# Amendment Sphere of Influence Plan/Municipal Service Review South San Joaquin Irrigation District

**AUGUST 2019** 

Prepared by Mintier Harnish for San Joaquin County LAFCo at the request of the South San Joaquin Irrigation District This page is intentionally left blank.

### **Background**

On September 9, 2014, a combined Sphere of Influence Plan and Municipal Service Review (SOI/MSR) for the San Joaquin Irrigation District (District) was prepared and publicly released by the San Joaquin County Local Agency Formation Commission (LAFCo), in compliance with the 2000 Cortese-Knox-Hertzberg Act (CKH Act). On December 11, 2014, LAFCo adopted the District SOI/SMR, along with an addendum to the document.

The District has since received annexation requests from several property owners who wish to obtain irrigation water and drainage services from the District. One property annexation request lies outside the District SOI (Area G), and the other lies within Area B (Area F), which is presently under a 30-year timeframe for irrigation and drainage service. The remaining properties are in Area D. The property owners within Area D have either discussed but not formally requested annexation, or their properties are split by the current District boundary. Given the number of properties in Area D potentially affected by an SOI amendment and the likelihood of additional property owners expressing interest in annexation in the future due to the anticipated increased demand for surface water due to an anticipated decrease in use of groundwater in the area, the District wishes to amend the SOI/MSR to change the entire Area D from the 30-year SOI timeframe to the 10-year SOI timeframe for irrigation water and drainage service. Retail electric service, however, would remain on the 30-year timeframe in Area D. These changes are summarized in Table 2-1 (see page 10 for changes to Table 2-1), and the areas discussed are shown in Figure 2-3, both extracted from the amended SOI/MSR.

**TABLE 2-1** FUTURE DISTRICT ANNEXATIONS

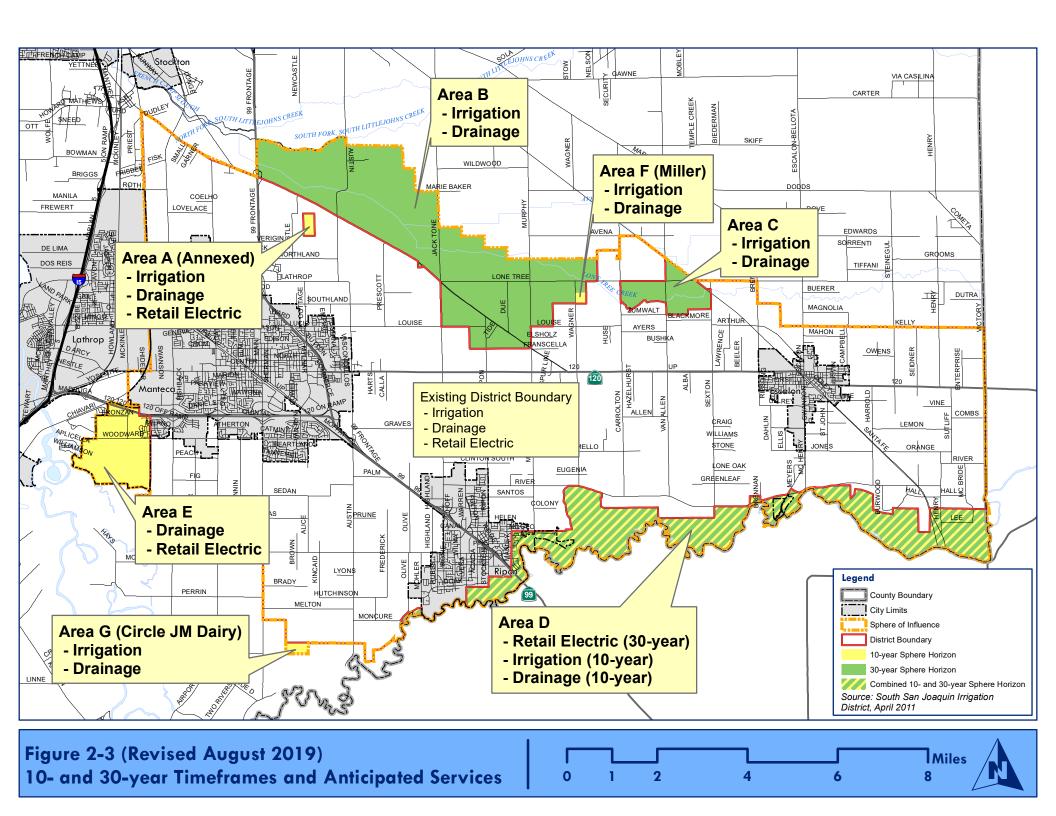
		General	Sphere	Horizon	Planned Services				
SOI Area	Acres	Location	10-Year	30-Year	Irrigation	Drainage	Electricity		
Area A	80	Island	Complete *		✓	✓	✓		
Area B	7,760	Northwest		×	✓	✓			
Area C	850	Northeast		×	✓	✓			
Area D	5,240	South	×	×	✓ 10-year	✓ 10-year	✓ 30-year		
Area E <sup>1</sup>	2,200	West	×			✓	✓		
Area F	40	North	×		✓	✓			
Area G	80	Southwest	×		✓	✓			

<sup>&</sup>lt;sup>1</sup> Includes areas within the Manteca city limits currently outside SSJID's SOI, but planned for inclusion in the SOI.

Source: SSJID, 2019; Mintier Harnish, 2019.



This page is intentionally left blank.



This document outlines, by page, the updates necessary to facilitate approval of an amendment to the District SOI/MSR, to modify the 10-year SOI for irrigation water and drainage service.

Chapter 1 provides an overview of LAFCo, the SOI, District boundary, MSR Determinations, and California Environmental Quality Act (CEQA) requirements. Minor changes were made to reflect the proposed SOI expansions and annexation of the 80-acre island (Area A).

Chapter 2 provides the SOI Plan, as required by the CKH Act. This chapter has been updated to provide current status of contracts (for example, SSJID's contract with PG&E has expired since the last SOI amendment). Sources have been updated to reflect the current location of information and outdated sources have been removed. Population projections have been updated to reflect a 2018 baseline population, extrapolated using data from the California Department of Finance (DOF). This chapter also includes description of the changes to service timeframes in Area D, based on several annexation requests in this area received by the District. Areas F and G have been added to the discussion to accommodate annexation requests outside of Area D.

Chapter 3 is the beginning of the MSR and addresses growth and population projections for the affected area. Population projections have been updated to reflect a 2018 baseline population, extrapolated using data from the DOF. District population in 2040 is estimated to be 187,604.

Chapter 4 addresses present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies. Metrics, such as irrigation water demand, land area served, water diversion, groundwater levels, and groundwater recharge have been updated. Sources have been updated to reflect the current location of information. Outdated sources have been removed. References to the Five-Year Capital Expenditures Plan have been updated, such as project funding. The description of Senate Bill (SB) X7-7, which requires all California irrigation districts to take actions to measure, report, and bill their customers for the delivery of actual volumes of water, has been updated to reflect District actions to implement SBX7-7.

Chapter 5 describes the financial ability of the District to provide services. Except for an updated description of SB X7-7 (Water Conservation Act of 2009), no other changes were made to this chapter.

Chapter 6 describes the status of, and opportunities for, shared facilities. Except for updated metrics for amount of untreated water sold, no other changes were made to this chapter.

Chapter 7 discusses accountability for community service needs, including governmental structure and operation efficiencies. The number of District employees and the District organizational chart were updated. No other changes were made to this chapter.



Chapter 8 evalutes the provision of infrastructure and services to disadvantaged unincorporated communities within and adjacent to the District's SOI. The household income threshold for a disadvantaged unincorporated community was updated to reflect more current income data. Within the District, only French Camp CDP qualifies as a disadvantaged unincorporated community. The number of households and meidan household income were updated to reflect more current data.

All appendices remain unchanged, with the exception of Appendix B. Appendix B provides information on population history and projections and was updated to reflect more current sources.

