Sacramento Suburban Water District
And
San Juan Water District
High-Level Feasibility Analysis for
Water Supply Reliability

May 2014

Prepared by:

MUNICIPAL CONSULTING GROUP

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Acronyms

ACRONYM	DEFINITION	FUNCTION
AFA	Acre Feet per annum	Measures volume of water, and is quantified as the amount of water that would cover 1-acre 1-foot deep over a one-year period.
BA	Biological Assessment	Evaluation of biological impacts of a project required to meet federal environmental regulations
BDCP	Bay-Delta Conservation Plan	A controversial plan that claims to develop a planning and environmental permitting process to restore habitat for Delta fisheries and to deliver water supplies to south of Delta interest.
BO	Biological Opinion	Resulting review and conditions of biological review by federal regulatory agencies
CalPERS	California Public Employees Retirement System	An agency in the California executive branch that manages pension and health benefits for California public employees, retirees, and their families.
CEQA	California Environmental Quality Act	The law that requires the environmental review process for California
CIP	Capital Improvement Project	Major projects or equipment that generally have a one-year or greater life span as defined by each agency.
CTP	Cooperative Transmission Pipeline	Large Diameter Transmission Line from the Peterson Water Treatment Plant to the Sacramento Suburban Water District Service Area. Agencies connected to the CTP are SJWD, SSWD, FOWD, CHWD, City of Roseville
CVP	Central Valley Project	Provides water supply, power, recreation and related services to customers throughout California
CVPIA	Central Valley Project Improvement Act	Environmental program intended to decrease salinity and improve fish populations in the Delta and connected rivers and lakes
DWR	Department of Water Resources	State agency responsible for the State's management and regulation of water usage.
EA	Environmental Assessment	Environmental document required to meet federal environmental requirements. (NEPA)
EIR	Environmental Impact Report	Meets the requirements of the California Environmental Quality Act (CEQA)
EIS	Environmental Impact Statement	Meets the requirements of the Federal National Environmental Policy Act (NEPA)
ESA	Endangered Species Act	The Act, under is various amendments, is administered by two federal agencies, the United States Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration (NOAA).
FONSI	Finding of No Significant Impact	Issued when environmental analysis and interagency review during the EA process find a project to have no significant impacts on the quality of the environment. (NEPA)

ACRONYM	DEFINITION	FUNCTION
GPM	Gallons per minute	Measurement of water or wastewater flow
GW	Groundwater	Water located beneath the earth's surface in soil pore spaces and in the fractures of rock formations.
GWMP	Groundwater Management Plan	State required document that outlines how the underlying groundwater basin will be managed
JPA	Joint Powers Authority	Group of governmental agencies formed by mutual agreement to construct or operate a project or enterprise
LAFCo	Local Agency Formation Commission	Political subdivision of the State to oversee the formation and development of local governmental agencies.
LTWAC	Long-Term Warren Act Contract	A contract with the Bureau of Reclamation to utilize their facility to wheel or store water for a specific amount of time.
MFP	Middle Fork Project	Facilities located on the Middle Fork of the Upper American River owned and operated by PCWA
MG	Million Gallons	Measurement of water or wastewater volume
MGD	Million Gallons per Day	Measurement of water or wastewater flow
MSR	Municipal Services Review	Provides a formal and comprehensive look at the provision of services within an agency.
NEPA	National Environmental Policy Act	The law that requires the environmental review process for under Federal jurisdiction
NMFS	National Marine Fisheries	Federal agency responsible for the stewardship and management of the nation's living marine resources and their habitat within the United States.
NOP	Notice of Preparation	A legal notice filed with the state clearinghouse to establish the starting date for developing an environmental document for a project
PCWA	Placer County Water Agency	Water district providing services to Placer County
PWTP	Peterson Water Treatment Plant	SJWD water treatment facility treating surface water from Folsom Reservoir
RFP	Request for Proposal	Document used to solicit professional services
RWA	Regional Water Authority	Regional organization made up of water agencies. Purpose is to assist with regional solutions related to water
SGA	Sacramento Groundwater Authority	A joint powers authority that manages a portion of the North-American Sub Basin between the American River, Sacramento River and the Placer County, Sutter County lines
SWP	State Water Project	California's state owned infrastructure for delivery of water supplies and Flood Control
SWRCB	State Water Resources Control Board	The state agency responsible for developing regulations and policy for protecting the water quality of the state
USBR	United States Bureau of Reclamation (Reclamation)	Federal agency which operates dams and hydroelectric power plants
USFWS	US Fish and Wildlife Service	Federal agency within the Department of the Interior for management of fish, wildlife, and natural habitats.

Executive Summary

Sacramento Suburban Water District and San Juan Water District have mutually agreed to investigate opportunities to maximize the reliability of their respective water supplies. Since September 2011, an ad hoc committee was created and has met to discuss collaborative water management opportunities. The ad hoc committee was formed with two directors from each agency, and has focused on a means of maintaining or increasing their combined level of water supply reliability.

The District's ad hoc committee selected three principal options, as discussed below, to identify the most feasible option for implementation based on a variety of factors. These factors include, but are not limited to, the following: operational suitability; economic viability; availability of infrastructure; consistency with adopted plans; legal and regulatory limitations; jurisdictional boundaries; site accessibility; and, control. The goal of this study is to identify options that can realistically maximize water supply reliability for both San Juan Water District (SJWD) and Sacramento Suburban Water District (SSWD) through a broad range of hydrologic and hydraulic conditions that are expected to occur both now, and in the future.

This document provides a preliminary assessm0ent of potential strategies identified with "San Juan Water District & Sacramento Suburban Water District Phase I Evaluation of Water Management Alternatives" (Phase 1 Evaluation). This study is a high level analysis and does not consider every conceivable nuance of each alternative.

Over the course of this report, MCG evaluated three (3) major options:

1. **Continue Existing Processes** - defined as continuing "business as usual." Any action that can be done now to increase water supply reliability, without any outside permissions or involvement from local, state or federal agencies (ex. PCWA, LAFCo, State Board, USBR). Further, no outside or intra-agency contracts or agreements would be needed to implement any of the identified project(s).
2. **Inter-Agency Agreements**: The Request for Proposal (RFP) for the Phase 1 Evaluation originally defined Option 2 as:

   > *"Amend the existing contract between SJWD and the Bureau of Reclamation to expand their place of use to include SSWD's service area boundary."*

   During discussions with both District staffs, it was agreed that other alternatives along with inter-agency agreements should also be considered. This option considers actions that would be available if the two governing boards remained independent, and could obtain execute agreements or implement programs required for more flexible operations and enhanced water supply reliability.
3. **Consolidation of San Juan Water District and Sacramento Suburban Water District**: This option acknowledges that current governance and an institutional requirements can impede efficient water management practices and therefore presumes that a consolidated and uniform governance structure could be created to maintain or increase overall water supply reliability.

Both governing boards recognize that public policy requires any analysis for a combination of the Districts must consider potential impacts with a focus on possible benefits to the Districts' customers. This analysis should also demonstrate how those benefits can be maintained in a long-term, sustainable manner.

From this high-level analysis, Option 3, combining the two Districts, is found to be the preferred option for maximizing water supply reliability. The Districts will need to demonstrate a "finding of fact" that combining the two districts will be in the public's interest and will meet the following objectives: (1) Provide increased water supply reliability, and (2) Result in greater economies in the form of less cost, or reduced costs, and a higher level of service for the general public. It is recommended that a subsequent, more detailed study (Phase 2 Study) be conducted that focuses on the recommendations of this report.

Summary of Options

Option 1 – Continue Current Practices - defined as " Business as Usual."

San Juan Water District does not have the ability to put all of their surface water entitlements to beneficial use within their retail and wholesale service areas. Orange Vale Water Company, the City of Folsom and SJWD-Retail do not have access to groundwater supplies; thereby, leaving them vulnerable during extend drought conditions. SSWD has access to a reliable surface water supply. This access allows SSWD to continue to improve the availability of regional groundwater supplies. However, SSWD does not have the infrastructure capacity to directly move or export groundwater to SJWD during single or multiple dry years. SSWD has the ability to put SJWD's program water to beneficial use with in their service area, which provides multiple benefits:

1) Continue to establish a sustainable groundwater basin through an in lieu banking program;
2) Establish a historical record for beneficial use through the SSWD customer base; and,
3) Use the SSWD and SJWD capital investments of conveyance facilities to move treated surface water from east to west in the CTP.

However, institutional constraints under Option 1 will continue to hold SSWD and SJWD's water supply reliability at risk because of (1) the length of time and (2) the diluted voice towards both using the SSWD/SJWD capital investments and maximizing SJWD surface water supplies to beneficial through the current regional programs. It has been 13 years since the Water Forum Agreement was signed. After the Water Forum, two regional joint powers authorities (JPAs) have been formed – Regional Water Authority and Sacramento Groundwater Authority - to promote collaboration on water management and water supply reliability programs in the greater Sacramento, Placer, and El Dorado County region. Because these programs consist of up to 25 water providers and affiliated agencies and had historically required unanimous consent for all decisions, progress has been slow to complete programs.

Additionally, risks are also looming to surface water contracts by not proactively taking actions to protect water supplies. California's Central Valley and southern California interests continue to pursue legislative and programmatic actions to increase water supply reliability through surface water supplies in northern California. Delta water quality and restoration is the primary venue to justify the need to impose flow standards to northern California water purveyors. Because of population and fiscal advantages, these interest groups are persuasive in working with State and federal representatives and agencies towards opening water right and entitlement contracts to address Delta water quality, outflows and flows standards for the upstream tributaries. Thus, regulatory hurdles on both the State and Federal levels have impeded success; and, in some cases, pose additional risks to water supply contracts or entitlements, as experienced by SJWD with Bureau of Reclamation and their CVP contract.

Option 2 - Inter-Agency Agreements

There appears to be sufficient legal and contractual authority to execute water transfers, assignments or exchanges of any of the water supplies (CVP, MFP or pre-1914 water supplies). However, re-opening water supply contracts, coupled with the lack of past practices involving

similar water supply contracts is very risky due to recent activities by State and Federal agencies as discussed in Option 1, above. Physical access to reliable surface water supplies continue to be threatened by on many changing circumstances like the BDCP, Climate Change, endangered species needs, Regulatory Requirements, and CVP / SWP Modified Operational Parameters, that are outside either of the Districts direct control. Diversifying both Districts' water supply portfolios is an important vehicle for increasing water supply reliability. Without risking the possibility of adding additional onerous provisions to existing contracts, inter-agency agreements do not appear to be a practicable or provide a reasonable route for the Districts' to pursue without risking the possibility for State or Federal entities to place additional and onerous provisions to existing contracts. Impacts could be significant, and actions to amend water contracts are not recommended at this time.

Option 3 - Combination of San Juan Water District and Sacramento Suburban Water District

The current discussions between SSWD and SJWD are focused on opportunities for joint management of water supply assets and related services. No consideration to expand District services that are currently provided by either District is considered in this analysis. The findings of this high-level analysis concludes that combining the water resource assets of SSWD and SJWD into a single entity will provide superior water supply reliability to both Districts.

Under Option 3, during normal and wet years, SJWD could enter into a renewable, time-limited agreement with SSWD to use Pre-1914 water that is treated through the Peterson Water Treatment Plant (PWTP) and conveyed through the Cooperative Transmission Pipeline (CTP). The Wholesale Agencies would maximize the use of its CVP and MFP water supplies exercising "Program Water" more extensively. This approach enhances water supply reliability not only for the two Districts', but also for the Wholesale Agencies by establishing a historical record of beneficial use of both the CVP and MFP water supplies. For example, in future dry years, when the Bureau of Reclamation order cutbacks to CVP water supplies, the CVP cutbacks are made based on recent, three year, historical use. Establishing a higher historic use baseline would provide SJWD-Wholesale entities more CVP water supplies during dry or critical-year conditions. If SJWD's surface water supplies were further reduced in drier years, SSWD could supplement SJWD through banked groundwater.

Local Agency Formation Commission (LAFCo), as described later, will require an explanation of how the water supply and infrastructure assets of each agency will be used to benefit the public by combining the districts. This would not only include the SJWD's pre-1914, CVP and MFP surface water assets; but would also include SSWD's water supply contracts with PCWA and the City of Sacramento, and SSWD's groundwater assets.

LAFCo would be expected to determine the feasibility of combining the District's organizations and operations under the following considerations:

- Employment contracts, policies and human resources issues;
- Specified plans for combination of top managers' roles and responsibilities, and for staffing key positions;
- Plans and safeguards to ensure uniform and consistent service quality throughout the newly merged jurisdiction.

Subsequent to negotiating an agreement to combine and implement any desired arrangements between SSWD and SJWD, an application would be submitted to the Sacramento LAFCo. LAFCo will conduct and lead the proceedings for a legal combination of the Districts. Because SJWD's service area is located in two adjacent counties, Sacramento LAFCo has indicated its desire to

obtain an acknowledgement or agreement with the Placer LAFCo, to serve as lead agency. The process for combination is well defined by LAFCo and can be summarized as follows:

1. SSWD and SJWD would hold a pre-application meeting with LAFCo. LAFCo's primary concerns with a proposed SJWD-SSWD combination as expressed by LAFCo staff include employment contracts, policies and human resources issues; specified plans for top managers' future roles and responsibilities, and staffing of key positions; plans and safeguards to ensure uniform and consistent service quality throughout the newly merged agency; and plans for retaining equity in rates, fees and charges throughout the new District.

2. The governing boards of SSWD and SJWD adopt similar resolutions for combination, If the governing boards adopt similar resolutions, LAFCo must approve the combination. However, LAFCo can impose terms and conditions upon the action such as: Requiring the Districts to jointly prepare a service plan and fiscal analysis for providing services. The Service Plan would need to address transition of employees, and designation of the general manager.
    a. LAFCo can include a condition requiring a period of time for the combination allowing the successor agency to transition Board representation. LAFCo staff indicated that the successor agency may have an initial successor board of 7, 9 or 11 members, but the size of the Board may need to be reduced over time to a smaller number in accordance with statutory requirements.
    b. In the service plan, LAFCo will require an explanation of how the water supply assets of each agency will be used to benefit the customer base of the combined District. This element of the Plan would not only include the pre-1914 and surface water assets; but would also include contracts between Reclamation and PCWA or the City of Sacramento; and SSWD's groundwater assets.

3. Prepare a fiscal analysis of the Service Plan: The fiscal analysis of the Service Plan must explain how the cost of service would be allocated among the former Districts' customers and, if appropriate, how SJWD's and SSWD's staffs would be integrated. SSWD and SJWD retail zones could be temporarily established to reflect different, zone-specific cost of services. Creating retail zones would be allowed a specified length of time for rates, fees and charges to be equalized over the entire successor district. The status and arrangements with the SJWD Wholesale Agencies would not necessarily need to change.
    a. SJWD's and SSWD's CalPERS retirement plans would need to be reconciled.
    b. Salary and benefits structures would need to be analyzed, and ultimately equalized salaries and benefits between the two districts, for all employees.
    c. SSWD and SJWD would be required to conduct the appropriate level of CEQA review for combining the Districts. It is anticipated that CEQA review could be accomplished with a negative declaration since both service areas are largely entitled with designated land uses and already-developed areas.

4. Proceed with the LAFCo Process: Once CEQA proceedings and a Service Study are final, and the desired arrangement for combining is defined between the Districts' and LAFCo's staffs, then the SJWD and SSWD Boards would initiate the formal LAFCo application process by adopting a substantially similar resolution of application and submitting supporting documentation required by LAFCo (maps, demographic and financial data, etc.).
    a. LAFCo staff would review the application and work with the two Districts' Boards and staffs on additional information requests.

b. With no protest, LAFCo could process and tentatively approve the application. Although LAFCo typically provides a 30-day minimum comment period, if no protests are received, LAFCo would proceed with one or more public hearings, depending on the number of public comments received.

5. LAFCO would record a Certificate of Completion: After its approval of an uncontested application, LAFCO would record a Certificate of Completion in both Sacramento and Placer Counties finalizing the combination.
    a. If protested, LAFCO would be required to hold additional proceedings and require the Districts to hold an election to permit their voters to approve or disapprove the proposed combination. A successful protest would require at least 25% of the landowners of assessed property holding 25% or more of total assessed value, or 25% of all registered voters within the two Districts.

Findings

From this high-level analysis, Option 3, Combination of SJWD and SSWD, is determined to be the recommended option to maximize long-term water supply reliability for the two districts. Under Option 3, a combined agency would place the two districts in a better position to control its destiny; manage and protect its water supplies; and address federal, state and regional influences impacting water supply reliability. The benefits for combining districts include:

(a) Economies of scale for district representation on regional, state and federal matters within the Lower American River region;
(b) Flexibility to use Pre-1914 water and maximize the use of CVP supplies for SSWD, SJWD and the Wholesale Agencies resulting in increased water supply reliability;
(c) Establish a historical record of using CVP supplies; and,
(d) Avoid event-driven inter-agency negotiations for exchanges or transfers of water supplies during dry-year reductions or critically dry-year events.

Although issues have been identified related to combining SSWD and SJWD, there are no obvious or compelling deterrents, which would preclude combining the two water districts. However, it is highly recommended that a detailed, Phase 2, analysis be conducted to validate and more thoroughly analyze a combination of water districts.

