

Lower San Joaquin River/ Delta South RFMP
Revised Draft Financial Plan
September 12, 2014

Appendix E

Financial Plan

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E1 Regional Financial Plan

E1.1 Regional Economic Profile

E1.1.1 Overview of Jurisdictions in the Regions

The Lower San Joaquin & Delta South regions (collectively the “Regions”) are located within San Joaquin County (“County”) and includes a host of municipalities, including the entire city of Lathrop, significant portions of the cities of Stockton and Manteca, a small segment of the city of Tracy, and an unincorporated portion of the County. **Map E-1** shows the Regions’ boundaries and demonstrates its relationship with constituent jurisdictions.

Table E-1 shows the number of residents and households in the Regions. As shown, the Regions is populated by approximately 385,000 residents, which is just less than half of San Joaquin County’s total population. Of the cities that are at least partially located within the Regions, Stockton is the largest with a total population of 295,000, followed by Tracy (84,000), Manteca (70,000), and Lathrop (19,000). Several small unincorporated communities also exist within the Regions, including French Camp, Morada, and others.

An economic region generally consists of a metropolitan area that contains a sufficient concentration of employment and population to sustain that area. In the case of the Regions, the boundaries do not conform to existing jurisdictional lines and the resulting availability and analysis of economic data is limited and can be somewhat problematic. For this reason—and because the economy of the Regions is significantly influenced by nearby areas—an “Economic Region” is presented in many of the tables, figures, and accompanying discussion below, which for the purposes of this analysis consists of the Regions itself plus the nearby cities of Ripon and Lodi.

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Map E-1 LSJ/DS Planning Area

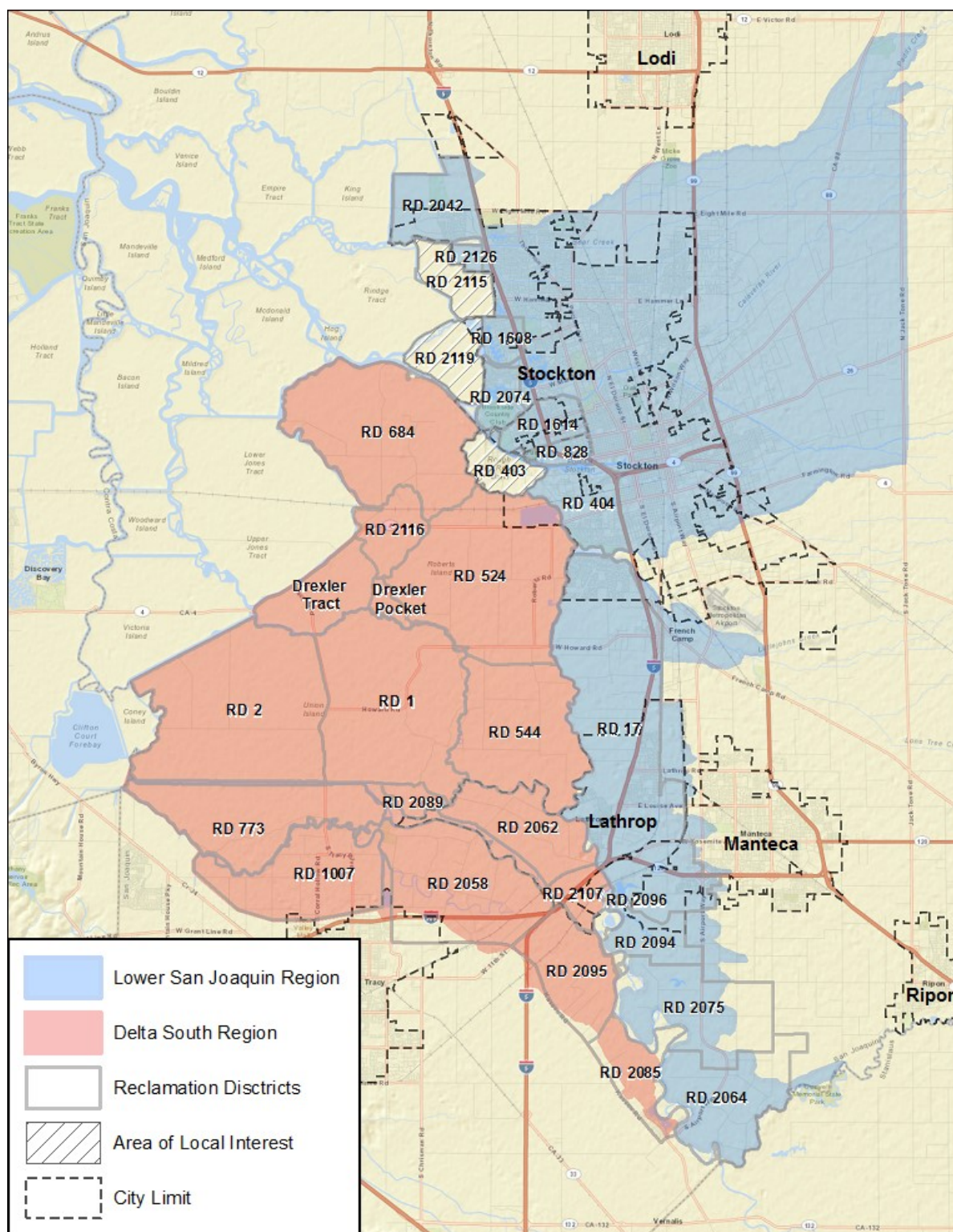


Table E-1 Regional Population / Household Overview

Flood Region Population/Household Overview (2013)			Regional Flood Management Plan Financial Plan: Economic Profile		
Area	Notes	Population (2013)		Housing Units (2013)	
		Number	%	Number	%
San Joaquin County [1]		698,414		235,906	
Flood Region [2]		385,823	100.00%	129,620	100.00%
Cities Partially or Entirely Within the Flood Region [2]					
Lathrop	Entirely located within Flood Region	19,209	4.98%	5,535	4.27%
Stockton	Mostly located within Flood Region	296,344	76.81%	100,003	77.15%
Manteca	Significant portion within Flood Region	71,164	18.44%	24,242	18.70%
Tracy	Very small portion located within Flood Region	84,060	21.79%	25,996	20.06%
Total		451,568	117.04%	150,241	115.91%
Other Rural Communities Entirely Within the Flood Region [3]					
French Camp CDP		4,421	1.15%	590	0.46%
Morada CDP		4,387	1.14%	1,588	1.23%
Cities Located Outside the Flood Region But Part of Economic Region [2]					
Lodi	Adjacent to Flood Region boundary	62,930		23,803	
Ripon	Approx. 5 miles from Flood Region boundary	14,606		5,176	
[1] Figures are from California Department of Finance, E-5 file. [2] From Claritas, as provided by DWR. [3] From US Census Bureau American Community Survey. Represent 5-year estimates for 2008 - 2012.					
Sources: California DOF, US Census Bureau, Claritas, and New Economics & Advisory					

E1.1.2 Regional Land Use Breakdown

Predominantly rural in nature, yet strategically located within relatively close proximity to major urban centers, the economy of the Regions is largely driven by agriculture and logistics/warehousing activities.

For purposes of estimating the funding capacity of the region as discussed later in this chapter, the region was subdivided into discrete impact areas as shown in **Map E-2**. This boundary encompasses the benefitting properties of the improvements and projects outlined within this plan. This area is larger than the Regions' boundary and includes the lands within the Regional Atlas designated as Areas of Local Interest. **Table E-2**, provides a breakdown of this area's land uses. This land use breakdown is distinct from the land use makeup of the Regions as a whole, as the breakdown excludes the area of the Regions that would otherwise not appear on County Assessor rolls and, as a result, would likely generate little or no value in terms of its ability to fund future infrastructure improvements. As shown, much of the Regions' land is dedicated to agriculture while a significant proportion is made up of urbanized and developed areas.

Map E-2 Project Benefit Areas

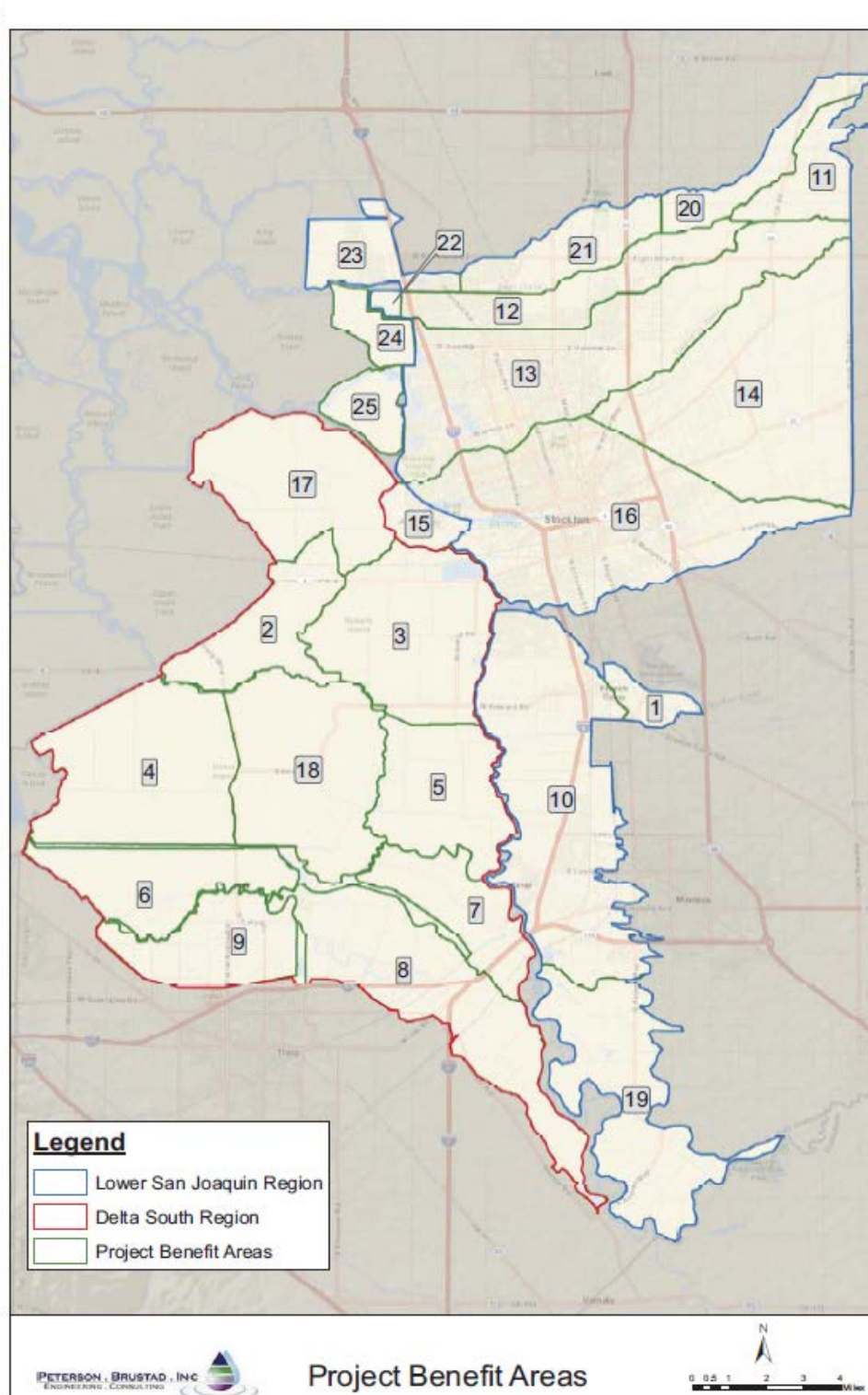


Table E-2 Land Consumption Patterns

Land Consumption Patterns		Regional Flood Management Plan Financial Strategy: Economic Profile	
Item	Flood Region		
	Acres	% of Total	
Residential	19,837	8.4%	
Industrial	4,471	1.9%	
Rural/Agricultural	194,393	82.6%	
Utilities/Transportation	4,261	1.8%	
Commercial	5,956	2.5%	
Government	6,562	2.8%	
Total	235,481	100.0%	
Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA			

E1.1.3 Regional Economic Drivers

San Joaquin County is marked by a high concentration of agricultural activities and produces over \$2.4 billion of agricultural goods per year. **Table E-3** summarizes the agricultural output of San Joaquin County, which includes significant quantities of grapes, walnuts, milk, almonds, cherries, and tomatoes.

In addition to agriculture, San Joaquin County has a strong foothold in the logistics industry because of its central location within the state, along critical transportation routes and among key population and employment centers. The County possesses a variety of key assets in various modalities of the transportation infrastructure system, including roadway, rail, air, and water.

Because of this focus on logistics, the Regions possesses a high concentration of industrial buildings, which are predominantly characterized as warehouse distribution facilities. **Table E-4** shows the industrial building inventory of cities within the Regions, which contains over 94 million square feet building space, or 135 square feet per person. Over 60 percent of this space is characterized as “warehouse” space which is significantly higher than other urban centers in Northern California, including nearby Sacramento County. Furthermore, San Joaquin County contains a very high amount of industrial space as benchmarked to its population base (135 square feet per resident), indicating the Regions’ specialty in warehousing and logistics activities.

Table E-3 Major Crops

Major Crops, 2012 (Flood Region Counties)				Regional Flood Management Plan Financial Plan: Economic Profile		
Crop	Total Production Value	Acres	Value/Acre	Unit	No. Units	Value/Unit
San Joaquin County						
Grapes	\$549,054,000	110,300	\$4,978	Ton	892,000	\$616
Walnuts	\$456,966,000	57,800	\$7,906	Ton	159,000	\$2,874
Milk	\$404,109,000	NA	NA	CWT	23,771,000	\$17
Almonds	\$300,426,000	56,100	\$5,355	Ton	69,000	\$4,354
Cherries	\$225,416,000	20,660	\$10,911	Ton	63,800	\$3,533
Tomatoes	\$102,632,000	30,200	\$3,398	Ton	1,161,000	\$88
Hay	\$89,602,000	63,700	\$1,407	Ton	387,000	\$232
Silage Corn	\$72,495,000	52,300	\$1,386	Ton	1,611,000	\$45
Grain Corn	\$69,788,000	60,600	\$1,152	Ton	292,000	\$239
Cattle, Calves	\$66,987,000	NA	NA	CWT	107,000	\$626
Apples	\$45,157,000	3,610	\$12,509	Ton	78,800	\$573
Asparagus	\$36,125,000	6,320	\$5,716	Ton	12,500	\$2,890
Total	\$2,418,757,000					
Sources: 2012 San Joaquin County Agricultural Report						
<i>Cattle* CWT - "Carcass" Weight or Live weight of Animal</i>						
<i>Dairy** CWT - Hundredweight/Centum weight (equivalent to 100 lbs)</i>						

Table E-4 Regional Industrial Building Space

Flood Region Industrial Building Space			Regional Flood Management Plan Financial Plan: Economic Profile			
Industrial Prototype	San Joaquin County			Sacramento County (For Comparison)		
	Total Sqft	Percent of Total	Total Industrial Sqft per Resident	Total Sqft	Percent of Total	Total Industrial Sqft per Resident
Light Industrial	31,794,546	34%		49,371,791	44%	
Warehouse	59,056,231	63%		21,937,025	20%	
R&D/ Flex [1]	3,449,568	4%		40,581,667	36%	
Total	94,300,345	100%	135	111,890,483	100%	77
[1] Sacramento County R&D/ Flex data includes Flex/ High Tech./ R&D, Special Purpose, and Incubator categories.						
Sources: Colliers Research & Forecast Report, Q1, 2012 for San Joaquin County, and CBRE Industrial MarketView, Q1 2014 for Sacramento County, and New Economics & Advisory.						

A significant portion of the Regions' warehouse distribution stock has been added in recent years as evidenced by falling vacancy rates and over 2.4 million square feet of net absorption of industrial space in 2013, indicating the continued strengthening of this sector in the Economic Region.¹

Another method to evaluate the Regions' economic base is to review the major employers present in the Regions. **Table E-5** lists San Joaquin County's 32 largest employers. As shown, over half of the County's major employers can be categorized as serving either the agricultural/ food or logistics industries, further underscoring the importance of these industries in the regional economy.

¹ From Colliers Research and Forecast Report for San Joaquin County, Fourth Quarter, 2013.

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Table E-5 Major Private Employers (Economic Region)

Major Private Employers (Economic Region)			Regional Flood Management Plan Financial Plan: Economic Profile	
San Joaquin County				
	Employer	City	In Flood Region	Employees
<i>Agriculture/Food/ Logistics</i>				
1	Ghirardelli Chocolate Company	Lathrop	☒	150
2	Pacific Coast Producers	Lodi	☐	500-1000
3	Eckert Cold Storage Co.	Manteca	☐	250
4	Franzia Winery	Ripon	☐	300
5	O G Packing and Cold Storage	Stockton	☐	1000-4999
6	Seneca Fruit Products	Stockton	☒	1000-4999
7	Diamond of California	Stockton	☐	500
8	Farmington Fresh Apple & Cherry Packing	Stockton	☒	300
9	Safeway Warehouse & Distribution	Tracy	☐	1,400
10	United Grocers	Tracy	☐	800
11	Leprino Foods Cheese Manufacturing	Tracy	☐	300
12	Schneider National Trucking	French Camp	☒	200
13	Swift Transportation Trucking	Lathrop	☒	450
14	Super Stores Industries Grocery Warehouse	Lathrop	☒	400
15	Home Depot Int'l Distribution	Lathrop	☒	350
16	Safeway Distribution Warehouse	Tracy	☐	1,400
<i>Other</i>				
17	San Joaquin General Hospital	French Camp	☒	1000-4999
18	Blue Shield of California call center	Lodi	☐	1,600
19	Waste Management	Lodi	☐	1,200
20	St Joseph Medical Ctr/Healthcare Call Center	Stockton	☒	4,600
21	Whirlpool Corporation	Stockton	☒	1000-4999
22	Division of Juvenile Justice	Stockton	☒	1000-4999
23	Kaiser Permanente	Stockton	☒	1000-4999
24	Dameron Hospital	Stockton	☒	1,200
25	University of the Pacific	Stockton	☒	900
26	AT&T	Stockton	☒	500
27	Bank of Stockton	Stockton	☒	440
28	Adessa Golden Gate (auto Wholesaler)	Stockton	☒	400
29	Applied Aerospace Structures Corp.	Stockton	☒	370
30	Sodexo (Hospital Linen Service)	Stockton	☒	250
31	All Trade Handyman Management	Tracy	☐	1000-4999
32	Defense Distribution Depot	Tracy	☐	1000-4999
EDD LaborMarket Major Employers by Co. These estimates are limited to ranges. Specific job estimates are provided by the San Joaquin Partnership as of 2012.				

E1.1.4 Employment by Industry

Employment patterns and industry specializations in the Regions can be understood by evaluating the concentration of jobs by sector for the County compared to California as a whole. For purposes of economic development, a concentration level of 1.20 or greater generally indicates that a region is “specialized” in that particular sector, a level of 0.80 to 1.20 suggests that the region’s level is commensurate with the statewide average for that sector, and a level of 0.80 or less suggests that a region may have insufficient levels in the sector. **Table E-6** shows that as of 2010 the County enjoyed a very high employment concentrations in the Farm Employment as well as Forestry, Fishing, and Other, (each approximately three times the California average). Transportation and Warehousing was another highly-specialized industry, at more than double California’s job concentration. All of these industries are projected to be similarly strong in 2040, with the Transportation and Warehousing industry significantly strengthening its position.

In contrast, several “white collar” industries are significantly under-specialized in the County, including the Information and Professional and Technical Services categories. In 2010, these categories represented only about 40% of the State’s concentration, while by 2040, this concentration is projected to fall to just 30%.

Table E-6 Employment by Industry, Flood Counties

Employment by Industry, Flood Counties					Regional Flood Management Plan Financial Plan: Economic Profile			
Item	2010				2040			
	California % Total	San Joaquin County Number (in thousands)	% Total	SJ County as a % of CA	California % Total	San Joaquin County Number (in thousands)	% Total	SJ County as a % of CA
Total Jobs								
Specialized Industries								
Farm Employment	1.07%	8.59	3.20%	299%	0.77%	8.38	2.13%	275%
Forestry, Fishing & Other	1.02%	8.38	3.12%	306%	0.92%	13.29	3.38%	367%
Utilities	0.30%	1.09	0.41%	135%	0.28%	1.72	0.44%	159%
Wholesale Trade	3.67%	11.77	4.38%	119%	3.42%	23.27	5.91%	173%
Transportation & Warehousing	2.86%	16.33	6.08%	213%	2.69%	30.61	7.78%	289%
Educational Services	2.19%	5.83	2.17%	99%	3.25%	20.28	5.15%	159%
State & Local Govt	10.79%	31.67	11.79%	109%	8.91%	43.13	10.96%	123%
Select Under-Specialized Industries								
Information	2.77%	3.08	1.15%	41%	2.35%	2.81	0.71%	30%
Professional & Tech Services	8.76%	9.36	3.49%	40%	10.20%	12.85	3.26%	32%
Other Industries	66.58%	172.43	64.21%		67.22%	237.24	60.28%	
Total	100.00%	268.53	100.00%		100.00%	393.58	100.00%	
Sources: Woods & Poole Economics 2012 State Profile								

E1.1.5 Commercial Real Estate Assessment

One of the Regions' primary competitive advantages is its reduced cost of doing business, as compared to some other urban centers in California. The commercial real estate market within the Regions is significantly less costly than other urban areas in Northern California, as demonstrated in **Table E-7**. The asking rents for retail, office, and industrial real estate in the Regions are generally significantly less costly than the Sacramento region, and in most cases just a fraction of the prices found in the San Francisco Bay Area.