### **Executive Summary**

### Page i

• *Updated verb tense:* 

SSJID is separately petitioneding San Joaquin LAFCo for a change of organization... Since the District is petitioneding San Joaquin LAFCo to annex an 80-acre island and for a change in organization...

• *Updated project setting:* 

The District has requested San Joaquin LAFCo to-changebring Areas D, F, and G into the 10-year SOI for irrigation water service. All the subject properties either currently have or will install their own irrigation and drainage infrastructure (pipes or ditches) so the District's current irrigation and drainage infrastructure would not require upgrading or expansion. The District has sufficient water and drainage infrastructure capacity to provide the requested irrigation water and drainage service to the proposed annexation areas.

### Page iii

Updated demographic information:
 It is anticipated population within SSJID's territory increase to 204,657187,604 through 2040.

### Page iv

- *Updated water demand information:* 
  - As of 2017, Firrigation water demand in the district currently (2013) averages approximately 230214,000 AF of water, serves approximately 4756,500-900 acres of agricultural land, and accounts for about 80 to 90 percent of the total water supplied by the District.
- Updated water supply information:
  - Pursuant to its Agricultural Water Management Plan, adopted December 16, 2015, the District continues to develop and implement strategies for water delivery monitoring and efficiency. As recommended by the SSJID Water Balance Study (Davids Engineering, 2009), SSJID should take steps to improve its monitoring and operations practices to ensure water supplies are delivered to customers as efficiently as possible.



• Updated water supply information:

Water well testing in the district in 2010-2017 showed a -0.22.0 foot net change increase in groundwater levels. While monitoring showed an overall decrease increase, ground water levels increased generally show a very gradual but steady decline in the western parts of the within the district overall.

### Page v

• *Updated water facilities information:* 

SSJID is commencing the study phase in developing a "Water Master Plan," which, among other things, will identify significant, long-term capital improvement projects for a 20-year horizon. SSJID's Five Year Capital Expenditures Plan identifies ongoing system improvements to maintain and enhance its irrigation water and water treatment facilities. In addition, In the near term, SSJID has several major capital improvement projects planned or currently underway to improve system efficiencies, conserve water, and deliver water to new customers. These include, including: the Phase II of the South County Water Supply Project; expansion of the pressurized agricultural water delivery system; treated water delivery of treated water to the City of Ripon; irrigation water delivery to the 80-acre annexation area; and the SB X7-7 Water Measurement Program. While SSJID's Five-Year Capital Expenditures Plan may change to reflect findings from-its Water Master Planits pressurized irrigation system study, it is reasonable to assume that the District's improvements will ensure it continues providing adequate irrigation water and treated water service to its customers.

### Page vi

- *Updated Plan title and date:*SSJID should conduct a financial analysis of the Agricultural Water Management Plan (Davids Engineering, Inc. 20152), Water Balance Report (Davids Engineering, Inc. 2009) and Urban Water Management Plan (20112016)...
- Fixed grammar:
  ...the users would be responsible for paying to upgrade facilities.
- Added information on recent SSJID efforts:
   SSJID and the City of Manteca are commencing a Master Plan Study for SSJID's primary drainage facility, the French Camp Outlet Canal ("FCOC") to analyze its hydrology and capacity and identify future improvements to enhance the operation of the FCOC.

### Page v

 Updated date: SSJID, MID, and PG&E currently (20193) provide for electricity generation, supply, or distribution within SSJID's SOI. SSJID...

### Page xvi

• Fixed grammar:

As a retail electric service provider, it is expected that SSJID would improve accountability, transparency, and public involvement...

### Page xvii

• *Fixed grammar:* 

Irrigation water and drainage service has been improved could be improved by approving SSJID's annexation application for the 80-acre island. Irrigation water and drainage service could be improved by;, amending SSJID's SOI to include the City of Manteca;, amending SSJID's 10-year SOI to include Area-D, Area-F, and Area-G; maintaining SSJID as the planned service provider in Area-B (Figure 2-3),; and detaching Area-C from CSJWCD's existing boundary and maintaining SSJID as the planned service provider (Figure 2-3). SSJID could also provide more efficient and cost--effective service to Area-B and Area-C compared to another agency...

## Page xviii

• *Fixed grammar:* 

Reorganization of SSJID to include retail electric service, as well as approval of SSJID's application to annex the 80-acre island, could provide more efficient and cost -effective retail electric service without impacting SSJID's existing services or customers.

### Page 2

• *Added description of new figures:* 

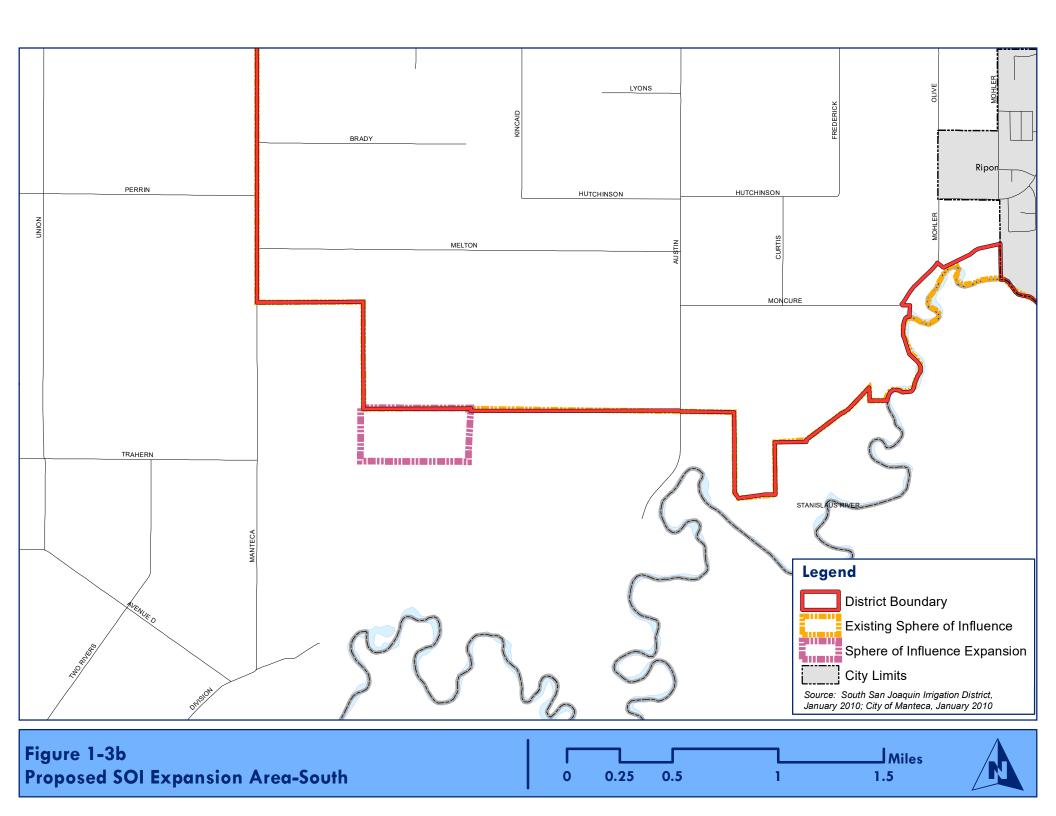
Figure 1-2 shows the SSJID's service area boundary, existing SOI, and proposed SOI. Figure 1-3a and 1-3b shows a-close-ups of the SOI expansion areas to the west and to the south.

### Page 7

Added Figure 1-3b: SOI Expansion Area Close-up-South



This page is intentionally left blank.



- Updated information on LAFCo application approval:
   In 2014, LAFCo approved SSJID's is also requesting that LAFCo approve its application to annex an 80-acre island within the District service area boundary.
- Updated information on SOI expansion: The proposed 2014 SOI expandsed the District SOI to the west by about 2,220 acres, so it is coterminous with the Manteca city limits. SSJID is now requesting the SOI be further expanded, and south by about 80 acres. The proposed SOI would total about 88,760-840 acres (138.87 square miles) and result in about 16,460-540 acres (25.87 square miles) remaining outside the District service area boundary.

