regional DACs. Additionally, projects in the proposal will contribute to minimizing regional conflict by addressing the most problematic source of tension affecting the region's agricultural, municipal, and environmental water use, namely water supply reliability and water quality.

Each of the projects in the proposal makes a specific contribution to addressing regional needs including: enhanced DAC municipal water supply and water quality needs, increased water use efficiency by a DAC, maximizing the use of recycled water to offset demand for surface water, groundwater, and water supply enhancement through a creative conveyance system.

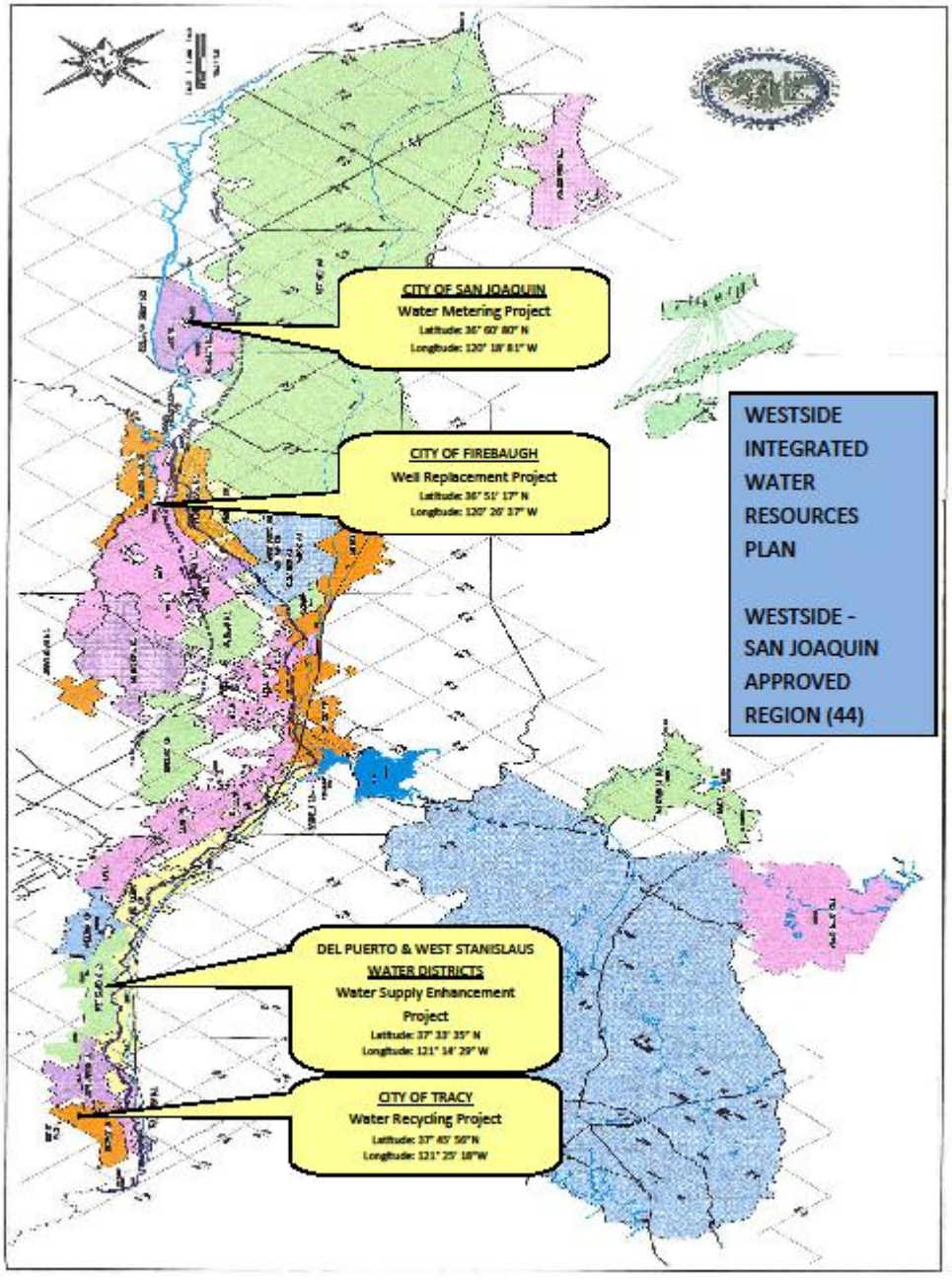
Project List

Project Name and Abstract	Agency/Status
City of Firebaugh Well Project A project of develop a new water supply well for the DAC City of Firebaugh that will provide increased regional water supply and quality benefits	City of Firebaugh Studies100 % complete
City of San Joaquin Water Meter Project A project to install 640 retail water meters to achieve a 20% water savings for newly meter accounts in a DAC	City of San Joaquin Needs study complete
City of Tracy Recycled Water Project A project that will enable the City of Tracy to distribute recycled wastewater for irrigation purposes that provide regional water supply and quality benefits	City of Tracy Master plan, treatment plant upgrade, and end user studies complete
WSID and DPWD Water Supply Enhancement Project A project that will enhance water supplies and supply reliability through construction of an intertie between the WSID Main Canal and DMC that will enable SJR water, including recycled water from east of the SJR, to be conveyed to the DMC and stored and used by south of the Delta water users. Project also includes Phase 1 of the WSID fish screen intake project.	WSID and DPWD Environmental work done Design near done

Integrated Elements of the Projects

The primary integrated element of the projects will be the ability for both the City of Tracy Recycled Water Project and the WSID/DPWD projects to transport recycled water that can be used for offsetting the demand for surface water and groundwater. Although the City of Firebaugh and City of San Joaquin projects are not directly integrated with other proposed projects, they are a high priority DAC projects.

Regional Map



Completed Work

City of Firebaugh – Background studies were completed in 2008 by the City's Planning Officials. These studies included the availability of local groundwater and the ability to avoid high arsenic concentrations through proper well design.