Table E-7 Regional Commercial Lease Rates

Flood Region Commercial Lease Rates		Regional Flood Management Plan Financial Plan: Economic Profile	
Area	Asking Lease Rates (\$/Sq. Ft./Mo.)		
	Retail <i>Direct NNN</i>	Office <i>Full-service</i>	Industrial <i>NNN</i>
Bay Area	N/A	\$4.25 [1]	\$0.60 [2]
Sacramento Region	\$1.46	\$1.66	\$0.43
Flood Region Submarkets			
San Joaquin County	\$1.31 [3]	\$1.22 [4]	\$0.29 [5]
Stockton/ Lathrop [6]	\$0.50 - \$1.25 [6]	\$1.00 - \$1.50 [6]	\$0.20 - \$0.50 [6]
Prepared by New Economics & Advisory			
[1] Reflects San Francisco Peninsula Market, as of 2013 Q3.			
[2] Reflects 2012 Q3 for Tri-Valley market.			
[3] From CBRE 2Q 2012.			
[4] From CBRE 4Q 2013.			
[5] From CBRE 4Q 2013.			
[6] Based on review of listing data from Loopnet, April 2014.			

E1.1.6 Wages in the Economic Region

In addition to the low cost of real estate in the Regions, wages paid to workers are also significantly lower than other areas in the state, making it an attractive place to do business from a cost standpoint. According to the Bureau of Labor Statistics, the average weekly wage for workers in San Joaquin County is \$810, which is just 68 percent of the rate paid to California workers overall,

and well below the rates in many Bay Area counties, which can range from \$1,200 to \$3,200 per week (**Table E-8**).

Table E-8 Regional Wages

Flood Region Wages		Flood Management Plan Financial Plan: Economic Profile	
Area	Average Weekly Wage	% of CA Avg.	
United States	\$1,000	84%	
California	\$1,186	100%	
Flood Region Data			
San Joaquin County	\$810	68%	
Comparison Data			
San Mateo County	\$3,240	273%	
Santa Clara County	\$1,906	161%	
San Francisco	\$1,694	143%	
Alameda County	\$1,265	107%	
Contra Costa County	\$1,168	98%	
Prepared by New Economics & Advisory			

E1.1.7 Socio-Economic Characteristics of Economic Region

Table E-9 provides a summary of recent socio-economic data available for the State, the Regions' boundaries, and the cities located within the Economic Region. The reported indicators in the Regions demonstrate a variety of socio-economic difficulties, including higher unemployment rates, lower household incomes, higher rates of poverty, and lower education levels as compared to statewide averages. However, there are certain cities within the Economic Region—namely the cities of Tracy and Ripon—that demonstrate substantially more favorable conditions and refer to the prosperity, quality of life, and appeal of these cities as residential enclaves.

Table E-9 Economic Indicators

Economic Indicators [1]			Regional Flood Management Plan Financial Plan: Economic Profile	
Area	Unemployment Rate [2]	Median HH Income	Percentage of Individuals Below the Poverty Line	Percentage of Residents HS Grad or Higher
California	8.5%	\$61,400	15.3%	81.0%
San Joaquin County	11.7%	\$53,895	17.5%	76.8%
Flood Region [3]	n/a	\$44,105	18.2%	71.9%
Cities in Economic Region				
Lathrop	9.4%	\$62,255	7.4%	74.0%
Lodi	8.8%	\$49,034	17.3%	78.7%
Manteca	10.1%	\$62,411	9.7%	81.3%
Ripon	8.1%	\$73,925	9.3%	89.7%
Stockton	14.2%	\$47,246	23.3%	73.7%
Tracy	7.2%	\$75,259	9.6%	82.8%
<i>Prepared by New Economics & Advisory</i>				
[1] All data is from US Census Bureau American FactFinder, unless otherwise noted.				
[2] Unemployment data from California Employment Development Department, April 2014. Not available for the Flood Region.				
[3] Flood Region data from Claritas.				

Furthermore, the Regions contain pockets of areas classified as Disadvantaged Communities (DAC). DWR provides a tool to determine DAC status as part of the IRWM planning process. DAC status is determined based on the DAC definition provided in DWR's Proposition 84 and 1E IRWM Guidelines, dated August, 2010. A MHI of less than \$48,706 is the DAC threshold (80% of the statewide MHI). The GIS mapping tool provided by DWR indicates that the communities of Stockton, Kennedy, Taft Mosswood and French Camp are all considered DAC's. These areas, shown in **Table E-10**, would be eligible, under current funding criteria, for higher State cost sharing under certain funding programs funded by Propositions 1E and 84.

Table E-10 Disadvantaged Communities

Disadvantaged Communities within the Flood Region	Regional Flood Management Plan Financial Plan: Economic Profile	
	Median Household Income	MHI as % of California
Community		
California	\$60,883	
San Joaquin County	\$54,341	89.3%
Disadvantaged Community		
Stockton	\$47,946	78.8%
Kennedy	\$35,450	58.2%
Taft Mosswood	\$33,581	55.2%
French Camp	\$39,729	65.3%
<i>Sources: DWR Disadvantaged Community Mapping Tool (http://www.water.ca.gov/irwm/grants/ resourceslinks.cfm) accessed 01-08-2014. U.S. Census Bureau, 2010 American Community Survey.</i>		
<i>Prepared by LWA</i>		

E1.1.8 Residential Real Estate Assessment

The Regions provide a range of home price options, which are generally much more affordable than the prices found in the Bay Area. As such, the Central Valley and the Regions accommodate many households who are seeking a greater value for their dollar, or who are otherwise priced out of more costly urban markets.

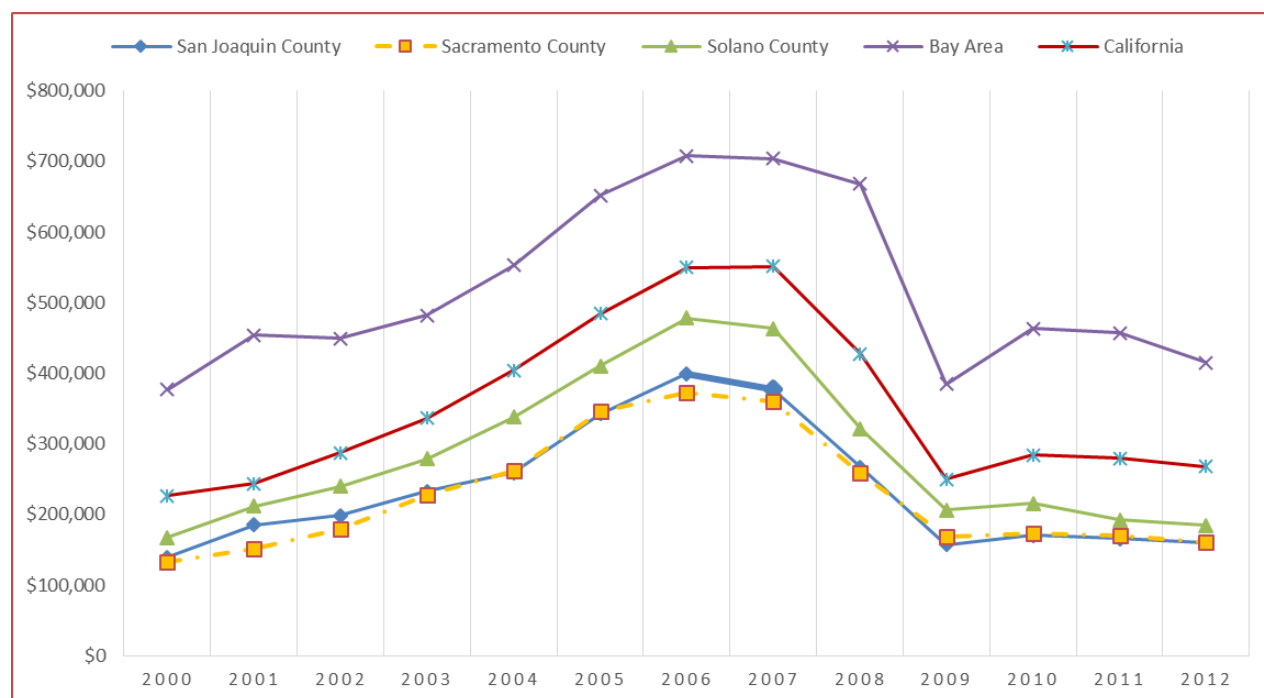
Table E-11 shows home values in cities as compared to other nearby and competing cities in the Sacramento and Bay Area regions. As shown, the median home prices in San Joaquin County and the cities within the Regions are generally lower than the median home price for California. In particular, Stockton home prices are far below the state's at just 44% of California's median, while Manteca and Lathrop are within 25% of California's median and the City of Tracy is nearly equal to the statewide median. However, when comparing these jurisdictions to Bay Area markets such as Contra Costa, Alameda, and Santa Clara counties, the Regions' home values are significantly lower, as shown in **Table E-11**.

Table E-11 Regional Home Price Comparison

Flood Region Home Price Comparison		Regional Flood Management Plan Financial Plan: Economic Profile	
Area	March, 2014 Median	% of Calif.	
State of California	\$376,000	100%	
San Joaquin County	\$249,500	66%	
Cities Within Flood Region			
Stockton	\$165,000	44%	
Manteca	\$300,000	80%	
Lathrop	\$290,000	77%	
Tracy	\$365,000	97%	
Other Comparison Geographies			
Sacramento County	\$245,000	65%	
Solano County	\$300,000	80%	
Contra Costa County	\$535,000	142%	
Alameda County	\$423,000	113%	
Santa Clara County	\$704,500	187%	
Sources: Dataquick, DQ News, and New Economics.			

Like other areas of California and the rest of the nation, the Regions saw home values decline precipitously during the “Great Recession” which began in 2008. **Figure E-1** shows the median home prices of several Northern California markets and the state overall in each year from 2001 to 2012. As shown, each area experienced rapid home price declines from 2007 to 2009, and then a period of stagnant growth from 2009 to 2012. San Joaquin County’s home values declined over 60 percent from a peak of \$399,000 in 2006 to \$160,000 in 2012. Only in the past few years have home prices begun to recover, and recent data from DataQuick indicates substantial prices gains of over 20% from March 2013 to March 2014, although these price levels are still far below the pre-recession “bubble” levels of the mid-2000’s. As many local agencies rely on property assessments and taxes to fund improvements and services, the depressed housing prices in Regions have a significant impact on a local municipality’s ability to generate new revenues.

Figure E-1 Median Home Values - Select California Geographies



E1.1.9 Future Growth Prospects

The California State Department of Finance projects that the state's population will grow, on average, by less than 1 percent annually through 2020 and 2035. While the same level of demographic and employment data is not available at a sub-county level, projected growth within the Regions by the regional metropolitan planning organizations, Woods and Poole, and the California Department of Finance provide insight into the potential level of growth anticipated by those organizations for their planning purposes.

Future growth in housing and employment was estimated for the entire cities of Stockton, Lathrop, and Manteca, since these cities are all located substantially within the Regions.² However, it should be noted that these statistics include the portions of the cities of Stockton and Manteca which are outside the regional boundary. Therefore, this assessment is likely to overestimate the amount of growth that is due to occur within the strict boundaries of the Regions.

Table E-12 summarizes that the regional jurisdictions are anticipated to grow by nearly 74,000 new housing units, (1.68% percent annually) and by approximately 72,000 jobs (1.25% annually) by 2040, which are significantly greater than the anticipated statewide growth rates. This growth

² The city of Tracy and the unincorporated County are not included in these figures, since they are not anticipated to experience growth within the regional boundary.

is based on projections from the COGs through 2035 and extended by five years to reach 2040. **Table E-13** contains supporting data for this projection calculation.

These indicators provide an insight into the expected demand for new housing and commercial development. While new development creates new impacts associated with the demand for flood risk mitigation, (by virtue of increases the consequences of a flood), new residential and commercial development could also provide additional resources to fund future improvements and services.

Table E-12 Potential Growth through 2040

Potential Growth (Through 2040) Jurisdictions Substantially Within the Flood Region		Regional Flood Management Plan Financial Plan: Economic Profile	
Item		Residential Units	Jobs
Year: 2013		129,780	125,043
Year: 2035		187,268	185,133
Resulting Avg. Annual Growth Rate		1.68%	1.25%
Projected: 2040		203,544	197,027
Growth: 2013 - 2040		73,764	71,984
<u>Sources: California DOF, SJCOG, and New Economics & Advisory</u>			

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Table E-13 Growth Forecasts in Regional Jurisdictions

Growth Forecasts in Flood Region Jurisdictions								Regional Flood Management Plan Financial Plan: Economic Profile				
Jurisdiction	Current Estimate		Future Projection 1					Future Projection 2				
	Year [1]	Amount	Year	Total Amount	Avg Ann Growth		% of Total	Year	Total Amount	Avg Ann Growth		% of Total
					Total Growth	Total Growth				Total Growth	Total Growth	
CALIFORNIA												
Population (in 1,000s)	2013	37,966	2020	40,818	1.04%	NA	NA	2035	46,330	0.85%	NA	NA
Employees (in 1,000s)	2010	19,711	2020	22,272	1.23%	NA	NA	2035	27,212	1.34%	NA	NA
FLOOD REGION HOUSING UNITS [1]												
Stockton	2013	100,003 ▲	2020	116,629	2.22%	16,626	70%	2035	134,254	0.94%	34,251	60%
Lathrop	2013	5,535	2020	9,110	7.38%	3,575	15%	2035	18,473	4.83%	12,938	23%
Manteca	2013	24,242	2020	27,635	1.89%	3,393	14%	2035	34,541	1.50%	10,299	18%
Total Housing Units: Flood Region	2013	129,780	2020	153,374	2.41%	23,594	100%	2035	187,268	1.68%	57,488	100%
FLOOD REGION JOBS [2]												
Stockton	2006	103,977 ▲	2020	131,309	1.68%	27,332	92%	2035	157,823	1.23%	53,846	92%
Lathrop	2006	5,458	2020	5,909	0.57%	451	2%	2035	7,090	1.22%	1,632	3%
Manteca	2006	15,608	2020	16,371 ▼	3.17%	1,816	6%	2035	20,220 ▼	1.27%	3,028	5%
Total Employees: Flood Region	2008/2009	125,043	2020	153,589 ▼	1.73%	29,599	100%	2035	185,133 ▼	1.25%	58,506	100%
[1] Current estimates from California Department of Finance. Projections from 2035 Regional Transportation Plan (prepared in 2014 by SJCOG). [2] Current estimates from 2011 Regional Transportation Plan Update (prepared in 2009 by SJCOG). Projections from 2035 Regional Transportation Plan (prepared in 2014 by Sources: SACOG Draft MTP/SCS 2035 Update-- Appendix E-3 Land Use Forecast Background Documentation; Butte County Long-Term Regional Forecasts 2010-202, Prepared by Butte County Association of Governments, January 26, 2011; Woods and Poole, 2012 (for California employment projections); DOF County-level population projections.												

E1.1.9.1 Housing Growth

Table E-14 contains a list of known proposed and planned development projects in the Regions, with their corresponding land use plans. The projects shown in **Table E-14** serve to illustrate the scale of new development that could potentially occur within the next real estate cycle; however, many additional projects would need to be developed to achieve the growth projections envisioned for these communities. As shown, there are currently over 52,000 residential units planned for development in the cities of Stockton and Lathrop. No residential development projects are currently planned to occur in the areas within the Regions in the unincorporated county or the cities of Tracy or Manteca.

E1.1.9.2 Employment Growth

Stockton is by far the largest employment center in the Regions, and over 90 percent of future job growth around the Regions is expected to occur within this city. Although most future employment growth in the Regions is expected to occur in the City of Stockton as opposed to other Regions jurisdictions, the City of Lathrop is expected to experience a large amount of non-residential development which will likely occur in new “greenfield” areas. **Table E-14** shows that over 1,100 acres of new office and industrial development is currently planned in the City of Lathrop, while approximately 700 acres of similar uses are predicted to be added in Stockton.

Table E-14 Proposed Development Projects

Select Approved, Proposed and Planned Development Projects in the Flood Region		Regional Flood Management Plan Financial Strategy: Economic Profile	
Jurisdiction	Residential Units	Commercial Acres	
		BP/Ind	Commercial
Stockton			
Bear Creek East	2,100	5	5
Bear Creek South	3,622	0	12
The Preserve	7,564	0	0
North Stockton Village	3,900	0	0
Mariposa Lakes [1]	1,674	380	18
Weston Ranch Town Center	0	0	45
Delta Cove	1,545	0	8
Sanctuary	7,070	25	10
Crystal Bay	1,343	0	0
ACE Facility Annexation	0	73	0
Tidewater Crossing [2]	2,663	224	17
Total Stockton	31,481	708	115
Lathrop			
Central Lathrop Specific Plan [3]	6,300	280	0
West Lathrop Specific Plan			
River Islands	11,000	450	45
Mossdale Village	3,201	0	127
Lathrop Gateway	0	168	140
South Lathrop Specific Plan	0	222	10
Total Lathrop	20,501	1,120	322
Manteca			
Family Entertainment Zone	0	0	110
Centerpoint Northwest Airport Way Master Plan	0	300	0
Total Manteca	0	300	110
TOTAL MAJOR IDENTIFIED PROJECTS	51,982	2,128	547
[1] Mariposa Lakes is not located entirely within the Flood Region boundary. This table only accounts for the land uses within the Flood Region boundary. [2] Tidewater Crossing is located primarily within the Flood Region boundary. The entire project is included in this table, although a small portion exists outside the Flood Region [3] According to the City of Lathrop, the Central Lathrop Specific Plan has recently begun vertical development and approximately 500 residential units are under construction. These 500 units have been deducted from the 6,800 units planed for this project. Sources: Stockton Planning Dept, Lathrop Planning Dept, Manteca Planning Dept, San Joaquin County, New Economics & Advisory.			

E1.1.10 Regional Economic Profile Findings

- **Finding 1: The Regions lie within the heart of the San Joaquin Valley and include a wide range of development typologies.** The geography of the Regions include several different types of communities whose socio-economic settings differ substantially. For instance, the City of Stockton is a mature and established urban community with a host of residential and non-residential building typologies. On the other hand, the cities of Lathrop and Manteca are primarily residential bedroom communities, although they are working to diversify their building stock to include commercial, industrial, and recreational offerings.
- **Finding 2: The San Joaquin Valley's economy is driven by agriculture and logistics.** In addition to its historic farming role, the San Joaquin Valley has also established itself as a major logistics node for Northern California by leveraging its transportation infrastructure and proximity and accessibility to several other regional markets which make it an ideal location for distribution.
- **Finding 3: The regional communities are characterized by a broad range of socio-economic conditions.** While most of the Regions demonstrate socio-economic indicators that are less favorable than statewide averages, some nearby jurisdictions (such as the cities of Tracy and Ripon) have lower unemployment, higher household incomes, lower rates of poverty, and higher education levels than the state.
- **Finding 4: Although the residential housing market within regional communities is beginning to reemerge, in the short-term home prices will likely remain soft.** San Joaquin County is largely considered "ground zero" of the Great Recession, and experienced home price reductions of roughly 60% between 2006 and 2012. As the market has worked through an unusually large inventory of foreclosures, home prices have remained suppressed. In the medium-long term, however, it is expected that growing economic activity and increasing home prices in the Bay Area will once again exert upward pressure on home prices in the San Joaquin Valley and the portion of homes financially under water will dissipate over time.
- **Finding 5: The Regions are expected to experience significant growth by 2040, including both residential and commercial development.** Real estate conditions have been improving since 2009 and existing communities are expected to expand greatly through annexations, some of which will occur within the Regions.
- **Finding 6: The Regions' communities are anticipated to experience rapid and sustained growth in both population and employment.** The Regions' three major jurisdictions are predicted to add approximately 74,000 new housing units and 72,000 new jobs by 2040. However, this growth relies on the assumption that the Central Valley will continue to provide a lower cost of labor and cost of living compared to the Bay Area. As such, home prices and incomes are expected to remain relatively low in order to sustain long-term growth.

Ultimately these finding support the following conclusions about the need and importance of flood risk reduction projects described within the plan and the ability of the region to finance and fund the identified projects.

- The agricultural economy that predominantly defines the Regions is critical to the economic viability of the supporting urban centers throughout the Region. The role of food production within the Central valley is critical to the economic security of the Region and the state as a whole. Flood risk reduction projects and management actions are needed to protect this economic sector. Further analysis will need to be completed to ensure that the level of investments are proportionate to the level of risk associated with losses.
- The goods movements and logistics role in the Regions is important to its economic viability and important to the economic security of the state as a whole. Flood risk reduction projects are needed to protect the infrastructure and investments made within the urban areas of the Region this economic sector.
- The socio-economic and real estate profile of the Regions, in terms of wages, unemployment household incomes and property values, will limit the Regions' ability to fund all types of new infrastructure and services. The Regions will need to evaluate and prioritize any limited ability to fund flood risk reduction infrastructure and services in the context of the need for services.