### Page 17

 Updated date: SSJID currently (20142019) delivers irrigation water and provides associated drainage, sells treated drinking water and raw water wholesale, and provides

recreation through agreement with Stanislaus County.

Updated needs analysis:
 In 2016, When-SSJID's contract with PG&E expires in 2016 expired, and the District will sell now sells all electricity to the City of Santa Clara under a contract that expires at the end of 2023.

### Page 18

• *Updated date:* 

The area currently (20142019) receives water through individual wells. CSJWCD does not have plans to provide water service to this area.



### Page 19

*Updated existing services information:* SSJID has conducted several analyses to determine potential impacts to its water supplies and identify necessary improvements to its water system, including the Agricultural Water Management Plan (20125), the Water Balance Report (200915), and the Urban Water Management Plan (20161), and the On-Farm Water Conservation Program (2011). The District is also currently (201984) undertaking a Water M<del>master pPlanning development processstudy to, among other things, assess</del> the feasibility of improving and modernizing the Division 9 pressurized irrigation system District's infrastructure to meet future demands, increase the flexibility and availability of water, and potentially expanding the pressurized irrigation system systems concept in other divisions within the district.

### Page 22

*Updated date:* 

As described in Chapter 5 of the MSR, SSJID has committed to paying franchise fees and property taxes to local government agencies within San Joaquin County that are estimated to exceed those currently (20192) paid by PG&E.

### Page 24

*Updated demographic information:* 

Chapter 3 of the MSR provides a detailed description of SSJID's existing and projected population. In summary, the estimated 20180 population within the SOI was <del>100,468</del>111,218 (California DOF, 2018) U.S. Census 2010). Within the District, there has been some growth in the cities and limited growth in the unincorporated areas. SSJID is expected to continue to grow at a 2.4 percent average annual growth rate, There has been limited growth in the district since 2010. The cities of Escalon, Manteca, and Ripon are expected to continue to grow at a historical growth rate of 2.4 percent per year, with little growth occurring in the unincorporated areas, resulting in a 2040 population of about <del>204,657</del>187,604 or <del>104,189</del>76,386 new residents (California DOF, 2018) (Census 2010; California DOF; San Joaquin Council of Governments, 2008).

*Updated map area reference numbering:* The District has identified Areas "A" and "GE" for inclusion in the 10-year Sphere Horizon (shown in yellow on Figure 2-3).



• Updated annexation area information:

**TABLE 2-1** FUTURE DISTRICT ANNEXATIONS

		General	Sphere	Horizon	Planned Services			
SOI Area	Acres	Location	10-Year	30-Year	Irrigation	Drainage	Electricity <sup>1</sup>	
Area A	80	Island	Compete		✓	✓	✓	
Area B	7, <del>800</del> 760	Northwest		×	✓	✓		
Area C	850	Northeast		×	✓	✓		
Area D	5,240	South	×	×	✓10-year	✓10-year	✓30-year	
Area E <sup>2</sup>	2,200	West	×			✓	✓	
Area F	40	North	×		✓	✓		
Area G	80	Southwest	×		✓	✓		

<sup>&</sup>lt;sup>1</sup>Would require San Joaquin LAFCo approval of SSJID's retail electric service application. <sup>21</sup> Includes areas within the Manteca city limits currently outside SSJID's SOI, but planned for inclusion in the SOI. *Source: SSJID, 2019*<sup>1</sup>; *Mintier Harnish, 2019*<sup>1</sup>.

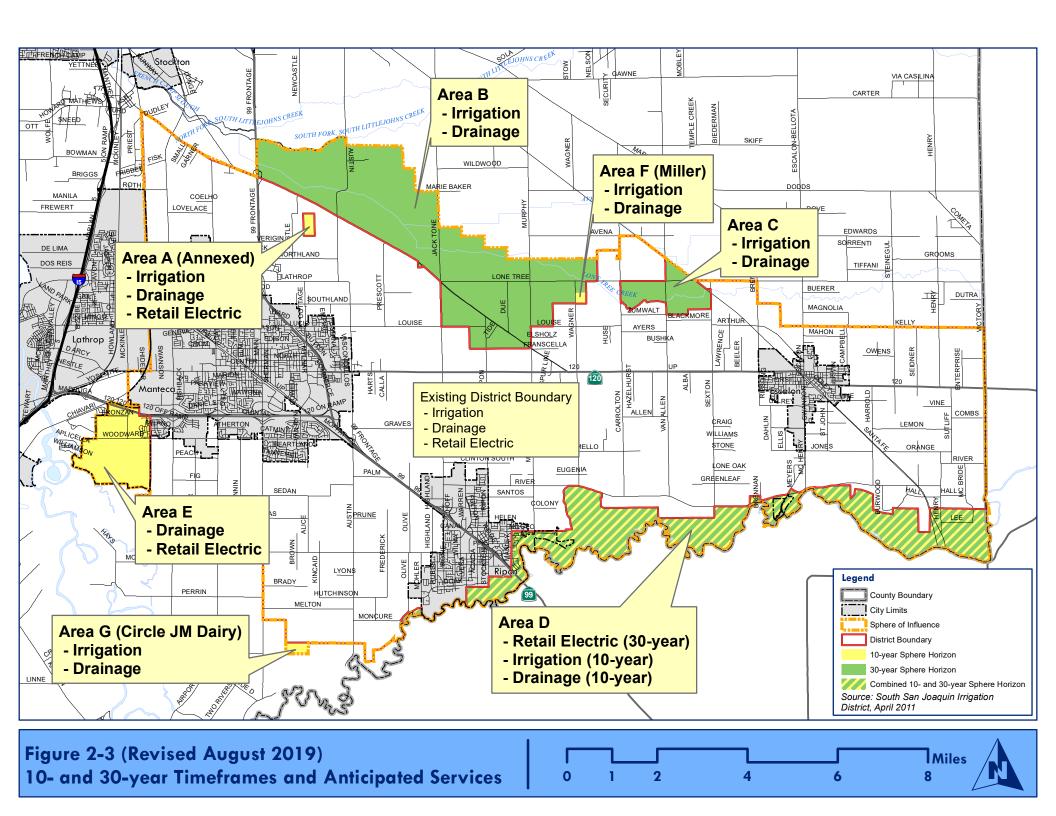
Updated annexation area information: The information contained in this section of the MSR reflects SSJID's currently (20142019) anticipated services. Generally, the District's current (20142019) decision to not expand a service into an area of its SOI is based on expected customer demand and the cost to extend facilities or service. For example, SSJID does not plan to extend electricity service to Areas "B", or "C", or "F" or "G".

### Page 27

• Updated Figure 2-3: 10- and 30-year Timeframes and Anticipated Services



This page is intentionally left blank.



• *Updated acreage:* 

Area B - 7,800760-acre Area to the Northwest

Area-B is a 7,<del>800</del>760-acre area on the northwest edge of the District. Area-B is within the 30-year Sphere Horizon.

• *Updated date:* 

CSJWCD does not currently (20142019) provide any services to the area and it does not have any plans to extend services to the area.

### Page 30

• *Updated Area "D" information:* 

This area includes the southern edge of the City of Ripon and the City of Escalon wastewater treatment plant. Area "D" is within the 30-year Sphere Horizon. The District anticipates that it would will ultimately provide irrigation and drainage within the next 10 years and retail electricity service to this area within the next 30 years...The District has identified several properties in Area D where either the property owners have discussed but not formally requested annexation, or the properties are split by the District boundary. Given the number of properties in Area D potentially affected by an SOI amendment, and the likelihood of additional property owners in the future also expressing interest in annexation due to the decreasing water availability and suitability in the area, the District has expressed interest in moving the entire Area D into the 10-year SOI for irrigation water service/drainage.