Streamlining the process, the Phase 2 Detailed Analysis for combining the two water districts should base their analysis on the requirements of the Sacramento Local Agency Formation Commission outlined for the Municipal Services Review (MSR). LAFCo has specific requirements for considerations when changing, adjusting or modifying service area boundaries. The MSR provides a written determination for the following factors:

a. Infrastructure needs and deficiencies
b. Growth and population projections for the affected areas
c. Financial constraints and opportunities
d. Cost avoidance opportunities
e. Opportunities for rate restructuring
f. Opportunities for shared facilities
g. Government structure options including advantages and disadvantages of consolidation or reorganization of service providers
h. Evaluation of management efficiencies
i. Local accountability and governance.

Major Actions for Moving Forward under Option 3

The following steps can be used as an outline for moving forward under Option 3:

1) Conduct a Phase 2 Detailed Analysis directed at combining SSWD and SJWD into one District.
   a. Validate the merits to dissolve SSWD and establish SJWD as the successor agency.
   b. Validate the establishment of divisions for elections of the successor agency directors, or for at-large elections that includes electoral zones for the directors of the combined district;
   c. Prepare a Municipal Services Review - an analysis based on the LAFCo process and requirements for consideration of the combination of districts;
   d. Establish a transition plan that addresses key issues such as:
      i) Transition of executive staff and associated support positions;
      ii) Completion of a compensation plan that addresses equalization of salaries and benefits, including reconciling CalPERS retirement plans between the two districts;
   e. Conduct a detailed cost-of-service plan to establish zones-of-benefit that reflects existing service areas and associated rate structures; and,
   f. Validate with Bond Counsel the process to fully integrate bond debt, considering the call-dates (2019 and 2022) of outstanding bonds, in developing a process that would not impair bondholder security.
2) Evaluate other considerations for the Phase 2 Detailed Analysis to include:
   a. Conduct an engineering feasibility study to explore the potential operational strategies of combining the two Districts, and verify as-good-as or better system performance criteria for existing customers under a range of hydrologic conditions. This study should investigate any new infrastructure or operational requirements needed to fully exercise water supplies available to the consolidated district.
   b. Develop provisions within the respective District resolutions to combine the districts to protect the surface water supply reliability of the Wholesale Agencies.
   c. Conduct a detailed operations/service plan to address staffing and resource management (e.g., fleet, corporation yards, etc.) issues to promote "cultural" integration of the combined districts' staff.
3) Each Board prepares and adopts substantially similar resolutions to combine districts, and subsequently submit an application to combine the districts to LAFCo.
4) Once the Phase 2 Analysis and LAFCo application is submitted, the Districts initiates an inter-agency agreement to implement an interim transfer to serve as a trial for maximizing the use of the surface water supplies.
   a. The inter-agency agreement outlines an Trial transfer between SJWD and SSWD using the Pre-1914 water supplies to serve SSWD **with a provision** that use of the Pre-1914 water supply **must revert back** to the Wholesale Agencies during emergency or shortage events (e.g., Stage 3, or greater, Notifications). Under this Trial Period during drought or shortage conditions, SSWD would forego the use of the interim Pre-1914 water supply and return to groundwater as its primary water supply. The Trial process establishes a model for implementing the formal conjunctive use program as well as identify operational or institutional challenges that were previously unforeseen.

      For SJWD's pre-1914 water right, Water Code Section 1706 allows this water supply to be transferred by changing the purpose of use, place of use or point of diversion under the water right. The point of diversion, place of use or purpose of this water supply can be changed only if others are not injured by the proposed change. This "no injury rule" protects other legal users (e.g., Wholesale Agencies) of the water, including fish and wildlife, from adverse impacts of a water transfer. Since SJWD has demonstrated a historical use of the entire pre-1914 water supply from Folsom Reservoir, establishing a "no injury rule" argument against an agreement to serve SSWD would be unlikely. The same point of diversion, if treated at the PWTP, and transmitted it through the Cooperative Transmission Pipeline, would further support an agreement.

A primary consideration for using the Pre-1914 water supply in the SSWD service area is centered on the existing Wholesale Agencies' rights and obligations. As the Wholesale Agencies have a long and complex history, more careful and detailed analysis of the historical records and specific contracts is necessary. SJWD has specific terms with each Wholesale Agency to provide surface water supplies. However, SJWD was formed by the Wholesale Agencies to act as the owner of the water rights and those agencies have traditionally relied upon SJWD for treating and delivering their water supplies.

Recommendations

Proceeding with Option 3, based on the high-level analysis conducted combining the two water districts, provides the highest level of long-term water supply reliability for both SSWD and SJWD, including the Wholesale Agencies. The following summarizes recommendations from this analysis:

1) Proceed with a Combination of Districts: SSWD and SJWD should move forward with combination of the two Districts. Combination will provide opportunities to maximize water supply reliability utilizing available assets of the individual districts. All the major elements of implementing a responsive conjunctive use program exist between the two districts. Surface and groundwater supplies are available; treatment, storage and major transmission facilities exist; and pumping facilities for water movement are being planned.

   a) Proceed with a Phase 2 analysis: Given the established process for combination, and the benefits of developing a long-term enhancement for water supply reliability, SSWD and SJWD should expect a significant amount time and effort to prepare the documentation and outreach necessary for combination; however, there is no obvious deterrent to move forward with the Phase 2 analysis to combine SSWD and SJWD.

   b) Use the Existing LAFCo Process: Using the defined LAFCo process, provides the two districts with the framework for analyzing a combination of the two disitrcts. If the districts ultimately decide to proceed with a combination, use of the LAFCo process facilitates the analysis and studies required for a LAFCo approval for a combination.

2) Develop and implement a Trial Transfer: Once the Phase 2 Analysis and LAFCo application is submitted, develop and implement a trial water transfer consisting of an short-term/interim water transfer between SSWD and SJWD to use Pre-1914 water supplies to serve SSWD **with a provision** that Pre-1914 water supplies **must revert back** to the Wholesale Agencies during an emergency, shortage events or critically dry years. Under these terms, SSWD would forego use of Pre-1914 water supplies and return to groundwater as their primary water supply. Wholesale Agencies would in turn maximize the use of SJWD's CVP and MFP water supplies maximizing the use of "Program Water". This approach enhances water supply reliability not only for the two Districts', but also for the Wholesale Agencies by establishing a historical record of beneficial use of both CVP and PCWA water supplies. If SJWD's surface water supplies were reduced in drier years, SSWD could supplement SJWD through banked groundwater, with the appropriate infrastructure, to the extent groundwater well capacity is available and facilities to pump groundwater back to SJWD are constructed.

Overview for High-Level Feasibility Analysis for Water Supply Reliability

Interests

The primary purpose for Sacramento Suburban Water District (SSWD) and San Juan Water District (SJWD) pursuing a Phase 1 Evaluation is to identify opportunities for maximizing long-term water supply reliability. This can be accomplished by putting surface water supplies to beneficial use through an integrated conjunctive program that utilizes the Districts' respective water resources and their associated infrastructure.

Purpose

This document provides a high-level assessment of potential strategies identified in the Request for Proposals (RFP), titled: "San Juan Water District & Sacramento Suburban Water District Phase I Evaluation of Water Management Alternatives" (Phase 1 Evaluation)[1]. This Phase 1 Evaluation is intended to serve as a frame of reference for the District's governing boards to determine whether to proceed with a Phase 2 evaluation - a more detailed Study that addresses specific elements of the recommended alternative or move directly to the recommended action.

Drivers To Analyze Water Supply Reliability

Northern California's water supplies (Ag, Municipal, Industrial and Environmental) are being threatened by the need to develop additional water supplies for population growth in southern California and to restore California's Bay-Delta, both of which aggravate tensions between agricultural, municipal, and environmental water interests. State and local agencies are developing new water projects; implementing aggressive water conservation efforts; requiring the reduction of consumptive demands or irrecoverable system losses; and developing water reclamation programs so that California can balance the expanding water supply needs of the State.

In particular, comprehensive water legislation adopted in 2009 requires the State Water Resources Control Board (SWRCB) to adopt minimum Delta Outflow standards and flow standards for all major Delta tributaries including the American River. This process adds considerable risk as surface water rights not yet used may be usurped for environmental flow needs.

Overview of the Districts

Sacramento Suburban Water District

SSWD serves a population of approximately 171,000 in Sacramento County and was organized as a County Water District. The District is comprised of two primary service areas: the North Service Area, and the South Service Area. The District's current water supply permit identifies two sub-areas of the NSA that is associated with former federal facilities. The NSA is a larger area consisting of the Arbors at Antelope housing area, McClellan Business Park, and the

Key Considerations:

- 44,771 Retail Customers
- 35.96 Square Mile Service Area
- Special District status
- Surface Water Supply Contracts through PCWA and City of Sacramento
- Groundwater Rights
- Capital Debt
- Available Transmission Capacity

[1] RFP distributed on 7/24/13 and amended on 8/1/13

previously mentioned North Service Area. The South Service Area includes the Town and Country service area of the former Arcade Water District. The service areas within the District are shown on Figure 1.

SSWD was formed through a consolidation of Northridge Water District and Arcade Water District in February 2002. SSWD is classified under LAFCo Law as a Special District – County Water District for the purpose of providing water utility service for residents and businesses located within their service area.

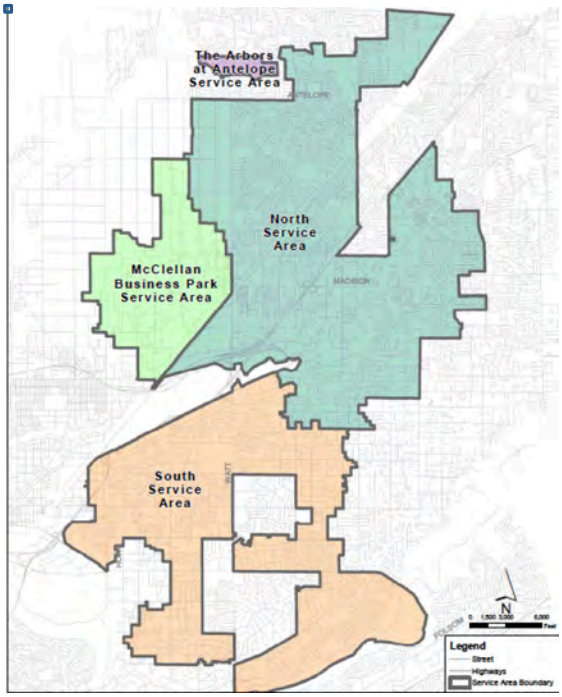


Figure 1, Sacramento Suburban Water District

Board of Directors - A five member Board of Directors governs SSWD. Directors are elected to serve four-year terms; with three Directors elected in one election and two during the next. Elections are held in even numbered years. Each director is elected, by division, and must reside within the division in which they live as shown in the SSWD Division Map (Appendix A).

Water Supply Contracts

SSWD has significant investments in groundwater infrastructure. For decades prior to the early 2000's, the District had groundwater as their only source of supply, which, along with other groundwater pumping agencies in the region, contributed to the decline regional groundwater levels. Through a series of infrastructure investments and agreements the District acquired periodic access to treated surface water supplies, which resulted in increased regional groundwater elevations. Since beginning the conjunctive use operation, SSWD has been able to demonstrated measurable improvement to groundwater elevations.

SSWD acquires surface water supplies from Placer County Water Agency from their Middle Fork Project, and from the City of Sacramento off the Lower American River. Access to these surface water supplies depends on hydrologic conditions in the region and in the Lower American River. Receiving this water depends on in-stream flow requirements, and operates two separate conjunctive use systems with different sources, source availability, treatment and transmission systems.

Under the Water Forum agreement, SSWD agreed to limit their diversions from the Lower American River when flow rates are below what is required by the Hodge decision. Because of these limitations, the District is looking for ways to increase regional reliability and utilize their extensive groundwater assets in conjunctive ways. When surface water is not available, SSWD supplies their customers with 100% groundwater from 86 production wells in the North American Groundwater sub-basin. It should be noted that SSWD does not need additional surface water supplies, but needs better access to those supplies during all year types. Through Sacramento Groundwater Authority's water accounting framework, SSWD can meet or exceed any obligations for groundwater banking, and water conservation.

SJWD treats and conveys treated PCWA surface water when capacity is available at its Petersen water treatment plant and when limitations do not preclude diversions from Folsom Reservoir. Water is available from PCWA's Middle Fork Project (MFP) when unimpaired inflow to Folsom Lake is expected to be above a trigger value of 1.6 million acre-feet per year. A Warren Act Contract from the U.S. Bureau of Reclamation is required to divert PCWA MFP water from Folsom Reservoir. This water is conveyed to SSWD's North Service Area through the Cooperative Transmission Pipeline (CTP). SSWD also receives treated surface water from the City of Sacramento from the Fairburn Water Treatment Plant for their South Service Area when requirements are met on the LAR.

Water Supply Summary		Amount (AFA)
Groundwater Supplies		158,761[2]
Surface Water Supplies	City of Sacramento (Area D)	9,300[3]
Surface Water Supplies	City of Sacramento (Area D)	26,064[4]
Placer County Water Agency	PCWA	12,000 to 29,000

Table 1, SSWD Water Supply Summary

San Juan Water District (SJWD)

San Juan Water District is both a wholesale and retail water purveyor. Retail operations serve an area of approximately 17 square miles in Granite Bay (Placer County) and a small area in northeast Sacramento County. Wholesale and Retail customers receive 100 percent of their water supply from Folsom Lake.

San Juan Water District (SJWD)- Retail

Retail customers include more than 10,000 residential and commercial service connections. These customers receive 100 percent of their water supply from Folsom Lake. San Juan Retail has the same governing body and water supply contracts as San Juan Wholesale does. A summary of their water entitlements is described below.

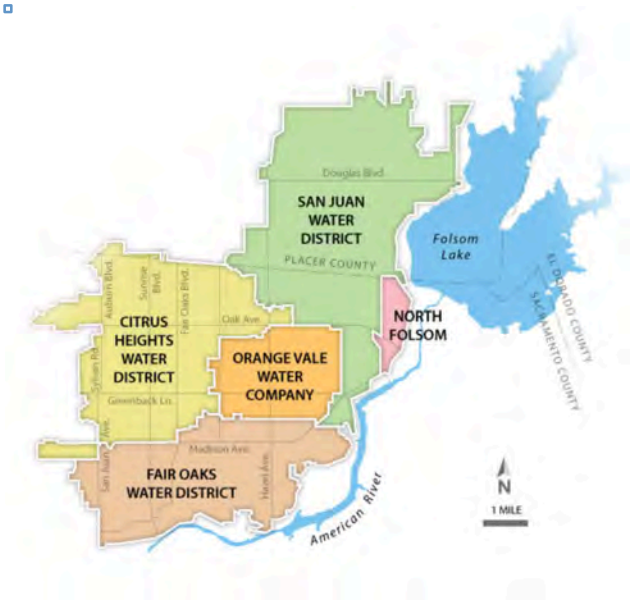


Figure 2, San Juan Water District

San Juan Water District - Wholesale

San Juan Water District's Wholesale operation dates back to 1954 when voters throughout the wholesale service area approved the formation of a community services district with the primary purpose of purchasing the pre-

[2] Annual amount based on 98,390 gpm well pumping capacity.
[3] Area D water rights overlaying the former Arcade Water District and currently under contract with the City of Sacramento.
[4] Area D water rights overlaying the former Northridge Water District not under contract

1914 water rights of the North Fork Ditch Company, whose existence dates back to 1854. The wholesale operation diverts water from Folsom Lake, treats it to meet drinking water standards and then delivers it to the wholesale customers.

SJWD's wholesale business operates a 150 million gallon per day (mgd) water treatment plant; storage facilities; several pump stations; and, 17 miles of transmission facilities. San Juan's wholesale customers include the City of Folsom, north of the American River; Citrus Heights Water District; Fair Oaks Water District; Orange Vale Water Company; and, San Juan Water District Retail.

Board of Directors

A five-member board of directors governs San Juan Water District's retail and wholesale operations. The directors are elected to serve four-year over-lapping terms, three Directors are elected in one election and two during the next year. Voters living throughout San Juan's wholesale and retail service area elect directors at-large to serve their four-year terms.

Key Considerations:

- 10,410 Retail Customers
- 17 Square Mile Service Area
- Community Services District status
- Surface Water Rights
- No Direct Groundwater Supply (SJWD-Retail)
- Available treatment capacity

Water Supply Contracts

SJWD has three primary sources of surface water supplies: (1) pre-1914 water rights; (2) a long-term Central Valley Project (CVP) contractual supply; and (3) a long-term contract with Placer County Water Agency (See Table 2). Surface water from these three sources is diverted through Bureau facilities at Folsom Dam ad delivered to the District at the Hinkle Wye. Access to PCWA supplies requires a Warren Act Contract with Reclamation to use CVP facilities to convey water to the Peterson Water Treatment Plant (PWTP).

The group of retail districts receiving water supplies from SJWD is collectively referred to as the San Juan Water District Wholesale Customer Agencies (Wholesale Agencies). Wholesale Agencies include the City of Folsom (north of the American River); Citrus Heights Water District; Fair Oaks Water District; Orange Vale Water Company; and, San Juan Water District-Retail. SJWD's wholesale operates a 150 million gallon per day (mgd) capacity surface water treatment plant, storage facilities, and manages several pump stations and transmission facilities.