E1.2 Funding Sources

In general, funding for flood risk management efforts comes from three sources; Federal, State and local governments. California's Flood Future report (and associated Attachment I: Finance Strategies) provides an excellent overview and description of the general funding regime currently being utilized to enhance California's flood system. The Attachment also identifies and describes many of the funding and financing mechanisms available to local agencies to fund flood control infrastructure and services.

Within the Regions, investments from Federal, State and local sources have been made and are also currently underway. The following provides a general overview of the current flood control funding sources within the Regions.

E1.2.1 Federal Funding

There are several ways in which Federal funding flows into the Regions. SJAFCFA is currently receiving reimbursements for previously completed improvements authorized through WRDA 1996. As the Federal government appropriates funding, SJAFCFA is able to receive reimbursement for the Federal cost share of the project. The USACE, in partnership with the State and SJAFCFA, currently have ongoing studies of flood risk and potential improvements in the Regions. These efforts could ultimately lead to additional Federal funding or crediting for locally advanced and completed flood risk reduction improvements. Ongoing flood risk evaluation and study efforts in the Regions are shown in **Table E-15**.

Table E-15 Federal Study Efforts in the Regions

Name	Description	Non-Federal Sponsor
Lower San Joaquin River Feasibility Study	A study that will reach to the southern part of San Joaquin County along the San Joaquin River up to and through Stockton, including the Lodi waste water treatment plant. In addition, the study includes the watersheds east of Stockton, and covers nearly 140 miles of levees. The results of this study will help determine needed improvements for future flood protection systems in an effort to reach or exceed the future 200-year level of flood protection.	SJAFCA
Delta Islands and Levees Feasibility ³	Addresses a variety of critical issues in the Delta including ecosystem restoration and flood risk management.	DWR
CALFED Levee Stability	Prioritizes levee projects and presents the Corps' long-term strategy for Delta levees while providing guidance for Congress to direct the Corps to participate in the improvement of specific Delta Levees.	DWR
Long Term Management Strategy for Dredged Material in the Delta	To improve operational efficiency and coordination in the discharge of the collective and individual agency decision making responsibilities resulting in approved dredging and dredge material management actions in the Delta.	State Water Resources Control Board

E1.2.1.1 Securing Federal Funding

Given the constraints of the current approach for evaluating and garnering Federal investment for projects coupled with waning Federal budgets and forecasted Federal expenditures, continuing to secure significant Federal investment in the Regions will likely become more difficult in the future. Furthermore, the evaluation, project identification and appropriation process for projects is protracted, expensive and can lead to higher project costs that may, in some cases, not be in the best economic interest of local project proponents. The timing of securing new Federal funding could be protracted and is not likely to lead to near term funding for immediately identified efforts. Congress recently passed WRRDA 2014 and typically does not consider new bills for at least five years. The last bill that authorized new projects was in 2007. As a result, funding and financing plans for near term projects identified within this plan should not rely heavily on near term Federal investment.

Finally, funding from the USACE could flow into the region as a result of repairs completed through the PL84-99 rehabilitation assistance program. To the extent there are damages as a result of a flood, this program would help rehabilitate damaged levees so long as the levees met PL 84-99 standards. Achieving these standards to ensure that Federal assistance after a flood is available

³ Study formulated to support CVFPP.

has been targeted as a minimum standard within the Regions to ensure future financial viability for flood risk reduction efforts.

E1.2.2 State Funding

In the near term, the State plans to utilize the remaining Proposition 1E bond funds authorized through June 2016 for projects identified within the Central Valley. Within the CVFPP, the State has identified that these remaining bond funds are well short of the identified need for investment in the flood risk reduction within the Central Valley,⁴ and that additional bond authorizations will be needed.⁵ As part of ongoing CVFPP planning process, over the next few years, the State will be identifying how it will address the future role it will play in securing funding for identified improvements and developing a sustainable funding source to meet the long term demands for flood control infrastructure. The State Legislature and Governor will need to play a significant role with respect to how State and local funding can be generated within the region as it proposes and considers legislation associated with planned updates to the CVFPP and future financing/funding plan recommendations.

Other policy efforts that could generate future State funding include the recommendations presented within the Governor's Water Action Plan. These recommendations include providing support and expanding funding for Integrated Water Management Planning and Projects, creating incentives for multi-benefit projects, providing assistance to disadvantaged communities, prioritizing funding to reduce flood risk and improve flood response. In addition to recommendations that could direct State funding to the region, the Governor's Water Action Plan also identified recommendations that could make it easier to generate local funding including removing barriers to local and regional funding for water projects. One of the key concepts in the Water Action Plan is that the administration will develop a water financing strategy that leverages various sources of water-related project funding and proposes options for eliminating funding barriers, including barriers to co-funding multi-benefit projects.

Tables E-16 through E-20 provides a breakdown of the programs that are currently and expected to be available to local agencies to assist within funding the projects and programs identified within this RFMP. The typical cost share percentages for these programs is listed, however, these cost sharing percentages can vary widely based upon project specific attributes.

⁴ The CVFPP identified costs to implement the State Systemwide Investment Approach between \$14 to \$17 Billion. The California's Flood Futures Report identified costs to upwards of \$50 billion statewide.

⁵ 2012 Central Valley Flood Protection Plan, Page 4-38 to 4-40.

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Table E-16 FEMA Funding Programs

Agency	Program Name (Acronym)	Program Summary	Status	Who is Eligible to Apply	Cost Share Range
FEMA	Flood Mitigation Assistance (FMA)	The FMA program is a grant program that provides funding to States, Territories, Tribal entities and communities to assist in their efforts to reduce or eliminate the risk of repetitive flood damage to buildings and structures insurable under the National Flood Insurance Program (NFIP).	FEMA	Native American tribal governments (Federally recognized), State governments, City or township governments, County governments	Varies 75%-100%
FEMA	Pre-Disaster Mitigation (PDM)	The PDM Grant Program is designed to assist States, Territories, Indian Tribal governments, and local communities to implement a sustained pre-disaster natural hazard mitigation program to reduce overall risk to the population and structures from future hazard events, while also reducing reliance on Federal funding from future disasters.	FEMA	Native American tribal governments (Federally recognized), State governments, City or township governments, County governments	75% 90% for small impoverished communities

Table E-17 California Natural Resource Agency Funding Programs

Agency	Program Name (Acronym)	Program Summary	Status	Who is Eligible to Apply	Cost Share Range
State-California Natural Resource Agency	California River Parkway Program (CRPP)	The Proposition 50 California River Parkways Grant Program in the Resources Agency is a competitive grant program for river parkways projects. Eligible projects must provide public access or be a component of a larger parkway plan that provides public access. In addition, projects must meet two of the following conditions: 1.) Provide compatible recreational opportunities including trails for strolling, hiking, bicycling, and equestrian uses along rivers and streams. 2.) Protect, improve, or restore riverine or riparian habitat, including benefits to wildlife habitat and water quality. 3.) Maintain or restore the open-space character of lands along rivers and streams so that they are compatible with periodic flooding as part of a flood management plan or project. 4.) Convert existing developed riverfront land into uses consistent with river parkways. 5.) Provide facilities to support or interpret river or stream restoration or other conservation activities.	California Natural Resource Agency	Public Agencies and California Nonprofit Organizations	TBD

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Table E-18 California DWR Funding Programs

Agency	Program Name (Acronym)	Program Summary	Status	Who is Eligible to Apply	Cost Share Range
State DWR	Early Implementation Program (EIP)	Fund "ready," no regrets Projects for State Plan of Flood Control Facilities in Urban areas in advance of adoption of the Central Valley Flood Protection Plan. These funds will be for: (a) repair, rehabilitation, reconstruction or replacement of levees, weirs, bypasses and facilities of the State Plan of Flood Control and (b) improving or adding facilities to the State Plan of Flood Control to increase levels of flood protection for Urban Areas.	Phasing Out	Eligible applications are local public agencies or Joint Powers Authority	50% to 90%
State DWR	Central Valley Flood System Conservation-Framework and Strategy	The program funds planning and implementation of projects in support of the Central Valley Flood System Conservation Framework and the Conservation Strategy. The projects will incorporate environmental stewardship and sustainability principles into State Plan of Flood Control flood management activities.	Starting Up	Federal, State and Local public agencies; private mitigation banks, Non-profits (501(c)(3))	Up to 100%
State DWR	Flood Corridor Program	This statewide program funds multi-objective, flood risk reduction projects that protect and restore floodplains and preserve or enhance wildlife habitat and agriculture. The program funds primarily non-structural projects, including acquiring and conserving floodplains, removing structures and precluding development in flood prone areas, and constructing earthen detention basins, along with restoring habitat and protecting agricultural land. Setback levees are also included when they enable a more naturally functioning floodplain. Flood Corridor Program includes three flood protection grant programs: • Flood Protection Corridor Program (Propositions 13 and 84) • Floodway Corridor Program (Proposition 1E) • Central Valley Nonstructural Grants Program (Proposition 1E)	Ongoing	Local public agencies (county, city, district or joint powers authority), nonprofit organizations, California Native American Tribes registered as a nonprofit organization or partner of a nonprofit or local public agency. Also, direct expenditure funding to other government agencies (local, State, or Federal), nonprofit organizations, or contractors for projects proposed by DWR that are in the	Up to 100%

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				State's interest to fulfill program goals.	
State DWR	Small, Rural, and Agricultural Community Flood Risk Reduction (SRACFRR)	Projects to reduce flood risk in small, rural, and agricultural communities in the Central Valley. Funds support non-routine O&M, O&M plan updates, evaluations, feasibility studies, design, and construction of proactive repairs to flood control facilities of the SPFC and appurtenant non-project levees.	Future	Local agencies: evaluate SPFC facilities must protect small and rural communities in the Central Valley designated by the CVFPP to have a High or Moderate-High Flood Threat Level.	50 to 90%
State DWR	System Wide Flood Risk Reduction (SWFRR)	Implement recommendations of Basin-wide Feasibility Studies	Future	Eligible applications are local public agencies or Joint Powers Authority	Up to 100%
State DWR	Urban Flood Risk Reduction (UFRR)	Levee repair or improvement projects within the Central Valley that are located within the urban area and are State Plan of Flood Control facilities.	Future	Eligible applications are local public agencies or Joint Powers Authority	50 to 90%
State DWR	Flood System Repair Projects (FSRP)	Evaluate (feasibility), design, and construct repairs of non-urban SPFC Facility (levees, channels, structures, etc.) deficiencies	Starting Up	Eligible applications are local public agencies or Joint Powers Authority	50% to 90%
State DWR	Delta Levees Subventions (DLS)	Cost share program for the maintenance and rehabilitation of non-project and eligible project levees in the Delta. The Subventions Program is authorized by California Water Code Sections 12980 et seq., and is managed by DWR. The Central Valley Flood Protection Board (Board) reviews and approves DWR's recommendations and enters into agreements with local agencies to reimburse eligible costs of levee maintenance and rehabilitation.	Ongoing	LMAs within the Primary and Secondary Zones of the Legal Delta.	Up to 75%
State FESSRO	<u>Delta Special Projects (DSP)</u>	Cost share grant program for local maintaining agencies in the Delta to rehabilitate non-project and eligible project levees. The program was established by the California Legislature under SB 34, SB 1065, and AB 360. The intent of Legislature, as stated in the Water Code, is to preserve the Delta as much as it exists at the present time.	Ongoing	LMAs within the Primary and Secondary Zones of the Legal Delta and limited areas within the Suisun Marsh.	75% to 95% Up to 100% for Habitat Projects
State DWR	<u>Flood ER - Forecast</u>	To further participation of reservoir operators (affecting CV) in the F-CO program, especially in obtaining	Ongoing	Federal agencies, State agencies or California Local	50% to 90%

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	<u>Coordinated Operations</u>	necessary decision support system tools & equipment and field measuring equipment.		Public agencies with responsibility for operating a reservoir that has a flood control reservation pool and is willing to participate in the Forecast-Coordinated Operations program and willing to coordinate its reservoir releases with other reservoir operators in the river system during flood events.	
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Table E-19 California IRWM Funding Programs

Agency	Program Name (Acronym)	Program Summary	Status	Who is Eligible to Apply	Cost Share Range
State IRWM	Integrated Regional Water Management (IRWM)	Grant funds for development and revisions of IRWM Plans, and implementation of projects in IRWM Plans. Goals of Projects: to assist local public agencies to meet long-term water management needs of the State, including the delivery of safe drinking water, flood risk reduction, and protection of water quality and the environment.	Ongoing	Applicant must be a local public agency or nonprofit representing an accepted IRWM Region. Other IRWM partners may access funds through their own agreements with the applicant/grantee.	Up to 75%

Table E-20 USACE Funding Programs

Agency	Program Name (Acronym)	Program Summary	Status	Who is Eligible to Apply	Cost Share Range
USACE/State	USACE/CVFPB Civil Works Projects (USACE CW)	If a feasibility study is completed a Chiefs Report is provided to congress. If congress authorizes the chief's report a local agency can advance a project with the USACE upon securing Federal appropriations.	Ongoing	CVFPB with a local Sponsor	35% Split between CVFPB and local Sponsor
USACE/State	USACE/CVFPB Feasibility Studies (USACE FS)	The objective of preparing a feasibility report is to identify the recommended plan: project scope, economic benefit, and an accurate cost and schedule baseline identified with potential project risks. Analysis of specific design alternatives, selection of a final recommended technical design solution, and development of confident cost estimates, schedule products, and risk identification are part of project formulation.	Ongoing	CVFPB with a local Sponsor	50% USACE 50% State; State and Locals Split 50%

E1.2.3 Local Funding

The cities, counties, local maintaining agencies and the regional flood control agencies within the Regions all have played a significant part in funding the local share of flood control improvements and operations and maintenance. Funding by local agencies within the region is limited due to constitutional and statutory constraints to the way local governments can fund and finance capital improvements and services. As noted previously, Attachment I to *California's Flood Future Report* provide a detailed description of funding mechanisms available to local agencies to fund flood control improvements.

In general, revenues for flood management within the Regions are generated from property based taxes, fees and assessments. In California, a local agency's ability to provide ongoing services and invest in its infrastructure is limited by voter-approved initiatives, such as Proposition 13 (1978) (limiting property tax increases), Proposition 218 (1996) (requiring voter approval for new assessments), and Proposition 26 (2010) (redefining many fees as taxes). The impacts of institutional and legal constraints associated with raising local funding for flood infrastructure and services is described in great detail in the Public Policy Institute of California's report, *Paying for Water in California*, March 2014. **Table E-21** provides a summary of the local funding methods used by many agencies in California and the Regions to fund flood management improvements and services. The table describes the general uses of the funding source and the attributes and applicability of the mechanism for flood management. In addition to these sources, many local agencies supplement funding for flood work specifically through enterprise revenues related to storm water management and general fund revenues.

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Table E-21 Summary of Potential Local Funding Mechanisms

	Funding Attribute						Pro/Con		
Item	Use	Voter Approval	Benefit Test	Bonds Allowed	Funding Period	Entity	Pro	Con	Note
Enterprise Revenues									
Utility User Fees/Taxes	O&M/ Capital Improvements	50% by Property Assessed	Yes	Yes	Long-Term	Varies	Would be broad based applying to all parcels. Depending upon service provided, could be exempt from Prop 218 balloting process. (Solely flood control would not apply.)	Might require enabling legislation for the specific district. Prop 218 would apply.	
Sales Tax Measure	O&M/ Capital Improvements as Approved	2/3	No	Yes	As Authorized	Cities or Counties	Flexible if approved.	Difficult to approve and limited to amount over statewide sales tax rate.	
Benefit Assessment Districts [1]									
Various Water Code Sections (i.e. LD Law / RD Law)	O&M/ Capital Improvements	50% by Property Assessed	Yes	No	Long-Term	Reclamation & Levee Districts	Simple Majority Approval, Ongoing Funding Source	Applicability of Prop 218 - Must Show Benefit, issues regarding certain public properties.	Used to fund maintenance or capital works. Through other authority, can be used to finance improvements.
Benefit Assessment District Act of 1982	O&M/ Capital Improvements	50% of Property Assessed	Yes	No	Long-Term	Flexible	Simple Majority Approval, Ongoing Funding Source	Must Show Benefit Improvements/Services must be within the Boundary, , issues regarding certain public properties.	Could provide some reimbursement of Advance Funding
Municipal Improvement District Act of 1913/1915	Capital Improvements	50% of Property Assessed	Yes	Yes	Long-Term	Flexible	Simple Majority Approval, Ongoing Funding Source	Must Show Benefit Improvements/Services must be within the Boundary	Could provide some reimbursement of Advance Funding
Geological Hazard Abatement Districts (GHAD)	O&M/ Capital Improvements	50% of Property Assessed	Yes	Yes	Long-Term	Independent District	Broad scope of works, locally autonomous, Simple Majority Approval, Ongoing Funding Source. Certain exemptions from review under CEQA apply.	Must prepare Plan of Control. Creates new independent entity with organizational responsibility (similar to JPA), Prop 218 applies with respect to assessments levied.	As independent entity could be alternative to JPA. Can fund reserves.
Community Facilities Districts [1]	O&M/ Capital Improvements	2/3's (See Note)	No	Yes	Long-Term	Flexible	Benefit not Needed, Flexible in Forming District, Improvements located anywhere	2/3 Approval Difficult to Obtain	Voting requirements change depending on presence of registered voters within boundary.

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Item	Funding Attribute						Pro/Con		Note
	Use	Voter Approval	Benefit Test	Bonds Allowed	Funding Period	Entity	Pro	Con	
Development Impact Fees	Capital Improvements	NA	Yes	NA	Long-Term	County & City (Land Use Agencies)	Implemented by Agency Action in Short Time Period	-Must Show Benefit -Development Feasibility Issues -Only works if area of flood control Benefit is slated for Development	Could provide some reimbursement of Advance Funding
Advance Funding [2]	Planning & Capital Improvements	NA	NA	NA	Short-Term	N/A	Can cover upfront planning/operations costs	Limited/Uncertain Availability	Could be subject to reimbursement from various sources over time.
Source: California Flood Future's Report - Attachment I, Finance Strategies, California Government Code, LWA and EPS. [1] Can be implemented by cities, counties, special independent districts, and JPA's with these types of members. [2] Advance Funding is defined as General Fund, developer, and/or other local public or private funding which could be subject to reimbursement from long term funding sources. More a way of financing improvements and shifting financing risk.									

E1.2.3.1 Region Specific Funding Programs

SJAFCA Program

SJAFCA's local funding program has consisted of the formation of an Assessment District to fund the construction of the FPRP and fund its long term operations & maintenance. The capital component of this Assessment District is no longer levied and the O&M portion levies approximately \$825,000 annually with increases tied to CPI. SJAFCA contracts for the maintenance with the San Joaquin County Flood Control & Water Conservation District. The annual O&M revenue is not sufficient to fund the annual O&M budgeted expenditures,⁶ as a result SJAFCA has had to withdraw funds from its O&M reserve fund to cover the budgeted O&M expenses. SJAFCA also has in place an Assessment District to fund the design, construction and long term operations & maintenance of the proposed Smith Canal Gate Closure Structure. This Assessment District will levy approximately \$1,663,000 annually to fund the annualized capital cost and O&M.

Currently SJAFCA's does not have a sustainable funding source for its Agency Operations. The Agency has six staff positions: Executive Director, Deputy Executive Director, Senior Civil Engineer, Associate Civil Engineer, Project Manager and Secretary. SJAFCA contracts for services such as legal counsel, Federal advocacy, and annual auditing. SJAFCA's annual operating budget for Fiscal Year 2013-14 is \$1,276,000. Currently the Agency is funding its annual agency operating costs from surplus fund balances. An evaluation of funding opportunities for SJAFCA's future role of long term planning, recertification of levees and future project implementation as well as the funding of increased Operations & Maintenance requirements is currently underway.

The future delivery of projects of regional interest and benefit could be implemented by SJAFCA as the local sponsor. This should be evaluated as part of future planning and implementation efforts for specific projects. Ultimately, a detailed evaluation of SJAFCA's role, its jurisdictional boundary and the specific identification of funding sources will need to take place as part of the feasibility evaluation stage of future projects.

San Joaquin County Flood Control & Water Conservation District

As described earlier in this report, the San Joaquin County Flood Control & Water Conservation District has broad water related service responsibilities throughout the County which includes maintenance responsibilities for flood control systems along Bear Creek and the Calaveras River. The district has several funding sources however, only certain charges it levies on property owners are used for the operations and maintenance of levees. Those listed below are in addition to the funding received from SJAFCA for O&M as noted above.

- Zone No. 9 – Zone 9 provides maintenance of 216 miles of project levees, 107 miles of project channels and approximately 100 miles of non-project channels. Maintenance

⁶ SJAFCA O&M Budgeted Expenditures for FY 2013-14 were \$881,500.

includes vegetation control, streambed clearing, erosion control, rodent control and patrol road maintenance. The district collects approximately \$2.4 million per year.

- Zone No. 10 – Zone 10 is the successor to the former Woodbridge Protection District Nos. 1 and 2, whose responsibilities included providing emergency flood protection and performing emergency remediation work along approximately 5.3 miles of the levee system along the Mokelumne River during periods of flooding. The district collects approximately \$13,000 per year.