City of San Joaquin – The City has completed a water conservation strategy study that identified installation of retail water meters as a priority water conservation measure. Implementation of this measure is consistent with the California Urban Water Conservation Best Management Practices.

City of Tracy – It is anticipated that CEQA documents for the recycled water master plan will be completed in October 2011. Water treatment plant upgrade, end user, and master plan studies are complete.

WSID and DPWD – Environmental compliance documentation is complete for the intertie with the adoption of a negative declaration by the WSID Board of Directors in October 2010. Design of the intertie should be complete by April 2011. The Fish Screen Feasibility Study should be complete by January 2011. The DPWD Recycled Water Feasibility Study will also be completed in January 2011.

Existing Data and Studies

A number of studies have been completed and data has been gathered to support each of the projects. These studies reinforce the value and appropriateness of each of the projects included in the proposal.

<u>City of Firebaugh Well Replacement Project</u>
All studies and research necessary for starting work on the project are complete

<u>City of San Joaquin</u>
The City has completed a Water Conservation Strategy Study.

<u>City of Tracy Recycled Water Project</u>
The following studies that have been prepared in support of the project:

Exhibit 1 Ch2MHill contract related to WWTP NPDES Compliance
Exhibit 2 West Yost & Associates contract for City of Tracy Water Master Plan
Exhibit 3 West Yost draft Chapter 9 – from Water Master Plan
Exhibit 4 City of Tracy Water Master Plan Project Schedule
Exhibit 5 RBF contract for the environmental work related to City master plan updates
Exhibit 6 Holly Sugar Sport Parks environmental work - City Council staff report on Final EIR
Exhibit 7 Nolte contract design of the Holly Sugar Sports Park
Exhibit 8 On-site Irrigation Tech Memo of Holly Sugar Sports Park
Exhibit 9 Irrigation system description for Holly Sugar Sports Park

Exhibit 10 Phase I Facilities Map - Work Plan
Exhibit 11 City Dec 21, 2010 Staff report for grant application work
Exhibit 12 Phase II facilities Map
Exhibit 13 Kennedy Jenks Water Rate Study for the City of Tracy

WSID and DPWD Water Supply Enhancement Project
The following studies have been prepared in support of the project:

Main Canal – Delta Mendota Canal Intertie Project Concept Development report (Concept Development Report), AECOM, August 2010

Northern San Joaquin Valley Water Reclamation Project, Volume 1, Feasibility Study Report, Final Draft, June 2005

WSID Final Fish Screen Feasibility Study (Draft), December 2010

Copies of the studies noted above are available in the appendix.

Project Timing and Phasing

Three of the proposed projects are ultimately to include a second phase.