Fixed formatting:

Area E - 2,200-acre Area to the West



• Added information on Area "F":

### Area F - 40-acre Area to the North

Area-F is a 40-acre area located at the northern edge of the District Boundary, encompassed by Area-B and located on the Robert L. Miller property. Area-F is within the 1030-year SOI. The District anticipates that it will provide irrigation and drainage service to this area within the next 10 years. The District expects that this area would remain in agricultural production. The area currently (2019) receives water through individual wells and through-natural streambeds that carry unused pass-through water from both SSJID and CSJWCD that ultimately drains to the San Joaquin River. In order to serve Area-F, the District would need to extend or construct irrigation and drainage lines and canals and impose conditions to allocate water supplies (e.g., extension of District facilities are the owner's expense, the owner must follow District rules for water delivery and pay District fees, the District makes no assurances of water supply, and new customers are subject to reductions in the event of shortages in supply).

• Added information on Area "G":

### Area G – 80-acre Area to the Southwest

Area G is approximately 80 acres and located at the southwest edge of the District Boundary, on the existing Circle JM Dairy property. It is within the 10 year SOL outside the Sphere of Influence. This property currently (2019) receives irrigation water service from the District through out-of-area service agreements. Annexation of this property would reduce their property owner's service costs and enable them to participate in District elections. Thise property owner would install their own irrigation and drainage infrastructure (e.g., pipes, ditches); meaning the District's current irrigation and drainage infrastructure would not require an upgrade or expansion.

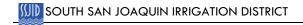
### Page 31

• *Updated date:* 

The District's current (20142019) water supplies are adequate to serve the area identified for annexation without affecting its current irrigation and domestic water customers.

• *Updated date:* 

SSJID does not currently (20142019) plan to provide all its services (i.e., irrigation water, agricultural drainage, and, if approved by San Joaquin LAFCo, retail electric) to all areas of its SOI.



• Updated population and demographics information:

Table 3-1 summarizes the 20108 SSJID District and SOI population. As the table shows, 98.8 percent (99,268109,890) of the population resides within the District service area. Areas outside the District, but within the District's SOI, are lightly populated, accounting for only 1.2 percent (about 1,3281,200) of the population. Most of the population in the SOI (88.1 percent or 88,52597,997) resides in the cities of Escalon, Manteca, and Ripon.

### Page 34

• *Updated population and demographics information:* 

**TABLE 3-1** 20180 DISTRICT AND SOI POPULATION

Location	20189 Population	Percent of SOI
Escalon	<del>7,132</del> 7,895	7.1%
Manteca <sup>1</sup>	<del>67,096</del> 74,275	<del>66.8%</del> 66.8%
Ripon	<del>14,297</del> 15,827	<del>14.2%</del> 14.2%
Unincorporated <sup>2</sup>	<del>10,743</del> 11,893	<del>10.7%</del> 10.7%
District Boundary Subtotal	<del>99,268</del> 109,890	98.8%
Remaining SOI <sup>2</sup>	<del>1,200</del> 1,328	1.2%
20180 Total SOI	<del>100,468</del> 111,218	100.0%

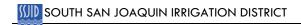
<sup>&</sup>lt;sup>1</sup> Includes areas within the Manteca city limits currently outside SSJID's SOI, but planned for inclusion in the SOI.

<sup>&</sup>lt;sup>2</sup> 2010 estimates bBased on estimated Census 2000 Block-Level population data;. At the writing of this report 2010 Census Block Level data is not available. Aassumes little growth occurred in unincorporated areas of the District and SOI between 2000 and 2010. 2018 estimates are extrapolated by multiplying the 2010 estimates by 10.7% (the population growth in San Joaquin County between 2010 and 2018 using DOF estimates). Source: Census 2000 and Census 2010, United States Census Bureau; California Department of Finance, 2018; Mintier Harnish, 20194.



• *Updated growth projections:* 

Appendix B: Historic and Projected Population and Employment provides a detailed description of San Joaquin County's historic and projected population and employment growth developed as part of the San Joaquin County General Plan Update (2008). Historically (i.e., 19902000 through 20052015), the county had an average annual population growth rate of about 2.21.8 percent. During the same period from 2000 through 2005, the cities of Escalon, Manteca, and Ripon (within the SSJID service area) had a combined historic average annual growth rate of about 2.82.5-percent (1.52.4 percent, 3.1 percent, and 2.83.0-percent, respectively). According to the Although growth projections used by San Joaquin Council of Governments (SJCOG), show that population growth for the cities of Escalon, Manteca, and Ripon are expected to grow occur at an average annual growth rate of about 1.32.4 percent through the year 2030, each of the local jurisdictions predict a higher future growth rate for themselves. Based on the 2011 Escalon SOI/MSR, Escalon expects a 2.01-2.33 percent compounded growth rate between 2018 and 2025. According to the Manteca Growth Management Ordinance, the City assumes a maximum 3.9 percent annual growth rate. Based on the 2010 Ripon SOI/MSR, Ripon expects an average annual growth rate of 3.2 percent. The higher expected growth rates of the cities within the SSJID service area combined little growth expected in the unincorporated areas, leads LAFCo to conclude that the 2.4 percent average annual growth rate used in the adopted 2014 SSJID SOI/MSR Report is still appropriate for this update. While the current recession has slowed growth throughout the State and nation, June 2011 California Department of Finance population projections show that in the near term San Joaquin County's population will experience a slow-down, but then recover in the long term consistent with projections used in this MSR.



### Pages 34-35

Updated population and demographics information:
 Table 3-2 shows projected population from 20180 through 2040 in two and five-year increments. Projected population is based on an historic expected future (i.e., 1990 2020 through 20052030) average annual growth rate of 2.4 percent. As the table shows, by 2020 the District's SOI population is expected to grow to 127,358119,226. By 2040 the District's SOI population is expected to grow to 204,657187,604.

TABLE 3-2 EXISTING AND PROJECTED POPULATION (SSJID SOI)

IADLL	EXISTING AND I NOSEC	EXISTING AND I ROSECTED I OF CEATION (COOLD COT)								
	<b>Projected Population</b>									
	(2.4 Percent Annual	Five-Year Increment of								
Year	<b>Growth Rate</b> )	<b>Net New Population</b>								
<del>2010</del>	<del>100,468</del>									
201 <mark>85</mark>	111,218 <del>113,117</del>	<del>12,649</del>								
2020	119,226 <del>127,358</del>	8,008 <del>14,241</del>								
2025	113,533 <del>143,393</del>	14,307 <del>16,034</del>								
2030	149,557 <del>161,446</del>	16,024 <del>18,053</del>								
2035	167,504 <del>181,772</del>	17,947 <del>20,326</del>								
2040	187,604 <del>204,657</del>	20,100 <del>22,885</del>								

Source: California Department of Finance, 2018; LAFCo, 2019; Mintier Harnish, 2019. Census 2000 and Census 2010, United States Census Bureau; California DOF, June 2011; San Joaquin Council of Governments, 2008; Mintier Harnish, 2011.

### • *Updated MSR Finding 1:*

The estimated 20180 population within the SOI was 100,468111,218. For the purposes of this report, we assume that the cities of Escalon, Manteca, and Ripon will continue to grow at their historical projected growth rate of 2.4 percent per year, with little growth occurring in the unincorporated areas of the district, resulting in a 2040 population of about 204,657187,604.

### Page 38

• *Updated irrigation water statistics:* 

As of 2017, ilrrigation water demand in the district <del>currently (20173)</del> averages approximately <del>230</del>214,000 AF of water and serves approximately <del>5647,500</del> 900 acres of agricultural land.



• *Updated MSR Finding 2:* 

As of 2017, Firrigation water demand in the district currently (2013) averages approximately 230214,000 AF of water, serves approximately 4756,500-900 acres of agricultural land, and accounts for about 80 to 90 percent of the total water supplied by the District.

### Page 39

Updated Urban Water Management Plan (UWMP) information:
 The District adopted an Urban Water Management Plan (UWMP) in June 2016-on
 September 13, 2011, for its domestic water service in accordance with the California Urban Water Management Planning Act...The UWMP evaluates SSJID's urban water supplies for the period of 2011 to 2030. This UWMP reports on activities from 2011 to 2015 and provides projections for future activities through 2040. This is the first UWMP prepared by SSJID.