Reclamation District / LMA Funding

There are 30 local maintaining agencies within the Regions which include; 14 RD's and Drexler Tract in the Delta South Region; 12 RD's in the Lower San Joaquin; and 3 other RD's with interest in the RFMP process. Each LMA has its own budget and funding sources. Some districts receive an apportionment of the property taxes collected by the County and some collect direct assessments on the property tax bills through their authority under reclamation district law or other assessment enabling statute. Some RD's provide services beyond flood control including irrigation. In addition, many of the Agency's receive funding from DWR through the Delta Levees Subventions program to supplement their local funding. As a result of this mix of funding sources, some data regarding district budgets may not be reflective of those expenditures and revenues solely related to levee and flood control services. **Table E-22** below shows the current Property Assessment revenue budgets of the respective RD's in the Region as well as their budgeted Levee Maintenance expenditures. This information has been compiled from various sources including RD assessment engineer's reports, DWR's Inspection and Local Maintaining Agency Report (2013), the State Controller's Special Districts Annual report as well as information obtained directly from LMAs through the RFMP outreach process.

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Table E-22 Reclamation District Assessment Budgets

RD Assessment Budgets			Regional Flood Management Plan Financial Plan: Funding	
Levee Maintaining Agency	Property Based Revenues (Assessments / Taxes)	Source	Approx Levee O&M Expenditures	Source
RD 1 (Union Island)	\$108,000	SCO	\$180,000	DWR
RD 2 (Union Island)	\$93,500	SCO	\$284,300	SCO
RD 17 (Mossdale) [6]	\$3,000,000	SCO [1]	\$550,000	RD
RD 403 (Rough & Ready)	\$40,300	SCO	\$36,000	SCO
RD 404 (Boggs Tract)	\$486,000	AE	\$50,000	DWR
RD 524 (Middle Roberts Island)	\$40,000	SCO	\$74,000	DWR
RD 544 (Upper Roberts Island)	\$100,000	SCO	\$150,000	DWR
RD 684 (Lower Roberts Island)	\$460,000	SCO	\$2,925,000	SCO [5]
RD 773 (Fabian Tract)	\$115,500	AE	\$225,000	RD
RD 828 (Weber Tract)	\$50,700	SCO	\$31,200	SCO
RD 1007 (Pico & Nagle)	\$26,000	SCO	\$27,000	SCO
RD 1608 (Lincoln Village West)	\$287,500	SCO	\$651,000	SCO
RD 1614 (Smith Tract)	\$420,000	AE	\$650,000	SCO
RD 2042 (Delta Farms)	\$1,260,000	SCO [1]	\$288,000	SCO
RD 2058 (Pescadero)	\$199,700	None [4]	\$0	None [4]
RD 2062 (Stewart)	\$176,000	SCO	\$270,000	DWR
RD 2064 (River Junction)	\$0	SCO	\$82,500	DWR
RD 2074 (Sargent-Barnhart Tract)	\$620,000	SCO [2]	\$675,000	SCO
RD 2075 (McMullin)	\$60,000	SCO	\$53,800	DWR
RD 2085 (Kasson)	\$90,250	SCO	\$54,400	DWR
RD 2089 (Stark)	\$21,000	SCO	\$24,000	DWR
RD 2094 (Walthall)	\$0	None [4]	\$14,700	DWR
RD 2095 (Paradise Cut)	\$47,000	SCO	\$52,500	DWR
RD 2096 (Wetherbee Lake)	\$22,000	SCO [3]	\$13,000	DWR
RD 2107 (Mossdale Island)	\$23,000	SCO	\$40,000	DWR
RD 2115 (Shima Tract)	\$32,200	SCO	\$37,400	SCO
RD 2116 (Holt Station)	\$0	SCO	\$900	SCO
RD 2119 (Wrights-Elmwood)	\$461,000	AE	\$155,000	SCO [5]
RD 2126 (Atlas Tract)	\$75,000	SCO	\$42,000	RD

Source Legend
SCO = Reported as Property Assessments from the State Controllers Annual Special District's Annual Report for FYE June 30, 2012, Table 10 - Land Reclamation and Levee Maintenance.
AE = Reported from Assessment Engineer of the District
RD = Reported from RD during Stakeholder input process
DWR = Reported from DWR's "Inspection and Local Maintaining Agency 2013 Annual Report"

[1] Notes that debt services is part of assessment revenue uses as reported by SCO.
[2] Reported as Charges for services, not Property Assessment revenue.
[3] Reported as Secured and Unsecured Property Tax Revenue, not Assessment Revenue.
[4] No data reported from any Source.
[5] Shows uses net of debt service from SCO report.
[6] Uses not reflective of debt service costs on outstanding bonds.

Prepared by LWA

E1.3 Project Funding Strategies

Each Area within the region has previously made efforts to implement its own unique combination of Federal, State and local sources to manage flood risk overtime. The goal of this plan is present a resource of information, make an assessment of the ability to fund new improvements within the Regions, and present general strategies and next steps for different groupings of improvements that the Regions, as a whole and stakeholders individually, can use to develop more detailed project specific financial plans in the future.

Funding needs for projects and management actions have been estimated and broken out into three tiers by time period. Tier 1 represents costs expected to be incurred within the first five years, Tier 2 are costs between years 6-12 and Tier 3 is beyond 12 years, but assumed to span to the end of the next 25 years. The costs for Tiers 1 and 2 (the near term costs) have been compared to the near term ability of the beneficiaries to generate funding as further discussed below.

E1.3.1 Regionally Significant Projects

Several projects have been identified and conceptualized through the regional planning process. These projects are significant in that they provide benefits to lands throughout the regions and some also incorporate multi-benefit aspects such as water supply, ecosystem restoration and flood protection restoration. Funding for these more complex projects needs to be addressed as these projects move from the conceptual stage to the feasibility analysis stage.

Financial plans should attempt to incorporate a myriad of potential Non-Local funding sources available through various programs. There will be opportunities for projects to blend funding from various programs from the Federal and State level. The challenge for these projects will be to compile a strategy for blending these funding sources together by parsing out the scopes of work in an efficient manner and matching the available funding to those scopes to maximize opportunities. To the extent that the Regions have identified a certain benefits from these proposed projects and can claim these benefits to leverage funding for other regional priorities, then transferring local dollars from future funding capacity captured in the region toward these projects may make sense.

The State has identified some of the regionally significant projects as part of the SSIA within the CVFPP and ultimately the CVFPB resolved that for the proposed improvements that provide systemwide benefits, systemwide flood control beneficiaries should contribute to the cost of providing systemwide benefits. Ultimately, the lead entity that shepherds projects identified within the CVFPP should seek leverage funding from the State through a forthcoming System Wide Flood Risk Reduction program. The State has indicated that funding for feasibility level work could provide up to 100% cost share. It will be important to ensure that feasibility studies be scoped to include the development of financial plans as part of the analysis.

Feasibility level financial planning work should include; 1) the identification of the beneficiaries of the proposed improvements; 2) the development of a methodology to apportion the costs and associated benefits of the needed improvements; and, 3) the development of a detailed funding and financing plan the clearly articulates the funding mechanisms that will be utilized, the lead entities and agencies responsible for implementing them and any needed financing associated with project implementation. Any evaluation should clearly account for and articulate those improvements

above and beyond those currently identified and being funded as part of other programs and identify opportunities to leverage multiple funding sources.

E1.3.2 Specific Projects / Efforts

The Regions have identified projects and flood management efforts that have been described in the RFMP by project type. The following **Tables E-23** and **E-24** presents summaries of the costs by funding source (i.e. Federal, State and local sources) and further summarize the costs as near term (those costs identified as Tier 1 and 2 costs) versus the total cost long terms costs. Because of the limited availability of Federal funding, as further discussed below, the near term costs have only been categorized with funding from State or local sources. Costs have not been categorized as funded from Federal sources in the near term.

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Table E-23 Lower San Joaquin Region Projects/Programs

<u>Regional Projects for All LMAs</u>	Near Term (Tier 1 & 2)			Long Term Total (All Tiers)			
	\$ million			\$ million			
	State	Local	Total	Fed	State	Local	Total
Master Plan for Mosdale to Stanislaus Corridor	1	1	2	0	1	1	2
San Joaquin National Wildlife Refuge Expansion	0	0	0	7.5	3.75	3.75	15
Floodplain at Dos Rios (transitory storage)	4.25	4.25	8.5	4.25	2.125	2.125	8.5
Study Reservoir Storage Improvements	1	1	2	0	1	1	2
Coordinated Reservoir Ops	1.75	1.75	3.5	0	3	3	6
Dredge SJ River from Paradise Cut to Stanislaus R	45	15	60	0	45	15	60
Total	53	23	76	11.75	55.875	25.875	93.5

<u>Residual Risk Management</u>	Near Term (Tier 1 & 2)			Long Term Total (All Tiers)			
	\$ million			\$ million			
	State	Local	Total	Fed	State	Local	Total
Flood O&M							
Increase SJ County O&M	0	22	22	0	0	50	50
Identify After-event Erosion	5.5	5.5	11	0	6.25	18.75	25
Develop Enhance O&M	0	6.6	6.6	0	0	15	15
Enhanced Emergency Response							
Improve SJ County Alert System	0.1375	0.1375	0.275	0	0.3125	0.3125	0.625
All-weather road RD 2064	0.75	0.25	1	0	0.75	0.25	1
Additional Information Collect/Share	2.2	2.2	4.4	0	7.5	7.5	15
Local ER Planning	4.4	4.4	8.8	0	10	10	20
Additional Forecasting/Notific.	2.2	2.2	4.4	0	5	5	10
Floodplain Risk Management							
Raise Structures & Protect Utilities	3.5	3.5	7	0	0	7	7
Flood Contingency Map for RD 2115	0.01	0.01	0.02	0	0	0.02	0.02
Flood Contingency Map for RD 2126	0.01	0.01	0.02	0	0	0.02	0.02
Land Use and Floodplain Management	5.5	5.5	11	0	0	20	20
Governance Investigation	0.5	0.5	1	0	0	1	1
Total	24.7	52.8	77.5	0.0	29.8	134.9	164.7

<u>Projects by LMA/City</u> <u>Summary of Improvement Type by Source</u>	Near Term (Tier 1 & 2)			Long Term Total (All Tiers)			
	\$ million			\$ million			
	State	Local	Total	Fed	State	Local	Total
HMP Geometry	0	0	0	0	0	0	0
PL 84-99 Geometry	50.4	16.8	67.2	0	50.4	16.8	67.2
Penetrations & Enroachments	1.5	0.5	2	0	1.4	0.6	2
Seepage/Slope Stability	11.1	3.7	14.8	0	69.45	23.15	92.6
Erosion	4.2	1.4	5.6	0	12.6	4.2	16.8
Other Geometry	1.8615	0.6205	2.482	0	32.7615	10.9205	43.682
Improve Dryland Levee	27.75	9.25	37	0	38.1	12.7	50.8
Channel Improvements	12.3	4.1	16.4	0	46.48	19.92	66.4
Internal Drainage	3.15	3.15	6.3	0	3.15	3.15	6.3
Improve to 200-year ULOP	112.5	37.5	150	765.05	308.9625	102.9875	1177
Other Structures	26.04	11.16	37.2	25.155	27.09	-13.545	38.7
Analysis	5.65	5.65	11.3	0	8.475	2.825	11.3
Total	256.5	93.8	350.3	790.2	598.9	183.7	1572.8
Total LSJ Regional Plan Costs by Source	334.2	169.6	503.8	802.0	684.6	344.4	1830.9

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Table E-24 Delta South Projects/Programs

<u>Regional Projects for All LMAs</u>	Near Term (Tier 1 & 2)			Long Term Total (All Tiers)			
	\$ million			\$ million			
	State	Local	Total	Fed	State	Local	Total
Paradise Cut Expansion	80.75	4.25	85	0	318.25	16.75	335
Middle River Siltation study	0.15	0.15	0.3	0	0.15	0.15	0.3
Total	80.9	4.4	85.3	0	318.4	16.9	335.3

<u>Residual Risk Management</u>	Near Term (Tier 1 & 2)			Long Term Total (All Tiers)			
	\$ million			\$ million			
	State	Local	Total	Fed	State	Local	Total
Flood O&M							
Identify After-event Erosion	5.5	5.5	11	0	6.25	18.75	25
Develop Enhance O&M	0	6.6	6.6	0	0	15	15
Enhanced Emergency Response							
All-weather Road RD 1	1.5	0.5	2	0	1.5	0.5	2
All-weather Road RD 2	1.5	0.5	2	0	1.5	0.5	2
All-weather Road RD 684	0.3	0.1	0.4	0	0.3	0.1	0.4
All-weather Road RD 773	4.5	1.5	6	0	4.5	1.5	6
All-weather Road Rd 2058	0.075	0.025	0.1	0	0.075	0.025	0.1
All-weather Road RD 2089	0.45	0.15	0.6	0	0.45	0.15	0.6
Additional Info. Collect/Share	2.475	0.825	3.3	0	5.65	5.65	11.3
Local ER Planning	2.2	2.2	4.4	0	5	5	10
Additional Forecasting/Notific.	2.2	2.2	4.4	0	5	5	10
Floodplain Risk Management							
Flood Contingency Map RD 1	0	0.02	0.02	0	0	0.02	0.02
Flood Contingency Map RD 2	0	0.02	0.02	0	0	0.02	0.02
Flood Contingency Map RD 524	0	0.02	0.02	0	0	0.02	0.02
Flood Contingency Map RD 773	0	0.02	0.02	0	0	0.02	0.02
Flood Contingency Map RD 2089	0	0.02	0.02	0	0	0.02	0.02
Raise Structures	0	20	20	0	0	20	20
Land Use and Floodplain Man.	0	5.5	5.5	0	0	10	10
Total	20.7	45.7	66.4	0	30.225	82.275	112.5

<u>Projects by LMA/City</u> <u>Summary of Improvement Type by Source</u>	Near Term (Tier 1 & 2)			Long Term Total (All Tiers)			
	\$ million			\$ million			
	State	Local	Total	Fed	State	Local	Total
HMP Geometry	0	0	0	0	0	0	0
PL 84-99 Geometry	17.10075	5.70025	22.801	0	19.20075	6.40025	25.601
Penetrations & Enroachments	8.4645	2.8215	11.286	0	7.9002	3.3858	11.286
Seepage/Slope Stability	184.8	61.6	246.4	0	248.175	82.725	330.9
Erosion	24.9	8.3	33.2	0	24.9	8.3	33.2
Other Geometry	1.95	0.65	2.6	0	78.9	26.3	105.2
Improve Dryland Levee	0.3	0.1	0.4	0	44.775	14.925	59.7
Channel Improvements	0	0	0	0	7.7	3.3	11
Internal Drainage	0	0	0	0	0	0	0
Improve to 200-year ULOP	127.5	42.5	170	0	127.5	42.5	170
Other Structures	1.68	0.72	2.4	0	1.68	0.72	2.4
Analysis	0.9	0.9	1.8	0	1.35	0.45	1.8
Total	367.6	123.3	490.9	0.0	562.1	189.0	751.1
Total DS Regional Plan Costs by Source	469.2	173.4	642.6	0.0	910.7	288.2	1198.9

Project costs have been allocated to the identified funding sources based upon conservative assumptions for cost sharing. State cost sharing has been assumed based upon available DWR funding program cost sharing guidelines, however, it is important to note that DWR cost sharing criteria typically considers project attributes that include the project's location, potentially the specific project sponsor, specific project benefits and other project specific features that go beyond simply the project type. Therefore, the assumed State cost sharing amounts shown in the tables could above or below the actual State cost sharing for a specific improvement as implemented by a local project sponsor. The balance of a project's cost is assumed to be funded from local sources. As noted above, no Federal funding has been assumed for near term costs (Tiers 1 and 2). Federal funding has been assumed on a limited basis for the total project costs, however, there are many factors that will affect the ability of the Regions to garner Federal funding as further discussed below.

E1.4 Constraints on Funding Capacity and Related Issues

The State and USACE prepared the Flood Futures report as part of the Statewide Flood Management Planning Program effort. The report provides a historical estimate of the funding provided by local, State, and Federal governments for flood management projects. The report discusses constraints that local agencies have in securing funding. Specifically the report mentions constraints associated with Propositions 13 and 218 that have made it more challenging for local maintaining agencies to raise funding for flood risk reduction improvement projects. Constraints from Proposition 218 and 13 have been well documented by the State and were highlighted as an issue in DWR's January 2005 White Paper, *Responding to California's Flood Crisis*.

The Public Policy Institute of California's (PPIC) report, *Paying for Water in California*, essentially argues that services for flood, storm water, and ecosystem are frustrated by legal and institutional barriers to secure adequate funding. The report reiterates the State's position regarding local funding constraints associated with Propositions 13 and 218. The PPIC report cites the 2012 Biggart Waters Act, Federal legislation focused on implementing actuarial insurance rates, as a policy level decision that would potentially increase a community's willingness to pay for flood risk reduction projects. Communities with a large enough tax bases and economical project costs can choose to tax their property to construct flood risk reduction projects. While transitioning to actuarial flood insurance rates could increase the amount of assessment that a property owner would be willing to pay there are limits. These issues are discussed in more detail below.

E1.4.1 Tax Rate and Infrastructure Burden Considerations

In order to consider an area's ability to generate additional taxes and assessment, the uses of taxing capacity for all infrastructure and services should be considered. The California Debt and Investment Advisory Commission (CDIAC) promulgates guidelines with respect to land secured financing including the use of assessments and Mello-Roos. CDIAC's Mello-Roos Guidelines (1991) suggest that jurisdictions should integrate Mello-Roos financing into the land use regulatory framework. Local governments should do this so that there is a process for coordinating the use of land secured financing. The concern is that in the absence of coordinated planning, taxpayers could vulnerable to onerous overlapping tax burdens imposed by a multitude of local governments that may provide services to the same group of tax payers. This issue is analogous

to the current ongoing efforts associated with planning for the future of flood management infrastructure. To the extent that there are a multitude of planning efforts all developing concurrent funding and financing strategies, these efforts should be coordinated to ensure that there is sufficient funding capacity available from the identified beneficiaries.

A reasonable land secured financing would be supported by property tax burdens that would not exceed 2% of the market value of the improved property. Some jurisdictions limit this amount to only 1.8%. Assuming a median home price in the Regions of approximately \$250,000, at a 2.0% limit, after leaving a conservative 1.1% for current ad valorem overlapping debt, the median home could only support an additional \$2,250 of annual taxes to fund all other annual infrastructure and service costs within a reasonable financing limit. It would be unreasonable to assume that all of the remaining tax limit could be captured to finance and fund additional flood management infrastructure and services. Furthermore, the approval processes for additional taxes and assessments governed by Proposition 218 presents significant challenges to local jurisdictions. This further erodes at the ability to capture available funding capacity.

As more detailed plans for funding services and infrastructure are developed, a coordinated approach must be made to ensure that the funding capacity for infrastructure and services is not pre-empted by other entities and that the financing goals and policies of the region's jurisdictions are reflective of their priorities. This is especially important within in San Joaquin County, where there are more than 90 special districts, it is important to ensure that interests competing for local property tax based revenues are coordinating their efforts.

Coordination with State led efforts to fund system-wide improvements will also need to take place to ensure that any proposals for funding State programs, such as central valley-wide or regional assessments, do not pre-empt locally led efforts and priorities and recognize the contributions of regions that have already passed flood based assessments.

E1.4.2 FEMA Flood Insurance – Pricing Mechanism

Flood risk reduction projects have a unique pricing mechanism in the Federal Emergency Management Agencies (FEMA) National Flood Insurance Program (NFIP). The potential for being mapped into a 100-year floodplain provides communities with a metric to make informed decisions to determine if it would be less expensive to pay for flood insurance or tax themselves to pursue construction of flood improvements.

The NFIP established the 100-year flood as the threshold for determining if structures with federally guaranteed mortgages are required to purchase flood insurance. Currently, the NFIP makes flood insurance available to structures located within participating communities at subsidized rates. However, Federal legislation passed in 2012 (The Biggert-Waters Flood Insurance Reform Act of 2012 or "BW-12") was intended to make flood premiums more representative of the actual risk posed from flooding (the actuarial rate). While recent legislation signed into law in March 2014 (the Homeowner Flood Insurance Affordability Act of 2013 or "HFIAA") makes modifications to BW-12 with respect to current subsidized insurance rates, initial guidance provided by FEMA indicates that flood insurance premiums will still be increasing.

The Federal Government's decision to move toward actuarial rates provides a direct linkage between the cost of insurance and structural flood risk reduction improvements. Because the vast

majority of homes within the US are financed with federally guaranteed mortgages that require flood insurance, in the face of 100-year flood risk, the cost of mitigation cannot be escaped by the homeowner. Simply put, a homeowner with a home located in a floodplain will face a cost, either a flood insurance premium cost, or a cost to demonstrate that their property should not have been mapped within the 100-year floodplain, or a cost to construct structural flood risk reduction improvements that provide a minimum 100-year level of protection. It is reasonable to assume that a practical homeowner would prefer the lesser of these costs. In the case of many communities within the Central Valley of California located within deep floodplains expensive structural levee improvement projects are required to meet the FEMA 100-year standard.