The City of San Joaquin Water Meter Installation Project consists of two phases defined by the type of account to receive a meter. The first phase, included in this proposal, would target 640, or 70%, of all residential accounts. The second phase, meanwhile, will install meters for the remaining 30% of residential accounts and all commercial industrial institutional (CII) accounts. Phase I is a stand-alone effort that will address the need to install residential meters and is independent of the CII installation phase.

The City of Tracy Water Recycling Project is part of a multi-phased project complex.

The grant request for Phase 1 from the City of Tracy is for the construction of the recycled water distribution system to Holly Sugar Sports Complex. The City did not anticipate building this system as soon as is now required because of the SBX7X requirements, so cash flow is an issue. For this reason, the City is proposing phasing of the recycled water distribution system improvements. Phase 1 facilities, are shown in Exhibit 10. Phase II facilities, would extend the distributions system to 11th Street and Lammers Road Intersection, are shown in Exhibit 12 and discussed in the Phase II section below. Phase II work is the subject of future grant requests.

Grant funding for Phase I is being requested at this time (2010 -2011). Phase II is being shown at this time to help define the benefit for the project and, will be requesting grant

funding in future allocations of funding by DWR (2012 and beyond). Each of the phases is described in the following pages. Thirty thousand dollars in matching funds are claimed in the Phase 1 budget for the grant application (City Dec 21, 2010 Staff report – Exhibit 11) and for the City's participation in the overall cost share of SLDMWA IRWM efforts.

The WSID and DPWD Water Supply Enhancement and Fish Screen Project also includes two phases. However, phasing of the planned improvements is such that Phase 1 stands on its own and is fully operational and beneficial without the completion of Phase 2. Phase 1 of the project will generate up to 50,000 AFY of additional water supply available south of the Delta. The Phase 2 facilities will increase the amount of water that can be conveyed by the Main Canal and Intertie and increase the additional water supply south of the Delta up to 75,000 AFY and will include the environmental benefits that accrue from the construction of the fish screen intake.

Project Specific Introductions, Backgrounds, and Goal and Objectives

Project specific introductions, backgrounds, and goals and objectives are presented below for each of the proposed projects.

City of Firebaugh Well Replacement Project

Introduction and Background

Introduction: Water production from the City of Firebaugh's existing Well #7 is an important source supply to meet municipal and industrial demands. However, new health regulations and well deterioration have made use of the well infeasible. The well has high levels of arsenic, approximately five times greater than the allowable federal and state drinking water standards, as revised in 2006. New permit conditions issued by the State of California Department of Public Health in September, 2010, will make it difficult for the City of Firebaugh to use Well #7 without violating drinking water standards. In 2010, water production fell significantly and sand production has increased, indicating the well is failing.

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Background**:** Arsenic is a primary contaminant, and chronic exposure to arsenic from drinking water has been found to cause cancer in humans according to the U.S. EPA. In addition, the well has lost production capacity such that the City does not have adequate water to meet its demands. Finally, the well is increasingly producing sand, which ruins pump equipment and fills the distribution system with sand. This results in the need for additional system maintenance and repair, thereby increasing the cost of

providing water to the community. For all of these reasons (e.g. primary drinking water standard, inadequate source supply, excessive operating cost due to sand), the well needs to be replaced in the immediate future. However, the City of Firebaugh does not have reserves for this project, and raising rates for the project will create financial hardship on the community which is already suffering through the economic downturn, boasting an unemployment rate of over 28% (as of November 2010, according to the Employment Development Department).
35%.

The project is an emergency replacement of existing facilities. The well is not expected to produce more water than the existing well, nor is it intended to provide water for new or planned growth. The project purpose is to replace critical water supply infrastructure and improve water quality to meet primary federal and state drinking water standards. Recent studies of the local groundwater basin were performed in late 2008(according to the study "Groundwater Conditions in the Vicinity of the City of Firebuagh, in Support of the Draft EIR for the 2030 General Plan", Ken Schmidt & Associates, November 2008. Studies revealed: (1) sufficient water to meet long-term demands is available in the local groundwater, and (2) water quality from other wells indicate that higher arsenic concentrations are found in select aquifers, and can be avoided with a properly designed well. A site for the proposed well has been identified and secured by the City. Hence, all studies and research necessary for starting work on the project are complete.