SJWD Water Supply Summary	
Water Supply Summary	Amount (AFA)
Water Rights	33,000
CVP	24,200
Placer County Water Agency	25,000
	82,200

Table 2, SJWD Water Supply Summary

Collaborative History Between SSWD and SJWD Both SJWD and SSWD have a long history of working collaboratively together on projects of mutual benefit. Actions related to the BDCP, OCAP Biological Opinion Recommended and Prudent Actions, and the SWRCB Flow proceedings, as well as multiple others, heightened the Districts' awareness of the need to implement a conjunctive use plan that provides redundancy of facilities and puts all surface water supplies to beneficial use. With SSWD's surface water contracts, groundwater facilities and transmission pipelines, and SJWD's treatment plant capacity and available surface water supplies, the two agencies identified a plethora of alternatives that facilitates this collaborative approach being explored.

Agency Comparison

To get an idea of size and operational scope of San Juan Water District and Sacramento Suburban Water District, a side-by-side comparison of the general agency statistics is contained in Appendix B.

Governance Comparison

SJWD is organized as a Community Services District, while SSWD is a County Water District. Each district was formed to provide water service for an identified service area. Both district types have distinct advantages and disadvantages; but, in practice, the districts are more alike than dissimilar when serving as a water purveyor. A community services district (CSD) has broader authorities and receives revenues from state property tax in addition to rates and service fees. The county water district does not receive revenues from property tax and is supported only by rates and service fees. The CSD was, by Legislative design, a method to provide community services similar to what an incorporated city would in less urbanized areas. The CSD Act authorizes districts to provide law enforcement, animal control, street lighting, recreation, and many other municipal-level services. However, like SSWD, SJWD only provides water utility services as a community services district. Unlike SSWD, SJWD provides both wholesale and retail water services.

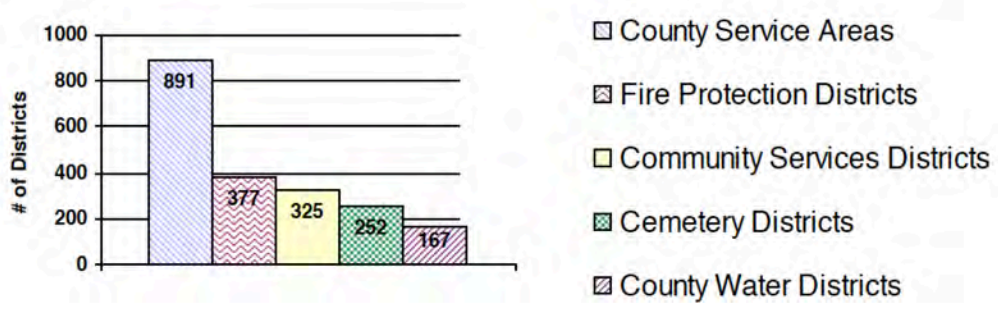
Special Districts

California has nearly 3,400 special districts that vary in scope and purpose. Special districts provide various types of public services such as fire protection, wastewater services, water supply, electricity, parks, recreation, sanitation, cemeteries, and libraries. Sacramento County has numerous special districts that provide these public services.

Service areas for special districts range in size from a few acres to thousands of square miles and can cross, city or county lines. For example, El Dorado Irrigation District has a sliver of its service area within the City of Folsom, south of U.S. Highway 50. On a larger scale, Metropolitan Water District of Southern California serves over 18 million people in more than 5,200 square miles in six counties.

There are about 50 major types of special districts (and many subcategories) ranging from airport to cemetery to water conservation districts. County water districts in California account for a relatively smaller number of special districts as shown in the chart below. The chart shows five of the most common types of districts. Also noted in the chart are the numbers of community services districts, which may also include water districts.

Special districts can generate revenue from several sources including property taxes, special assessments, and fees. Enterprise districts are run much like a business and provide specific benefits to their customers who pay for services the district provides.



There are two forms of special district governance. Two out of three have a board of directors independently elected and that serve for fixed terms. Most have five-member boards but can vary with the size and purpose of the district. The other type of special district is a dependent district governed by either a city council or county board of supervisors. SSWD was formed under the County Water District Law[5], and SJWD was formed under the Community Services District Law[6]. The government code identifies the powers and authority of each form of district.

SSWD, under County Water District Law, is authorized to provide water service and to take actions needed to develop water rights and resources, and to build, operate, maintain, upgrade and expand infrastructure necessary to provide service to their customers. They can also take part in activities to ensure its authority to supply water to its customers.

SJWD, under the Community Services District Law, is authorized to take similar actions to provide water service to its customers. The Community Services District Law is also permitted to provide services and take action like a general law municipality in relatively more undeveloped areas. SJWD provides wholesale service under the scope of the Community Services District Law. SSWD does not provide wholesale services; however, there is no restriction as a County Water District, from providing wholesale water service.

Under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 called the "LAFCo Law," neither District may exercise any power that it is not actively exercised unless the District applies to LAFCo for the authority to exercise that underlying power and LAFCO approves the request.

[5] Water Code sections 30000 through 33901
[6] Government Code sections 61000 through 61226.5

Option 1 – Continue Existing Processes

Option 1 is defined as "continuing business as usual." Meaning the Districts can take any action that can be done now to increase water supply reliability without permission or involvement from any local, state or federal agencies (e.g., PCWA, LAFCo, State Board, USBR). Meaning they would not need any outside or interagency contracts or agreements in order to implement identified water supply reliability project(s).

Several regional organizations have been created to organize and implement opportunities to work collaboratively with other water purveyors.

Regional Water Authority

The Regional Water Authority (RWA) was developed to unite the regions water purveyors to implement projects like the Integrated Regional Water Management Plan (IRWMP) using governance and project management structures already in place.

RWA's Integrated Regional Water Management Plan is a Multiple Agency Program that is dependent on other agencies. Agency projects identified usually require state or federal grants and matching contributions from the participants to implement the projects. Because multiple projects are usually part of a larger grant application effort, individual purveyors are less influential over the broader picture and to some extent lose some control over their own projects. Implementation under this structure requires interagency agreements and would fall under Option 2.

Sacramento Groundwater Authority[7]

A second regional organization is the Sacramento Groundwater Authority (SGA). This joint powers authority (JPA) was formed as an outgrowth of the Water Forum Agreement, focused primarily on managing the groundwater basin between the American and Sacramento Rivers on the south and west, the Placer and Sutter County lines on the north, and the Sierras on the east.

SGA last adopted a Groundwater Management Plan (GWMP) in February 2009, with the intent of updating the plan every five years. The primary purpose of the plan is to monitor the status and health of the basin, collect data for analysis and develop and implement policies to protect the quality and sustainability of their portion of the groundwater basin.

In the GWMP, several tools were identified that would assist agencies in formalizing conjunctive use throughout the basin. The Water Accounting Framework (WAF) focuses on maintaining various modeling and management tools needed to assess the results of conjunctive use operations in the basin. A formal accounting framework was developed that accounts for deposits and withdrawals associated with annual conjunctive use operations.

This program continues to evolve under the GWMP. The next steps are to evaluate how other groundwater banks throughout the state operate and recommend criteria on how local agencies conducting conjunctive use programs could participate the regional banking and exchange program (internal or external) to the basin. A second effort focuses on what monitoring criteria should be collected to assess the long-term sustainability of the basin in a conjunctive use / banking and exchange operation.

A sense of urgency does not exist under RWA or SGA for implementing an aggressive conjunctive use program in the region. A program that focuses on increasing water supply reliability for both

[7] Excerpts Taken from GWMP - 2008

surface water and groundwater supplies over the next 5-years is needed for agencies with larger populations, related infrastructure debt and minimal alternative water supplies. The current, 2013-14 drought has highlighted this need.

Under RWA or SGA, implementation of a project requires grants or direct contributions by individual participants to move the program forward. Using the current financing structure ("Under the Green Line – RWA") dilutes SJWD or SSWD's influence on implementing an agency specific project by only having one or two votes, which is not necessarily weighted by how much is contributed toward the project.

Inter-Agency Agreements - If SSWD and SJWD decided to move forward outside of the IRWMP or the GWMP, this would require interagency agreements, which is the focus of Option 2 and its analysis.

1.1 Financial

If the districts stay with the status quo or modify water contracts in the service areas, they will maintain their own debt, operating structures, and connections. Under these two scenarios, these decisions will not have an impact on the debt or financial structures of the Districts.

1.2 Risks

1.2.1 Sacramento Suburban Water District

Since the early 1990's SSWD and its predecessors have taken steps to augment groundwater supplies in the North American Sub-basin through implementing two independent conjunctive use systems; importing surface water from the American River and banking in lieu in their service area. One system has been and continues to be accomplished through agreements with Placer County Water Agency (PCWA), US Bureau of Reclamation (USBR), and San Juan Water District (SJWD). Construction of major pipeline projects by the District enables SSWD to receive treated surface water from SJWD's Peterson water treatment plant (PWTP). Major pipeline projects include the Cooperative Transmission Pipeline (CTP), Antelope Transmission Pipeline (ATP) and other appurtenant facilities.

The District also entered into an agreement with the City of Sacramento to purchase treated American River water from Fairbairn WTP. SSWD also receives water from the City of Sacramento through various interties, primarily at the District's Enterprise Tank and Pump Station.

To date no formal solution for being able to use the CTP or banked groundwater in a long-term conjunctive use program exists. SSWD and SJWD Wholesale are the only investors in the regional infrastructure, and SSWD is the only agency with a significant long-term financial risk. The Operating costs for the CTP is based on a pro-rata basis based upon the quantity of water delivered through the CTP. The Maintenance costs are incurred on a pro-rata basis based upon the percentage each agency is entitled to of the total capacity of the CTP. Whereas the capital costs are allocated on a pro-rata basis based upon percentage each agency is entitled to the CTP capacity, by segment of the system. As part of the Phase 2 analysis, if the Districts decide to pursue, consideration to review historical cost allocations, and an analysis of scenarios for normal/wet-year and dry-year uses that promote groundwater banking and exchanges should be conducted.

SSWD purchases surface water from PCWA, on a take-or-pay, and from the City of Sacramento to offset groundwater use in their service area. The PCWA supply can only be taken when available. SSWD pays SJWD and the City to treat water on their behalf and pay the lion's share of the operations and maintenance cost for the CTP.

If SSWD cannot find an economical way to put banked groundwater to use, they will be putting their customer base at a financial disadvantage to other purveyors in the region who are benefitting from their forward thinking in stabilizing the groundwater basin.

Financial Risks

From an analysis conducted in **February 2014** for SSWD the following costs were identified for banking surface water in the groundwater basin.

Buy PCWA Water Delivered by SSWD	$212.30/AF
Buy City of Sacramento Water Delivered by SSWD	$439.41/AF
Have SSWD Bank Surface Water	
Low	$260.63/AF
High	$398.45/AF
Previously Banked Water Delivered by SSWD	$455.96/AF

Acquisition and banking costs per acre-foot for banking purposes only is expensive when compared to what regional surface water supplies cost. Compare contractual surface water purchased, treated and delivered for $182 per acre-foot. SSWD would benefit from finding a way to obtain a return on their investment in groundwater storage.

SSWD would benefit from finding a way to obtain a return on their investment in groundwater storage.

As of January 2014 the following conditions still exist for SSWD:

- Banked groundwater still remains in the aquifer.
- SSWD continues to pay Placer County Water Agency for surface water whether they can take the water or not. The contract requires the District to pay for 12,000 acre-feet of water when the water can be diverted from the American River.
- SSWD customers continue to pay debt service on bonds issued to build infrastructure to access surface water from the American River and Folsom Lake.
- Regulatory or institutional structures as well as the appropriate infrastructure is not fully in place to enable movement of water between purveyors, except on an emergency basis.

1.2.2 San Juan Water District

San Juan Water District has one of the oldest water rights on the American River. Table 3 summarizes the District's water supplies as well as wholesale and commitments. SJWD has between 21,000 and 26,000 AF of "program water" available for a regional conjunctive use program. To maximize water supply reliability, the District must demonstrate beneficial use of their full water rights and entitlements or potentially loose a portion of the supply portfolio. SJWD has already experienced a supply reduction in their CVP contract.

Under existing conditions, the major source of SJWD's supply is Folsom Reservoir. Based on changing circumstances like the BDCP, Climate Change, Regulatory Requirements, Modified Operational Parameters and others, are threatening the reliability of surface water supplies on the American River. Diversifying the water supply portfolios in both Districts is an important vehicle for maximizing water supply reliability.

The following is a real example of how water supply reliability has changed over a short timeframe. During the initial phases of the Water Forum process, water supply reductions were expected to occur roughly 13 out of 100 years (13% of the time). Since 2000 this impact has changed to roughly 52 years out of a 100 (52% of the time) where some form of a reduction in supplies will occur. Critically dry years were projected to occur 2 years out of 100. Now, they are projected to

occur 11 years out of 100. Surface water supplies are at risk and access to alternate sources of supply are critical to achieving increased water supply reliability.

San Juan Retail, Orange Vale Water Company and the City of Folsom do not have access to groundwater sources when surface water is not available. There are numerous water purveyors looking for opportunities to access the regional groundwater basin for storage opportunities. In exchange they are looking to store surface water during plentiful times with the expectation of accessing the stored groundwater supplies through some type of exchange agreement during dry years. To maximize SJWD's water supply portfolio, SJWD must use the SJWD programmatic water (21,000 to 26,000 AF) that has not yet been put to beneficial use. An active regional conjunctive use program provides local purveyors the opportunity to bank water, but to date it has been difficult, if not impossible to implement under current conditions. Inter-Agency Agreements are required to implement a regional, multi-agency conjunctive use program.

On a smaller scale, the wholesale agencies have not been able to capitalize on work completed by SGA to implement a local program, as intended under the Water Forum Agreement. The reality is that the ability to move water between wholesale partners is limited. This makes it difficult for agencies that only have access to surface water, to access groundwater under Fair Oaks Water District or Citrus Heights Water District. In addition, extraction capacity and pumping capacity does not exist throughout the wholesale service area to provide enough groundwater supplies for those agencies not overlying the groundwater basin.

Table 3, Summary of Water Use by Agency

Summary of Water Use by Agency And Contract Amounts			
	Current (2015 est.) Acre-Feet/Year	2030 (Buildout Approximation) Acre-Feet/Year	Contract Amounts Acre-Feet/Year
San Juan Wholesale Pre-1914 CVP CVP – Fazio PCWA			 33,000 11,200 13,000 25,000
San Juan WD – Retail	12,969	16,615	
City of Folsom	1,540	1,540	
Fair Oaks WD	12,853	14,894	
Citrus Heights WD	18,904	18,765	
Orange Vale WC	5,400	5,000	
Roseville - Reallocation	4,000	4,000	
TOTAL:	**55,666**	**60,814**	**82,200**
Available for Conjunctive Use:	**26,534**	**21,386**	

Inter-Agency Agreements - If SSWD and SJWD decided to move forward outside of the IRWMP or the GWMP, this would require interagency agreements. This is the intent of Option 2 of this analysis.

Financial Risks

SJWD currently pays for their PCWA supply on a "take or pay" basis. This means that the District pays for a full contract amount regardless of whether they use the water. Because the water is released down stream by PCWA or because the CVP water is not fully used, the Bureau of Reclamation considers this water abandoned and benefits by using it downstream. To ensure these entitlements are not lost, especially after significant investment in the entitlements, the District must put the supplies to beneficial use. Estimated cost of CVP and PCWA water supplies are:

Annual Cost at Risk			
	Volume AF/Yr	Annual AF Cost $/AF	Annual Cost
CVP Contractual Supplies	24,200 AF	$35	$847,000[a]
PCWA Contractual Supplies	25,000 AF	$35(PCWA Cost) + $30(Wheeling Cost)	$1,625,000
Prorated Cost	21-26,000	$50.24	$1.055 to $1.306 million

Table 4, Annual Cost as Risk
NOTE: a - Pays for only the amount of CVP water taken in a given year.

1.3 Option 1 - Summary

San Juan Water District does not have the ability to put all of their surface water entitlements to beneficial use within their retail or wholesale service areas. Orange Vale Water Company, the City of Folsom and San Juan Water District do not have access to groundwater supplies leaving them vulnerable during extend drought conditions. Sacramento Suburban Water District does not have reliable access to surface water supplies. They have the ability to put SJWD's program water to beneficial use in a broader service area, which provides multiple benefits: 1) increased groundwater basin sustainability through an in lieu banking program; 2) SSWD has the customer base to put surface water supplies to beneficial use; and, 3) there has been considerable investment in conveyance facilities to move treated surface water from east to west in the CTP.

Major risk arises out of the significant amount of time required to put a regional program into operation. For over 13 years, since the signing of the Water Forum Agreement, RWA and SGA have put a portion of elements of a comprehensive conjunctive use program in place, but there is no urgency on the region's part to complete the whole program. Regulatory hurdles on both State and Federal levels have impeded success and, in some cases, pose risks to water supply entitlements as experienced by SJWD and SSWD with their various contracts.

Ongoing annual operating costs (~$2 million) continue to be recognized by the Districts, without being fully able to put water earmarked for a conjunctive use program to beneficial use through a regional banking program.

Both water district's water supply reliability remains at risk if the existing regional programs are entrusted to collaboratively achieve reliability. Because of the amount of participants within these regional programs, SSWD and SJWD are two of many agencies making decisions on prioritization of program elements that will enhance water supply reliability.