There are, however, limits to direct correlation of flood insurance rates and the ability of a local community to tax itself. The direct linkage is easily complicated by many identifiable factors including:

- For large coordinated structural levee improvement projects, typically a property tax increase is needed in order to finance the local cost share of the project cost. Because such projects take many years to complete, homeowners could be forced to pay both the high cost of flood insurance while the flood risk remains, as well as the annual tax needed to construct the improvements. As a result, homeowners will typically not be in favor of taxing themselves for the full amount of any long term savings.
- Land based financing funds many critical services within local communities and these services are competing for limited funding. For areas where existing taxes and assessments on properties are already perceived as high, additional taxing capacity for flood improvements would be limited and compete against other services required by the community.
- As discussed above in Tax Rate and Infrastructure Burden Considerations, some communities within California have adopted policies consistent with recommendations from the California Debt and Investment Advisory Commission (CDIAC). Not only will increased flood assessments compete with other services but the magnitude of a local flood assessment must also fit within the adopted policies of local communities that are attempting to efficiently manage debt within the context of State policies and guidelines.
- If future flood insurance rates exceed a homeowner's ability pay the cost of their taxes, mortgage and flood insurance, no additional assessment capacity would exist to fund flood management projects.

Flood insurance rates do provide a starting point for a community to make an informed decision about how much they would be willing to pay to fund flood improvements. However, a project specific rate study coupled with a well-planned and executed strategic public outreach campaign are also required to assess and determine a communities willingness and ability to pay additional taxes or assessments for flood management. Ultimately, flood insurance is just one of many factors to be taken into consideration.

E1.4.3 Proposition 218 & Publicly Owned Parcels/Property

Many LMA and JPA's within the Regions have relied on benefit assessments imposed pursuant to the statutory authorities provided in Water Code §55000 et. seq. ("Reclamation District Law") and/or Government Code §54703 et. seq., the Benefit Assessment District Act of 1982, to generate funding for flood control services. These laws were implemented before the effective imposition of the assessment rules put in place pursuant to Proposition 218 on July 1, 1997. The provisions of the statutes upon which many LMAs rely do not implicitly grant the authority to levy assessments on certain public property. Reclamation District Law exempts assessments on streets, roads and schools.⁷ The Benefit Assessment District Act of 1982 precludes assessments on any property owned by a Federal or State governmental or any another local agency.⁸ However, local agencies imposing these assessments are conflicted due to the provisions of Proposition 218. Many local agencies believe that the provisions of Proposition 218, which governs the apportionment of benefit and imposition of assessments as prescribed by Article 13 Section 4 of the California Constitution, are in conflict with these statutes.⁹ Many new flood control and drainage assessments provide significant benefit to roads and publically owned parcels and the apportionment of benefit consistent with the provisions of Proposition 218 requires that assessments be allocated to those lands. Due to the conflicts between the underlying statutes providing the authority to impose assessments and the provisions of Proposition 218, local agencies providing these services are left in a position of being unable to collect the full amount of funding needed to provide services and new improvements or facing difficult constitutional legal challenges. This dilemma poses an additional burden on local agencies trying to fund flood control and drainage services.

E1.4.4 FEMA Agricultural Zone

A significant portion of agricultural lands in California's Central Valley are not protected by levees constructed to modern standards. In order for states like California to continue to sustain a robust agricultural economy and discourage urbanization of these rural areas, changes are needed to the NFIP that will promote the sustainability of agriculture in the floodplain. MapMod and RiskMAP have, or will, map most of the agricultural areas in the Central Valley into a special flood hazard area (SFHA). The rural communities that occupy these floodplains lack the financial ability to cost-effectively improve their levee systems to meet FEMA's 100-year certification criteria. The restrictions on development in an SFHA, while effectively curbing residential development in the

⁷ Reference Water Code §51200. The assessments levied by a district shall include all lands and rights of way within the district, owned by the State or by any city, county, public corporation, or utility district formed under the laws of the State *other than public roads, highways, and school districts.* (emphasis added)

⁸ Reference Government Code §54715. (a) "The legislative body of a local agency may by ordinance or resolution, adopted after notice and public hearing, determine and propose for adoption an annual assessment on each parcel of real property within the jurisdiction of the local agency, *except that the governing body shall not impose an assessment upon a federal or state governmental agency or another local agency.* (emphasis added)

⁹ California Constitution Article 13D (Assessment & Property-Related Fee Reform) §4. Parcels within a district that are owned or used by any agency, the State of California or the United States shall not be exempt from assessment unless the agency can demonstrate by clear and convincing evidence that those publicly owned parcels in fact receive no special benefit.

floodplain, do not provide the flexibility needed to sustain the current vibrant agricultural economy that is critical to California's Central Valley. These strict regulations have rendered financially infeasible and/or unattainable the reinvestment in agricultural operation facilities, commercial facilities in support of agriculture, equipment repair facilities, livestock and crop processing facilities, housing for agricultural operators or temporary farm workers. These regulations could also affect the ability of agricultural operations to rely on collateralizing (with the Commodity Credit Corporation) grain stored in the floodplain.

Within small communities, the implementation of a Zone D designation would involve working with FEMA to designate the small communities as Zone D rather than Zone AE. The Zone D designation is used where there are possible but undetermined flood hazards, but no definitive analysis of flood hazards has been conducted. The Zone D might be properly applied to agricultural zones with high levels of protection, even if the areas cannot be certified as out of the 100-year floodplain. The Zone D designation would allow for new structures to be constructed. Additional investigation of how rates would be calculated would be required but this could be a significant component of the future development of plans for regional improvements.

To ensure that an appropriate level of flood risk is achieved in concert with the financial capability of the area, the State should support the Regions' efforts for flood insurance reform ensuring that the agricultural use of the area is sustainable and allowing for the existing vibrant agricultural economy to thrive.

E1.4.5 Constraints on Federal Funding

The USACE has historically been a major contributor to investment in flood risk reduction infrastructure in California. The USACE is faced with more demands for building and maintaining its projects than available Federal funding allows (Stern & Carter, 2011). It is estimated the USACE has a backlog of authorized projects higher than \$62 billion. However, some of the backlogged appropriations are related to projects that are unlikely to be constructed, as throughout the nation they are not competitive when compared against other projects.

There are many factors contributing to the growth of the USACE backlog. Authorizations have outpaced appropriations, aging infrastructure requires more significant financial investments, and escalation of construction related costs have all contributed to increasing the backlog of authorized projects. **Table E-25** was developed from the fiscal year 2015 Federal budget and shows that the USACE civil works budget is shrinking and future projections suggest that recent cuts to the civil works budget are intended to be permanent with only modest annual increases. The USACE civil works budget is projected to be about \$4.5 to \$5.0 billion over the next five years. Looking back at Federal budget over the past 5 years would suggest that less than 50% of the USACE budget is utilized for construction activities that would reduce the total backlog of authorized projects. When adjustments for inflation are considered the real value of Corps construction appropriations have been shown to be flat for the last 20 years and the projected budget for the next 10 years suggests that trend will continue.

Securing Federal funding for large flood risk reduction projects will continue to become more competitive. In the past, funding for authorized projects has relied heavily on prioritizing appropriations based on a project's benefit to cost ratio (BCR). This approach limits Federal investments to areas that can achieve a very robust BCR and generally these projects would be in

urban areas where significant benefits exist. In FY 2010 budget requests, the administration required ongoing flood management projects to generally have a BCR greater than 2.5, and for new start projects the minimum BCR was generally 3.2. While the BCR's for projects vary each year, the competition for limited Federal funding also increases as authorizations continue to outpace appropriations.

Table E-25 USACE Annual Budget Projections and Percent Reduction in Backlog

Report	Actual	Enacted	Requested	Out Years								
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Corps of Engineers	\$8.1	\$5.5	\$4.5	\$4.7	\$4.7	\$4.9	\$5.0	\$5.1	\$5.2	\$5.3	\$5.4	\$5.6
Percent Change per year		-32%	-18%	4%	0%	4%	2%	2%	2%	2%	2%	4%
Estimated Construction (Retiring Backlog)		\$2.8	\$2.3	\$2.4	\$2.4	\$2.5	\$2.5	\$2.6	\$2.6	\$2.7	\$2.7	\$2.8
Percent of Backlog (\$60 Bil)		4.6%	3.8%	3.9%	3.9%	4.1%	4.2%	4.3%	4.3%	4.4%	4.5%	4.7%
Percent of Backlog (\$80 Bil)		3.4%	2.8%	2.9%	2.9%	3.1%	3.1%	3.2%	3.3%	3.3%	3.4%	3.5%

Source: Federal Budget FY 13-14 and annual budget reports

E1.4.6 State Funding Incentives

The State is developing a suite of programs to provide funding to urban areas, small communities and rural areas, and for system-wide improvements. The State has been extremely successful under its existing Early Implementation Program with the development of financial incentives to create objective based outcomes that support the goals of the CVFPP. Developing appropriate incentives that encourage local communities to implement flood risk reduction projects consistent with the CVFPP goals is one of the most powerful tools available to the State. Examples of current incentives include increased cost share for projects that protect State facilities, creation of open space, habitat, and recreation opportunities, construction of setback levees, and protection of disadvantaged communities. For instance, it can be politically challenging to implement setback levees and system improvement projects. However, when a community can make a strong case that advancing these types of projects will allow a local agency to leverage limited local funding and increase the amount of flood risk reduction that can be implemented it can garner support from a community. Developing incentives that encourage local communities to meet the objectives of the CVFPP will result in local communities formulating projects that are acceptable to the community and will advance the objectives of the CVFPP.

E1.4.7 Local, State, and Federal Funding Percentages

A number of different estimates have been released that attempt to describe the different cost percentages paid by the locals, State and Federal government. Estimates of historic percentages were provided in the PPIC report on Paying for Water in California and the Flood Futures Report. The CVFPP provided an estimate of future percentages assumed for implementation of the State System-wide Investment Approach (SSIA). **Table E-26** compares estimates of historical percentages paid by local, State, and the Federal government to the estimates provided in the CVFPP. When comparing the historic percentages paid to the estimates in the CVFPP it is clear that significant State and Federal funding will be required to complete work under the CVFPP.

Reliance on the Federal government to contribute up to 46% of the costs to complete the CVFPP is not very likely given historic Federal contributions and constraints on Federal funding. When considering the legal and institutional constraints on raising local funding and securing significant Federal funding it is not clear if implementation of the CVFPP as currently defined can be achieved without significant State funding support.

Table E-26 Historic and projected cost shares to complete flood risk reduction projects

Report	Local	State	Federal	Total
PPIC Report "Paying for Water in California"	62%	27%	12%	100%
Flood Futures Report (2000 to 2010)	72%	12%	17%	100%
CVFPP SSIA Potential Cost Sharing by Agency	8%	46%	46%	100%

E1.4.7.1 Other Non-Local Funding Sources

Opportunities exist for local agencies to leverage funding from Non-Governmental Organizations for projects that have components or features that align with the interest of those agencies. Opportunities for funding could include funding for environmental restoration and agricultural easement acquisition. Environmental enhancement and open space projects that are funded by the NGO's could lead to opportunities to leverage additional State funding for flood risk reduction projects to the extent the combined multi-benefit projects align with certain objective criteria for State Funding resulting in supplemental cost sharing. Further, coordination with the Mid and Upper San Joaquin region will be critical to ensure that the multi-benefit component of projects that affect a system are properly accounted for. As local project proponents evaluate available funding options for projects, agencies should look for opportunities to combine or add features to projects within and across regions that combine funding sources and that ultimately result in the lowest net local cost. In combination with this effort however, the State and local agencies will need to work to determine and develop sources of sustainable funding for the long maintenance and operation of restoration and habitat enhancement projects.

E1.4.8 Relative Local Funding Capacity for Additional Improvements & Services

Given the existing constraints of local jurisdictions to generate additional local funding for improvements and services (O&M), namely Propositions 13 and 218, in the currently constrained environment, the two most feasible ways for local jurisdictions to generate funding are from self-imposed taxes and assessments and development impact fees. In order to determine the relative remaining local funding capacity of the region to fund additional flood control improvements and services, a rough assessment of the remaining capacity to impose additional assessment and fees upon itself was completed.

E1.4.8.1 Assessment Capacity and Land Based Funding Approach

As noted previously, the Regions were divided into sub-zones based on defined hydraulic basins as shown in **Map E-2**. Because of constraints of Proposition 218 and other property / land based funding mechanisms that tie the proportionality of the funding generated from the land to the use of the land, LWA analyzed the land uses in each of the project benefit zones. The source of the land use information for purposes of this analysis was parcel and use code information obtained

from ParcelQuest which represents San Joaquin County assessor data. LMAs in the region reviewed the land uses and provided input into the land use information and associated categorizations.

In order to calculate the relative funding capacity from each of the benefit zones, two approaches were used to estimate a high and low funding capacity. **Attachment 1** provides a detailed analysis for each benefit zone that derives the high and low capacities. **Table E-27** summarizes the analysis and indicates the RD's within each zone and the Region analyzed.

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Table E-27 Summary of Capacity Analysis

Summary of Capacity Analysis Lower San Joaquin/Delta South RFMP			Regional Flood Management Plan Financial Plan: Funding	
Benefit Area	RDs in Benefit Area Analysis	Current Budget [1]	Capacity	
			LOW	HIGH
Lower San Joaquin Region				
1	N/A	\$0	\$79,063	\$168,573
10	17	\$3,000,000	\$2,210,561	\$5,035,076
11	N/A	\$0	\$104,966	\$111,618
12	N/A	\$0	\$633,672	\$1,686,312
13	1608, 2074	\$907,500	\$1,888,399	\$5,902,595
14	N/A	\$0	\$557,392	\$1,000,719
15	403	\$40,300	\$216,139	\$647,244
16	404, 828, 1614	\$2,552,700	\$1,802,928	\$5,588,476
20	N/A	\$0	\$139,185	\$323,977
21	None	\$0	\$419,475	\$954,355
22	2126	\$75,000	\$13,762	\$10,861
23	2042	\$1,260,000	\$425,568	\$1,032,513
24	2115	\$32,200	\$43,995	\$34,720
25	2119	\$461,000	\$108,194	\$164,543
19A	2064	\$0	\$143,435	\$206,562
19B	2075	\$60,000	\$107,266	\$78,460
19C	2094	\$0	\$54,349	\$43,032
19D	2096	\$22,000	\$19,822	\$90,366
Sub-Total LSJ Region		\$8,410,700	\$8,968,173	\$23,080,003
Delta South Region				
2	Drexler, 2116	\$0	\$245,223	\$205,016
3	524	\$40,000	\$481,797	\$676,252
4	2	\$93,500	\$213,122	\$174,460
5	544	\$100,000	\$190,000	\$151,189
6	773	\$115,500	\$132,551	\$112,564
7	2062, 2107	\$199,000	\$133,600	\$172,499
8	2058, 2085, 2095	\$336,950	\$381,808	\$733,321
9	1007	\$26,000	\$213,212	\$314,471
17	684	\$460,000	\$248,290	\$251,633
18	1, 2089	\$129,000	\$347,893	\$384,150
Sub-Total DS Region		\$1,499,950	\$2,587,495	\$3,175,554
Legend				
		Current Budget below Low Capacity estimate		
		Current Budget between High and Low Capacity estimate		
		Current Budget above High Capacity estimate		
[1] Current Budgeted Revenue number shown is based on information provided directly by the RD's or found within the State Controller's (SCO) Special District's 2012 Annual Report - Table 10. Table 10 of the SCO report shows General and Special Revenue Fund information by Activity. This information is taken from Activity classification "Land Reclamation and Levee Maintenance."				
Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA				

It's important to note that the above analysis does not take into consideration other taxes and assessments currently burdening the area along with future needs for other infrastructure and public services. It will be important to consider an area's ability to generate additional taxes and assessments and other uses of taxing capacity as further discussed above in Section E1.4.1.

Based on the methodology employed, the Lower San Joaquin Region has a very wide range of potential funding capacity based upon current state of development in the Region. Given the varying approaches between the Low and High Capacity analysis, this infers that to the extent the Lower San Joaquin Region was to implement assessments at similar levels to those assessments recently imposed throughout the Central Valley, there could a significant amount of funding that could be generated. It's important to note that the capacity of different zones within the Regions would vary significantly due to existing assessments already in place. There are approximately 130,000 parcels in the Lower San Joaquin Region. An \$80 average per parcel increase over existing in-place assessments could generate more than \$10,000,000 per year. Further, additional development within the Region, as described and discussed in Section E1.1, would also generate additional incremental assessments to fund future improvements.

Based on the methodology employed, the Delta South Region has a very narrow range of additional funding capacity. This is due to the relatively undeveloped nature of the property in the Region. Generally, developed parcels are able to carry more infrastructure funding burdens than undeveloped agricultural property. In fact, given the two approaches for determining capacity, whereby the High approach places more benefit on developed structures and the Low approach allocates more assessment and benefit to undeveloped parcels, in some cases, the Low approach estimated that there is a greater capacity for funding than the High approach. Ultimately, the analysis concludes that there is not a significant amount of excess funding capacity in the Delta South Region. There are approximately 105,000 parcels in the Delta South Region. A \$10 average per parcel increase over existing in-place assessments could generate more than \$1,000,000 per year. This additional amount funding, while significant, is not sufficient to fund the projected project costs identified within this report.

E1.4.9 New Development Funding

A discussed further in Section E1.1.9, future growth with the region is focused within the City of Stockton and areas within Lathrop including River Islands (RD 2062 Stewart Island) and Mossdale Village (RD 17 Mossdale). While projects in Lathrop have already developed financing plans that include future funding for planned improvements needed in order to move forward with development, future development interests can provide additional up front funding improvements and ultimately contribute to long term Operations & Maintenance of levees. However, there are limitations to imposition of development impacts fees stemming from the statutory nexus requirements of AB 1600 (Government Code §66000 et. seq.) New development cannot be required to fix existing deficiencies through the imposition of a development impact fee and development impacts fees cannot be used for maintenance. A specific analysis of the funding capacity of new development is beyond the scope of the financial plan. Efforts are underway by project proponents and stakeholders in the Regions. Any future funding analysis should include a review of the beneficiaries of the flood projects identified within this plan and the proposed development plans in Stockton, Lathrop and Mossdale. This analysis should determine if a

reasonable nexus can be drawn between the proposed projects and the need for the improvements. A more detailed project specific financial planning effort could lead to evaluation and appropriateness of a future funding programs tied to new development that include impact fees, special taxes and assessments to fund additional projects that help fund needed improvements and mitigate for the impacts of new development in the floodplain.

E1.4.10 Local Funding Capacity Summary

Table E-28 provides a comparison of the estimated funding capacity to the projected near term (Tier 1 & 2) and long term net local funding needs with each Region.

Table E-28 Comparison of Local Funding Need to Capacity

Comparison of Local Funding Need to Capacity		Regional Flood Management Plan Financial Plan: Funding	
Region		LOW	HIGH
Lower San Joaquin			
	Estimated Capacity of Region	\$8,970,000	\$23,080,000
	Current Annual Funding	\$8,410,000	\$8,410,000
	Net Local Additional Capacity	\$560,000	\$14,670,000
	Total Estimated Financing Capacity	\$7,000,000	\$182,000,000
	Estimated Local Costs Near Term	\$169,600,000	
	Estimated Local Costs Long Term	\$344,400,000	

Delta South Region			
	Estimated Capacity of Region	\$2,590,000	\$3,180,000
	Current Annual Funding	\$1,500,000	\$1,500,000
	Net Local Additional Capacity	\$1,090,000	\$1,680,000
	Total Estimated Financing Capacity	\$14,000,000	\$21,000,000
	Estimated Local Costs Near Term	\$173,400,000	
	Estimated Local Costs Long Term	\$288,200,000	

Given the wide range of funding capacity estimated in the Lower San Joaquin Region, additional investigation into specific projects and the exploration of funding sources that leverage the projected growth in the region is warranted. In addition, an appropriate allocation of project costs to specific beneficiaries is needed. However, because of the complex nature of the improvements,

and the interrelationships between the various zones in the Region, it would be wise for the region as whole to develop allocation and funding guidelines and principals that help focus future detailed financial strategies for specific projects. Future regional planning efforts could address this effort. It is important to note however, that while additional funding capacity may exist, capturing the capacity, given the constraints of Proposition 218, will be inefficient and likely present significant challenges for the Region.

The relatively low funding capacity of Delta South Region is consistent with the land use profile of this portion of the Region. Additional investigation and the exploration of new funding sources that further leverage the existing land uses in this portion of the region may not ultimately yield a significant amount of additional funding. Efforts to generate additional funding maybe better focused on garnering support for State led subventions and special projects funding. Further, targeted investments in the Delta South Region that are coupled with and tied to regionally led efforts consistent with the SSIA will help support efforts that benefit the entire region. In addition, the Region

E1.4.11 Operations and Maintenance Funding Needs

The ability to adequately operate and maintain the levee system varies within the region. DWR has documented the cost and extent of levees maintained and each LMAs O&M costs in the annual *Inspection and Local Maintaining Agency Report*. A review of the information within the annual DWR inspections report suggests that levee maintenance in the Region generally varies from \$4,000 to \$17,000 per mile. A review of the inspection reports also suggests that many LMAs have minimally acceptable ratings or unacceptable ratings in the Fall of 2013.

The mission of many LMAs is both internal drainage and levee maintenance. The O&M cost per mile can vary based on the scope of activities performed by and LMA, local maintenance practices, and restrictions on securing adequate funding to properly maintain levees. While understanding the annual costs associated with an LMAs O&M practices per mile is important, performance based metrics would be required to make a determination of the minimum or average cost per levee mile required to meet current State and Federal standards. This analysis could be performed with existing levee inspection data that is collected by the State and the USACE.