Regional Goals and Objectives

The following goals and objectives have been identified for the City of Firebaugh Well Replacement Project. In developing a replacement well for the residents of Firebaugh, the City will be meeting the following goals and objectives: 1.) Provide safe drinking water to residents that meets all federal and state drinking water standards, 2.) provide adequate source capacity for drinking and fire suppression that meets the requirements of the State of California, Department of Health Services, and 3.) provide affordable water for the residents of Firebaugh.

City of San Joaquin Water Meter Installation

Introduction and Background

The City of San Joaquin is a small, rural, poverty-ridden community of 4,065 in the western part of Fresno County. Its economy is primarily agricultural in nature, and drought and legislation-based water shortages have caused even further hardships to the residents there who are already experiencing extreme economic conditions. The average Median Household Income (MHI) is roughly half of the Statewide Average for California.

The City of San Joaquin relies exclusively on groundwater pumping for their domestic use, with three production wells supplying the City. Additionally, the reduction in water allocations to farmers has resulted in increased pumping for agricultural use, thereby

putting additional strain on the groundwater resources in the area. Although the City is currently in the enviable position of having enough water capacity to meet its demand, concerns over the availability of water continue to grow. In 2009, the City contracted with a sub consultant for preparation of a Water Conservation Strategy. This document was prepared using the US EPA's Water Conservation Plan Guidelines and the California Green Building Standards Code (2011 Title 24-Part 11). It is included in the Proposal as an appendix.

There were two goals identified by the City's water conservation strategy. The first was a citywide reduction in water use of 20% by the year 2011. A 20% reduction in water usage by 2011 mirrors the reduction goals of the current California Green Building Standards Code. The second goal was to have installed water meters on all service accounts by the year 2020. California state law requires meters on all service accounts by the year 2025. Installing meters can also lead to reduced water use, and will enable the city to charge residents based on actual water usage. The cost of installing meters, however, is quite high, and the city does not have the available funds to accomplish this goal on their own. With the available funding through the IRWM Implementation program, the City seeks to install meters on 640 of their existing residential services (roughly 70% of the total residential accounts). This project would be Phase I of the City's Water Meter Installation projects. The City will continue to seek additional funding opportunities to meter the remaining residential services and the roughly 50 existing commercial and industrial services.

Goals and Objectives

With the first phase of the City of San Joaquin's Water Meter Installation projects, the City seeks to reduce water consumption by 20% on the newly metered services. The 20% reduction target is provided by the USEPA in Appendix B of their Water Conservation Plan Guidelines. Based on existing estimated residential consumption, it is estimated that this project could reduce water use by approximately 34.7 million gallons per year. Over the life of the project, this savings could provide approximately 2 years of additional supply for the entire City, based on current demands.

City of Tracy Recycled Water Project Phase I and Phase II

Introduction and Background

SBX7 7 requires a 20% reduction in water use per person by the year 2010. The City of Tracy is an urban water provider with a large non-residential urban water demand. Meeting the conservation goals using any of the methodologies proposed by the state for meeting the SBX7 7 requirements for urban water users with similar land use breakdowns will be extremely difficult with reduced water use through conservation alone. To meet the water use reduction goals the City must implement recycled water use. The City of Tracy is actively pursuing this goal.

The City of Tracy has recently completed modifications to their wastewater treatment facility. The treatment modification increased the City's level of treatment to Title 22 levels and allow for unrestricted reuse. The City is conducting ongoing studies related to the treatment plant upgrades and the NPDES permit requirements. CH2MHill is providing this service for the City (Ch2MHill contract Exhibit 1).

The City is anticipating the use of recycled water and has installed various portions of the recycled water distribution system with the construction of various road improvements throughout the City over the last decade. In addition, the City of Tracy is currently completing a Water Master Plan that addresses both potable and recycled water supplies and their distribution systems (West Yost & Associates contract Exhibit 2). This study defines the areas of disposal throughout the City for recycled water and distribution system needed to serve those areas. The City-wide recycled water system draft master plan chapter 9 from the West Yost report is shown Exhibit 3 (this is a draft chapter the report will be completed in spring 2011). Tracy's schedule for the recycled water master plan work, prepared by Harris & Associates (City's Program Manager for Master Plan Project) is shown in Exhibit 4. One hundred thousand dollars of the West Yost contract ($460K) is claimed as matching funds in the budget (Table 7 Phase I) for this, Phase 1 of the City of Tracy's recycled water project.