### Page 40

- Updated Table 4-1 source:
   Source: SSJID UWMP, Table 5-63-1, Davids Engineering, Inc. December June 20126.
- *Updated date in MSR Finding 4:*SSJID's Urban Water Management Plan (UWMP) (September 13, 2011June 2016) covers treated water delivered by the district as part of the SCWSP.

### Page 41

• *Updated water supply study information:* 

According to the 2015 SSJID Water Balance Study Agricultural Water Management Plan (Davids Engineering, 201509), an estimated 19,000 to 45,000 acre-feet of the demand per water year between 1994 and 2014 was supplied by rainfall stored in the root zonetotal rainfall on agricultural land within the district boundaries varied from 30,000 to 123,000 acre-feet annually between 1994 and 2008.

• *Updated study reference:* 

Detailed analysis and information on SSJID's irrigation water supply and demand can be found in the District's Agricultural Water Management Plan (Davids Engineering, Inc., 20152) and the SSJID Water Balance Study (Davids Engineering, Inc., 2009). Domestic water supply and demand analysis and information can be found in the District's Urban Water Management Plan (20146, Provost & Prichard Consulting Group).

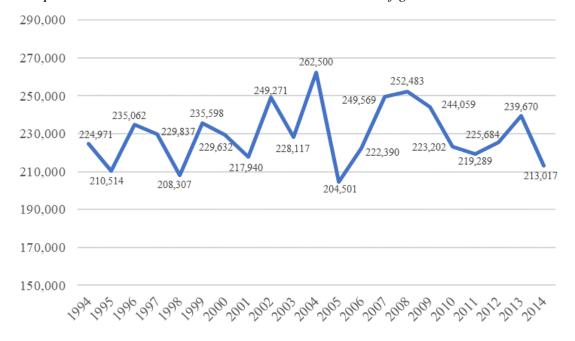


• *Updated Figure 4-1:* 

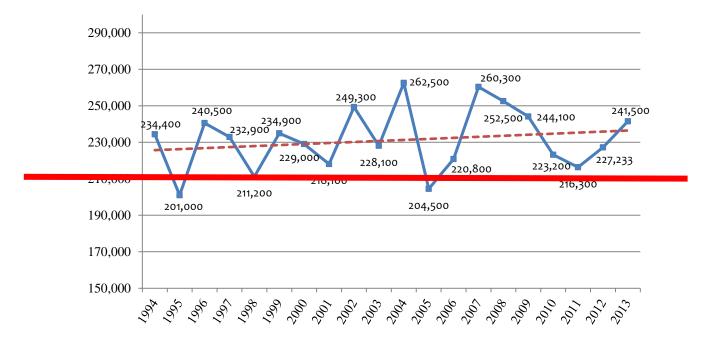
According to the 2015 SSJID Water Balance Study Agricultural Water Management Plan (Davids Engineering, 201509), the District's supply has varied from about 205,000<del>204,500</del> to <del>268,000</del>262,500 acre-feet between 1994 and 2014<del>08</del>, with a wet year average of 220,000 af and a dry year average of 237,000 af. The overall average for the 21-year period was 230 af.. As the dashed trend line shows, average water diversions have increased slightly from just under 230,000 acre-feet/year to about 240,000 acre-feet/year. The difference between these measurements in Figure 4-1 and the Water Balance Study is due to the location used to take the measurements.



### • Updated the Goodwin Dam Water Diversions to SSJID figure:



Source: AWMP, 2015.



Source: Tri Dam, 2013



### Pages 43-44

• *Updated water source information:* 

According to the 2015 SSJID Water Balance Study Agricultural Water Management Plan (by David's Engineering, 20092015), the reported results of the water balance for each flow path imply a greater degree of accuracy than is justified. While potential error in the data has not been assessed, uncertainty for each flow path has been estimated, which is approximately equivalent to a 95 percent confidence interval. there is appreciable uncertainty in SSJID's outflow measurements, and the overall level of confidence in the water balance is lower than desired, although adequate for making initial performance assessments. Water balance is the amount of water delivered to SSJID customers after accounting for various factors, such as evaporation, leakage, and seepage. Davids Engineering recommended that certainty be increased by improving outflow measurements and conducting regular, independent validation of inflow measurements. Specifically, the Study made four recommendations to improve water balance:

Further enhance ongoing efforts to expand and improve flow measurement;
Differentiate between District lateral and farm performance and conduct on-farm efficiency assessments with cooperating landowners;

Work toward providing real time flow measurements to system operators; and Continue to enhance centralized data storage and management.

Updated MSR Finding 6
 As recommended by the SSJID Water Balance Study (Davids Engineering, 2009),

 SSJID should take steps to improve its monitoring and operations practices to ensure water supplies are delivered to customers as efficiently as possible.

### Page 45

• *Updated water supply information:* 

According to SSJID's AWMP, agricultural irrigation is the dominant water use in SSJID. Total water required to meet the evapotranspiration need of the crops grown varied from 147,000 to 178,000 acre-feet per water year between 1994 and 2014. between 1994 and 2008 SSJID and growers within the SSJID service area pumped an average of 39,652 acre-feet of groundwater, most of which was pumped by growers with their own wells. In wet years groundwater pumping averaged 30,025 acre-feet; in dry years pumping increased to an average of 48,075 acre-feet, most by growers with their own wells.



### Page 59

- *Updated groundwater information:*Decreases have averaged over 1.75 feet per year, and groundwater levels have dropped over 100 feet in some areas during the 40-year period.
- Updated groundwater information:
   Groundwater is relatively shallow (i.e., less than 20 feet below ground level) in the central portion of San Joaquin County, and as shallow as two feet within SSJID's SOI and on the western side of SSJID.
- Updated groundwater information: In Spring 2010Fall 2016, SJCFCCD reported on 44-22 wells, out of a total of 39 wells, within the District showing a -0.2 foot netan average -0.77 change in groundwater levels. Of the 44-22 reported wells, 26-12 showed decreases in groundwater levels, 14-nine (9) showed increases in levels, and one (1)4 wells showed no change. Increases in groundwater levels were concentrated in the western portions of the District.
- Updated MSR Finding 7: As a result of groundwater pumping by property owners, cities, and water providers within and outside the district, groundwater levels have decreased an average of 1.57 feet per year...Water well testing in the district in 20106 showed a -0.277 foot net change in groundwater levels. While monitoring showed an overall decrease, ground water levels increased in the western parts of the district.

• *Updated water balance study findings:* 

Results from a water balance study prepared for the District by Davids Engineering, Inc., as reported in SSJID's 20152 Agricultural Water Management Plan, showed that the District's irrigation water service facilities and practices, which include seepage, deep percolation of applied water, and deep percolation of precipitation, result in groundwater recharge of about 144,000 acre-feet per year, while District and private groundwater pumping is about 54,000 acre-fee. Thus, the net effect of District, landowner operations, and annual precipitation is recharge of nearly 90,000 acre-feet each year. supply of surface water in canals and reservoirs annually recharges the groundwater in excess of 50,000 acre-feet. When combined with drain seepage and deep percolation, SSJID contributes a total recharge of about 97,000 acre-feet per year. Between 1994 and 2014, net groundwater recharge tended to be greater in wet, full allocation years, and less in net dry years. Total recharge was found to be greater in dry years due to longer irrigation seasons (i.e., increased number of days during which seepage in the distribution and drainage systems occurs) and increased crop irrigation requirements in dry years.

• *Updated MSR Finding 8:* 

SSJID's irrigation water service facilities and practices, which include seepage, deep percolation of applied water, and deep percolation of precipitation, result in groundwater recharge of about 97144,000 acre-feet per year while District and private groundwater pumping is about 54,000 acre-feet. Based on average recharge rates compared to average groundwater pumping within SSJID, the AWMP found that SSJID activities result in a net recharge to the groundwater basin of about 57,300 acre-feet per year. Thus, the net effect of District, landowner operations and annual precipitation is recharge of nearly 90,000 acre-feet each year.

### Page 51

• *Updated timeframe:* 

The City of Ripon is <del>currently (2014)</del> interested in negotiating with SSJID (and the other cities in the SCWSP) to receive treated water in lieu of raw water it receives under its current contract with the District and to accelerate the annual delivery schedule.