E1.5 Conclusions & Recommendations

Recent studies and reports providing analysis, commentary, and policy recommendations related to funding flood management have had a common theme emphasizing the importance of creating sufficient and sustainable funding sources to manage flood risk over time. DWR's *California Flood Futures Report* identifies existing funding constraints and presents recommendations for actions that could lead to new funding sources. PPIC's *Paying for Water in California* identifies and describes those same constraints with respect to local funding and presents recommendations that would help local entities address the funding gaps identified within the report. Ultimately, creating a sustainable and politically actionable funding source for flood management will require some action by the State Legislature to change the current constitutional and statutory constraints on raising new revenue. The Region, State and DWR should explore the following recommendations, some of which could be implemented in the near term. In the long term, the State should continue efforts to implement recommendations made in recent studies focusing on long term stable funding for flood management.

Recommendation 1: Local agencies in Region should work with the State to help align the incentives within funding programs to the goals and objectives outlined in the CVFPP. In many cases providing local agencies with more favorable cost sharing and crediting provisions will help position the State to secure limited Federal funding. Increasing the amount of Federal funding available will help limited State and local funding to be applied to small communities and rural areas that will face significant financial challenges in meeting the goals established in the CVFPP.

Proposition 1E requires the State to “Secure the maximum feasible amounts of Federal and local matching funds to fund disaster preparedness and flood prevention projects in order to ensure prudent and cost-effective use of these funds to the extent that this does not prohibit timely implementation of this article.” The interpretation of this section of Proposition 1E should be evaluated in the larger context of the State’s objectives and should be reflected in the State’s financial strategy with a realistic understanding of the constraints of both Federal and local funding. The interpretation that the State should work to maximize the amount of local funding could undermine the State’s ability to secure a significant amount of Federal funding. Maximizing the amount of Federal funding may require that the State to provide local agencies with favorable cost sharing and crediting provisions under State funding programs.

Recommendation 2: In the rural agricultural areas within the Region, where the economic profile is predominately characterized by its rural and agricultural setting and the capacity to fund additional flood risk projects is constrained, in some cases, the most economical and financially feasible way to manage the flood risk may not be to construct additional improvements. Where a specific set of improvements primarily benefits an agricultural land use and a supporting community; local, State and Federal interests may conclude that the benefits of structural improvements do not outweigh the costs. To resolve this issue, and to ensure that an appropriate level of flood risk is achieved in concert with the financial capability of the area, the State should support the Region’s efforts for flood insurance reform ensuring that the agricultural use of the area is sustainable and allowing for the existing vibrant agricultural economy to thrive.

Recommendation 3: The State should consider providing funding to evaluate and implement new local funding mechanisms to generate the local cost share of projects consistent with the SSIA. The State has made it a clear priority to maximize the value of its investment by leveraging non-State funding sources. Directly funding efforts to establish new funding sources at the local level is consistent with this priority. The upfront costs associated with evaluating new projects, developing financing plans and implementing new funding mechanisms (within the current legal framework) presents a significant hurdle to many local entities. As the State is currently developing new programs which will provide funding for Feasibility studies, as a component of this effort, funding for financing plan implementation should also be included.

Recommendation 4: The State should continue to explore regional, basin or valley-wide funding districts that ensure that all beneficiaries of the flood management infrastructure pay. Any such funding district should recognize the nexus of the flood management system to other essential public services such as safety, water supply and quality, recreation, and environmental protection. The current approach governed by Proposition 218 makes it too onerous to implement such a district at the local level. As a result, the current approach, which links the properties that receive special benefit to those within a district that will pay for the cost of the work performed, ignores the interconnectedness of the flood management system. A valley wide or regional assessment

would need to be imposed not only on lands within a defined floodplain but also (i) on lands that drain into that floodplain, (ii) lands that would be in the 100-year floodplain absent flood management works, and (iii) potentially on lands that benefit from the lack of disruption that flood management seeks to offer.

Recommendation 5: In the context of NFIP reform and rising flood insurance rates, the State could explore alternative flood or hazard insurance programs that could satisfy both Federal lending requirements as well as provide structural mitigation to reduce risk. Various proposals have been discussed and questions arise whether such a program at a State level, absent heavy subsidy, could result in lower overall costs and more manageable constraints. However, one key aspect to a supportable and more sustainable program would be to ensure those required to purchase insurance represent all those properties that could potentially bear a cost as a result of a flood loss. This would include all those beneficiaries as discussed above.

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Attachment 1
LWA Technical Memorandum re:
Local Funding Capacity Analysis

Revised Technical Memorandum

Lower San Joaquin / Delta South Regional Flood Management Plan: Financial Plan

Funding Capacity Analysis

September 9, 2014

Prepared for: Peterson Brustad, Inc.

Prepared by: Seth Wurzel

This memorandum has been prepared by Larsen Wurzel & Associates, Inc. (LWA) at the request of Peterson Brustad, Inc. (PBI) in support of the preparation of the Lower San Joaquin / Delta South Region Flood Management Plan (RFMP) Financial Plan. Included within the scope of preparation of the Financial Plan is an assessment of the relative capacity of the Regions to generate additional funds for the identified flood control projects within the RFMP.

Discussion

Two approaches were developed in order to bracket the range of relative funding capacity of identified sub-zones within the Regions, a low and a high end approach. Because of constraints of Proposition 218 and other property / land based funding mechanisms that tie the proportionality of the funding generated from the property benefit and further that typically benefit is a function of the use of the land, LWA analyzed the land uses in each of the Region's benefit zones. Each of the funding capacity approaches is rooted in the relative land use make-up of the sub-zones within the region. The sub-zones are shown in the attached **Figure 1** prepared by PBI. The land use inventory, determined on an acreage basis, for each zone was developed by reviewing the assessor's use codes for each parcel in each zone and categorizing the use codes into the following land use categories;

- Residential,
- Industrial,
- Rural/Agricultural,
- Utilities/Transportation,
- Commercial, and
- Government.

A summary of the assessor use codes found within the Region and their summarized categorization by LWA can be found within **Appendix A**. **Appendix B** provides the inventory of acreage and the number of parcels for within each Zone of the Region (Table XX-a for each zone in **Appendix B**).

Capacity by Land Use Type

There are many approaches that can be developed to determine the ability of a property to pay for public infrastructure and services. One traditional and more academic approach would be an affordability or feasibility type analysis whereby the job base and incomes of a community are analyzed, the cost of housing and infrastructure development and services are reviewed and the resulting taxing capacity of the property is analyzed. However, given the requirements of Proposition 218 and the voting requirements imposed by it, an approach that considers the ability of passage of a new assessment which is more constraining is warranted in order to judge the capacity of the RD to generate new funding.

To address Proposition 218's proportionality requirements within this capacity analysis, LWA researched 13 different assessment district engineer's reports for new flood control assessment districts that have been approved with the last 10 years. While there are differing methodologies between these assessments, by computing the typical assessment for each of the land use categories and comparing these assessments, attributes of the differing methodologies are considered when analyzing the proportionately of the relative assessments between the land uses. **Table 1** below shows the relative proportionality of benefit between each land use type by comparing an average flood control assessment per acre of Residential to the average flood control assessment per acre of all land use types. The relative equivalency factors are shown in the table below.

Table 1
Typical Flood Control Property Benefit Assessment

Regional Flood Management Plan
Financial Strategy: Funding Assessment

Land Use Category	Unit	Typical Annual Rate	Units for Analysis	Assumption	Per Acre Rate	Equivalency Factor
Residential	Per Unit	\$119.33	Units/Acre	4	\$477.33	1.00
Industrial	Per 1,000 SF	\$77.26	FAR	0.2	\$673.07	1.41
Rural/Agricultural	Per Acre	\$12.53	Per Acre	1	\$12.53	0.03
Utilities/Transportation	N/A	\$0.00	N/A	0	\$0.00	0.00
Commercial	Per 1,000 SF	\$91.69	FAR	0.25	\$998.52	2.09
Government	Per 1,000 SF	\$76.06	FAR	0.2	\$662.60	1.39

[1] Includes both typical Single Family units (assumed to be 1,500 SF on 1/4 Acre of Land flooded to 5').

[2] An FAR of .25 is assumed for typical Industrial land, assumption assumes flooding to 5'.

[3] An FAR of .4 is assumed for typical Commercial & Governmental land, assumption assumes flooding to 5'.

Source: SAFA, SJAFA, SBFA, RD 10, RD 17, RD 2042, RD 2103, RD 1001, WSAFA, TRLIA, KLRDD & MLC.

LWA then applied the equivalency factors to determine the relative amount of benefit acres in each zone. LWA then determined the relative percentage of benefit acres by each land use type in each zone (as shown in Table XX-b for each benefit zone in **Appendix B**).

The following briefly describes the low and high end approach for bracketing the range of funding capacity.

Low End Capacity – Relative Existing Assessment Base

The Low End Capacity is assumed to be equivalent to the average funding generated on a per acre basis by the RD's within the region that currently generate property based revenues for flood control services (capital and O&M). The assumption is that all land within the region can generate at least a relatively proportionate amount of funding (adjusted for their relative economic character based on the incomes in each benefit zone area) based upon the current funding generated by all other RD's in the region. Ultimately, it was determined that the RD's that currently do provide funding provide the following amount of funding on a per acre basis (allocated to each land-use based upon the same factors noted above).

Land Use Type	Average Assessment / Acre for Region
Residential	\$150
Industrial	\$154
Rural/Agricultural	\$15
Utilities/Transportation	\$298
Commercial	\$173
Government	\$205

For each RD in the region, this funding capacity per acre was adjusted for the relative economic characteristic of the benefits based on the benefit zone's Median Household Income as compared to the weighted average Median House Hold Income of those benefit zones in the region that currently generate property based revenues (which is \$43,342). The resulting adjusted assessment per acre was multiplied by the amount of acreage for each land use type in the region to determine the low end funding capacity for the benefit zone. This analysis is shown in Table XX-c for each benefit zone in **Appendix B**.

High End Capacity – New AD Approach

The High End Capacity is assumed to be equivalent to the average funding generated on a per acre basis by several recently approved assessment throughout the central valley for purely flood control improvement purposes. The assumption is that the land within the region could generate up to this amount if an effectively scoped and budgeted Proposition 218 balloting process was put before the property owners to generate new capacity for needed flood control improvements. The average assessments per acre in this case were adjusted for their relative economic character based on the median household income in each benefit zone area as compared to the median household income in the central valley. The average assessment per acre for each land use type for high end analysis is shown below.

Land Use Type	Average Assessment / Acre for Central Valley
Residential	\$477
Industrial	\$673
Rural/Agricultural	\$13
Utilities/Transportation	\$0
Commercial	\$998
Government	\$662

For each RD in the region, this funding capacity per acre was adjusted for the relative economic characteristic of the benefits based on the benefit zone's Median Household Income as compared to the Median House Hold Income for the entire central valley (which is \$45,170). The resulting adjusted assessment per acre was multiplied by the amount of acreage for each land use type in the region to determine the high end funding capacity for the benefit zone. This analysis is shown in Table XX-c for each benefit zone in **Appendix B**.

Summary Results of Capacity Analysis

Table S-1 summarizes the result of the capacity analysis and shows the current budget generated by the RD's within each Benefit Zone as well as the results of the Low and High End analysis for comparison purposes. The next step of the Financial Planning effort will summarize the costs for the identified improvements within the RFMP and compare this to the relative capacity to generate funding based upon the approach described above.

FIGURE 1

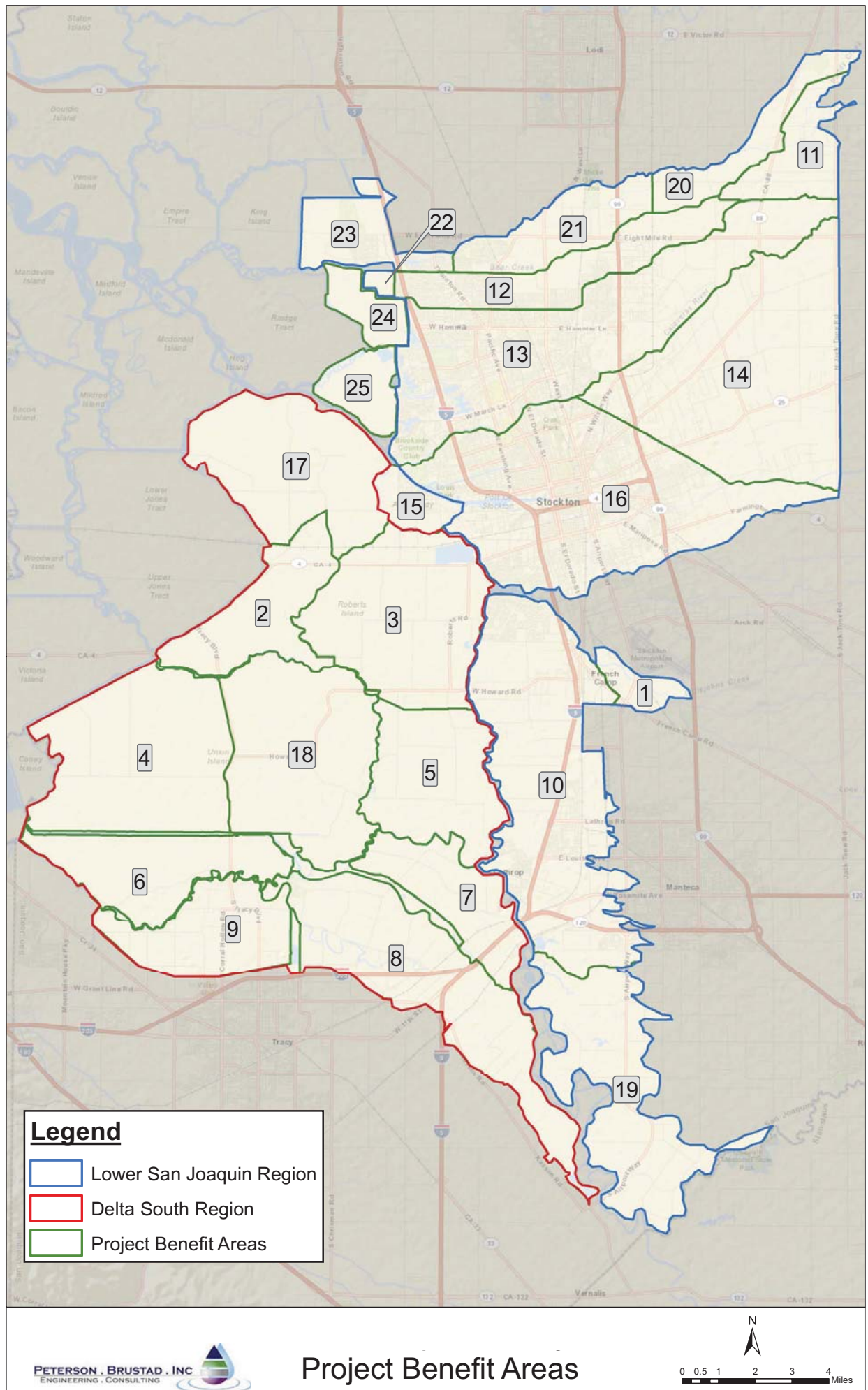


Table S-1
Summary of Capacity Analysis
Lower San Joaquin/Delta South RFMP

Regional Flood Management Plan
Financial Plan: Funding

Benefit Area	RDs in Benefit Area Analysis	Current Budget [1]	Capacity	
			LOW	HIGH
Lower San Joaquin Region				
1	N/A	\$0	\$79,063	\$168,573
10	17	\$3,000,000	\$2,210,561	\$5,035,076
11	N/A	\$0	\$104,966	\$111,618
12	N/A	\$0	\$633,672	\$1,686,312
13	1608, 2074	\$907,500	\$1,888,399	\$5,902,595
14	N/A	\$0	\$557,392	\$1,000,719
15	403	\$40,300	\$216,139	\$647,244
16	404, 828, 1614	\$2,552,700	\$1,802,928	\$5,588,476
20	N/A	\$0	\$139,185	\$323,977
21	None	\$0	\$419,475	\$954,355
22	2126	\$75,000	\$13,762	\$10,861
23	2042	\$1,260,000	\$425,568	\$1,032,513
24	2115	\$32,200	\$43,995	\$34,720
25	2119	\$461,000	\$108,194	\$164,543
19A	2064	\$0	\$143,435	\$206,562
19B	2075	\$60,000	\$107,266	\$78,460
19C	2094	\$0	\$54,349	\$43,032
19D	2096	\$22,000	\$19,822	\$90,366
Sub-Total LSJ Region		\$8,410,700	\$8,968,173	\$23,080,003
Delta South Region				
2	Drexler, 2116	\$0	\$245,223	\$205,016
3	524	\$40,000	\$481,797	\$676,252
4	2	\$93,500	\$213,122	\$174,460
5	544	\$100,000	\$190,000	\$151,189
6	773	\$115,500	\$132,551	\$112,564
7	2062, 2107	\$199,000	\$133,600	\$172,499
8	2058, 2085, 2095	\$336,950	\$381,808	\$733,321
9	1007	\$26,000	\$213,212	\$314,471
17	684	\$460,000	\$248,290	\$251,633
18	1, 2089	\$129,000	\$347,893	\$384,150
Sub-Total DS Region		\$1,499,950	\$2,587,495	\$3,175,554

Legend

	Current Budget below Low Capacity estimate
	Current Budget between High and Low Capacity estimate
	Current Budget above High Capacity estimate

[1] Current Budgeted Revenue number shown is based on information provided directly by the RD's or found within the State Controller's (SCO) Special District's 2012 Annual Report - Table 10. Table 10 of the SCO report shows General and Special Revenue Fund information by Activity. This information is taken from Activity classification "Land Reclamation and Levee Maintenance."

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix A

Assessor's Land Use Codes & Summarized Land Use Categories

Appendix A

Table A-1

Assessor's Land Use Codes and Summarized Land Use Categories
Lower San Joaquin/Delta South RFMP

Saqa Joaquin County Use Code	Summarized Land Use for RFMP Analysis	San Joaquin County Use Code Category	Assessor's Land Use Code Description
0	Residential	Residential	USE CODE NOT ASSIGNED
1	Residential	Residential	VAC RES LOT - DEV W/UTIL. VAC LOT W/PROB. W/C PRECLUDES BLDG A RE
2	Residential	Residential	VAC LOT - TOTALLY UNUS. (INCURABLE)
3	Residential	Residential	(GARAGE,
4	Residential	Residential	VAC RES SUBDIVISION SITE
5	Rural/Agricultural	Residential	VAC RES LOT-UNDEV
6	Rural/Agricultural	Residential	POTENTIAL RESIDENTIAL SUBDIVISION
7	Rural/Agricultural	Residential	SINGLE FAMILY DWELLING(SFD)
10	Residential	Residential	CONDOMINIUM UNIT
11	Residential	Residential	PLANNED UNIT RESIDENTIAL DEV. (PURD)
12	Residential	Residential	SINGLE FAMILY RESIDENCE W/ SECONDARY RES SQ FT
13	Residential	Residential	
14	Residential	Residential	SFD W/SECONDARY USE (I.E. BARBER SHOP,
15	Residential	Residential	ZERO LOT LINE RES
16	Residential	Residential	RES LOT W/MOBILEHOME SINGLE FAMILY with COMMON WALL
17	Residential	Residential	(DUET, HALF-PLEX, etc)
20	Residential	Residential	VAC LOT (ZONED FOR TWO UNITS)
21	Residential	Residential	ONE DUPLEX - ONE BLDG
22	Residential	Residential	TWO SFDS ON SINGLE PARCEL
30	Residential	Residential	VACANT LOT ZONED FOR 3 OR 4 UNITS
31	Residential	Residential	SINGLE TRIPLEX -(3 UNITS, 1 STRUC.)
32	Residential	Residential	THREE UNITS - 2 OR MORE STRUCTURES
34	Residential	Residential	SINGLE FOURPLEX
35	Residential	Residential	FOUR UNITS, 2 OR MORE STRUCTURES
40	Residential	Residential	VACANT LOTS ZONED FOR APARTMENTS
41	Residential	Residential	5-10 RES. UNITS - SINGLE BLDG
42	Residential	Residential	5-10 RES. UNITS - 2 OR MORE BLDGS.
43	Residential	Residential	11-20 RES. UNITS - ONE STRUCTURE
44	Residential	Residential	11-20 RES. UNITS - 2 OR MORE BLDGS.
45	Residential	Residential	21-40 UNITS
46	Residential	Residential	41-100 UNITS
47	Residential	Residential	OVER 100 UNITS
48	Residential	Residential	HIGH RISE APARTMENTS
50	Rural/Agricultural	Agricultural	RURAL RESIDENTIAL - VACANT HOMESITE
51	Rural/Agricultural	Agricultural	RURAL RESIDENCE - 1 RES.
52	Rural/Agricultural	Agricultural	RURAL RESIDENTIAL - 2 OR MORE RES.