The City is updating master plans for drainage, water, sewer, traffic, parks, and public facilities. The environmental work (being completed by RBF contract –Exhibit 5) for the six updated master plans is currently underway and is anticipated to be completed in the summer of 2011. It is assumed that the water master plan represent $50,000 of the $300,000 RBF contract and that approximately 20% of the water master plan is associated with recycled, thus $10,000 of the RBF contract was claimed as matching funds in the budget (Table 7 for Phase I). The RBF environmental document is being used for both Phase I and II.

The City is also currently designing, and will be bidding in April 2011, the construction of the Holly Sugar Sports Complex (approximately 160 acres of sports fields). A summary of the project approvals is provided in the attached final public notice for the sport parks environmental work Exhibit 6. The sports complex will incorporate an extensive irrigation system and onsite storage facilities (Nolte contract –Exhibit 7). The City's sports park contract will construct the backbone services to the park's various fields, including the irrigation of common areas. The actual sports fields will be constructed by various sports groups in the City area, through lease and maintenance agreements. The sports fields will be built over several years, as money is available, and connect to the stub-outs that the city's backbone facilities will be putting in for irrigation to each field. The schedule for the sports complex construction and the irrigation system planned on site are defined in attached technical memos from Nolte (Exhibits 8 and 9). The budget for this project assumes $150,000 in matching irrigation system design funds associated with a portion of Nolte's $1.7 million dollar contract. Additionally, the water use at these fields is the source of the Phase I economic analysis.

The construction contract for the sports park infrastructure will be released in May of 2011 (City of Tracy CIP # 78115 - $11,068,970 – funded by the general fund ($8 million), development impact fees ($2.5 million), and a federal grant of $450,000). The construction cost for the irrigation system is assumed to be $925,000 for the work tied to the Nolte design. These are estimates the work will not be completed until late winter or early spring. There will be an additional cost for the extension of the irrigations system into each specific sports field that will be released by those leasing the fields that are not included in these costs.

The grant request for Phase 1 from the City of Tracy is for the construction of the recycled water distribution system to Holly Sugar Sports Complex. The City did not anticipate building this system as soon as is now required because of the SBX7 7 requirements, so cash flow is an issue. For this reason, the City is proposing phasing of the recycled water distribution system improvements. Phase 1 facilities, are shown in Exhibit 10. Phase II facilities, would extend the distributions system to 11th Street and Lammers Road Intersection, are shown in Exhibit 12 and discussed in the Phase II section below. Phase II work is the subject of future grant requests.

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Regional Goals and Objectives

The State has developed a series of water management strategies and desired outcomes that are closely aligned with the objectives of the West San Joaquin Region. Many of the items on that list are actions that will be undertaken with this Proposed Project and the implementation of the City's recycled water master plan in general. This write up is to illustrate the similarities between the State's goals (**bold**), regional objectives (*Italics*), and the proposed recycled water facilities project.

Ecosystem Restoration – *Plan Objective #1 Provide Reasonable Opportunity to advance ecosystem restoration through balanced project implementations.* The construction of recycled water facilities will allow the city to start utilizes this source of water, a byproduct of the recent wastewater treatment plant modifications. The project will provide operational flexibility for the water resources to the area, which minimizes the conflicts associated with Delta pumping restrictions that are associated with the City water supplies from the Delta Mendota Canal (DMC). The project also increase the reliability of the City to meet NPDES permit requires for the waste water facilities improving water quality in the affected San Joaquin River ecosystem.

Environmental and Habitat Protection and Improvement – *Objective #2 Develop Regional Solutions that protect environmental and habitat concerns and provide potential for improvement.* Making use of the recycled water has indirect benefits to the delta by reducing municipal discharges to the San Joaquin River, while at the same time reducing demands for supplies delivered from the DMC.

Water Supply Reliability – *Object #3 Improve south–of-delta water supply reliability by an average of 25%.* Every acre-foot of recycled water used by the City is a one to one reduction in demands for water supplies currently delivered from the delta or local groundwater basin.

Flood Management – *Object #4 Minimize risk of loss of life, infrastructure, and resources caused by significant storm events by utilizing uncontrolled flow beneficially.* Not applicable.