Option 1 will not achieve the goal of maximizing water supply reliability. Nor will it minimize risks to water supply entitlements due to the following reasons:

a. San Juan Water District will need to pursue other options to maximize the beneficial use for its surface water entitlements within both the retail and wholesale service areas.
b. Wholesale agencies, such as Orange Vale Water Company and San Juan Water Districts, do not have access to groundwater supplies that make them vulnerable during extend drought conditions.
c. Sacramento Suburban Water District has the ability to put SJWD's CVP and MFP water supplies to beneficial use.
d. Sacramento Suburban Water District has the capacity to pursue options that allow increased development of groundwater banking and exchange opportunities through its in-lieu groundwater banking program, and to capitalize on its considerable investment in conveyance facilities to move treated surface water from east to west through the CTP.

Continuing down the same road will garner the same results. Option 1 is not a recommended course of action.

Option 2 – Inter-Agency Agreements

A high-level assessment considered alternatives to achieve water supply reliability through inter-agency arrangements between SSWD and SJWD. The Request for Proposal (RFP) for this Phase 1 Evaluation defines Option 2 as:

> *"Amend the existing contract between SJWD and the Bureau of Reclamation to expand their place of use to include SSWD's service area boundary."*

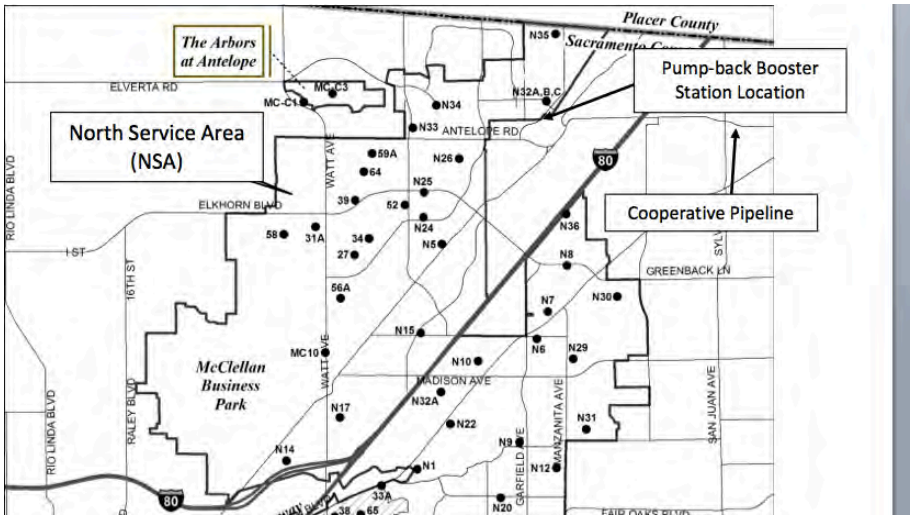
However, through discussions with agency staff, an Option 2 was modified to address inter-agency agreements based on existing water supply agreements. Although some variations of these alternatives are unworkable because of constraints from the agreement process, local or regional political environments, or for increased risks to one or both districts, it is important to identify the alternatives and include them in this analysis to avoid re-introducing these alternatives should the Districts' move into the next phase of a more detailed-level analysis. Generally, the alternatives analyzed include:

1. Contract amendments for water transfer, assignments or exchanges; and
2. Amendment of the Service Area in the SJWD and Reclamation contract to include SSWD.

For the two alternatives, the analysis assumed the following:

1. No changes to the Board structure, or to either Districts' assets, liabilities, permits, operations contracts or other formal instruments that together legally authorize and define the two Districts respectively;
2. Strategies that advance or meet the Districts' primary interest of maximizing water supply reliability through a range of available authorities, agreements, contracts, and processes.
3. Amend or apply SJWD's long-term surface water supply portfolio, as appropriate, or identify other reasonable opportunities, for SJWD to deliver surface water supply beyond SJWD's service area boundary to SSWD.

2.1 Framework - Option 2



Under Option 2, inter-agency agreements would be executed so that SJWD could provide surface water to SSWD for consumptive use or for in-lieu groundwater banking. During dry years or emergency events, SSWD could reciprocate by using groundwater pumped back into the SJWD services area through the Cooperative Transmission Pipeline. This would occur when the SJWD's primary source of supply (surface water from Folsom Reservoir), is constrained by reservoir operations or if storage is not capable of meeting SJWD's demands.

SSWD has a reliable groundwater supply augmented by their banking program initiated in 1998. Banked groundwater can be a major source of potable water for use during peak-periods or dry-year events. This usage of groundwater in this way is consistent with the Water Forum, and with the Statewide goal of being self-reliable using conjunctive use strategies – increased use of groundwater during dry years and use of surface water in the normal/wetter years allows replenishment of the groundwater basin.

2.2 Assumptions - Option 2

Two variations of this option are being looked at: 1) focus on SJWD's water supply contracts by using a portion of their Central Valley Project (CVP) water; a portion their Placer County Water Agency (PCWA) Middle Fork Project (MFP) water; or a portion of the pre-1914 water rights; and, 2) changes to the service area boundaries, within these contracts, which focus specifically on SJWD's CVP entitlement or the PCWA-SJWD MFP entitlement.

2.3 Background - Option 2

2.3.1 Water Transfers, Exchanges and Assignments

Moving water between agencies plays an important role in California's long-term water supply arena. For this analysis, amendments to existing contracts were reviewed with the objective of reallocating water supplies between SSWD and SJWD as a means of providing long-term water supply reliability to SSWD, SJWD and the Wholesale Agencies.

To provide flexibility in allocating the use of water, this high-level analysis focused on changes to water contracts for short-term water transfers; that is, water transfers in effect for one year or less. State and federal agencies have procedures to assist with water transfers proposed by local entities. USBR accommodates water transfer requests within the Central Valley Project (CVP) through the provisions of the Central Valley Project Improvement Act (CVPIA); and, DWR allows use of the State Water Project (SWP) facilities under the provisions of the State Water Code. Because of the public trust issues that surround water rights, any changes must be recognized and approved by the appropriate state and federal agencies. This is viewed as a necessary part of the process for independent water transfers.

The SWRCB has given priority to process short-term water transfers to accommodate the changing needs of state water users. During critically dry years, or during consecutive drought years, the State Water Bank was established (1991), to purchase water from willing suppliers and sell to entities with critical needs. In 1991 the State Water Bank purchased rights to use 821,000 acre-feet of water.

Water contract amendments can be a temporary or permanent sale of water from a water right by a water right holder; a lease of the right to use the water from the water right holder; or a sale or lease of a contractual right to the water supply. These contract amendments can also take the form of long-term contracts for the purpose of improving long-term supply reliability. Generally, water is made available for transfer using one of the following approaches:

1. Carryover Storage: Transferring water from storage that would otherwise have been carried over to the following year. The expectation is that the reservoir will refill during subsequent wet seasons.
2. In-lieu Transfers: Pumping groundwater (groundwater substitution) instead of using surface water and transferring the surface water rights to another party.
3. Conjunctive Use: Transferring previously banked groundwater either by directly pumping and transferring the banked groundwater or by pumping banked

groundwater for local use and transferring surface water that would have been used locally to another user.

4. Conservation: Reducing the existing consumptive use of water through crop idling or shifting, or implementing water use efficiency measures to make water available.
5. System Optimization: Reducing return flows or seepage from conveyance systems that would otherwise be irrecoverable in making water available. Transferring agencies would use water made available from reduced return flows or seepage, and the receiving agency would utilize the newly created excess water supplies that were historically lost prior to the system optimization.

For this analysis, transfers using (1) a portion of SJWD Central Valley Project (CVP) contract water supply to SSWD; (2) a portion of Placer County Water Agency (PCWA) Middle Fork Project (MFP) water supply to SSWD; or (3) a portion of SJWD Pre-1914 Water Rights supply to SSWD were reviewed.

2.3.2 Authority

For each of the water supplies identified above, there are references in federal and state laws, and in the various water supply contracts that recognize some level of authority for water transfers. This section is not making a determination as of risk or making a recommendation, but is being provided as a summary of background information used in the analysis.

2.3.2.a CVP Water Supply

For the CVP water supplies, Reclamation's Mid-Pacific Region typically cites Section 3405(a) of the Central Valley Project Improvement Act (CVPIA) for transfers. Section 3405(a) provides the primary authority for transfers involving CVP water supplies, and specifically allows transfers (subject to certain conditions) of all or a portion of Project water " . . . subject to such contracts to any California water user or agency, State or Federal agency, Indian Tribe or private non-profit organization for Project purposes or any purpose recognized as beneficial under State law."

Additionally, the Department of the Interior Final CVPIA Administrative Proposal on Water Transfers, dated April 16, 1998, provides Department-level interpretation on select requirements in the CVPIA. Under Title XXXIV of Public Law 102-575 (Water Transfer), dated February 25, 1993, CVP water transfers are largely governed by the Bureau of Reclamation Guidelines for Implementation of Water Transfers. CVPIA and Region Water Transfer Guidelines provide for both short-term and long-term water transfers, and define short-term transfers as "Project transfers for periods of 1 year or less"; and long-term transfers as "those transfers for a period or periods of more than 1 year with the maximum period being limited by the term of the Project contract under which the transfer is being made."

Within its CVP water supply contract, there exists contractual authority for SJWD to transfer a quantity of their CVP supply as provided by Article 9 of Contract No. 6-07-20-W1373-LTR1, Sales, Transfers or Exchanges of Water. Article 31 of Contract No. 6-07-20-W1373-LTR1, Assignment Limited - Successors and Assigns Obligated, authorizes the Regional Director to approve a proposed assignment. No Reclamation-level basis of negotiations (BON) and no further delegation from the Commissioner's Office is required or necessary for the Contracting Officer to approve the proposed assignment.

For assignments, Reclamation typically cites the Act of June 17, 1902 (32 Stat. 388), and acts amendatory or supplementary thereto, including but not limited to the following acts that are collectively referred to as "Reclamation Law:"

- August 26, 1937 (50 Stat. 844), as amended and supplemented;
- August 4, 1939 (96 Stat. 1187), as amended and supplemented;
- June 21, 1963 (77 Stat. 68);
- October 12, 1982 (96 Stat. 1262), as amended;
- November 5, 1990 (104 Stat 2074) and
- Title XXXIV of the Act of October 30, 1992 (106 Stat. 4706). There does not appear to be any specific Reclamation policy or set of guidelines governing assignments.

Assignment of some quantity of CVP water supply would eventually require an amendment to the quantity made available in Contract No. 6-07-20-W1373-LTR1. Such an assignment would also require a new CVP contract with SSWD for the specified quantity of water. Historically, Reclamation has approved such assignments, entered into a new contract with the assignee (in this case SSWD), and amended the assignor's (SJWD) contract once that contract expires or is formally amended for other purposes. However, there needs to be firm understanding with Reclamation on this concept prior to committing to an assignment. Any formal amendment now to SJWD's CVP contract could expose it to interim renewal status pending completion of the current Remand Process.

2.3.2.b MFP Water Supply

Transfer of the Middle Fork Project (MFP) water by SJWD after delivery to the PWTP to SSWD would presumably be subject to only the California State Water Code requirements, PCWA MFP permit conditions and applicable provisions of CEQA, CESA and other State laws. Transfer of the MFP water at a point prior to the PWTP (e.g., at the Hinkle Wye) would potentially require approval by Reclamation according to Article 18 of the Long-Term Warren Act Contract (LTWAC). If so, such approval would constitute a federal action, thereby requiring appropriate NEPA analysis, which would increase a risk to the LTWAC.

For the MFP water supply, the California Water Code provides basic authority for water transfers among permitted entities. Temporary water transfers are authorized in Sections 1725 to 1732 of the California Water Code ("Temporary Transfers"). These transfers are defined as having a duration of one year or less. Long-term water transfers, under Sections 1735 to1737, having a duration of more than one year.

The PCWA/SJWD contract has some provisions that recognize the ability to execute water supply transfers. Article 18 of SJWD's PCWA Contract, "Assignment," appears to authorize SJWD to transfer some quantity of the MFP water subject to approval by PCWA. Article 19, "Area Served by the District", further appears to authorize SJWD to transfer the MFP water beyond the SJWD service area boundary, elsewhere within Sacramento County, subject to approval by PCWA. Article 18 of SJWD's LTWAC with Reclamation (Contract No. 6-07-20-W1315), "Assignments Limited – Successors and Assignments Obligated" provides SJWD authority to transfer some quantity of non-project (MFP) water under that contract, subject to approval by Reclamation.

2.3.2.c Pre-1914 Water Right

For SJWD's Pre-1914 water right, the State Water Code allows this water supply to be transferred by changing the purpose of use, place of use or point of diversion under the water right. The point of diversion, place of use or purpose of this water supply can be changed only

if others are not injured by the proposed change. This "no injury rule" protects other legal users of water, including fish and wildlife, from the adverse impacts of a water transfer. SJWD has a historical record to divert and use its entire Pre-1914 water supply from Folsom Reservoir, treat it at the Peterson Water Treatment Plant, and transmit it through the Cooperative Transmission Pipeline.

The concept would be to push a significant portion of SJWD's Pre-1914 water right water supply into SSWD and for SJWD to maximize its use of PCWA and CVP entitlements within SJWD's existing service area. This concept would also enhance the reliability of the two District's PCWA and CVP water supplies. If SJWD's surface water supplies were reduced in an emergency or in drier years, SSWD could stop using surface water and use groundwater. They could also push water up, into SJWD's service area to supplement SJWD's reduced surface water supplies should pumping facilities be constructed.

Historically, the Wholesale Agencies acted together to form SJWD by petitioning the Board of Supervisors in Placer and Sacramento Counties. Their intent was to purchase water rights from the Northfork Ditch Company and have the newly formed Community Services District act as the owner of the water rights while managing other water supply contracts on which they rely.

A primary consideration for using the Pre-1914 in the SSWD service area is centered on how the existing Wholesale Agencies' will benefit from a more reliable water supply resulting from this transfer. SJWD has specific contractual terms with each Wholesale Agency for providing surface water supplies for their operations. Contractual Terms and Conditions should be carefully reviewed as part of the next Phase. The concept would include assurances that there would never be a diminishment of the surface water supply reliability for the Wholesale Agencies. If surface water was ever at risk, or otherwise constrained, SSWD would revert to 100% groundwater service.

2.3.3 Past Practice

Past practices were reviewed as a basis by which federal, state, local or other jurisdictional agencies have exercised their authority for similar actions, under similar circumstances.

2.3.3.a CVP Water Supply

Water transfers are an integral part of CVP water operations, particularly in drought years, as long as transfers are consistent with state and federal laws governing water transfers. According to the MP Region 2013 Central Valley Project Water Plan, "Reclamation utilizes several administrative and programmatic procedures to facilitate, expedite, and streamline the approval process of water transfers in the Central Valley." Long-term water transfer programs include, but are not necessarily limited to the Accelerated Water Transfer Program (AWTP), the Long-Term North to South Transfers, and the 25-Year Exchange Contractors Transfer Program.

Short-term or long-term water transfers within the same basin or watershed and current CVP permitted place of use require an Environmental Analysis (EA) in accordance with the National Environmental Policy Act (NEPA). Full Environmental Impact Statement (EIS) appear to have been performed only for major, programmatic-type transfers such as the East-West Transfer Program. The majority of Reclamation EAs appear to result in a Finding of No Significant Impact (FONSI) that

do not include effects on listed species and/or their critical habitat under the Endangered Species Act (ESA). Water transfer contracts within the same basin or watershed and CVP permitted place of use does not require formal Section 7 consultation with the National Marine Fisheries Service (NMFS) or the U.S. Fish and Wildlife Service (FWS). FONSIs for CVP transfers were approved prior to the year they are executed for short-term transfers, and within a similar timeframe if the transfer is within the same basin, watershed and a permitted place-of-use for long-term transfers. In all cases, these timeframes and findings are conditioned upon no effects on listed species under the ESA, Section 7 requirements.

For assignment of the SJWD project water, the "Assignment Limited – Successors and Assigns Obligated" provision is a standard article in all long-term water service contracts and many other types of Reclamation water contracts. Reclamation and individual CVP contractors have invoked the "Assigns" provision numerous times over the years to assign rights and entitlements for a specific quantity of water from one CVP contractor to one or more CVP contractors. Based upon a review of historical records, Reclamations appears to have executed previous CVP assignments within a fairly basic framework, adapted as necessary to meet individual circumstances. Because SSWD is not a CVP Contractor, the process to assign Project water to SSWD would require appropriate National Environmental Policy Act (NEPA) analysis and ESA consultation, which would be onerous at this time. In summary:

a. CVP assignments were typically initiated with some form of agreement or mutual statement of intent between an assigning CVP District or Agency (assignor) and one or more receiving Districts or Agencies (assignee).
b. The assignor subsequently requested Reclamation's Contracting Officer in writing to approve the proposed assignment pursuant to the "Successors and Assigns" provision of the assignor's CVP contract.
c. Upon receipt of the assignor's request, Reclamation collaborated with the parties in conducting appropriate National Environmental Policy Act (NEPA) analysis and ESA consultation; negotiating a formal "Agreement for Partial Assignment" (Assignment Agreement) among Reclamation, the assignor and the assignee for the assignment; and negotiating a new, separate CVP water contract with the assignee.
d. Previous Assignment Agreements are standalone documents wherein the assignor agreed to convey rights and entitlement for some quantity of Project water available under the assignor's CVP contract, to the assignee. The more recent "Agreements for Partial Assignment" clarified that the Agreement was not an amendment to the assignor's contract. Regardless of such clarification, there appears to be no previous circumstance where Reclamation then immediately amended the assignor's CVP contract to reflect the reduction in quantity made available. Instead that reduction was addressed whenever the assignor's CVP contract either expired and was renewed, or was converted to a separate type of contract, or was amended for some other purpose.
e. New contracts between Reclamation and assignees were usually, but not always, executed at or near the same time as the Assignment Agreement. In several cases, the Assignment Agreement was implemented - and CVP water was allocated, delivered and accounted for directly with the assignee accordingly - months or even years in advance of executing a separate CVP contract with the assignee. Notwithstanding the execution date, the separate contracts consistently followed the same standard form as other CVP contracts. The term of these new contracts also consistently conformed to the term of the assignor's then-existing contract. Essentially, the assignee's contract expired and was renewed whenever the assignor's existing CVP contract expired and

was renewed. If the assignee was not a current CVP contractor prior to the assignment, then the new contract had the effect of converting the assignee to a CVP contractor.