### Pages 51

• *Updated water supply data:* 

According to SSJID's AWMP, it is estimated that SSJID is expected to receive its full supply in 79 out of 100 years and is expected to receive at least 249267,000 acre-feet in 95-90 out of 100 years. The minimum supply SSJID is expected to receive in any year is approximately 190225,000 acre-feet.

### Page 54

• Updated source references:

These strategies include those identified in the California Water Plan and Safeguarding California: 2018 Update. 2009 Update (California Department of Water Resources, 2010) as well as strategies identified in and the 2009 California Climate Adaptation Strategy.

### Page 55

• *Updated source reference dates:* 

Detailed analysis and information on SSJID's water quality can be found in the District's Agricultural Water Management Plan (20125, Davids Engineering, Inc.) and 20146 Urban Water Management Plan (20146, Provost & Prichard Consulting Group).

### Page 56

• *Added source reference date:* 

According to SSJID's 2015 AWMP, the District monitors electrical conductivity for its 28 production wells using permanently installed sensors.

### Page 57

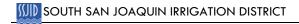
• *Updated source references:* 

Detailed information on SSJID's existing and planned irrigation—water distribution system can be found in the Districts' 2015 Agricultural Water Management Plan (2012, Davids Engineering, Inc.). Domestic water treatment and distribution facilities information can be found in the District's 2016 Urban Water Management Plan (2011, Provost & Prichard Consulting Group).

### Page 66

• *Updated source reference date:* 

SSJID has identified, in its Five-Year Capital Expenditures Plan (September November 21, 201724, 2013), maintenance projects and system enhancements...



- Updated information from the SSJID Five-Year Capital Expenditures Plan:
  In total the Plan identifies project costs of about \$33.520.2 million over five years (includes irrigation system, shop, and water treatment plan improvements); however, SSJID is only directly responsible for funding about \$14-3.6 million of those costs. The remaining \$19.5 millioncost would be the responsibility of property-owners or developers, cities within the district, partner irrigation districts, or specific rate payer fees (e.g., SBx7-7 rates).
- Updated source reference date:
   SSJID's irrigation system improvement plans are likely to change once the District completes its current (20193) Master Plan sStudy on expanding its pressurization irrigation system.

### Pages 69

*Updated information on SBX7-7 Water Measurement Program:* Senate Bill X7-7 (SB X7-7), also known as the Water Conservation Act of 2009, contains provisions requiring all California irrigation districts, including SSJID, to take actions to measure, report, and bill their customers for the delivery of actual volumes of water. SSJID is required to measure the volume of water delivered to its customers and adopt a pricing structure based at least in part on the quantity of water delivered. SSJID'S first tier volumetric charge is \$3 per acre-foot of water for the first 48 inches and \$10 per acre-foot for water used in excess of 48 inches. Water usage is determined by the flow rate multiplied by the duration of the water run. Flow rate is determined on the basis of the predetermined capacities of gates, laterals, and turnouts throughout the distribution system, together with average head during each irrigation delivery. Electronic flow meters, doppler meters, and magnetic meters will be used to take measurements. SSJID is implementing all technically feasible Efficient Water Management Practices identified by SB X7-7 to achieve water use efficiency improvements in SSJID operations and to encourage on-farm improvements, detailed in the 2015 SSJID Agricultural Water Management Plan. SBx7-7 (Steinberg, 2009) requires water purveyors to develop a water measurement program by 2015. The District is currently (2013) working with an engineering firm to implement a measurement program, which will include 111 Doppler and 282 magnetic meters. To comply with the SBx7-7 volumetric pricing requirements, SSJID adopted a new, \$3.00 per acre-foot charge in addition to its existing charges, which will be implemented in 2014 (see Chapter 5).



• *Updated MSR Finding 19:* 

While SSJID has prepared plans to ensure its water supplies and associated infrastructure are sufficient to meet future demands, SSJID has not conducted detailed financial studies to determine how it will carry out implementation of the Agricultural Water Management Plan (20152), Water Balance Report (2009), and Urban Water Management Plan (20161). For water conservation programs, it appears that SSJID is not planning to provide future funding. SSJID should conduct a financial analysis of the Agricultural Water Management Plan (Davids Engineering, Inc. 20152), Water Balance Report (Davids Engineering, Inc. 2009) and Urban Water Management Plan (20161), and prepare a comprehensive, near- to mid-term Capital Improvement Plan to carry out identified improvements.

Updated date:
 In 20125 SSJID prepared and adopted its current AWMP.

### Page 72

- Added UWMP update information:
   In 2011 SSJID prepared and adopted its UWMP, and most recently updated it in 2016.
- Removed outdated finding from previous version of the UWMP:

  According to SSJID's Urban Water Management Plan (2011), SSJID began implementing these measures as early as 2005. In most cases SSJID continues to carry out these and other measures that increase domestic water conservation.

### Page 78

Updated date:

SSJID has identified, in its Five-Year Capital Expenditures Plan (Novebmer 21, 2017September 24, 2013), a specific set of maintenance projects and system enhancements that will ensure SSJID's water and drainage systems continue to operate and function at an optimal level.

### Page 80

Updated date:

SSJID, MID, and PG&E currently (20193) provide for electricity generation, supply, or distribution within SSJID's SOI.

• *Updated date:* SSJID does not currently (20193) provide retail electric service.

### Page 84

• *Updated date:*Currently (20139) SSJID does not provide retail electricity service.

### Page 89

Updated date:
 Figure 4-10 shows areas currently (20193) served by PG&E and MID.

### Page 99

 Updated date: SSJID currently (20193) receives retail electric service for its facilities from PG&E and MID.

### Page 119

Updated date:
PG&E currently (20139) offers programs for customers to reduce their peak and base period demands for electricity.

### Page 130

Pursuant to SBx7-7 (Steinberg, 2009), The District recently (20182) has enacted a new volumetric pricing structure that pursuant to SBx7-7 (Steinberg, 2009). SBx7-7 requires agricultural water to be priced at least in part based on volume. SSJID useshas added a volumetric rate of \$3.00 per acre-foot to the existing fixed charge of \$24 per acre. The new volumetric This rate is projected to provide enough incremental revenue to amortize the cost of the meters and to cover operating and maintenance costs of the measurement program. This fee structure became effective in 2014.

### **Page 135**

• *Updated date:* 

The District is also currently (20193) reviewing the feasibility of delivering treated water to Ripon. Updated date:

According to the 2011-2015 UWMP, SSJID charges cities involved in the SCWSP for all operating, maintenance, and capital costs of the water treatment and delivery system.



### Page 174

Updated date:
 SSJID could provide services to Area-C, which is currently (20194) within CSJWCD's service area and SSJID's SOI.

- Added recent water capacity information:
   SSJID also sold 11,500 acre-feet, 42,500 acre feet, and 31,459 acre-feet of untreated water in 2015, 2016, and 2017, respectively.
- *Fixed typo:* SSJID, in coordination with the SCWSP members, could work with the City of Ripon to provide treated water to Ripon from the Nick C. Groote Water Treatment Plant.

### Page 181

Updated employee information:
 SSJID currently (20194) has 89-97 full-time employees who are responsible for operations and maintenance, construction, billing and collection for irrigation and water utility services, and wholesale power sales.

### **Page 183**

• Updated Figure 7-2: Organizational Chart

### **MISSION**

SSJID provides the utmost value for its agricultural, urban and business community while protecting and delivering vital

### **VISION**

As a premier organization, South San Joaquin Irrigation District is passionately focused on delivering high quality water and power that are integral to the communities we serve, while leading in innovation and sustaining a deep respect for our history, our employees and our environment.