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Table A-1

Assessor's Land Use Codes and Summarized Land Use Categories
Lower San Joaquin/Delta South RFMP

Saqn Joaquin County Use Code	Summarized Land Use for RFMP Analysis	San Joaquin County Use Code Category	Assessor's Land Use Code Description
53	Rural/Agricultural	Agricultural	RURAL RESIDENTIAL - VACANT - DEV. WITH
54	Rural/Agricultural	Agricultural	RURAL RES. - WITH MISC. RES. IMPS; ONLY
55	Rural/Agricultural	Agricultural	LABOR CAMP
56	Rural/Agricultural	Agricultural	RURAL RESIDENTIAL W/MOBILHOME
59	Residential	Residential	RESIDENTIAL CARE HOME (6 UNITS OR LESS)
60	Commercial	Commercial	MOTELS LESS THAN 50 UNITS
61	Commercial	Commercial	MOTELS OVER 50 UNITS
62	Commercial	Commercial	MOTELS LESS THAN 50 UNITS W/SOME KIT.
63	Commercial	Commercial	MOTELS OVER 50 UNITS W/SOME KITCHENS
64	Commercial	Commercial	MOTELS LESS THAN 50 UNITS W/SHOPS
65	Commercial	Commercial	MOTELS OVER 50 UNITS W/SHOPS
70	Commercial	Commercial	HOTEL W/O RESTAURANT
71	Commercial	Commercial	HOTEL W/RESTAURANT
78	Commercial	Commercial	ROOMING HOUSE - CONVENT - RECTORY ETC.
80	Residential	Residential	COMMON AREAS - NO STRUCTURES
81	Residential	Residential	COMMON AREAS - W/STRUCTURES
82	Residential	Residential	COMMON AREAS - ROADS & STREETS
90	Residential	Residential	MOBILE HOME PARK
91	Commercial	Commercial	OVERNIGHT TYPE TRAILER PARK
92	Residential	Residential	MOBILE HOME PARK W/OVERNIGHT FACILITIES
93	Commercial	Commercial	RESORT TYPE TRAILER PARK
94	Residential	Residential	MOBILE HOME CONDOMINIUM LOT
95	Residential	Residential	MOBILEHOME APPURTENANCES
96	Residential	Residential	MOBILE HOME
100	Commercial	Commercial	VACANT COMMERCIAL LAND - UNDEV.
101	Commercial	Commercial	VACANT COMMERCIAL LAND W/UTIL.
102	Commercial	Commercial	VACANT COMMERCIAL LAND W/MISC IMPS
107	Commercial	Commercial	POTENTIAL COMMERCIAL SUBDIVISION
110	Commercial	Commercial	SINGLE STORY
111	Commercial	Commercial	MULTIPLE STORY STORIES
112	Commercial	Commercial	MULTIPLE STORES IN ONE BUILDING
113	Commercial	Commercial	STORE WITH RES. UNIT OR UNITS
114	Commercial	Commercial	STORE CONDO

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Table A-1

Assessor's Land Use Codes and Summarized Land Use Categories
Lower San Joaquin/Delta South RFMP

Saqa Joaquin County Use Code	Summarized Land Use for RFMP Analysis	San Joaquin County Use Code Category	Assessor's Land Use Code Description
120	Commercial	Commercial	1 STORE & 1 OFFICE
121	Commercial	Commercial	MULTIPLE COMBINATION OF OFFICES, SHOPS,
130	Commercial	Commercial	1 STORY DEPARTMENT STORE
131	Commercial	Commercial	2 STORY DEPARTMENT STORE
140	Commercial	Commercial	GROCERY STORE
141	Commercial	Commercial	SUPERMARKETS
142	Commercial	Commercial	CONVENIENCE STORE
143	Commercial	Commercial	CONVENIENCE STORE WITH GAS SALES
144	Commercial	Commercial	FRUIT STAND
150	Commercial	Commercial	REGIONAL SHOPPING CENTER
151	Commercial	Commercial	COMMUNITY SHOPPING CENTER
152	Commercial	Commercial	NEIGHBORHOOD SHOPPING CENTER
153	Commercial	Commercial	INDIVIDUAL PARCEL WITHIN REGIONAL SHOPP
154	Commercial	Commercial	INDIVIDUAL PARCEL WITHIN COMMUNITY CEN
155	Commercial	Commercial	INDIVIDUAL PARCEL W/IN NEIGHBORHOOD SHO
156	Commercial	Commercial	SHOPPING CENTER COMMON AREA
170	Commercial	Commercial	1 STORY OFFICE BUILDING
171	Commercial	Commercial	2 STORY OFFICE BUILDING
172	Commercial	Commercial	3 OR MORE STORY OFFICE BLDG.
173	Commercial	Commercial	OFFICE BLDG W/RES UNIT OR UNITS
180	Commercial	Commercial	ASSISTED LIVING RESIDENCE
181	Commercial	Commercial	CONGREGATE SENIORS HOUSING
183	Commercial	Commercial	SKILLED NURSING FACILITY
184	Commercial	Commercial	SPECIALTY HOME (DEVELOPMENTALLY DISABLE)
190	Commercial	Commercial	MEDICAL OFFICES
191	Commercial	Commercial	DENTAL OFFICES
192	Commercial	Commercial	MEDICAL DENTAL COMPLEX
193	Commercial	Commercial	VETERINARY HOSPITALS
194	Commercial	Commercial	ONE STORY OFFICE CONDO.
195	Commercial	Commercial	TWO STORY OFFICE CONDO.
196	Commercial	Commercial	MEDICAL OFFICE CONDO.
197	Commercial	Commercial	DENTAL OFFICE CONDO.
200	Commercial	Commercial	COMMERCIAL COMMON AREA - NON SHOPPING C
201	Commercial	Commercial	MISC. MULTIPLE USES - NONE FULLY DOMINA

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Table A-1

Assessor's Land Use Codes and Summarized Land Use Categories
Lower San Joaquin/Delta South RFMP

Saqn Joaquin County Use Code	Summarized Land Use for RFMP Analysis	San Joaquin County Use Code Category	Assessor's Land Use Code Description
			COMMERCIAL USE(DOES'NT REASONABLY FIT A
202	Commercial	Commercial	
203	Commercial	Commercial	ANIMAL TRAINING FACILITY
204	Commercial	Commercial	DAY CARE CENTER
210	Commercial	Commercial	RESTAURANTS
211	Commercial	Commercial	FAST FOOD RESTAURANTS
212	Commercial	Commercial	FOOD PREPARATION - TAKE OUT ONLY
213	Commercial	Commercial	COCKTAIL LOUNGE - BARS
214	Commercial	Commercial	RESTAURANT W/RES UNIT OR UNITS
230	Commercial	Commercial	WALK-IN THEATERS
231	Commercial	Commercial	MULTIPLE SCREEN THEATERS
240	Commercial	Commercial	BANKS
250	Commercial	Commercial	FULL SERVICE STATIONS
251	Commercial	Commercial	SELF SERV. STATION(HAS NO FACILITIES FO
252	Commercial	Commercial	SERVICE STATION W/CAR WASH
253	Commercial	Commercial	TRUCK TERMINALS
254	Commercial	Commercial	BULK PLANTS
255	Commercial	Commercial	SELF SERVICE STATION W/MINI MART
			CONVENIENCE STORE (MINI-MART) W/ GAS
256	Commercial	Commercial	SA
260	Commercial	Commercial	AUTO SALES W/SERVICE CENTER
261	Commercial	Commercial	AUTO SALES W/O SERVICE CENTER
262	Commercial	Commercial	USED CAR LOT
			OTHER SALES CENTERS (TRAILERS, MOBILE
263	Commercial	Commercial	H
270	Commercial	Commercial	FARM OR CONTS. MACH. SALES & SERVICE
271	Commercial	Commercial	FARM OR CONTS. MACH. SALES ONLY
272	Commercial	Commercial	FARM OR CONST. MACH. SERVICE ONLY
280	Commercial	Commercial	AUTO & TRUCK REPAIRS & ACCESSORIES
281	Commercial	Commercial	SPECIALTY SHOPS (TIRES, BRAKES, ETC.)
282	Commercial	Commercial	CAR WASH
283	Commercial	Commercial	SELF SERVICE CAR WASH
284	Commercial	Commercial	LAUNDRY
285	Commercial	Commercial	AUTO BODY SHOP
290	Commercial	Commercial	RETAIL NURSERY
291	Commercial	Commercial	COMMERCIAL/WHOLESALE NURSERY
300	Rural/Agricultural	Commercial	VACANT INDUSTRIAL LAND UNDEVELOPED

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Table A-1

Assessor's Land Use Codes and Summarized Land Use Categories
Lower San Joaquin/Delta South RFMP

Saqa Joaquin County Use Code	Summarized Land Use for RFMP Analysis	San Joaquin County Use Code Category	Assessor's Land Use Code Description
			VACANT INDUSTRIAL LAND - DEVELOPED
301	Rural/Agricultural	Commercial	WITH
302	Rural/Agricultural	Commercial	VACANT INDUSTRIAL LAND W/MISC IMPS
307	Rural/Agricultural	Commercial	POTENTIAL INDUSTRIAL SUBDIVISION
310	Industrial	Commercial	LIGHT MFG. & LIGHT INDUSTRIAL
311	Industrial	Commercial	LIGHT INDUSTRIAL & WAREHOUSING
			LIGHT INDUSTRIAL WHSE MULTIPLE
312	Industrial	Commercial	TENNANTS
313	Industrial	Commercial	INDUSTRIAL CONDO
314	Industrial	Commercial	SHOP-WORK AREA W/SMALL OFFICE
320	Industrial	Commercial	WAREHOUSING - ACTIVE
321	Industrial	Commercial	WAREHOUSING - INACTIVE
323	Industrial	Commercial	WAREHOUSING - YARD
324	Industrial	Commercial	MINI STORAGE WAREHOUSING
330	Industrial	Commercial	LUMBER MILLS
331	Industrial	Commercial	RETAIL LUMBER YARDS
			SPECIALTY LUMBER
332	Industrial	Commercial	PRODUCTS(MOULDTINGS, SA
340	Industrial	Commercial	PACKING PLANTS
341	Industrial	Commercial	COLD STORAGE OR REFRIGERATED WHSE
350	Industrial	Commercial	FRUIT & VEGETABLE
351	Industrial	Commercial	MEAT PRODUCTS
352	Industrial	Commercial	LARGE WINERY
353	Rural/Agricultural	Agricultural	SMALL/BOUTIQUE WINERY
355	Industrial	Commercial	OTHER FOOD PROCESSING
360	Industrial	Commercial	FEED & GRAIN MILLS
361	Industrial	Commercial	RETAIL FEED & GRAIN SALES
362	Industrial	Commercial	STOCKYARDS
363	Industrial	Commercial	AG CHEMICAL SALES AND/OR APPLICATION
370	Industrial	Commercial	HEAVY INDUSTRY
371	Industrial	Commercial	SHIPYARD
380	Industrial	Commercial	MINERAL PROCESSING
381	Rural/Agricultural	Agricultural	SAND & GRAVEL - SHALE
390	Industrial	Commercial	INDUSTRIAL COMMON AREA
			MISC. INDUSTRIAL MULT. USES - NONE
391	Industrial	Commercial	FULL
392	Industrial	Commercial	INDUST. USE(DOES'NT REASONABLY FIT ANY
400	Rural/Agricultural	Agricultural	IRRIGATED ORCHARD
401	Rural/Agricultural	Agricultural	IRRIGATED ORCHARD W/RESIDENCE

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Table A-1

Assessor's Land Use Codes and Summarized Land Use Categories
Lower San Joaquin/Delta South RFMP

Saqa Joaquin County Use Code	Summarized Land Use for RFMP Analysis	San Joaquin County Use Code Category	Assessor's Land Use Code Description
420	Rural/Agricultural	Agricultural	IRRIGATED VINEYARD
421	Rural/Agricultural	Agricultural	IRRIGATED VINEYARD W/RESIDENCE
450	Rural/Agricultural	Agricultural	IRRIGATED ROW CROPS
451	Rural/Agricultural	Agricultural	IRRIGATED ROW CROPS W/RESIDENCE
460	Rural/Agricultural	Agricultural	IRRIGATED PASTURE
461	Rural/Agricultural	Agricultural	IRRIGATED PASTURE W/RESIDENCE
462	Rural/Agricultural	Agricultural	HORSE RANCH
463	Rural/Agricultural	Agricultural	HORSE RANCH W/RESIDENCE
470	Rural/Agricultural	Agricultural	DAIRY
471	Rural/Agricultural	Agricultural	DAIRY W/RESIDENCE
480	Rural/Agricultural	Agricultural	POULTRY RANCH
481	Rural/Agricultural	Agricultural	POULTRY RANCH W/RESIDENCE
490	Rural/Agricultural	Agricultural	FEED LOTS
500	Rural/Agricultural	Agricultural	DRY FARM
501	Rural/Agricultural	Agricultural	DRY FARM W/RESIDENCE
510	Rural/Agricultural	Agricultural	DRY GRAZE
511	Rural/Agricultural	Agricultural	DRY GRAZE W/RESIDENCE
520	Rural/Agricultural	Agricultural	NON-IRRIGATED VINEYARDS
521	Rural/Agricultural	Agricultural	NON-IRRIGATED VINEYARDS W/RESIDENCE
550	Rural/Agricultural	Agricultural	TREE FARM
590	Rural/Agricultural	Agricultural	WASTE LANDS
591	Rural/Agricultural	Agricultural	BERMS
610	Commercial	Commercial	SWIM CENTERS
611	Commercial	Commercial	RECREATIONAL CENTERS
612	Commercial	Commercial	MARINA OR YACHTING CLUB
613	Commercial	Commercial	RAQUETBALL CLUB
615	Commercial	Commercial	PRIVATE CAMPGROUND OR RESORT
620	Commercial	Commercial	PRIVATELY OWNED DANCE HALLS
630	Commercial	Commercial	BOWLING ALLEYS
631	Commercial	Commercial	ARCADES & AMUSEMENT CENTERS
640	Commercial	Commercial	CLUBS, LODGE HALLS
650	Commercial	Commercial	PRIVATELY OWNED AUDITORIUMS & STADIUMS
660	Rural/Agricultural	Commercial	18 HOLE PUBLIC GOLF COURSE
661	Rural/Agricultural	Commercial	9 HOLE PUBLIC GOLF COURSE
662	Commercial	Commercial	COUNTRY CLUB
670	Commercial	Commercial	PRIVATELY OWNED RACE TRACKS
690	Rural/Agricultural	Commercial	PRIVATELY OWNED PARKS
710	Commercial	Commercial	CHURCH, SYNAGOGUE OR TEMPLE

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Table A-1

Assessor's Land Use Codes and Summarized Land Use Categories
Lower San Joaquin/Delta South RFMP

Saqa Joaquin County Use Code	Summarized Land Use for RFMP Analysis	San Joaquin County Use Code Category	Assessor's Land Use Code Description
711	Commercial	Commercial	OTHER CHURCH PROPERTY
720	Government	Commercial	PRIVATE SCHOOL
721	Government	Commercial	PAROCHIAL SCHOOL
722	Government	Commercial	SPECIAL SCHOOL
730	Government	Commercial	PRIVATE COLLEGES
740	Government	Commercial	FULL SERVICE HOSPITAL
742	Government	Commercial	CLINIC
760	Government	Commercial	ORPHANAGES
770	Rural/Agricultural	Commercial	CEMETERIES (NON-PROFIT)
771	Commercial	Commercial	MORTUARIES & FUNERAL HOMES
772	Rural/Agricultural	Commercial	CEMETARY TAXABLE (PROFIT)
810	Utilities/Transp	Commercial	SBE VALUED
811	Utilities/Transp	Commercial	UTILITY WATER COMPANY
812	Utilities/Transp	Commercial	MUTUAL WATER COMPANY
813	Utilities/Transp	Commercial	CABLE T.V.
814	Utilities/Transp	Commercial	RADIO & TV BROADCAST SITE
815	Utilities/Transp	Commercial	PIPELINE RIGHT-OF-WAY
850	Utilities/Transp	Commercial	RIGHT-OF-WAY
851	Utilities/Transp	Commercial	PRIVATE ROAD
860	Government	Commercial	WELL SITE
861	Government	Commercial	TANK SITE
862	Rural/Agricultural	Commercial	SPRINGS & OTHER WATER SOURCES
870	Rural/Agricultural	Commercial	RIVERS & LAKES
890	Industrial	Commercial	PARKING LOTS - FEE
891	Industrial	Commercial	PARKING LOTS - NO FEE
900	Utilities/Transp	Commercial	VACANT FEDERAL LANDS
901	Utilities/Transp	Commercial	FEDERAL BUILDINGS
902	Utilities/Transp	Commercial	MILITARY INSTALLATION
903	Utilities/Transp	Commercial	MISC FEDERAL PROPERTY
910	Rural/Agricultural	Commercial	VACANT STATE LANDS
911	Government	Commercial	STATE BUILDINGS
914	Government	Commercial	STATE SCHOOLS, COLLEGES
916	Rural/Agricultural	Commercial	MISC STATE PROPERTY
920	Rural/Agricultural	Commercial	VACANT COUNTY LAND
921	Government	Commercial	COUNTY BUILDINGS
923	Rural/Agricultural	Commercial	COUNTY PARKS & OTHER REC FACILITIES
924	Government	Commercial	COUNTY HOSPITALS
925	Rural/Agricultural	Commercial	MISC COUNTY PROPERTY
930	Rural/Agricultural	Commercial	VACANT CITY LANDS
931	Government	Commercial	CITY BUILDINGS

Appendix A**Table A-1****Assessor's Land Use Codes and Summarized Land Use Categories
Lower San Joaquin/Delta South RFMP**

San Joaquin County Use Code	Summarized Land Use for RFMP Analysis	San Joaquin County Use Code Category	Assessor's Land Use Code Description
932	Government	Commercial	CITY SHOPS & YARD
933	Government	Commercial	CITY PARKS & OTHER REC. FACILITIES
934	Utilities/Transp	Commercial	MUNI. UTILITY PROP.(RESERVOIRS,SEWER PL
935	Industrial	Commercial	PARKING LOTS - GARAGES
937	Government	Commercial	MISC CITY PROPERTY
940	Government	Commercial	SCHOOL DISTRICT PROPERTIES
941	Government	Commercial	FIRE DISTRICTS
942	Rural/Agricultural	Agricultural	FLOOD CONTROL DISTRICT PROPERTY
943	Rural/Agricultural	Agricultural	WATER DISTRICT PROPERTY
944	Rural/Agricultural	Agricultural	MISC. DISTRICT PROPERTY
950	Rural/Agricultural	Agricultural	PUBLIC OWNED LAND - NON-TAXABLE
951	Rural/Agricultural	Commercial	PUBLIC OWNED LAND - TAXABLE [Section 11]

Source: SJ County Assessor / CD DATA, LWA

Appendix B

Land Use & Parcel Count by Zone

Appendix B
Table 1-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 1

RD's: N/A

Land Use Type	Acres	Parcel Count
Residential	34	13
Industrial	165	14
Rural/Agricultural	1,848	57
Utilities/Transportation	45	0
Commercial	15	2
Government	0	17
Total	2,106	103

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 1-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 1

RD's: N/A

Land Use Type	Acres	Relative Assessment Factor	Proportionate Acreage	Proportionate Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	34	1.00	34	7%
Industrial	165	1.02	168	34%
Rural/Agricultural	1,848	0.10	185	37%
Utilities/Transportation	45	1.98	89	18%
Commercial	15	1.15	17	4%
Government	0	1.36	0	0%
Total	2,106		493	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 1-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 1

RD's: N/A

Land Use Type	Acres	<i>Low</i> <u>Regional Approach</u>			<i>High</i> <u>New AD Approach</u>		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 1-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	34	\$150	1.06	\$5,400	\$477	1.02	\$16,497
Industrial	165	\$154	1.06	\$26,842	\$673	1.02	\$112,961
Rural/Agricultural	1,848	\$15	1.06	\$29,822	\$13	1.02	\$23,618
Utilities/Transportation	45	\$298	1.06	\$14,210	\$0	1.02	\$0
Commercial	15	\$173	1.06	\$2,790	\$999	1.02	\$15,497
Government	0	\$205	1.06	\$0	\$663	1.02	\$0
Total	2,106			\$79,063			\$168,573

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 2-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit
Area
2

RD's: Drexler, 2116 (Holt Station)

Land Use Type	Acres	Parcel Count
Residential	4	3
Industrial	4	1
Rural/Agricultural	10,518	82
Utilities/Transportation	92	0
Commercial	33	5
Government	0	11
Total	10,651	102

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 2-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 2

RD's: Drexler, 2116 (Holt Station)		Relative	Proportionate	Proportionate
		Assessment		
Land Use Type	Acres	Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x b</i>	<i>d=c/total</i>
Residential	4	1.00	4	0%
Industrial	4	1.02	4	0%
Rural/Agricultural	10,518	0.10	1,052	82%
Utilities/Transportation	92	1.98	183	14%
Commercial	33	1.15	38	3%
Government	0	1.36	0	0%
Total	10,651		1,281	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 2-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 2

RD's: Drexler, 2116 (Holt Station)

Land Use Type	Acres	<i>Low</i> <u>Regional Approach</u>			<i>High</i> <u>New AD Approach</u>		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 2-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	4	\$150	1.26	\$672	\$477	1.21	\$2,050
Industrial	4	\$154	1.26	\$776	\$673	1.21	\$3,258
Rural/Agricultural	10,518	\$15	1.26	\$201,785	\$13	1.21	\$159,483
Utilities/Transportation	92	\$298	1.26	\$34,735	\$0	1.21	\$0
Commercial	33	\$173	1.26	\$7,255	\$999	1.21	\$40,225
Government	0	\$205	1.26	\$0	\$663	1.21	\$0
Total	10,651			\$245,223			\$205,016