Groundwater Management – *Objective #5 Maximize utility of Regional aquifers while reducing potential for overdraft.* Implementation of the project allows the City the option to utilize recycled water as a means of groundwater recharge, both directly through a recharge program or, indirectly through landscape irrigation and designated disposal areas.

Recreation - *Objective #6 Consider recreational potential in project development.* The recycled water has been planned for use in large landscaping and turf areas such as parks, schools, road medians, and irrigation and industrial demands in future development areas. Additionally areas such as the Tracy Gateway Business Park intend to sustain various water features and irrigation demands through the development's golf course and campuses. These are key components to the business parks outdoor activities.

Storm Water Management – *Objective #7 Capture storm water for higher beneficial use whenever practicable.* Not Applicable.

Water Conservation – *Objective #8 Always promote and enhance water conservation.* Under the States calculations for conservation, recycled water use offers a one to one benefit on demand reduction. Recycled water use is a key component in the City's efforts to comply with SBX7 7 (20x2020).

Water Quality Improvement – *Objective #9 Develop regional solutions that provide opportunity for water quality improvement.* The water quality improvements are tied to the habitat improvements discussed above. Making use of the recycled water has indirect benefits to the delta by reducing municipal discharges to the San Joaquin River, while at the same time reducing demands for supplies delivered from the DMC.

Water Recycling – *Objective #10 Always promote and enhance water recycling.* This project would be constructing the initial components of the recycled water program that the City has recently defined in a City wide master plan and is currently completing

CEQA. Utilizing recycled water allows the City additionally room to fit under the discharge capacity limitations associated with the operation of the wastewater facility and discharges (NPDES Permit) to Old River.

Wetlands Enhancement – *Objective #11 When Possible, align projects to complement existing wetlands.* Recycled water could be used by the City to enhance wet lands other mitigation areas that may be implemented in the recently acquired Holly Sugar properties.

CEQA – The project anticipates completing CEQA documents for recycled water master plan in October of 2011. Design of each phase of the project could begin upon notice of grant award.

WSID and DPWD Water Supply Enhancement Project

Introduction and Background

The West Stanislaus Irrigation District (District or WSID) was established in 1920 for the purpose of providing water for area farmers to grow crops in the San Joaquin Valley. The District diverts 262 cubic feet per second (cfs) per their water right for irrigation from the San Joaquin River between Mendota Pool and Vernalis in accordance with their License Number 3957 (Permit 2758, Application 1987). The District's Point of Diversion is described as north twenty nine degrees fifty minutes east (N29d50E), nineteen thousand two hundred ninety (19,290) feet from W ½ corner of Section 28, T4S, R7E, Mount Diablo Base and Meridian (MDB&M), being within the SE ¼ NE ¼ of Section 10, T4S, R7E MDB&M.

The District serves an area that is unincorporated and agricultural, located west of the San Joaquin River, northwest of the City of Patterson, and includes the unincorporated communities of Westley, Grayson and Vernalis. A small portion of the district extends into San Joaquin County. District boundaries include approximately 21,676 acres. The District provides its customers with irrigation water for agricultural purposes. This water is provided via several sources including surface water from the Tuolumne and San Joaquin River, groundwater from four deep wells within the District's boundaries, and imported water from the Central Valley Project (described below).

In addition, the District is obligated by a 1928 agreement to divert at its diversion point on the San Joaquin River, 45 cfs of riparian water for irrigation of approximately 2,207 acres of riparian land adjacent to the District, known as the White Lake Water Company (north of the unincorporated community of Grayson). That agreement is still binding between the parties, and imposes upon WSID the continuing obligation to dedicate 45 cfs of pumping capacity to the adjacent riparian lands. This was confirmed by a State Water Resources Control Board September 11, 1941 Memorandum of Field Visit stating: ". . .the district is obligated to supply up to 45 cfs to the Burkhard property by an agreement since 1928 and merely acts as a transporting agent for this water which is under riparian and an old appropriative right."

The District also receives Central Valley Project water annually from the Delta Mendota Canal (DMC) per their contract 14-06-200-1072-LTR. The contract provides for delivery of 50,000 AF of project water used to supplement crop delivery requirements from March 1 through February 28 annually. The crops grown in the District service area are primarily row crops, including alfalfa, almonds, apricots, beans, and tomatoes. The average farm size in the District is about 160 acres.