Reclamation appears to have adhered to the principle that an Assignment Agreement did not constitute an amendment to the assignor's then-existing CVP contract. Reclamation's commitment to this principle was sometimes difficult to confirm due to diverging administrative practices over time. For example, most Assignment Agreements were given a regular water contract number once they were signed, which can be confusing in itself, other Assignment Agreements were not. With interim renewal contracts, Reclamation appears in some cases to have dispensed with Assignment Agreements altogether and the assignment was executed in conjunction with the assignor's most recent renewal.

Reclamation generally promotes water exchanges concurrently with water transfers as a centerpiece of their CVP water management program. However, there is no formal definition of "Water Exchange" in the Reclamation Manual. As a practical matter, the Mid-Pacific Region has described the concept, over time, in various venues. For example:

a. The Mid-Pacific Region "Central Valley Project (CVP) Water Transfer Program Fact Sheet", revised February 2013, states:
   "[Water Exchanges are] a 'water for water' transaction that involves the <u>two-way</u> movement of water. The most common exchange agreement provides a bucket-for-bucket exchange, but certain transactions may provide for an unbalanced exchange. Exchanges may involve an agreement to provide water to a contractor who has an immediate need, with a commitment to return water at a later date, i.e., a loan of sorts. Water exchanges are also used to facilitate the movement of water in order to overcome physical obstacles, such as the lack of conveyance facilities; to avoid conveyance losses due inherent in moving water long distances; as part of water banking transactions; or for other reasons."
b. A Water Exchange Contract between Reclamation and Byron Bethany Irrigation District (Byron Bethany), defines "Exchange Water" or "Exchanged Water" to mean
   ". . . that Project Water made available to the Contractor by the Contracting Officer from Project Facilities for a like amount of the Contractor's introduced Non-Project Water less losses."
c. A Water Exchange Contract among Reclamation, the San Luis Water District and Meyers Farms Family Trust (San Luis/Meyers Farms) defines "Exchange Water" to mean
   "the Project Water that will be made available to the Contractor for diversion from the San Luis Unit facilities, unless otherwise agreed in writing by the Contracting Officer, in exchange for the Banked Water made available to the Contracting Officer in the Pool."

CVP water exchange agreements involving one or more <u>non-CVP</u> contractors can occur when a CVP contractor exchanges some quantity of CVP contract water supply for non-project water that could be either surface water or groundwater. Most if not all exchanges would involve transfer or assignment by the participating CVP contractor of some quantity of CVP contract supply. Consequently, authorities, policies and procedures for water transfers, or contract assignments, would govern the exchange. The authority for CVP contractors to execute a Water Exchange Agreement among themselves, subject to approval by Reclamation, is manifested in the Sales, Transfers or Exchanges of Water" article of their CVP water service

or repayment contracts, as with water transfers. The authority to exchange CVP water with non-project water, either surface water or groundwater, would also be subject separately to the non-project party's contracts, permits and other applicable constraints.

2.3.3.b MFP Water Supply

The total water made available by SJWD's Long-Term Water Supply Contract with PCWA dated December 7, 2000 (PCWA Contract), is up to 21,000 acre-feet annually (4,000 AF per year is earmarked for City of Roseville). A long-term Warren Act Contract (LTWAC) with Reclamation necessarily supports conveyance of the MFP water to SJWD for use of excess federal capacity at Folsom Dam and Reservoir and appurtenant facilities (Contract No. 6-07-20-W1315, dated February 29, 1996).

For the MFP water supplies, although there is precedent in California where a transferee then 'retransferred' water to a third party, SJWD does not appear to have previously retransferred any MFP water made available under the PCWA Contract. Apparently there are no readily available examples of non-CVP water of being transferred from one party to another through the application of Article 18 or similar provision of a Long-Term Warren Act Contract. Any formal amendment now to SJWD's LTWAC contract could expose it to interim renewal status pending completion of the current Remand Process.

2.3.3.c Pre-1914 Water Right

SJWD's rights are as successor to the North Fork Ditch Company as set forth in Contract No. DA-04-167-ENG610, dated April 12, 1954, between SJWD and the United States. Under terms of the contract, Reclamation is obligated to deliver 33,000 acre-feet annually on a priority basis to SJWD.

2.4 Other Considerations and Constraints

"Other Constraints and Considerations" highlights the more obvious risks and uncertainties that should be considered and/or addressed in determining the feasibility of this Option. The current NMFS BO, issued on June 4, 2009, was in response to a request issued in 2006 by U.S. Bureau of Reclamation (Reclamation) for re-consultation of a NMFS BO issued in 2004. Reclamation issued a revised biological assessment in August 2008, and a draft NMFS BO was issued for peer review on December 11, 2008. Although the NMFS BO was published following the NOP, most of the provisions were being discussed prior to the NOP. Therefore, the NMFS BO is included in the Existing Conditions.

2.4.a Remand process

Reclamation is currently conducting ESA Section 7 consultation with NMFS and the USFWS for long-term operation of the CVP in coordination with the State Water Project (SWP). This consultation is commonly referred to as the "Remand Process."

2.4.b Bay-Delta Conservation Plan

The State of California, together with specific State and Federal water contractors, is pursuing an incidental take permit from NMFS under ESA Section 10 through the Bay Delta Conservation Plan (BDCP) process. NMFS is deeply engaged in both processes. However, NMFS has limited resources to consult on individual water transfers, contracts or other CVP-related actions in the event the EA or EIS determines there are effects on listed species or critical habitat.

2.4.c Reclamation Water Transfers

Reclamation transfers establish basic requirements that must be met in order for Reclamation to approve a Transfer Proposal. These include:

(1) Section 3405(a).1.(A) limits the amount (or combination of transfers) of Project water transferred. The transferred supply cannot exceed ". . . in any year, the average annual quantity of water under contract actually delivered to the contracting district or agency during the last three years of normal delivery prior. . .."

(2) Section 3405(a).1.(I) limits transfers of Project water that would have been consumptively used or irretrievably lost to beneficial use during the year or years of the transfer.

(1) Section 3405(a).1.(M) limits transfers between Project contractors ". . . within counties, watersheds, or other areas of origin, shall be deemed to meet the conditions set forth in subparagraphs (A) and (I) of this paragraph."

These and other provisions of Section 3405(a) would need to be evaluated and reconciled for applicability to any potential water transfer from SJWD to SSWD, once the scope of a transfer is determined.

2.5 Boundary Amendment

As described in the RFP for this work, an analysis to amend or apply SJWD's long-term water service contract with Reclamation (Contract No. 6-07-20-W1373-LTR1, dated February 28, 2006) was conducted. This analysis focused on amending the SJWD CVP contract with Reclamation to allow deliveries of CVP surface water from SJWD to the SSWD service area, which is not currently within the SJWD service area, as defined in their Reclamation contract.

2.5.1 Authority

The authority analysis focused on the legal, regulatory and contractual basis for amending the SJWD's CVP service area boundary to include the SSWD serve area. This is a threshold-level criterion, particularly with any strategy involving Reclamation.

2.5.1.a Reclamation Act

Reclamation's authority to create, renew, amend, or supplement existing project water is provided by a body of statutes including: "the Act of June 17, 1902 (32 Stat. 388), and acts amendatory or supplementary thereto, including, but not limited to the acts of :

1. August 26, 1937 (50 Stat. 844), as amended and supplemented,
2. August 4, 1939 (53 Stat. 1187), as amended and supplemented,
3. July 2, 1956 (70 Stat. 483),
4. June 21, 1963 (77 Stat. 68),
5. October 12, 1982 (96 Stat. 1263), as amended, and
6. Title XXXIV of the Act of October 30, 1992 (106 Stat. 4706)."

These authorities allow Reclamation to amend contracts, including SJWD's long-term water service contract, Contract No. 6-07-20-W1373-LTR1.

2.5.1.b Policy PEC P05, Water-Related Contracts–General Principles and Requirements

Reclamation policies; directives and standards; and, instructions governing water contracting are extensive. Policy PEC P05[8], Water-Related Contracts–General Principles and Requirements, defines "contract amendment" as "a formally executed amendment to an existing water-related

[8] Published on July 24, 2013.

contract between Reclamation and another party that changes conditions, rights, or obligations under the contract."

A formal contract amendment would ostensibly require a new project description, a revised Basis of Negotiation (BON) approved by the Office of the Commissioner, a formal negotiation process and additional appropriate environmental analysis. Reclamation water contracts are formally amended, usually only upon expiration, or to incorporate new statutory or regulatory requirements (e.g., new requirements imposed by CVPIA, or transition from fixed water rates to cost of service rates according to CVP water rate-setting policies).

As a practical matter, most Reclamation water contracts provide for the Contracting Officer (in this case, the Mid Pacific Regional Director) to approve other less material changes that may realistically be expected to occur over the term of the contract. Contract provisions of this type represent built-in delegations of authority by the Commissioner of Reclamation to the Contracting Officer, and therefore do not require a BON or other higher-level approval to execute.

2.5.1.c Contract No. 6-07-20-W1373-LTR1

There are two contract articles in Contract No. 6-07-20-W1373-LTR1 that require and authorize the Contracting Officer to approve service area related actions. For the Mid-Pacific Region of Reclamation, the Contacting Officer may be the Regional Director or an appropriate delegate within the region.

1. Article 5(c) of Contract No. 6-07-20-W1373-LTR1 (Point of Diversion and Responsibility for Delivery of Water). This article authorizes the Contracting Officer to approve delivery of contract water by a CVP outside the Contractor's service area.
   - "5(c) The Contractor shall not deliver Project Water to land outside the Contractor's Service Area unless approved in advance by the Contracting Officer."
2. Article 35 (Changes in Contractor's Service Area) authorizes the Contracting Officer to approve modifications to the Contractor's service area. Specifically,
   - "35(a) While this Contract is in effect, no change may be made in the Contractor's service area, by inclusion or exclusion of lands, dissolution, consolidation, merger, or otherwise, except upon the Contracting Officer's written consent."
   - "35(b) Within 30 days of receipt of a request for such a change, the Contracting Officer will notify the Contractor of any additional information required by the Contracting Officer for processing said request, and both parties will meet to establish a mutually agreeable schedule for timely completion of the process. Such process will analyze whether the proposed change is likely to: (i) result in the use of Project Water contrary to the terms of this Contract; (ii) impair the ability of the Contractor to pay for Project Water furnished under this Contract or to pay for any Federally-constructed facilities for which the Contractor is responsible; and (iii) have an impact on any Project Water rights applications, permits, or licenses. In addition, the Contracting Officer shall comply with the NEPA and ESA. The Contractor will be responsible for all costs incurred by the Contracting Officer in this process, and such costs will be paid in accordance with Article 25 of this Contract."

2.5.2 Past Practice

In general, Reclamation appears to accommodate most service area-type actions through the application of Article 35. Reclamation has included the following or similar language in several environmental documents associated with service area actions:

> "*Changes in the CVP Contractors' boundaries and service area change requests are often misconstrued. Reclamation does not have land use change approval authority. However,*

Reclamation must determine whether boundary change requests would be consistent with the Reclamation Reform Act, water rights permits or other laws and regulations. During this determination and approval process, Reclamation evaluates any proposals for boundary changes as they relate to the use of the water and prepares environmental documents in accordance with National Environmental Policy Act (NEPA) prior to Reclamation's approval."

2.5.2.a Reclamation Act - "Service Area" or "Contract Service Area"

Reclamation appears to be clarifying the distinction between the "service area" or "contract service area" defined in the Contract, and a District's legal boundaries. The Phase II Analysis needs to confirm this with Reclamation. There are past examples of the Mid-Pacific Region Contracting Officer approving delivery of water beyond the Contractor's service area; and in circumstances where the Contractor's existing service area has been expanded or modified by a merger or other formal action by an appropriate jurisdictional agency. Under Option 2, without some formal action by the LAFCo, the appropriate jurisdictional agency to approve consolidation of SJWD and SSWD, the Contracting Officer would be restricted from extending SJWD's CVP service area to include SSWD's service area.

2.5.2.b Environmental Analysis

Based upon a preliminary review of publicly available records, most service area requests are accomplished through an Environmental Assessment (EA)/Finding of No Significant Impact (FONSI). Delivery of CVP contract water beyond SJWD's current contract service area to SSWD is subject to terms and conditions of Reclamation's CVP water rights permits since the SSWD is not within the SJWD's CVP Service Area, and would not likely be able to fall within an EA/FONSI.

2.6 Summary

There appears to be sufficient legal and contractual authority to execute water transfers, assignments or exchanges of the CVP, MFP or pre-1914 water supplies with SSWD. However, the risks of re-opening water supply contracts for amendments would be very high and not recommended at this time. Additionally, during recent State activities like the BDCP, many purveyors have expressed significant concern over re-opening water supply contracts and are avoiding the effort if at all possible.

Source	Annual Amount (acre-feet)	Notes
Long-term Renewal Contract	24,200	Subject to 25 percent reductions.
Pre-1914	33,000	Use only for SJWD wholesale area
Placer County Water Agency – Middle Fork Project	25,000	Placer County use is prioritized over Sacramento County use.
TOTAL	82,200	

Table 5, SJWD Water Supply Summary

Based on many changing circumstances (BDCP, Climate Change, Regulatory Requirements, Modified Operational Parameters), access to reliable surface water supplies continue to be threatened by factors outside the Districts' direct control. Diversifying each District's water supply portfolio is important for increased water supply reliability. Each of the three surface water supply options within SJWD portfolio has constraints that make inter-agency transfers questionable. CVP contracts are subject to 25 percent reductions during drought as

determined by the USBR's draft Municipal and Industrial Supply – Shortage Policy, and are specific on only using it within SJWD (Contractor) Service Area. The SJWD pre-1914 water right is constrained to provide water only to the SJWD's Wholesale Service Area. The PCWA contract is constrained to provide water to the Placer County portion of the District's wholesale service area first, with a caveat that any excess water used in Sacramento County may be pulled back for use in Placer County if the need arises. Because this supply is subject to temporary or permanent reduction it further dilutes its reliability.

2.6.1 Central Valley Project

SJWD's surface supplies remain at risk because they have not been entirely put to beneficial use or access to the supply during critically dry years makes the need for alternate sources, such as groundwater, significantly important to maximize the water supply reliability. SJWD's water supply portfolio includes 21,000 to 26,000 AF of "Program Water" that is earmarked for conjunctive use and has not been currently put to beneficial use. Because of varying constraints under each water supply contract, historically, SJWD has used its Pre-1914 and MFP first, and then CVP water supply on an as-needed basis. Unless there is a provision in SJWD's CVP contract that allows "credit" for the use of non-CVP water supplies to be counted as part of their historical-use under SJWD's CVP, any transfer of SJWD's CVP water maybe limited by the following constraints:

1. Water must have a history of consumptive use or that would have been "*. . . consumptively used or irretrievably lost to beneficial use during the year or years of the transfer,*" as stated in CVPIA, Section 3405, Water Transfers, Improved Water Management & Conservation.
2. Section 9(c), of the SWJD Contract with Reclamation, declares that a transfer can only occur "*. . . between existing Project Contractors and/or the Contractor and United States, Department of the Interior*; . . . ." SSWD is not a CVP Contractor, and would be subject to first rights of refusal provisions of the CVPIA by other CVP Contractors.
3. The SJWD Contract limits the use of CVP water to SJWD's defined Service Area (Article 5(c)). Transfer outside the Contractors Service Area is further at risks under CVPIA, Section 3405 (a)(1)(M), which allows other CVP Contractors a 90-day period to exercise a first right of refusal on proposed transfers from a CVP Contractor to a non-Contractor.

An active regional conjunctive use program would provide an opportunity to strategically use CVP water supplies. Inter-Agency Agreements between SSWD and SJWD could facilitate how SJWD's water supplies could be put to use to implement a regional, multi-agency beneficial conjunctive use program and does not jeopardize SJWD's CVP contract. However, SSWD could not receive long-term benefits of SJWD surface water supplies through an inter-agency agreement specific to CVP supplies without onerous legislative or contractual changes to the existing SJWD surface water contract provisions.

2.6.2 Middle Fork Project

For the Middle Fork Project water, there is ample precedent in California where a transferee then 'retransfers' water to a third party. The long-term availability/reliability of this water supply is restricted by Article 8(a) of SJWD's PCWA contract, where PCWA can notify SJWD that Placer County has a need for this water, and SJWD could be subject to a temporary or permanent reduction in their contractual supplies for the amount of water used within Sacramento County. Furthermore, PCWA must approve any transfer or use of MFP supplies outside SJWD's current service area boundaries.

Since SJWD's MFP contract is under a "take-or-pay" provision, SSWD would need to thoroughly review their surface water contracts with PCWA, where they are under similar arrangements to pay for surface water supplies.