### Figure 7-2 SSJID Organizational Structure



General Manage

Betty Garcia Clerk of the Board

Field Maintenance Supervisor

Mike Hanson

Maintenance

Tom Lindsey

Justin Lee

David Pauley

Maintenance

Jonnie Moore

**General Counsel** 

Frank Avila

**Irrigation Operations Manager** 

Accountability Excellence Health and Safety Innovation Integrity

**Positivity** Respect Service Teamwork Transparency

Julie Jeleti

Laboratory Coordinator /



October 4, 2018



Assistant General Manager



counting & Custon Services Manager



Maria Gikas Senior Accounting



Julie Minton **Customer Service** 







**Engineering Department Manager** 



Dawn Driesen



Troylene Sayler Public Relations



**Donald Thornburg** 

Specialist

IT Systems

Matt Macedo

Pest Control Applicator

Spray Applicator



Engineering Technician & Facility Inspector



Julie Vrieling Office Support / Water Conservati Coordinator



GIS / Engineering







Civil Engineer /













Lloyd Wayman **Telemetry Systems Supervisor** 



Randall Harris

Electrician /

SCADA &

Randal Welch SCADA Technicia









Rvan Thrasher

Distribution

Water Meter







Nathan Walker

Division 1-2

Sean Jefferson

Division 1

Day Manager





Andrew Teicheira

Division 1-2

Patrick Mays

Division 1

Night Manager

Joshua Stanley

Night Manager



Irrigation Services Supervisor



Division 6

Trenton Fereria

Division 3-4

Brvan Kennedy

Day Manage



Andrew McDonald

Division 2

Day Manager







Bob Anderson

Division 2

Night Manager

**Rob Shipman** 

Night Manage











Thomas Johnson

David Marker

Shawn Ussery

Maintenance







Troy Thrasher







Jim Schaad

Tim Hagins

Maintenance

















Dick Pendletor Welder & Mechan



Bill Emslie Equipment Mechanic





John Thien

Mechanic Helper



Justin Ashworth



Jennifer Giddens



**Charles Galea Chief Plant Operator** 



Jason McCulloch

Zachary Hoesch

Jeremy Ellsworth Operator

**Matt Gonzales** 











Chris Avila



Worker



Division 5-6













Worker

Worker



Eddie DeFreitas





• *Updated date:* 

The current plan was approved by the SSJID Board on November 21, 2017 September 24, 2013 (Appendix C: SSJID Five-Year Capital Expenditures Plan).

### Page 192

• *Updated date:* 

SSJID is currently (20193) exploring the feasibility of constructing a new District headquarters facility.

### **Page 208**

• *Deleted outdated information:* 

Currently (2012) the best available data for determining disadvantaged unincorporated communities was prepared by the California Department of Water Resources (DWR).

• *Updated demographic information:* 

DWR developed a mapping tool to help determine which communities meet the disadvantaged communities median household income definition. DWR's maps and geographic information system (GIS) files use the US Census Bureau's American Community Survey and are compiled for the five year period 2006-20102012-2016. DWR included in the maps a calculated field that indicates the DAC status for different census geographies (Census Designated Place, Tract, and Block Group). DWR established a median household income of less than about \$48,70051,026 as the disadvantaged unincorporated communities threshold (i.e, 80 percent of the statewide median household income)... The French Camp CDP is located adjacent to the SSJID SOI, it includes 609-527 households and has been in existence for more than 50 years, and it had a median household income (\$39,72932,383).

### Page 215

• *Updated reference date:* 

Davids Engineering. South San Joaquin Irrigation District 20125 Agricultural Water Management Plan. Davis, California. December 20125.

### Page 219

• *Updated reference date:* 

Provost & Prichard Consulting Group. *SSJID Urban Water Management Plan*. Fresno, California. AugustJune, 20112016.



### Appendix B: Population History and Projections

- *Deleted outdated information and updated tables:* 
  - \* Woods & Poole Economics, Inc., (WPE) provides long-term projections of population, employment, and earnings for all counties in the United States. WPE uses the "Export-Based Approach" to generate employment and earnings projections by industry sector that are based on data from the U.S. Department of Commerce. Compared to the other sources reviewed, WPE projections forecast the most conservative growth rates for both population and employment in the county. WPE projects County population to grow at an average annual growth rate of 1.1 percent to reach 880,100 by 2030, while employment is projected to grow at a faster rate than population 1.3 percent annually from 307,000 jobs in 2010 to 398,700 jobs in 2030 (see Table 3-22).

			POPULA											
_		Historical Tro	ends		Average Annual Growth Rate <sup>1</sup>						Average Annual Growth Rate			
-	<del>1990</del>	<del>1995</del>	<del>2000</del>	<del>2005</del>	<del>1990-2005</del>	<del>2010</del>	<del>2015</del>	<del>2020</del>	<del>2025</del>	<del>2030</del>	<del>2010-2030</del>			
County Population				•				•						
Caltrans	_	<del>522,100</del>	<del>569,064</del>	<del>665,390</del>	<del>2.5%</del>	<del>766,644</del>	<del>874,103</del>	982,834	<del>1,091,537</del>	_	<del>2.4%</del>			
CCSCE <sup>2</sup>		_	<del>583,586</del>	660,274	<del>2.5%</del>	<del>727,026</del>	<del>798,768</del>	_	_	_	<del>1.9%</del>			
<del>DOF</del>	480,628	<del>517,926</del>	<del>563,598</del>	<del>652,060</del>	<del>2.1%</del>	741,417	_	965,094	_	<del>1,205,198</del>	<del>2.5%</del>			
SJCOG	_	_	<del>563,598</del>	630,613	<del>2.3%</del>	708,364	<del>792,998</del>	888,536	<del>995,132</del>	<del>1,117,006</del>	<del>2.3%</del>			
U.S. Census	480,628	_	563,598	646,259	<del>2.0%</del>		_	-		_	N/A			
Woods & Poole	484,131	<del>517,923</del>	568,333	664,796	<del>2.1%</del>	706,428	747,377	789,558	833,424	<del>880,147</del>	<del>1.1%</del>			
Average	481,796	<del>519,316</del>	568,629	653,232	<del>2.2%</del>	729,976	803,312	906,506	973,364	1,067,450	<del>2.0%</del>			
County Employmen	tt³													
Caltrans	_	<del>170,140</del>	<del>196,410</del>	214,220	2.3%	235,700	<del>259,160</del>	280,680	304,170	_	<del>1.7%</del>			
SJCOG		_	195,710	207,397	<del>1.2%</del>	220,000	234,343	<del>250,624</del>	<del>270,406</del>	<del>289,461</del>	1.4%			
EDD	<del>172,433</del>	<del>175,568</del>	204,007	<del>221,171</del>	<del>1.7%</del>	_	_	_		_	N/A			
Woods & Poole	<del>215,763</del>	<del>226,419</del>	<del>259,492</del>	<del>286,410</del>	<del>1.9%</del>	306,636	<del>327,846</del>	<del>350,178</del>	373,760	398,717	<del>1.3%</del>			
Average	194,098	190,709	213,905	232,300	1.8%	<del>254,112</del>	273,783	<del>293,827</del>	<del>316,112</del>	344,089	<del>1.5%</del>			

<sup>&</sup>lt;sup>4</sup>-The time frame for the average annual growth rate may vary based on available data.

<sup>2</sup>-Average annual growth rate shown for the 1996-2016 period; population and employment projects extrapolated to 2015 by Economic Planning Systems (EPS).

<sup>3</sup>-Defined as number of jobs in the County.

Source: U.S. Census; Caltrans; CCSCE; DOF; EDD; SJCOG; Woods & Poole; and EPS.



POPULATION AND EMPLOYMENT TRENDS SAN JOAQUIN COUNTY 1990-2030												
		Historical Trends						Projected Trends			Average Annual Growth Rate	
	1990	1995	2000	2005	2010	2015	1990-2015	2020	2025	2030	2020-2030	
County Population												
Caltrans		522,100	569,064	665,390	686,585	727,547	1.8%	779,252	821,256	858,944	1.0%	
DOF	480,628	517,926	563,598	652,060	685,306	723,856	2.2%	782,662	838,755	894,330	1.4%	
SJCOG			563,598	630,613	687,744	726,106	1.3%	775,819	829,426	883,484	1.3%	
U.S. Census	480,628		563,598	646,259	673,613	708,554	1.6%				N/A	
Average	480,628	520,013	564,965	648,581	911,083	962,021	1.7%	779,244	829,812	878,919	1.2%	
County Employment <sup>2</sup>	<u>.</u>											
Caltrans		170,140	196,410	214,220	208,200	234,900	1.2%	263,600	276,200	286,500	0.9%	
SJCOG			195,710	221,017	203,367	292,491	1.5%	259,051	277,070	294,751	1.3%	
Average		170,140	196,060	217,619	205,784	263,696	1.3%	261,326	276,635	290,626	1.1%	

<sup>&</sup>lt;sup>1</sup> The time frame for the average annual growth rate may vary based on available data.