All irrigation water from the San Joaquin River is conveyed through a two mile intake channel just upstream of the confluence of the Tuolumne and San Joaquin Rivers then pumped to the District's Main Canal. The Main Canal consists of roughly 3 miles of concrete lined channel with six lift stations. The first lift station pumps the water from the intake channel approximately 30 feet into the Main Canal. Each subsequent lift station pumps the water approximately 20 feet for a total vertical lift of 130 ft. Off of

each lift there are two laterals, one running north and one running south, to supply water for irrigation purposes. All water deliveries made from the first lift are delivered to the White Lake Water Company and portions of water deliveries made from the second and third lifts are made to the White Lake Water Company for a combined delivery rate of 45 cfs. All other deliveries are made to WSID water users.

Along the intake channel, which ends at the District's Main Lift Station No. 1, there are four small pumps with capacities of 10 cfs each owned by USFWS used to irrigate the riparian habitat maintained on the San Joaquin River National Wildlife Refuge (SJRNWR). The SJRNWR is comprised of 6,500 acres of riparian habitat consisting of trees and flora for the purposes of wildlife enhancement.

Project Description, Goals and Objectives

The goal of the WSE Project is to construct an intertie between the WSID Main Canal and the DMC and make other improvements to the Main Canal system that will enable WSID to convey, store, reschedule, transfer and/or exchange San Joaquin River (SJR) water and other water that may become available south of the Delta. The water supply beneficiaries of the project will be the WSID, DPWD and the numerous CVP contractors and other water users south of the Delta. The objective of the project is to improve the surface water supply reliability of WSID, DPWD and other potential project beneficiaries south of the Delta through improved management of existing south of the Delta water supplies, thus reducing dependence on Delta water supplies, minimizing fallowing of land, providing for in-lieu groundwater recharge through reduced groundwater pumping and facilitating the transfer of other eastside water to the westside of the San Joaquin Valley.

The new water conveyance facilities will also facilitate the conveyance of recycled water from the cities of Modesto and Turlock to DPWD as part of the planned North Valley Regional Recycled Water Project (NVRRWP). Both Modesto and Turlock currently dispose of recycled water in the San Joaquin River (SJR). Modesto is constructing recycled water facilities to meet their new NPDES permit conditions and currently does not have recycled water customers for the reclaimed water. Modesto recently constructed the first phase of its recycled water facilities that has the capacity to produce up to 2,500 AFY of Title 22 recycled water. By 2016, the second phase of the recycled water facilities will be constructed and will provide an additional 14,000 AFY of recycled water. At build out, Modesto will have the ability to produce up to 27.5 million gallons per day (31,000 AFY) of recycled water. Turlock currently produces approximately 11,000 AFY of recycled water that is discharged to an agricultural drain that ultimately discharges to the SJR. At build out, Turlock will have the ability to produce up to 20 million gallons per day (22,000 AFY) of recycled water.

One of the primary alternatives being evaluated as part of the NSJVWRP is the conveyance of recycled water from Modesto and Turlock to DPWD. This alternative provides a unique opportunity for recycled water to be moved across the SJR to supplement DPWD's existing irrigation water supply and to improve water reliability for

the District's customers. DPWD is currently preparing a Recycled Water delivery System Feasibility Study (RWDSFS) that is reviewing and evaluating alternative conveyance and delivery methods for conveyance of up to 31,400 AFY of recycled water from Modesto and Turlock treatment facilities to DPWD. Both the NVRRWP and the RWDSFS identify the use of WSID water conveyance facilities as an integral component in moving the recycled water to DPWD. The concept is to pump the recycled water from the SJR to the DMC for delivery to DPWD. The construction of the WSID Main Canal/DMC Intertie will enable this transfer of recycled water to DPWD. The continued discharge of recycled water to the SJR by Modesto and Turlock for ultimate delivery to DPWD helps alleviate the persistent water shortage in DPWD and avoids the cost of a pipeline across the SJR and through DPWD as well as the need to provide for seasonal storage of flows generated during periods of low demand. The detailed description of this recycled water disposal alternative and the associated costs for Modesto and Turlock are included in the Northern San Joaquin Valley Water Reclamation Project Volume 1 Feasibility Study Report, Final Draft, June 2005 (copy attached). Construction and the costs for Modesto and Turlock facilities required to convey the recycled water to the SJR are not included in this WSE project and funding request. A copy of the DPWD RWDSFS report will be forwarded to the DWR to accompany this application for project funding as soon as it is completed.