SJWD does not appear to have previously re-transferred any MFP water made available under the PCWA Contract. Additionally, there is no readily available evidence where non-CVP water was transferred from one party to another through the application of Article 18 or any similar provision of a Long-Term Warren Act Contract. This alternative is expected to be a high-risk approach due to current contract provisions and the lack of precedents to transfer LTWAC water supplies.

2.6.3 Pre-1914

For the Pre-1914 water rights, this water supply has been internally designated for use only within the SJWD Wholesale area.[9] Transfer of any quantity of SJWD's Pre-1914 Water Rights water is likely to be highly controversial within, and potentially outside, the SJWD Wholesale areas. SJWD, functioning in its wholesale water purveyor role, provides Pre-1914 water as the most reliable water supply for its Wholesale and Retail customers. During surface water shortage events, SJWD works with the Wholesale agencies, which includes Citrus Heights Water District (CHWD), Fair Oaks Water District (FOWD), Orange Vale Water Company (OVWC), and City of Folsom (Folsom), to supplement reductions in surface water supplies during shortage events.

The Wholesale Agencies identify Pre-1914 as a highly reliable and secure water supply for their agencies except when water surface elevations at Folsom Lake put all similar Folsom water supplies at risk. This supply does not have any cut-back provisions from Reclamation for diversions at Folsom Reservoir. Thus, any discussions to transfer, exchange or re-assign this surface water supply is seen as a threat to the Wholesale Agencies' water supply reliability, and could dilute the security of their surface water supply.

[9] San Juan Water District 2010 Urban Water Management Plan, p.20

Option 3 - Combination of SSWD and SJWD

The objective of Option 3 is to conduct a high-level analysis of combining Sacramento Suburban Water District (SSWD) and San Juan Water District (SJWD) for the primary goal of maximizing water supply reliability, as well as providing other substantive benefits to the customers of both districts. Both governing boards recognize that public policy requires a detailed analysis regarding the impacts to combine the two water districts and to identify long-term and sustainable benefits to the customers.

If combining the two districts is found to be the preferred alternative to achieve the goal in maximizing water supply reliability, the Districts will also have to demonstrate that merging the two water districts will be in the public's best interest, meeting the following objectives:

a. Provide water supply reliability.
b. Provide a long-term result in greater economies in the form of less cost and a higher degree of service to the general public.
c. Continue the sound and professional degree of management currently reflected by both districts within the Sacramento region.

3.1 Framework for Option 3

The two districts have complementary assets and needs that allow the consideration for a combination. SJWD is a wholesale and retail water supplier with surface water rights and entitlements. As mentioned in Option 1, above, SJWD has between 21,000 and 26,000 AF of water supply available for a conjunctive-use program. To ensure increased water supply reliability, the District must demonstrate beneficial use of their water rights and entitlements. SJWD has already experienced a supply reduction in their CVP contract, and portions of the SJWD Wholesale area and SJWD-Retail do not have access to groundwater supplies when surface water is not available.

Because of the constraints on each water supply contract, SJWD has historically used its Pre-1914 and MFP water supplies first, and the CVP water supply on an as-needed basis. Thus, SJWD is seeking opportunities to access the regional groundwater basin and to maximize the use of water supplies that are not currently used for beneficial use. This approach would increase, or maximize, historical uses of CVP water supplies. This strategy becomes critical in dry years when Reclamation assesses three-year historical to determine reductions of CVP municipal and industrial water supplies.

Conversely, SSWD has a significant groundwater supply, including an established groundwater bank with a substantial balance, and two surface water contracts for conjunctive use.

To date no formal solution exists for using the CTP or banked groundwater. SSWD is the largest and primary investor in regional conjunctive-use infrastructure with a significant long-term financial commitment. As discussed in Section 1.2, above, for the Phase 2 analysis, if the Districts decide to pursue, consideration to review historical cost allocations, and an analysis of scenarios for normal/wet-year and dry-year uses that promote groundwater banking and exchanges should be conducted. SSWD continues to purchase water from both PCWA and the City of Sacramento to offset groundwater use within their service area. SSWD is currently seeking an economical way to use banked groundwater within the region or for in-lieu water supply transfers. The goal is to supplement the financial costs for its conjunctive use investments.

Utilizing these assets in combination has the potential to achieve a "higher level" of water supply reliability for both Districts. A possible scenario for evaluation under the Phase 2 Detailed Analysis for a combined agency may include:

1) Use the SJWD CVP and PCWA – MFP water entitlements within the SJWD service area,

where it is currently designated for use under the SJWD-Reclamation agreement, and

2) Use the Pre-1914 water supply in the SSWD.

This scenario would not require outside agency approvals if the combined agency does not seek to amend the place-of-use for the CVP water supply. The use of the Pre-1914 water supply, within the expanded boundaries of the combined agency, would not require State approvals. However, to address concerns for "diluting" the water supply reliability of the Wholesale Agencies, a provision to "recall" the Pre-1914 water supply for use by the Wholesale Agencies is recommended during dry-year or emergency periods. This Pre-1914 supply would supplement any CVP reductions incurred for the SJWD areas. The SSWD area would simply return to groundwater use. This scenario would maximize the use of the surface water supplies and establish historical and beneficial uses for the entire surface water portfolio.

3.2 Assumptions for Option 3

The Option 3, Combination of SSWD and SJWD, analysis assumes that the two Districts would combine under either a consolidation arrangement or a dissolution/successor arrangement. Because SJWD serves as a wholesale agency to manage the surface water supplies of Citrus Heights Water District, Fair Oaks Water District, city of Folsom (portion), Orangevale Water Company, San Juan Retail, the Option 3 analysis also assumes no changes to the wholesale agreements and arrangements. The analysis assumes that SJWD has the authority to maximize the use of the District's surface water supply portfolio to protect and maximize the historical beneficial uses of this portfolio. It is recognized in this analysis that an arrangement to combine SJWD and SSWD will require assurances from SJWD to the Wholesale Agencies to preserve or enhance water supply reliability of the combined Pre-1914, CVP and PCWA-MFP surface water supplies.

3.3 Background for Option 3

For the Option 3 analysis, five primary categories were reviewed for the analysis that include:

(a) Governance
(b) Administration and Management
(c) Fiscal
(d) Operations
(e) Water Supply

These categories are consistent with the key elements identified by LAFCo for analysis to combine agencies and include related categories related to the operations of the SSWD and SJWD districts.

3.3.a Governance

Two options were reviewed to combine SSWD and SJWD under Government Code Section 56826.5.

(1) Consolidation: SSWD and SJWD could "consolidate," meaning that the two existing districts are dissolved and a new district is formed as a county water district or a community services entity. The new district would combine all individual assets and liabilities into a single new district as a county water district or a community services district.

(2) Dissolving one of the two Districts: Either SSWD or SJWD would be dissolved, and the remaining district would serve as the "successor agency." The assets and liabilities of the dissolved district would be transferred to the "successor" district.

Because of the contractual arrangements for the CVP water supply, the Wholesale Agency arrangements and the history for the Pre-1914 water rights associated with SJWD, dissolution of

SSWD and establishing SJWD as the successor agency may be the logical and most reasonable approach for combining the two districts. The preferred governance option should be further reviewed in any Phase 2 study.

Since SSWD's service area is not recognized as part of the SJWD service area in the CVP contract, designating SSWD as the successor agency would not automatically include SSWD's service area into SJWD's CVP service area. Under Sections 1(f) and 35 of the CVP water supply contract between SJWD and Reclamation, SJWD would have to request Reclamation's written consent to expand the place of use of its CVP water supplies, which could subject Reclamation or other CVP Contractors to attack the SJWD contract. Because of the complexities associated with amending a CVP contract, pursuit of any amendments to the SJWD-CVP contract should be conducted under a separate and subsequent process and should not be an element of Option 3.

Composition of Directors

The size of the successor district's Board of Directors will need to be determined. A community services district, which is SJWD's current governance structure, is limited to a maximum of five board members. In preliminary discussions with LAFCo, the combined district may be allowed time to transition the board composition; however, the transition should be completed within a five to seven year period or a defined period that is coincidental to the directors election cycles. A county water service district such as SSWD may have more than five directors if approved by LAFCo.

If a dissolution process is pursued under a community services district with SJWD as the successor, the governing board will need to establish a transitional plan to reduce the size of the governing board to five members. Both SJWD and SSWD have five directors. To maintain a "majority" governance board, the combined agency would have to either temporarily add a director or eliminate a member to establish a governing board that avoids a possible stalemate until the transition to five directors is completed. Under a transition to the five directors, the governing boards, prior to any LAFCo application and adoption of similar resolutions to combine agencies, must decide on the number of directors for the initial stages of the successor agency. Because of State requirements, the number of directors will ultimately need to be reduced to five members.

Divisions for Elections

Another consideration regarding the method of electing board members that will need to be addressed in the resolutions for combining the districts. SSWD customers currently elect their Directors "by division," where the board member must live within the defined division boundaries, and is voted for only by registered voters within that division for four year terms. Whereas, registered voters within the SJWD wholesale and retail service area elect SJWD's directors at-large for four-year terms. The governing boards will need to make a policy decision to be governed under geographic divisions similar to SSWD or under the at-large structure at SJWD.

Wholesale Customers

SJWD serves as a wholesale agency to manage the surface water supplies of Citrus Heights Water District, Fair Oaks Water District, City of Folsom (portion), Orangevale Water Company, and San Juan Retail. The Wholesale Agencies have expressed concern over the use of the Pre-1914 water rights and the CVP water entitlements outside of the SJWD Wholesale and Retail areas. One of the primary reasons for the formation of the SJWD wholesale arrangements was to allow the wholesale group to share and maximize the use the surface water supplies from the Lower American River.

Under the proposed scenario for combination that includes provisions for dry-year or emergency arrangements, there is no need to change to the wholesale agreements and

arrangements. Under the Wholesale Agency arrangements, SJWD has the authority to maximize the use of the SJWD's surface water supply portfolio to protect and maximize the historical beneficial uses of this portfolio. Provisions or arrangements from SJWD to the Wholesale Agencies should be evaluated in the Phase 2, Detail Analysis, to preserve or enhance water supply reliability of the combined Pre-1914 and CVP surface water supplies.

3.3.b Administration & Management

District Transition and Staffing

Both SSWD and SJWD have similarities with regard to providing water utility services to their communities. Both agencies also have administrative and management structures found in water agencies that include the general manager's office, administrative support, finance and accounting, information technology, and engineering support. A high-level review of SJWD's and SSWD's fiscal state indicates that overhead rates are competitive with the costs for outsourcing work. Except for the general manager's office functions, based on the review of the budgets and published accomplishments, significant improvements for efficiencies and overlapping/duplication were not obvious for this level of analysis. Thus, any significant cost savings from staffing changes in a combination of SJWD and SSWD would likely be modest.

For administration and management functions, both agencies appear to operate under minimal staffing and are able to optimize costs by using outside services for non-recurring and short-term activities. Engineering activities are focused on unplanned technical support for both the operations and project management using non-agency professionals for renewal/replacement capital projects.

For the general manager's office within each district, the Phase 2, Detailed Analysis, will need to conduct a detailed review of the general manager, assistant general manager and associated administrative support positions. Because of the on-going intra-agency needs and because of the recurring regional, state and federal activities that are impacting both districts, consideration should be given to restructure the general manager's office for the combined agency to address district functions, regional coordination and state/federal regulatory and legislative support. As part of the Phase 2 review, funds currently spent on outside services that are recurring each fiscal year, and are necessary for unplanned and immediate actions should be reviewed as a transitional plan for the general manager's office. A considerable amount of time is spent to participate in regional strategy and legislative issues. This participation dilutes the ability for the executive staff to readily attend to operational and other district matters. For example, both Districts hire public relations firms and lobbyists to support regional groups like RWA for conducting legislative and regulatory advocacy. Re-classifying one of the general managers and/or assistant general manager positions for this purpose might yield cost savings and also develop in-house expertise and resources for the combined district.

3.3.c Fiscal Impacts - Operations

The fiscal analysis must explain how the cost of service would be allocated among the former Districts' customers and, if appropriate, how SJWD's and SSWD's staffs would be integrated. The level of detail under the Phase 2 analysis must address larger issues, such as debt service and rate structures, and address employee issues such as retirement programs. For example, the SJWD's and SSWD's CalPERS retirement plans differ, and would need to be reconciled under a combined agency.

Operations and Maintenance Budgets

The Districts' budgets are difficult to compare. SJWD has both a retail and wholesale component. Administrative costs are allocated between retail and wholesale operations. SSWD has some economies of scale by having a larger service area.

- SJWD serves approximately 11,000 service connections.

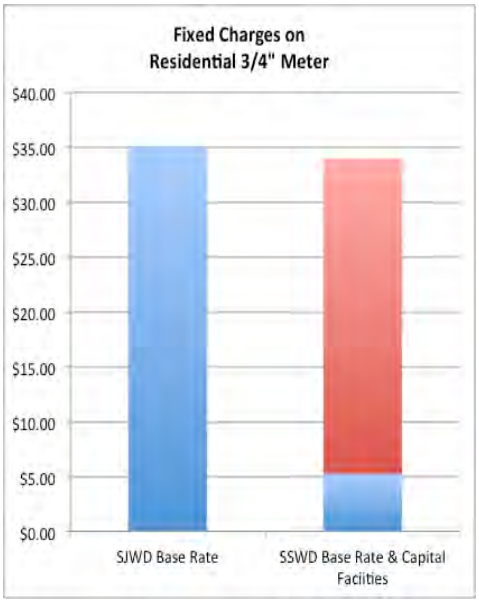
- SSWD serves 44,771 service connections.

Operating Budgets are notably different:

- SJWD's budget expenditures are $664 per service connection.
- SSWD budget expenditures are $260 per service connection.

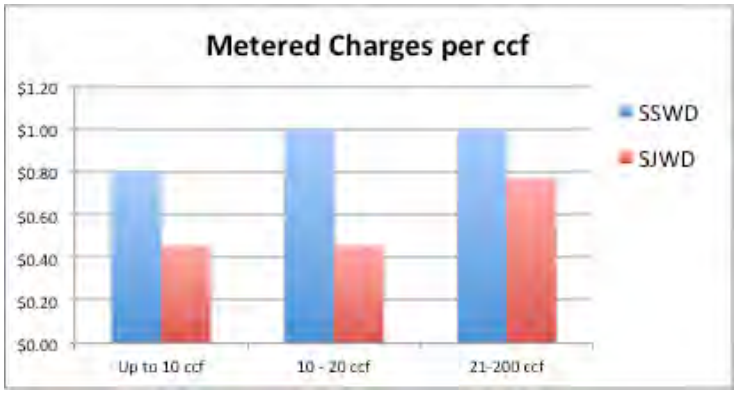
SSWD's lower costs per connection are due, in part, to scales of efficiency of SSWD, the larger district. It may also reflect different standards in how the districts are able to maintain their water systems. This cost for service would need to be thoroughly analyzed in the Phase 2, Detailed Analysis. Combining these budgets into a single operating budget will have a long-term financial benefit for SJWD customers. A potential increase in SSWD's costs per connection basis might result from the combination. This most likely will justify a LAFCo condition to complete the financial integration of the former agencies' finances and operations over a defined period.

SJWD's and SSWD's have different rate structures. The Districts have taken different approaches to allocating costs between fixed charges and usage charges. SJWD has a higher monthly fixed charge and lower usage charges than SSWD. SSWD has a monthly capital facilities charge that SJWD does not have. Approximately 32% of SSWD's ratepayers remain on flat-rate accounts until the water meter implementation plan is completed.



If the Districts combine, they will have to address the differences in rate structures. Integrating rates, fees and charges might be difficult if changes result in rate increases for customers of one district, but not the other or if there are other disparate impacts. Many rate actions will require compliance with Propositions 218 or 26. While Prop. 218 does not dictate the method of allocating rates, all rate changes or increases must demonstrate the benefit of property-related charges on each property. LAFCo may impose a condition for rate issues to be addressed in any service plan prepared for a proposed combination. Difficulties associated with integrating rates may be reduced or eliminated because a combined district could be formed with "zones of benefit" that reflect the former District's service areas and any rates changes can be gradually introduced over a period of years.

To address *Proposition 218* requirements for existing and combined agency customers, with respect to the SSWD and SJWD retail areas, zones-of-benefit could be temporarily established to reflect different, zone-specific costs of services. LAFCo would likely allow this on a temporary basis until rates, fees and charges could be equalized over the entire successor district. The status and arrangements with the SJWD Wholesale Agencies should not change.



Transfer and Deposition of Assets and Liabilities

If a combination is pursued, integrating SJWD's and SSWD's outstanding debt will need to occur over a period of time until any remaining debt can be treated as the debt of the combined entity. Understanding the ability to repay, call or refund debt is key to combining the Districts' long-term debt. Currently, there are limitations on the District's ability to pre-pay debt without having to pay a substantial penalty.

SJWD and SSWD have both issued debt to finance infrastructure in their respective service territories. SSWD has $97.03 million in debt outstanding that is composed of $55.03 million in fixed rate debt and $42 million in variable rate debt. SSWD's variable rate debt is partially hedged against interest rate risk with a fixed-payer swap. Whereas, SJWD has $44.39 million in outstanding debt in fixed rate bonds.

The existing debt portfolios for both Districts are shown in the following two tables.