Source: U.S. Census Bureau, 2006-2010 American Community Survey; U.S. Census Bureau, 2011-2015 American Community Survey; Caltrans, 2017; DOF, 2018; SJCOG, 2018.

<sup>&</sup>lt;sup>2</sup> Defined as number of jobs in the County.

- California Center for the Study of the Continuing Economy (CCSCE). CCSCE provides high level statewide and county projections. Short term projections provide a nearer-term indicator of future growth and appropriateness of other projection sources. Projections are based on the analysis of economic regions, in this case the San Joaquin Valley Region, derived from CCSCE's regional projections, county level data provided by regional planning agencies (such as SJCOG), and analysis of historical county shares of regional growth. Employment projections are determined based on analysis of individual industries in each area's economic base and factor location decisions, such as national growth rates and supply and determinants unique to each industry sector.
- California Employment Development Department (EDD). The State EDD provides detailed current employment estimates based on the Current Employment Statistics (CES) survey, which summarizes monthly employment, hours, and earnings data from a sample of California employers. Final revisions to the statewide and local area data, called a "benchmark" are made each March for the current and previous year. Projections are available by industry sector.

To provide a reasonable estimate of projected population and employment in the County, Table B-2 averages these projected demographic trends. This method accounts for the level of variation in projection methodology and provides a foundation for future analysis. Average San Joaquin County population projections estimate a 1.22 percent average annual rate of growth from 20240 through 2030 for a total of nearly 880,0001.1 million people, while employment is estimated to average 1.51 percent annually to a total of 344,10 over 290,0000 jobs by 2030.

Overall, the County and incorporated cities have experienced significant growth since 2000. Annual average rates of growth of 2 percent or higher represent strong growth and almost all the Cities experienced this level of growth between 2000 and 2005. Countywide growth was at 2 percent; however, the unincorporated County population growth was a bit slower at 1.7 percent annually, possibly related to annexations of unincorporated land to cities.



Projected growth is expected to be absorbed largely by the cities. Between 2010 and 2030, SJCOG data show that of the total projected countywide population, about 88 percent of growth would occur in cities. By 2030 about 81 percent of the population growth would occur in incorporated cities. Average annual growth rates of these cities' population would also increase at a slightly faster rate than that of the unincorporated county. The county as a whole is expected to increase by a rate of 2.2 percent annually from 2010-2030. More robust growth is expected in Lathrop, Tracy, and Manteca, as those cities have planned capacity for future residential development. Growth in the unincorporated County is relatively slower than that of the cities—an estimated 1.1 percent increase annually over the 20-year time frame, as opposed to 2.4 percent annually in the cities over the same time period.

		His	torical		<b>Projected</b>							
			<del>2000-</del>	<del>2005</del>					<del>2010-</del>	<del>2030</del>		
City/County	2000	2005	Total Growth	Avg. Annual Growth Rate	<del>2010</del>	2020	<del>2030</del>	% of Total Population 2030	Total Growth	Avg. Annual Growth Rate		
Escalon	<del>5,963</del>	<del>6,712</del>	<del>749</del>	<del>2.4%</del>	<del>7,526</del>	<del>9,410</del>	<del>11,782</del>	<del>1.1%</del>	<del>4,256</del>	<del>2.3%</del>		
Lathrop	<del>10,445</del>	<del>12,369</del>	<del>1,924</del>	3.4%	<del>15,453</del>	24,144	41,556	3.8%	<del>26,103</del>	<del>5.1%</del>		
Lodi	<del>57,011</del>	60,913	3,902	1.3%	65,028	73,130	81,717	<del>7.4%</del>	<del>16,689</del>	1.1%		
Manteca	49,255	<del>57,499</del>	<del>8,244</del>	3.1%	66,210	<del>85,605</del>	108,719	9.9%	42,509	<del>2.5%</del>		
Ripon	<del>10,158</del>	11,794	<del>1,636</del>	3.0%	<del>13,615</del>	<del>17,413</del>	<del>21,756</del>	<del>2.0%</del>	<del>8,141</del>	2.4%		
Stockton	243,771	<del>268,270</del>	24,499	<del>1.9%</del>	<del>298,267</del>	<del>366,332</del>	438,770	<del>39.8%</del>	140,503	<del>1.9%</del>		
Tracy	56,929	<del>70,541</del>	<del>13,612</del>	4.4%	85,845	<del>125,192</del>	189,389	<del>17.2%</del>	103,544	4.0%		
Total Incorporated	433,532	488,098	<del>54,566</del>	2.4%	<del>551,944</del>	<del>701,226</del>	893,689	<del>81.0%</del>	341,745	2.4%		
% of Population	<del>76.9%</del>	<del>77.6%</del>	-	-	<del>76.8%</del>	<del>79.5%</del>	<del>81.0%</del>	_	<del>88.9%</del>	_		
Unincorporated												
County	<del>130,066</del>	141,278	<del>11,212</del>	<del>1.7%</del>	<del>166,696</del>	<del>180,478</del>	209,443	<del>19.0%</del>	42,747	<del>1.1%</del>		
% of Population	<del>23.1%</del>	<del>22.4%</del>	-	-	<del>23.2%</del>	<del>20.5%</del>	<del>19.0%</del>	-	<del>11.1%</del>	-		
Total Population	563,598	629,376	65,778	2.2%	718,640	881,704	1,103,132	<del>100.0%</del>	<del>384,492</del>	2.2%		



## TABLE B-2 POPULATION FORECAST SAN JOAQUIN COUNTY AND CITIES 2000-2030

		Н	listorical	(2000-201	5)		Projected (2020-2030)				
City/County	2000	2005	2010	2015	Total Growth	AAGR	2020	2025	2030	Total Growth	AAGR
Escalon	5,963	6,842	7,132	7,332	1,369	1.5%	7,612	7,889	8,168	556	0.7%
Lathrop	10,445	12,768	18,023	21,022	10,577	5.3%	28,896	35,475	42,109	13,213	4.1%
Lodi	57,011	61,431	62,134	64,415	7,404	0.8%	69,219	73,397	77,610	8,391	1.2%
Manteca	49,255	60,598	67,096	75,211	25,956	3.1%	77,018	82,912	88,855	11,837	1.5%
Ripon	10,158	12,599	14,297	14,868	4,710	2.8%	16,525	17,850	19,186	2,661	1.6%
Stockton	243,771	277,485	291,707	305,303	61,532	1.6%	329,729	352,239	374,939	45,210	1.3%
Tracy	56,929	78,228	82,922	88,074	31,145	3.3%	95,040	102,236	109,492	14,452	1.5%
Total Incorporated	433,532	509,951	543,311	576,225	142,693	2.0%	624,039	671,998	720,359	96,320	1.5%
% of Population	76.9%	79.1%	79.3%	79.6%	-	-	80.4%	81.0%	81.5%	-	-
Unincorporated	130,066	135,108	141,995	147,631	17,565	0.9%	151,780	157,428	163,125	11,345	0.7%
% of Population	23.1%	20.9%	20.7%	20.4%	-	-	19.6%	19.0%	18.5%	-	-
Total County Population	563,598	645,059	685,306	723,856	160,258	1.8%	775,819	829,426	883,484	107,665	1.3%

Source: SJCOG, 2018; DOF, 2018San Joaquin Council of Governments, April 2004.

While the current recession has slowed growth throughout the State and nation, recent (June 2011) California Department of Finance population projections show that in the near-term San Joaquin County's population will experience a slow-down, but then recover in the long-term consistent with projections used in this MSR.



This page is intentionally left blank.