Environmental compliance for construction and operation of the Intertie has been completed with the preparation of an Initial Study and adoption of a Negative Declaration by the Board of WSID in October 2010. The final design of the Intertie facilities is underway and will be completed by April 2011. The construction of the facilities is scheduled to begin in the fall of 2011.

In addition to the water supply benefits that will accrue from the construction of the new conveyance facilities, the final design, environmental compliance, and permitting of the WSID Fish Screen Intake are included in Phase 1 of the project. WSID is nearing completion of the Fish Screen Feasibility Study and will soon be ready to move into the final design stage of the project. The Feasibility Study is scheduled for completion in January 2011(copy of the Draft Study is attached). The fish screen intake project is on an accelerated schedule because of its importance in helping protect Chinook salmon and steelhead juveniles migrating downstream from their nursery areas in the Merced and Tuolumne Rivers past the WSID diversion each spring. Proposition 84 funding of this project will help facilitate the accelerated schedule. The construction of the fish screen intake will be included in Phase 2 of the project.

The WSE Project will be completed in phases with design and construction of the major facilities as follows:

Phase 1

- Construction of the Main Canal/DMC Intertie (Intertie), including a 250 cubic-feet per second (cfs) pump station on the Main Canal (Pump Station

5A), approximately 5,100 feet of 96-inch pipe and the associated head works and metering facilities at the DMC. The construction of the Intertie also requires the replacement of the DPWD Milepost 31.31 delivery on the DMC and construction of a 72-inch bypass pipeline to convey water to Reaches 5 and 6 of the Main Canal. Environmental compliance for the Intertie facilities has been completed and a copy of the adopted document is attached. Design of the Intertie facilities is approximately 75 percent complete and completed plans and specifications along with bid documents are scheduled to be completed by April 2011. Construction of the Intertie will facilitate the conveyance of up to 57,000 AFY of water from the San Joaquin River to the DMC.

- Final design, environmental compliance and permitting for the WSID Fish Screen Intake.

Phase 2

- Replacement of existing Pump Stations 1 and 2 on the Main Canal with a new 350 cfs Pump Station 1A (PS 1A) and approximately 4,200 feet of 114-inch pipeline that will replace Reach 1 of the Main Canal as the primary facility to convey water to Reach 2. A 72-inch bypass pipeline will also be constructed to convey water to Reach 1 to facilitate deliveries from Reach 1. Construction of PS1A will increase the amount of water that can be conveyed to the DMC up to 65,000 AFY.
- Replacement of existing Pump Stations 3 and 4 on the Main Canal with a new 310 cfs Pump Station 3A (PS 3A) and approximately 4,000 feet of 108-inch pipeline that will replace Reach 3 of the Main Canal as the primary facility to convey water to Reach 4. A 72-inch bypass pipeline will also be constructed to convey water to Reach 3 to facilitate deliveries from Reach 3. Construction of PS 3A will increase the amount of water that can be conveyed to the DMC up to 75,000 AFY.
- Construction of the WSID Fish Screen Intake.

A further description of the Intertie facilities and the analysis of potential water developed by the project is included in the attached “Main Canal – Delta Mendota Canal Intertie Project Concept Development” report (Concept Development Report), AECOM, August 2010. The phasing of the WSE Project is also described in the Concept Development Report. The phasing of the planned improvements is such that Phase 1 stands on its own and is fully operational and beneficial without the completion of Phase 2. Phase 1 of the project will generate up to 57,000 AFY of additional water supply available south of the Delta and allow continued conveyance of deliveries to the upper reaches of the Main Canal system while avoiding costly upgrades to the existing pumping facilities that are approximately 80 years old. The Phase 2 facilities will increase the amount of water that can be conveyed by the Main Canal and Intertie and increase the additional water supply south of the Delta up to 78,000 AFY and will include the environmental benefits that accrue from the construction of the fish screen intake.

Funding for the Phase 1 project components is being requested as part of this application. It is anticipated that additional funds will be requested for Phase 2 elements in the next round of Prop. 84 implementation funding.

The Project Concept Development Report, WSID Fish Screen Feasibility Report (Draft), and Northern San Joaquin Valley Water Reclamation Project Feasibility Status Report Final Draft are attached for further information.