Table 6. Sacramento Suburban Water District Debt Portfolio

Series Name	Indenture	Tax Status	Fixed or Variable	Status	Issue Size	Delivery Date	Final Maturity	Outstanding Par	Next Call Date
Series 2009A	Adj. Rate Refunding Revenue COPs	Tax-Exempt	Variable Rate Bonds	Refunding	$42,000,000	6/30/09	11/1/34	$42,000,000	-
Series 2009B	Refunding Revenue COPs	Tax-Exempt	Fixed Rate Bonds	Refunding	36,155,000	6/30/09	11/1/28	29,700,000	11/1/2019
Series 2012A	Refunding Revenue Bonds	Tax-Exempt	Fixed Rate Bonds	Refunding	29,200,000	4/19/12	11/1/27	25,330,000	11/1/2022
							Outstanding Par	**$97,030,000**	

Table 7. San Juan Water District Debt Portfolio

Series Name	Indenture	Tax Status	Fixed or Variable	Status	Issue Size	Delivery Date	Final Maturity	Outstanding Par	Next Call Date
Series 2009A	Certificates of Participation	Tax-Exempt	Fixed Rate Bonds	New Money	$30,510,000	6/30/09	2/1/39	$30,075,000	2/1/2019
Series 2012A	Revenue Bonds	Tax-Exempt	Fixed Rate Bonds	Refunding	15,195,000	5/16/12	2/1/33	14,065,000	2/1/2022
Series 2012B	Revenue Bonds	Taxable Municipal	Fixed Rate Bonds	Refunding	705,000	5/16/12	2/1/14	250,000	-
							Outstanding Par	**$44,390,000**	

Each district funds debt service differently. Thus, SJWD's and SSWD's debt repayment structures will need to be carefully evaluated as part of any proposal to combine. SJWD's property tax revenues are used to pay debt service. SSWD uses monthly customer fees. Resolving these differences could have impacts on rates and charges.

Under Water Code Section 31012 for County water districts:

> *"If, on or after the effective date of this section, substantially all of a district water system is acquired by another public agency by any method other than a vote of the electorate of that district so authorizing, the following provisions shall apply:*
>
> *(a) All funds derived from the operation of the former district system shall be separately accounted for and used exclusively for the purposes of maintenance, operation, betterments, and bond debt service of the acquired system.*
>
> *(b) No funds derived from the former district system shall be used for any other such purpose until all debt of that former system has been paid in full or until a majority vote of the electorate of the area served by that former system has authorized such other expenditures."*

Based on this preliminary review of the documents, the following issues will need to be addressed in any consolidation and reviewed by Bond Counsel:

(1) If a combination occurred, the debt service of each former District would remain the obligation of that District's ratepayers until the combined agency could demonstrate to

LAFCo and bondholders that combining the former Districts' debts into a single debt was fair and would not impair bondholder security.

(2) Call Dates for the outstanding debt is 5-8 years in the future.
(3) Full integration of the system finances would not be completed until debt could be refunded or replaced with the combined entity's debt.
(4) The bonds in SSWD have bond covenants that require them to maintain their own 2009B and 2012A bonds and are not refundable until 2019 and 2022, respectively.
(5) SJWD's 2009A and 2012A bonds are not refundable until 2019 and 2022, respectively.

SJWD allocates its debt between its retail and wholesale accounts and pays for debt service through a combination of property taxes, facility impact fees, and net operating revenues. Meanwhile, SSWD pays for its debt service through monthly capital facility charges. SJWD and SSWD handle their payment of debt service differently because of differences in financial resources and business structure.

Allocations of debt service, by connection, for the retail operations are close.

- SJWD charges $2,189 per connection.
- SSWD charges $2,166 per connection.

If consolidated, the average allocation per connection would not materially change, assuming that the wholesale debt structure would not change. The method by which debt service is paid would have to be addressed:

a) SSWD covers debt through a capital facilities charge in its rates.
b) SJWD does not explicitly pay for debt service through its rates.
c) SJWD's debt is divided between its retail and wholesale operations, and debt service is paid primarily through a combination of property taxes and connection fees, with shortfalls covered by net income from operations.

Table 8, Comparison of Debt Burden Between Water Districts

Water District	Outstanding Debt	Connections	Debt Per Connection	Primary Debt Payment Sources
San Juan--Wholesale	$20.1 million	n/a	n/a	Property tax & net operating revenues
San Juan--Retail	$24.1 million	11,000	$2,189	Property tax, connection fees, net operating revenues
Sacramento Suburban	$97.0 million	44,794	$2,166	Monthly Capital Facilities Charge

The governing boards will need to consider adding property taxes as a possible source for debt payment within the SSWD service area, which does not current access property taxes. Generally, property taxes are at an already strained revenue source within Sacramento County, and changes will require 2/3-voter approval within the impacted area. However, the Phase 2, Detailed Analysis, process should pursue a "due diligence" question for revenue enhancements since members of the combined agencies could ask why this revenue source was not pursued.

Capital Investments

Differences in unfunded capital needs will need to be resolved. SJWD's and SSWD's capital budgets are notably different in terms of the cost demands and revenue sources of their respective capital improvement project (CIP) budgets. Based on SJWD's 2011 ten-year CIP plan:

- Expect to invest an average of $2.5 million per year in capital projects for each of the retail and wholesale operations.
- SJWD's CIP receives some tax revenues from Sacramento County.

SSWD has a 5-year CIP in the recently completed "Comprehensive Water Rate Study" by HDR Engineering with an average cost of $26.9 million per year. Current SSWD rates support approximately $14.5 million per year, which requires a significant rate increase to bridge the gap for the unfunded portion of $12.4 million per year.

Capital Budgets are also notably different between the two districts in terms of the cost demands from their capital improvement project (CIP) budgets. Based on SJWD's 2011 ten-year CIP plan, SJWD could expect to invest an average of around $2.5 million per year in capital projects for each of the retail and wholesale operations. Comparatively. SSWD has a 5-year CIP in the recently completed "Comprehensive Water Rate Study" by HDR Engineering. SSWD's average cost of $26.9 million per year according to the HDR report. Current SSWD rates will support approximately $14.5 million per year, and revenues generated from a conjunctive use program requires could help to bridge the gap for the unfunded portion of the CIP.

3.3.d Operations

Continuity of Service

In operations, both agencies have distribution staffing that is focused on the water transmission and water distribution systems. For its water supply operations, SJWD is focused on surface water treatment, storage and pumping. SSWD is focused on groundwater pumping and groundwater well operations. Each of these areas is distinct in the requirements for special skills and experience; and, therefore, do not provide obvious areas of duplication or overlap.

In the Phase 2, Detailed Analysis, considerations for the activity levels associated with specific operational functions must be addressed. For example, the two districts may have differences in scheduling and forecasting field operations to address aged infrastructure, condition assessments, customer contacts, and other preventative maintenance activities. Although the detailed analysis is beyond the scope of this high-level analysis, consideration for continuity of service in the field operations should address the minimum categories, as listed below, for evaluation. Table 9, Operational Activities and Factors for Detailed Analysis, lists operational activities and other operational factors such as fleet and district-facilities. For example, the equipment and fleet evaluation should address recurring needs for rolling stock and project needs for specialty equipment, such as backhoes, trenchers and front loaders, that may be less utilized and could be considered surplus between the two districts.

1) Transmission & Distribution
    a. Preventative Maintenance
        i. Age 0-15 Years
        ii. Age 15-30 years
        iii. Age 30-45 years
        iv. Age over 45 years
    b. Backflow Devices Inspections and repairs
    c. Leak Repair/Replacement
        i. Mains
        ii. Services
    d. Hydrant Flushing/Maintenance
    e. Water Metering Repair/Replacement
2) Supply
    a. Well Maintenance/Rehabilitation
    b. Well Pumping Testing and Repairs/Rehabilitation
    c. Storage Inspections and Repairs/Rehabilitation
    d. WTP Process Maintenance/Rehabilitation
3) Customer Contacts
    a. Walk-in
    b. Telephone/electronic
    c. Other
4) Equipment/Fleet
    a. Service Vehicles
    b. Utility/Specialty vehicles
    c. Generators
    d. Other O&M Equipment /Tools
5) Operational Facilities
    a. Corporation Yards/treatment site

Table 9, Operational Activity and Factors for Detailed Analysis

Another consideration is the location of the corporation yard for the two districts. For effective combination of the two districts, consideration should be given to evaluate the location and merging of operational staff to facilitate merging of the "cultural" differences between the two districts. The two districts will expand into a fairly significant geographic area and the existing operational facilities for each district are separately located in the outer reaches of the two districts.

Maintenance and management of separate facilities and the current staffing will present problems in integrating the two districts if no staffing plan is developed and implemented. However, while structuring a combined agency's workforce might be difficult, by itself it is not a deterrent to a combination.

Analysis of Water District Compensation

SJWD is conducting a compensation study that includes salary structures. Thus, cost-benefit analysis for operational benefits is not included in this analysis. The analysis of SJWD's and SSWD's respective salary structures and the differing CalPERS retirement plans will need to be reconciled under the Phase 2 Analysis for a combined agency to address both employee and LAFCo's concerns.

Using current information outside the Compensation Study, this analysis did not compare job duties or requirements for each classification under this high-level review. Our analysis, however, identified the following issues that will need to be addressed if a combination is pursued.

- Integration of staff and duties could happen over time.
- A combination may result in duplicate jobs and therefore might require restructuring a combined agency's workforce.
- Salary and benefits structures would need to be analyzed and ultimately an equalized level of salaries and benefits developed for all employees.

Structuring compensation and benefit packages under a combined agency may be difficult; however, by itself, it is not a deterrent to a combination.

3.3.e Water Supply

The two Districts have complementary assets and needs that allow the consideration of a combination. SJWD is a wholesale and retail water supplier with surface water rights and entitlements. SSWD has a significant groundwater supply, including an established groundwater bank with a substantial balance and surface water contractual entitlements.

Under Option 3, the water supply portfolios for SSWD and SJWD would be combined and the board of directors of the combined district would decide the use of the combined assets. These combined assets provide a significant resource for achieving a "higher level" of water supply reliability for both Districts. The combined assets (surface water and groundwater) also provide water supply reliability benefits to the Wholesale Agencies and benefit regional water management activities. Additionally, possible revenue opportunities can be created through regional conjunctive-use agreements that are necessary to maximize regional sustainability.

Pre-1914 Water Supply

Under the combined district, the purpose of use, the place of use or any additional points of diversion of SJWD's pre-1914 water right may be recognized without SWRCB proceedings so long as the action to combine the Districts does not become subject to a claim by some other party under the "no-injury" rule of Water Code Section 1706. This water supply could provide the flexibility for the combined district to utilize SJWD's pre-1914 water right within the totality of the new service area, subject only to any proven injury to another's legal use of water. It is unlikely that any legal injury claim would be upheld since all of SJWD's per-1914 water has been put to beneficial use within the American River watershed.

CVP Water Supply

Reclamation recognizes the combined service areas of both San Juan Water District's retail and Wholesale Agencies as the service area under SJWD's CVP water supply contract. Since SSWD's service area is not recognized by Reclamation as part of the SJWD service area, adding SSWD into SJWD would not automatically expand SJWD's CVP service area to include SSWD. Sections 1(f)

and 35 of SJWD's CVP contract provides that SJWD may not expand the place of use of its CVP water supplies without Reclamation's prior written consent.

Under Option 3, SSWD remains capable of fully serving groundwater during dry years to its customers. However, using the Pre-1914 water supply throughout the expanded service area, the Wholesale Agencies would establish and maximize beneficial use of CVP water supplies. This strategy builds the historical record of using CVP water supplies, and becomes important when Reclamation uses the historical record to determine water supply allocations during critically dry years. The combined district's water supply portfolio also provides a backstop to available surface water supplies through the use of groundwater for the Wholesale Agencies. No onerous inter-agency process would be required, although a significant infrastructure investment would be needed to move water between agencies. SSWD also would benefit through conjunctively using surface water supplies more often and in more year types, but remain reliant on 100% groundwater during extreme dry conditions, when SJWD needs the available surface water supplies from the American River.

If SJWD and SSWD decide to request expansion of the CVP service area, the request should be processed separately from the LAFCo action to avoid the need and the perception of the need for a NEPA process within the LAFCO proceedings.

3.4 Summary

As a combined agency, major infrastructure can easily be used or enhanced without the onerous time and resource intensive demands required to negotiate agreements. For water supply reliability, the key benefit for the consideration of a combined agency is focused on the use of banked groundwater and the continuation of in-lieu groundwater banking utilizing existing surface water supplies. A major benefit to both SSWD and SJWD is the use of SJWD's pre-1914 water supply throughout the combined agency while establishing a historical record of beneficial use for the SJWD CVP and MFP water supply. An added benefit of the combined agency and its groundwater banking program is that water supply transfers can be readily implemented to offset capital improvement expenditures for existing infrastructure debt and also for any new capital improvements required for intra-agency capital infrastructure to maximize conveyance between the SSWD, SJWD and Wholesale Agencies.

The combined assets (surface water and groundwater) may also provide water supply reliability benefits and possible revenue opportunities through regional conjunctive-use agreements that are necessary to maximize regional sustainability for those agencies interested in investing or partnering with the combined agency.

4.0 Recommended Approach

Combination of SSWD and SJWD is considered to achieve a "higher level" of water supply reliability for both Districts. It is recommended that the next stage of evaluation, under the Phase 2 Detailed Analysis, include:

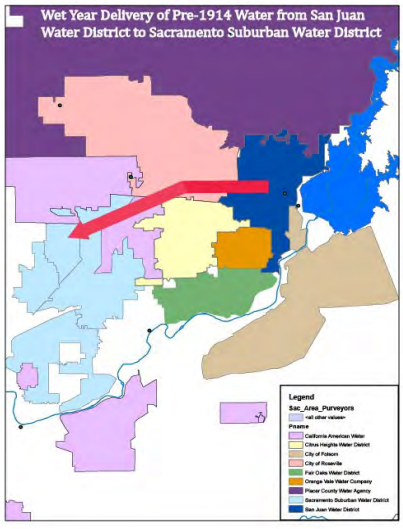
Issues have been identified related to combining SSWD ands SJWD. Each issue may be difficult to facilitate within the adopted resolutions by each water district; however, there are no obvious or compelling deterrents to combing the two water districts. From a water resources perspective, combining SSWD and SJWD is the preferred option to achieve long-term water supply reliability. It is highly recommended that a detailed, Phase 2, analysis be conducted to validate and more thoroughly analyze combining the water districts.

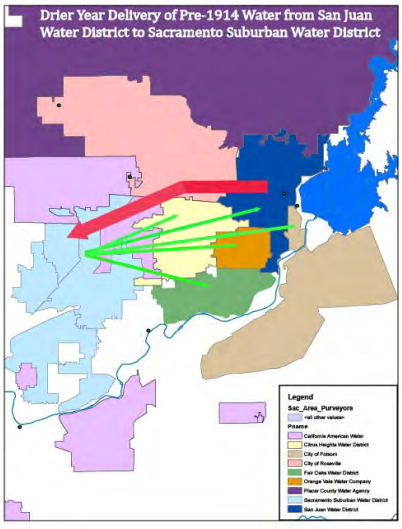
4.1 Water Supply Reliability

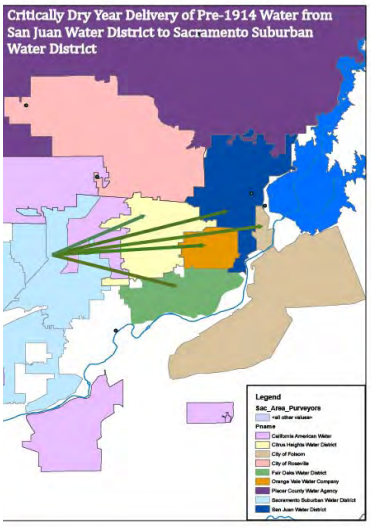
The current discussions between SSWD and SJWD are focused on opportunities for joint management of water supply assets and related services. No considerations to expand the services currently provided by SSWD and SJWD are considered in this analysis. Thus, in the MSR and as part of the Phase 2 Detailed Analysis, an explanation of how the water supply assets of each agency must be addressed to benefit the public of the combined District. This would not only include the SJWD pre-1914 and CVP surface water assets; but also would include the Districts' water supply contracts with Reclamation, PCWA and the City of Sacramento, SSWD's groundwater assets, and the water supply inter-relationships with the Wholesale agencies. The basis for the Option 3 approach for normal/wet-years is:

1) Use the SJWD CVP water entitlements within the SJWD service area, where it is currently designated for use under the SJWD-Reclamation agreement, and
2) Use the Pre-1914 water supply in the SSWD.

- Normal/wet Year scenario
  Pre-1914 Supply (red) delivered to SSWD. SJWD uses CVP and MFP Supplies
- Dry-year reductions scenario
  Reduced Pre-1914 Supply (red) delivered to SSWD and
  SSWD Groundwater (green) used within SSWD area and made available to SJWD areas for reductions of CVP and MFP Supplies
- Critically Dry-year scenario
  SSWD Groundwater (green) used within SSWD and used in SJWD areas







This scenario would not require outside agency approvals if the combined agency does not seek to amend the place-of-use for the CVP water supply. The use of the Pre-1914 water supply, within the expanded boundaries of the combined agency, would not require State approvals. However, to address concerns for "diluting" the water supply reliability of the Wholesale Agencies, a provision to maintain the Pre-1914 water supply within the Wholesale Agency boundaries is recommended during dry-year or emergency periods. This Pre-1914 supply would supplement any CVP contract reductions incurred for the SJWD areas, and the SSWD area would return to groundwater use. This scenario would maximize the use of the surface water supplies and establish historical and beneficial uses for the entire surface water portfolio.

4.2 Fiscal Continuity

The fiscal analysis must explain how the cost of service would be allocated among the former Districts' customers and, if appropriate, how SJWD's and SSWD's staffs would be integrated. With respect to the SSWD and SJWD retail areas, zones could be temporarily established to reflect different, zone-specific cost of services. This would be allowed on a temporary basis until rates, fees and charges could be equalized over the entire successor district. The status and arrangements with the SJWD Wholesale Agencies would not change. SJWD's and SSWD's CalPERS retirement plans would need to be reconciled.

A combined agency would be in a position to better manage and protect its water supplies to address federal, state and regional influences for water supply reliability. The benefits for combining districts include:

1. Economies of scale for representation on regional, state and federal matters within the Lower American River region
2. Flexibility to use Pre-1914 and maximize the use of CVP supplies for SSWD, SJWD and the Wholesale Agencies
3. Maximizing the historical record of CVP supplies
4. Avoid event-driven inter-agency negotiations for exchanges or transfers of water supplies during dry-year reductions or critically dry-year events.

4.3 LAFCo Process – Order of Proceedings

Streamlining the Phase 2 Detailed Analysis for combining the two water districts, the effort should be based on the requirements of the Sacramento Local Agency Formation Commission (LAFCo) outlined for the Municipal Services Review (MSR). LAFCo has specific requirements for considerations when changing, adjusting or modifying service area boundaries. The MSR provides a written determination for the following factors:

a) Infrastructure needs and Deficiencies
b) Growth and Population projections for the affected areas
c) Financial constraints and opportunities
d) Cost avoidance opportunities
e) Opportunities for rate restructuring
f) Opportunities for shared facilities
g) Government structure options including advantages and disadvantages of consolidation or reorganization of service providers
h) Evaluation of management efficiencies
i) Local accountability and governance.

As an element of the MSR, the LAFCo will determine whether the District's organizations and operations can be feasibly combined under the following considerations:

1. Plans and safeguards to ensure uniform and consistent service quality throughout the newly merged jurisdiction;
2. Plans for merging the elected officials into a single board of directors within a specified timeframe;

3. Employment contracts, policies and human resources issues;
4. Specified plans for combination of top managers' roles and responsibilities, and for staffing of key positions.

Subsequent to negotiating an agreement to combine and implement any desired arrangements between the two Districts, SSWD and SJWD, an application would be submitted to the Sacramento Local Agency Formation Commission (LAFCo). LAFCo would conduct the proceedings for a legal combination of the Districts. Because SJWD's service area is located in two adjacent counties, LAFCo has indicated its desire to obtain an acknowledgement or agreement, with the Placer LAFCo, to serve as the lead. The LAFCo process is fairly defined and can be summarized as follows:

1) SSWD and SJWD conduct a pre-application meeting with LAFCo.
   LAFCo's primary concerns with a proposed SJWD-SSWD combination as expressed by LAFCo staff include employment contracts, policies and human resources issues; Specified plans for top managers' roles and responsibilities, and for staffing of key positions; Plans and safeguards to ensure uniform and consistent service quality throughout the newly merged agency, including uniformity in rates, fees and charges throughout the new District.

2) If SSWD and SJWD adopt similar resolutions, LAFCo must approve the combination. However, LAFCo can impose terms and conditions upon the action such as:
   a) Requiring the Districts to jointly prepare a service plan and fiscal analysis for providing services. The Service Plan would need to address transition of employees, and designation of the general manager.
   b) LAFCo can condition a period for the combination to allow the successor agency to transition Board representation. LAFCo staff indicated that the successor agency may have an initial successor board of 7, 9 or 11 members, but the size of the Board may need to be reduced to a smaller number in accordance with statutory requirements.
   c) In the service plan, LAFCo will require an explanation of how the water supply assets of each agency will be addressed to benefit the public of the combined District.
      i) This element of the Plan would not only include the SJWD pre-1914 and CVP surface water assets; but also would include the Districts' water supply contracts with Reclamation, PCWA and the City of Sacramento, and SSWD's groundwater assets.

3) The fiscal analysis of the Service Plan must explain how the cost of service would be allocated among the former Districts' customers and, if appropriate, how SJWD's and SSWD's staffs would be integrated.
   a) With respect to the SSWD and SJWD retail areas, zones could be temporarily established to reflect different, zone-specific cost of services. This would be allowed on a temporary basis until rates, fees and charges could be equalized over the entire successor district. The status and arrangements with the SJWD Wholesale Agencies would not change.
   b) SJWD's and SSWD's CalPERS retirement plans would need to be reconciled.
   c) Salary and benefits structures would need to be analyzed and ultimately an equalized level of salaries and benefits developed for all employees.

4) SSWD and SJWD would be required to conduct the appropriate level of CEQA review and will need to prepare a service plan with LAFCo staff. It is anticipated that CEQA review would be accomplished with a negative declaration since both service areas are largely entitled with their land uses and developed areas, and no programs are anticipated to expand services and capital improvement needs that are focused on growth inducing activities.

5) Once CEQA proceedings and a service study are final and the desired arrangement is defined

between the Districts' and LAFCo's staffs, the SJWD and SSWD Boards would initiate the formal LAFCo application process by adopting substantially similar resolutions of application and submitting them with the supporting documentation required by LAFCo (maps, demographic and financial data, etc.) – Municipal Services Review.

6) LAFCo staff would review the applications and work with the two Districts' Boards and staffs to fulfill additional information requests as needed.

7) With no protest, LAFCo could process and tentatively approve the application. Although LAFCo typically provides a 30-day minimum comment period, if no protests are received, LAFCo would proceed with one or more public hearings, depending on the number of public comments received.

8) After its approval of an uncontested application, LAFCO would record a Certificate of Completion in both Sacramento and Placer Counties before finalizing the combination.
   a) If protested, LAFCO would be required to hold additional proceedings and require the Districts to hold an election to permit their voters to approve or disapprove the proposed combination. A successful protest would require at least 25% of the landowners of assessed property and 25% or more of total assessed value, or 25% of all registered voters within the two Districts, to sign a protest petition and timely submit it to LAFCO.

4.4 Recommended Outline of Specific Actions - Option 3

The following steps can be used as an outline for moving forward under Option 3:

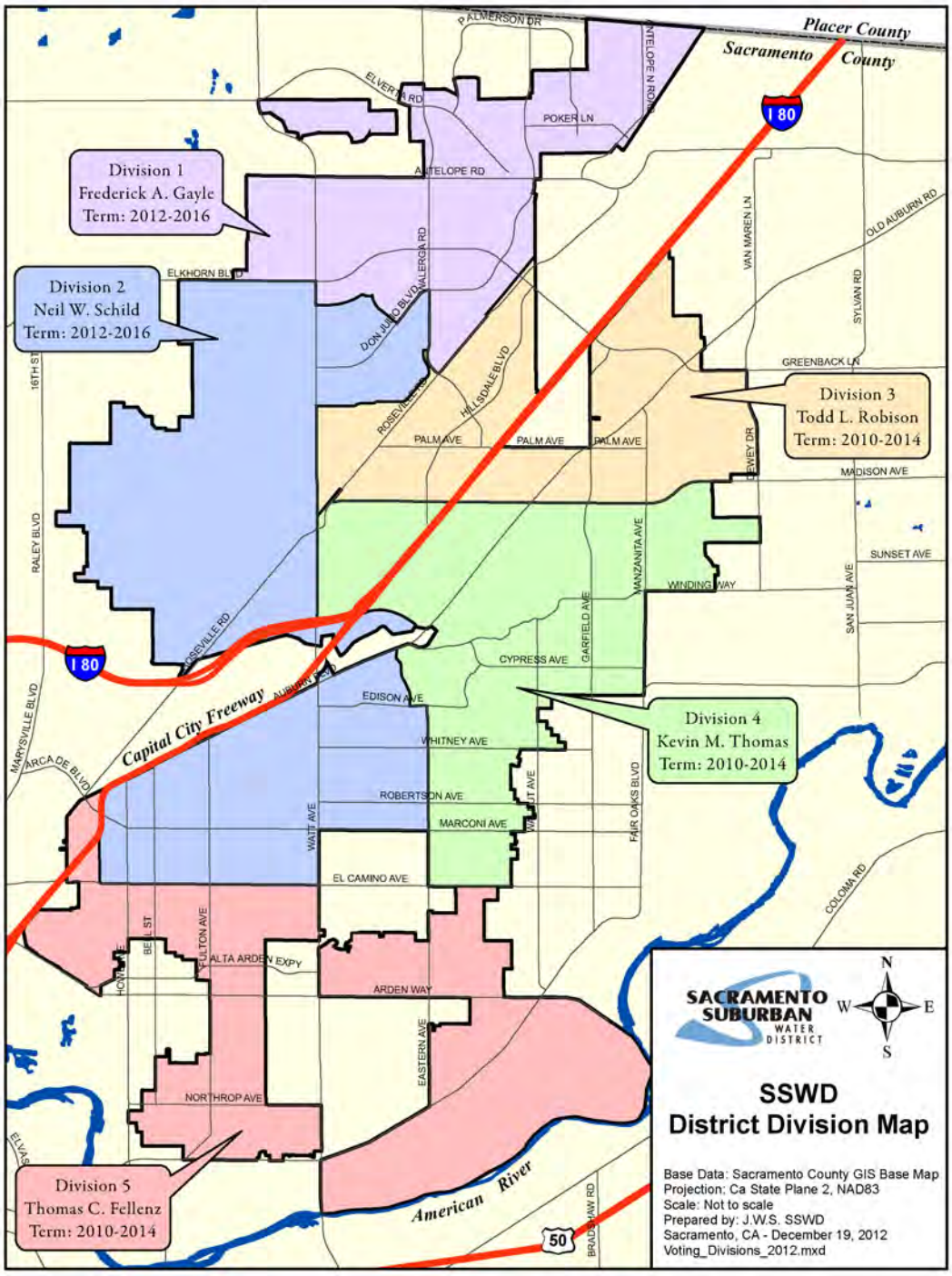
1) Proceed with a Phase 2 analysis: Conduct a Phase 2 Detailed Analysis to combine SSWD and SJWD. Given the established process for combination, and the benefits of developing a long-term enhancement for water supply reliability, SSWD and SJWD should expect a significant amount time and effort to prepare the documentation and outreach necessary for combination.
   a) Validate the merits to dissolve SSWD and establish SJWD as the successor agency
   b) Validation to establish divisions for elections of the successor agency directors, or for at-large elections
   c) Prepare a Service Plan and analysis based on the LAFCo process and requirements for consideration of the combination of districts
   d) Establish a transition plan that addresses key issues such as:
      i) Transition of executive staff and associated support positions
      ii) Completion of a compensation plan once SJWD is completed with its current compensation study. This plan must address equalization of salaries and benefits, including reconciling CalPERS retirement plans between the two districts
   e) Conduct a detailed cost-of-service plan to establish zones-of-benefit to reflect existing service areas and associated rate structures.
   f) Validate with Bond Counsel the process to fully integrate bond debt considering that the call-dates for outstanding bonds are in 2019 and 2022, and developing a process that would not impair bondholder security.
   g) Develop and public outreach and public education program that focuses on the benefits for pursuing a combination of the Districts.
   h) Prepare a water supply plan that outlines the uses of the combined Districts' water supply assets that will increase water supply reliability for the benefit the public. This plan should include the SJWD pre-1914 and CVP surface water assets; the Districts' water supply contracts with Reclamation, PCWA and the City of Sacramento; SSWD's groundwater assets; and address the water supply inter-relationships with the Wholesale agencies.
2) Develop and implement a Trial Transfer: Once the Phase 2 Analysis and LAFCo application is submitted, develop and implement a trial water transfer consisting of an short-term/interim water transfer between SSWD and SJWD to use Pre-1914 water supplies to serve SSWD **with**

a provision that Pre-1914 water supplies **must revert back** to the Wholesale Agencies during an emergency, shortage events or critically dry years. Under these terms, SSWD would forego use of Pre-1914 water supplies and return to groundwater as their primary water supply. Wholesale Agencies would in turn maximize the use of SJWD's CVP and MFP water supplies maximizing the use of "Program Water". This approach enhances water supply reliability not only for the two Districts', but also for the Wholesale Agencies by establishing a historical record of beneficial use of both CVP and PCWA water supplies. If SJWD's surface water supplies were reduced in drier years, SSWD could supplement SJWD through banked groundwater, with the appropriate infrastructure, to the extent groundwater well capacity is available and facilities to pump groundwater back to SJWD are constructed.

Appendices

A. SSWD Division Map
B. General District Statistics Comparison
C. Option 3 Water Supply Scenarios

Appendix A. Sacramento Suburban Water Disitrct Division Map



Appendix B. General District Statistics and Activity Level Comparison

Statistics and Activity Levels					
2012 District Comparison					
General Statistics					
		Sacramento Suburban Water District	San Juan Water District - Retail -	San Juan Water District - wholesale -
Population Served		171,229	30,618	180,000
Connections		44,771		
Wholesale				5
Retail				
Number of Metered Accounts		29,776	10,410	5
Number of Unmetered Accounts		14,995	0	0
Total Number of Accounts		44,771	10,410	5
Estimated Number of EDUs		69,490	N/A	N/A
Estimated Number of EDU's - 0.43 af/yr/EDU				
Service Area (Square Miles)				
Retail		35.96	18.66	
Wholesale				
SJWD Retail		N/A		18.66
City of Folsom		N/A		1.3
Fair Oaks Water District		N/A		9.8
Citrus Heights Water District		Unknown		12.59
Orange Vale Water Company		N/A		4.86
Cal Am		Unknown		
RLECWD		Unknown		
Total:				46.88
Total:		35.96	18.66	46.88

Production				
Production		SSWD	SJWD Retail	SJWD Wholesale
Surface Water Purchased (AFA)		10,558.73	0	13,936
Wells (AFA)		27,530.06	0	0

Distribution System Summary				
	SSWD		SJWD Retail	SJWD Wholesale
Pipeline Miles	T-Mains (14" and Larger)	D-Mains (12" and Smaller)		
Age 0 to 15 years	31.9	68.4	25.5	1.6
Age 15 to 30 years	16.2	576.9	77.9	7.2
Age 30 to 45 years	2		50.1	2
Age over 45 years	3		16.3	3.2
Unknown Age (Age to be determined)			30.5	3.2
Miles of Main	53.1	645.3	200.3	17.2
Storage Facilities		7	3	1
Treatment Plants		2**	0	1
Number of Wells		84	0	0
Number of Pump Stations		5	5	0
Number of Corporation Yards		2	0	1
Administration Buildings		1	0	1
System Interties		47	8	16

Water Sold (AFA)					
			SSWD	SJWD Retail	SJWD Wholesale
Water Sold (AFA)					
Wholesale					
	SJWD Retail		0.00		13,936
	City of Folsom		0.00		1,529
	Fair Oaks Water District		0.00		9,887
	Citrus Heights Water District		0.00		13,583
	Orange Vale Water Company		0.00		4,658
	Cal Am		470.60		N/A
	RLECWD		2.15		N/A
	Total:		472.75		43,593
Total			472.75		43,593

Staffing Levels

Activity Levels

				SSWD	SJWD Retail	SJWD Wholesale
Leaks Repaired						
	Main Leaks			56	8	0
	Service Leaks			188	80	0
Hydrant Flushes				542	109	N/A
Customer Contacts – District Estimates						
1	Telephone			46,062	13,000	N/A
2	Walk Ins			14,866*****	780	N/A
3	Other		email	Unknown	520	N/A
4			Correspondence received by mail		140	N/A
5			Conversation Appointments		2,090	N/A
Bills Sent, Including Delinquents				491,578	69,800	1/Agency/Month

	SSWD	SJWD Retail	SJWD Wholesale
Employees plus General Manager	61	27.63	18.37
Unaccounted for Water (AFA)	3,809***	1,113 ****	N/A

Capital Expenditures

		FY 11-12	FY 11-12
	SSWD	SJWD Retail	SJWD Wholesale
Capital Expenditures	17,440,003.00	11,404,600.00	8,735,390.00

* Of the 576.9 miles of distribution mains that are 15 years and older, 343 miles are asbestos cement (AC) pipes that are 37 years of age and older.
** The District has iron and manganese treatment facilities in place at the Eden/Root Well (#32A) and Enterprise/Northrop Well (#75).
*** Per the *2010 Urban Water Management Plan*, unaccounted for water is assumed to be 10% of total retail treated water production.
****
***** Plus or minus 8%

1 Telephone contacts are estimated at 250 per week on average
2 Walk-ins are estimated at 15 per week on average
3 E-mail contacts are estimated at 10 per week
4 Mail contacts are estimated at 2 per week
5 Customer contacts by all methods are a combination of customer services and conservation accounts.

Appendix C. Option 3 Water Supply Senarios

- Normal/wet Year scenario
  Pre-1914 Supply (red) delivered to SSWD.
  SJWD uses CVP and MFP Supplies

- Dry-year reductions scenario
  Reduced Pre-1914 Supply (red) delivered to SSWD and
  SSWD Groundwater (green) used within SSWD area and made available to SJWD areas for reductions of CVP and MFP Supplies

- Critically Dry-year scenario
  SSWD Groundwater (green) used within SSWD and used in SJWD areas