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 3-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 3

RD's: 524 (Middle Roberts Island)

Land Use Type	Acres	Parcel Count
Residential	10	5
Industrial	2	1
Rural/Agricultural	11,650	173
Utilities/Transportation	251	0
Commercial	2	1
Government	597	30
Total	12,511	210

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 3-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 3

RD's: 524 (Middle Roberts Island)		Relative	Proportionate	Proportionate
		Assessment		
Land Use Type	Acres	Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	10	1.00	10	0%
Industrial	2	1.02	2	0%
Rural/Agricultural	11,650	0.10	1,165	47%
Utilities/Transportation	251	1.98	496	20%
Commercial	2	1.15	3	0%
Government	597	1.36	811	33%
Total	12,511		2,487	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 3-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 3

RD's: 524 (Middle Roberts Island)

Land Use Type	Acres	<i>Low</i> <u>Regional Approach</u>			<i>High</i> <u>New AD Approach</u>		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD
<i>Source</i>	<i>Table 3-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	10	\$150	1.28	\$1,911	\$477	1.23	\$5,830
Industrial	2	\$154	1.28	\$373	\$673	1.23	\$1,570
Rural/Agricultural	11,650	\$15	1.28	\$227,051	\$13	1.23	\$179,568
Utilities/Transportation	251	\$298	1.28	\$95,720	\$0	1.23	\$0
Commercial	2	\$173	1.28	\$540	\$999	1.23	\$2,997
Government	597	\$205	1.28	\$156,202	\$663	1.23	\$486,288
Total	12,511			\$481,797			\$676,252

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 4-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 4

RD's: 2 (Union Island)

Land Use Type	Acres	Parcel Count
Residential	0	0
Industrial	10	1
Rural/Agricultural	12,979	23
Utilities/Transportation	0	0
Commercial	0	0
Government	0	2
Total	12,989	26

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 4-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 4

RD's: 2 (Union Island)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	0	1.00	0	0%
Industrial	10	1.02	10	1%
Rural/Agricultural	12,979	0.10	1,298	99%
Utilities/Transportation	0	1.98	0	0%
Commercial	0	1.15	0	0%
Government	0	1.36	0	0%
Total	12,989		1,308	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 4-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 4

RD's: 2 (Union Island)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 4-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	0	\$150	1.07	\$0	\$477	1.03	\$0
Industrial	10	\$154	1.07	\$1,647	\$673	1.03	\$6,933
Rural/Agricultural	12,979	\$15	1.07	\$211,457	\$13	1.03	\$167,527
Utilities/Transportation	0	\$298	1.07	\$18	\$0	1.03	\$0
Commercial	0	\$173	1.07	\$0	\$999	1.03	\$0
Government	0	\$205	1.07	\$0	\$663	1.03	\$0
Total	12,989			\$213,122			\$174,460

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 5-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 5

RD's: 544 (Upper Roberts Island)

Land Use Type	Acres	Parcel Count
Residential	2	2
Industrial	0	0
Rural/Agricultural	9,653	110
Utilities/Transportation	0	0
Commercial	0	0
Government	0	2
Total	9,655	114

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 5-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 5

RD's: 544 (Upper Roberts Island)		Relative	Proportionate	Proportionate
		Assessment	Acreage	Share
Land Use Type	Acres	Factor		
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	2	1.00	2	0%
Industrial	0	1.02	0	0%
Rural/Agricultural	9,653	0.10	965	100%
Utilities/Transportation	0	1.98	0	0%
Commercial	0	1.15	0	0%
Government	0	1.36	0	0%
Total	9,655		967	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 5-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 5

RD's: 544 (Upper Roberts Island)

Land Use Type	Acres	<i>Low</i> <u>Regional Approach</u>			<i>High</i> <u>New AD Approach</u>		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 5-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	2	\$150	1.29	\$388	\$477	1.24	\$1,184
Industrial	0	\$154	1.29	\$0	\$673	1.24	\$0
Rural/Agricultural	9,653	\$15	1.29	\$189,612	\$13	1.24	\$150,005
Utilities/Transportation	0	\$298	1.29	\$0	\$0	1.24	\$0
Commercial	0	\$173	1.29	\$0	\$999	1.24	\$0
Government	0	\$205	1.29	\$0	\$663	1.24	\$0
Total	9,655			\$190,000			\$151,189

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 6-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area
6

RD's: 773 (Fabian Tract)

Land Use Type	Acres	Parcel Count
Residential	0	0
Industrial	0	0
Rural/Agricultural	6,808	43
Utilities/Transportation	35	0
Commercial	19	5
Government	0	2
Total	6,862	50

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 6-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 6

RD's: 773 (Fabian Tract)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	0	1.00	0	0%
Industrial	0	1.02	0	0%
Rural/Agricultural	6,808	0.10	681	88%
Utilities/Transportation	35	1.98	69	9%
Commercial	19	1.15	22	3%
Government	0	1.36	0	0%
Total	6,862		771	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 6-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area
6

RD's: 773 (Fabian Tract)

Land Use Type	Acres	<i>Low</i> Regional Approach			<i>High</i> New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 6-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	0	\$150	1.13	\$0	\$477	1.08	\$0
Industrial	0	\$154	1.13	\$0	\$673	1.08	\$0
Rural/Agricultural	6,808	\$15	1.13	\$117,143	\$13	1.08	\$92,145
Utilities/Transportation	35	\$298	1.13	\$11,707	\$0	1.08	\$0
Commercial	19	\$173	1.13	\$3,700	\$999	1.08	\$20,418
Government	0	\$205	1.13	\$0	\$663	1.08	\$0
Total	6,862			\$132,551			\$112,564

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 7-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 7

RD's: 2062 (Stewart), 2107 (Mossdale Island)

Land Use Type	Acres	Parcel Count
Residential	3	1
Industrial	1	1
Rural/Agricultural	4,470	45
Utilities/Transportation	127	0
Commercial	113	5
Government	0	17
Total	4,714	69

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 7-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 7

RD's: 2062 (Stewart), 2107 (Mosssdale)		Relative		
		Assessment	Proportionate	Proportionate
Land Use Type	Acres	Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	3	1.00	3	0%
Industrial	1	1.02	1	0%
Rural/Agricultural	4,470	0.10	447	54%
Utilities/Transportation	127	1.98	251	30%
Commercial	113	1.15	130	16%
Government	0	1.36	0	0%
Total	4,714		832	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 7-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 7

RD's: 2062 (Stewart), 2107 (Mossdale Island)

Land Use Type	Acres	<i>Low</i> <u>Regional Approach</u>			<i>High</i> <u>New AD Approach</u>		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 7-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	3	\$150	1.06	\$535	\$477	1.01	\$1,620
Industrial	1	\$154	1.06	\$166	\$673	1.01	\$693
Rural/Agricultural	4,470	\$15	1.06	\$72,148	\$13	1.01	\$56,578
Utilities/Transportation	127	\$298	1.06	\$40,098	\$0	1.01	\$0
Commercial	113	\$173	1.06	\$20,652	\$999	1.01	\$113,608
Government	0	\$205	1.06	\$0	\$663	1.01	\$0
Total	4,714			\$133,600			\$172,499

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B**Table 8-a****Land Use & Parcel Count by Zone****Lower San Joaquin/Delta South RFMP****RD's: 2058 (Pescadero), 2085 (Kasson), 2095 (Paradise Cut)**

Benefit Area 8

Land Use Type	Acres	Parcel Count
Residential	72	220
Industrial	7	11
Rural/Agricultural	14,702	343
Utilities/Transportation	105	0
Commercial	470	8
Government	9	28
Total	15,366	610

*"a-landuse"**Source: PBI Parcel Inventory, SJ County Assessor / CD*

Appendix B
Table 8-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 8

RD's: 2058 (Pescadero), 2085 (Kasson)		Relative		
		Assessment	Proportionate	Proportionate
Land Use Type	Acres	Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	72	1.00	72	3%
Industrial	7	1.02	7	0%
Rural/Agricultural	14,702	0.10	1,470	64%
Utilities/Transportation	105	1.98	209	9%
Commercial	470	1.15	540	23%
Government	9	1.36	12	1%
Total	15,366		2,310	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 8-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 8

RD's: 2058 (Pescadero), 2085 (Kasson), 2095 (Paradise Cut)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 8-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	72	\$150	1.09	\$11,857	\$477	1.05	\$36,265
Industrial	7	\$154	1.09	\$1,207	\$673	1.05	\$5,087
Rural/Agricultural	14,702	\$15	1.09	\$244,014	\$13	1.05	\$193,458
Utilities/Transportation	105	\$298	1.09	\$34,252	\$0	1.05	\$0
Commercial	470	\$173	1.09	\$88,561	\$999	1.05	\$492,528
Government	9	\$205	1.09	\$1,917	\$663	1.05	\$5,983
Total	15,366			\$381,808			\$733,321

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 9-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit
Area
9

RD's: 1007 (Pico & Nagle)

Land Use Type	Acres	Parcel Count
Residential	95	45
Industrial	28	13
Rural/Agricultural	5,602	247
Utilities/Transportation	57	0
Commercial	48	17
Government	46	38
Total	5,875	360

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 9-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 9

RD's: 1007 (Pico & Nagle)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	95	1.00	95	10%
Industrial	28	1.02	28	3%
Rural/Agricultural	5,602	0.10	560	61%
Utilities/Transportation	57	1.98	113	12%
Commercial	48	1.15	56	6%
Government	46	1.36	62	7%
Total	5,875		913	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 9-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 9

RD's: 1007 (Pico & Nagle)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 9-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	95	\$150	1.54	\$21,959	\$477	1.48	\$67,001
Industrial	28	\$154	1.54	\$6,563	\$673	1.48	\$27,583
Rural/Agricultural	5,602	\$15	1.54	\$131,358	\$13	1.48	\$103,898
Utilities/Transportation	57	\$298	1.54	\$26,134	\$0	1.48	\$0
Commercial	48	\$173	1.54	\$12,856	\$999	1.48	\$71,332
Government	46	\$205	1.54	\$14,343	\$663	1.48	\$44,656
Total	5,875			\$213,212			\$314,471

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 10-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area
10

RD's: 17 (Mossdale)

Land Use Type	Acres	Parcel Count
Residential	2,330	12,596
Industrial	1,416	313
Rural/Agricultural	12,159	772
Utilities/Transportation	1,567	0
Commercial	823	271
Government	1,000	439
Total	19,296	14,391

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 10-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 10

RD's: 17 (Mossdale)		Relative	Proportionate	Proportionate
		Assessment	Acreage	Share
Land Use Type	Acres	Factor		
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	2,330	1.00	2,330	22%
Industrial	1,416	1.02	1,444	14%
Rural/Agricultural	12,159	0.10	1,216	12%
Utilities/Transportation	1,567	1.98	3,103	30%
Commercial	823	1.15	947	9%
Government	1,000	1.36	1,360	13%
Total	19,296		10,400	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 10-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 10

RD's: 17 (Mossdale)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 10-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	2,330	\$150	1.41	\$493,953	\$477	1.36	\$1,512,670
Industrial	1,416	\$154	1.41	\$307,236	\$673	1.36	\$1,296,038
Rural/Agricultural	12,159	\$15	1.41	\$261,046	\$13	1.36	\$207,228
Utilities/Transportation	1,567	\$298	1.41	\$659,145	\$0	1.36	\$0
Commercial	823	\$173	1.41	\$200,724	\$999	1.36	\$1,117,751
Government	1,000	\$205	1.41	\$288,457	\$663	1.36	\$901,389
Total	19,296			\$2,210,561			\$5,035,076

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 11-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 11

RD's: N/A

Land Use Type	Acres	Parcel Count
Residential	41	21
Industrial	2	1
Rural/Agricultural	5,055	309
Utilities/Transportation	26	0
Commercial	17	3
Government	6	19
Total	5,147	353

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 11-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 11

RD's: N/A

Land Use Type	Acres	Relative Assessment Factor	Proportionate Acreage	Proportionate Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	41	1.00	41	7%
Industrial	2	1.02	2	0%
Rural/Agricultural	5,055	0.10	506	80%
Utilities/Transportation	26	1.98	52	8%
Commercial	17	1.15	19	3%
Government	6	1.36	8	1%
Total	5,147		628	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 11-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 11

RD's: N/A

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 11-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	41	\$150	1.10	\$6,793	\$477	1.06	\$20,785
Industrial	2	\$154	1.10	\$367	\$673	1.06	\$1,548
Rural/Agricultural	5,055	\$15	1.10	\$84,671	\$13	1.06	\$67,151
Utilities/Transportation	26	\$298	1.10	\$8,564	\$0	1.06	\$0
Commercial	17	\$173	1.10	\$3,221	\$999	1.06	\$17,919
Government	6	\$205	1.10	\$1,350	\$663	1.06	\$4,214
Total	5,147			\$104,966			\$111,618

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 12-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area
12

RD's: N/A

Land Use Type	Acres	Parcel Count
Residential	2,120	10,104
Industrial	34	11
Rural/Agricultural	5,090	136
Utilities/Transportation	137	0
Commercial	211	96
Government	198	173
Total	7,791	10,520

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 12-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 12

RD's: N/A

Land Use Type	Acres	Relative Assessment Factor	Proportionate Acreage	Proportionate Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	2,120	1.00	2,120	61%
Industrial	34	1.02	35	1%
Rural/Agricultural	5,090	0.10	509	15%
Utilities/Transportation	137	1.98	271	8%
Commercial	211	1.15	243	7%
Government	198	1.36	270	8%
Total	7,791		3,447	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 12-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 12

RD's: N/A

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 12-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	2,120	\$150	1.22	\$388,835	\$477	1.17	\$1,183,942
Industrial	34	\$154	1.22	\$6,463	\$673	1.17	\$27,106
Rural/Agricultural	5,090	\$15	1.22	\$94,550	\$13	1.17	\$74,627
Utilities/Transportation	137	\$298	1.22	\$49,761	\$0	1.17	\$0
Commercial	211	\$173	1.22	\$44,607	\$999	1.17	\$246,975
Government	198	\$205	1.22	\$49,457	\$663	1.17	\$153,662
Total	7,791			\$633,672			\$1,686,312

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 13-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP
RD's: 1608 (Lincoln Village West), 2074 (Sargent-Barnhart Tract)

Benefit Area
13

Land Use Type	Acres	Parcel Count
Residential	6,998	31,024
Industrial	131	93
Rural/Agricultural	10,155	409
Utilities/Transportation	294	0
Commercial	1,656	1,351
Government	1,136	483
Total	20,370	33,360

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 13-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 13

RD's: 1608 (Lincoln Village West), 2074		Relative		
		Assessment	Proportionate	Proportionate
Land Use Type	Acres	Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	6,998	1.00	6,998	57%
Industrial	131	1.02	133	1%
Rural/Agricultural	10,155	0.10	1,015	8%
Utilities/Transportation	294	1.98	582	5%
Commercial	1,656	1.15	1,905	16%
Government	1,136	1.36	1,545	13%
Total	20,370		12,179	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 13-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 13

RD's: 1608 (Lincoln Village West), 2074 (Sargent-Barnhart Tract)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 13-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	6,998	\$150	1.03	\$1,083,623	\$477	0.99	\$3,306,856
Industrial	131	\$154	1.03	\$20,705	\$673	0.99	\$87,037
Rural/Agricultural	10,155	\$15	1.03	\$159,263	\$13	0.99	\$125,986
Utilities/Transportation	294	\$298	1.03	\$90,374	\$0	0.99	\$0
Commercial	1,656	\$173	1.03	\$295,056	\$999	0.99	\$1,637,306
Government	1,136	\$205	1.03	\$239,378	\$663	0.99	\$745,410
Total	20,370			\$1,888,399			\$5,902,595

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 14-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area
14

RD's: N/A

Land Use Type	Acres	Parcel Count
Residential	659	493
Industrial	409	148
Rural/Agricultural	19,699	1,813
Utilities/Transportation	266	0
Commercial	245	73
Government	46	99
Total	21,324	2,626

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 14-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 14

RD's: N/A

Land Use Type	Acres	Relative Assessment Factor	Proportionate Acreage	Proportionate Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	659	1.00	659	17%
Industrial	409	1.02	417	11%
Rural/Agricultural	19,699	0.10	1,970	50%
Utilities/Transportation	266	1.98	526	13%
Commercial	245	1.15	282	7%
Government	46	1.36	62	2%
Total	21,324		3,916	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 14-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 14

RD's: N/A

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 14-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	659	\$150	0.94	\$93,131	\$477	0.90	\$283,107
Industrial	409	\$154	0.94	\$59,209	\$673	0.90	\$247,930
Rural/Agricultural	19,699	\$15	0.94	\$281,952	\$13	0.90	\$222,177
Utilities/Transportation	266	\$298	0.94	\$74,485	\$0	0.90	\$0
Commercial	245	\$173	0.94	\$39,867	\$999	0.90	\$220,369
Government	46	\$205	0.94	\$8,748	\$663	0.90	\$27,136
Total	21,324			\$557,392			\$1,000,719

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 15-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area
15

RD's: 403 (Rough & Ready)

Land Use Type	Acres	Parcel Count
Residential	4	1
Industrial	9	4
Rural/Agricultural	1,639	11
Utilities/Transportation	2	0
Commercial	17	2
Government	908	11
Total	2,579	29

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 15-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 15

RD's: 403 (Rough & Ready)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	4	1.00	4	0%
Industrial	9	1.02	10	1%
Rural/Agricultural	1,639	0.10	164	11%
Utilities/Transportation	2	1.98	3	0%
Commercial	17	1.15	19	1%
Government	908	1.36	1,235	86%
Total	2,579		1,435	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 15-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 15

RD's: 403 (Rough & Ready)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 15-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	4	\$150	1.00	\$668	\$477	1.00	\$2,119
Industrial	9	\$154	1.00	\$1,434	\$673	1.00	\$6,273
Rural/Agricultural	1,639	\$15	1.00	\$24,960	\$13	1.00	\$20,542
Utilities/Transportation	2	\$298	1.00	\$475	\$0	1.00	\$0
Commercial	17	\$173	1.00	\$2,874	\$999	1.00	\$16,595
Government	908	\$205	1.00	\$185,728	\$663	1.00	\$601,714
Total	2,579			\$216,139			\$647,244

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 16-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP
RD's: 404 (Boggs), 828 (Weber Tract), 1614 (Smith Tract)

Benefit Area
16

Land Use Type	Acres	Parcel Count
Residential	6,442	35,659
Industrial	2,073	1,252
Rural/Agricultural	6,054	323
Utilities/Transportation	816	0
Commercial	1,542	2,442
Government	2,061	944
Total	18,988	40,620

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 16-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 16

RD's: 404 (Boggs), 828 (Weber Tract), : Relative

Land Use Type	Acres	Assessment Factor	Proportionate Acreage	Proportionate Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	6,442	1.00	6,442	42%
Industrial	2,073	1.02	2,114	14%
Rural/Agricultural	6,054	0.10	605	4%
Utilities/Transportation	816	1.98	1,616	11%
Commercial	1,542	1.15	1,773	12%
Government	2,061	1.36	2,803	18%
Total	18,988		15,354	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 16-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 16

RD's: 404 (Boggs), 828 (Weber Tract), 1614 (Smith Tract)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 16-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	6,442	\$150	0.78	\$755,479	\$477	0.75	\$2,306,366
Industrial	2,073	\$154	0.78	\$248,792	\$673	0.75	\$1,046,233
Rural/Agricultural	6,054	\$15	0.78	\$71,897	\$13	0.75	\$56,897
Utilities/Transportation	816	\$298	0.78	\$189,937	\$0	0.75	\$0
Commercial	1,542	\$173	0.78	\$207,992	\$999	0.75	\$1,154,622
Government	2,061	\$205	0.78	\$328,831	\$663	0.75	\$1,024,359
Total	18,988			\$1,802,928			\$5,588,476

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 17-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit
Area
17

RD's: 684 (Lower Roberts Island)

Land Use Type	Acres	Parcel Count
Residential	14	3
Industrial	8	1
Rural/Agricultural	11,122	115
Utilities/Transportation	122	0
Commercial	43	4
Government	75	23
Total	11,385	146

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 17-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 17

RD's: 684 (Lower Roberts Island)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	14	1.00	14	1%
Industrial	8	1.02	9	1%
Rural/Agricultural	11,122	0.10	1,112	73%
Utilities/Transportation	122	1.98	242	16%
Commercial	43	1.15	49	3%
Government	75	1.36	102	7%
Total	11,385		1,529	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 17-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 17

RD's: 684 (Lower Roberts Island)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 17-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	14	\$150	1.07	\$2,304	\$477	1.03	\$7,040
Industrial	8	\$154	1.07	\$1,398	\$673	1.03	\$5,886
Rural/Agricultural	11,122	\$15	1.07	\$181,197	\$13	1.03	\$143,554
Utilities/Transportation	122	\$298	1.07	\$39,053	\$0	1.03	\$0
Commercial	43	\$173	1.07	\$7,893	\$999	1.03	\$43,864
Government	75	\$205	1.07	\$16,446	\$663	1.03	\$51,288
Total	11,385			\$248,290			\$251,633

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 18-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 18

RD's: 1 (Union Island), 2089 (Stark)

Land Use Type	Acres	Parcel Count
Residential	4	3
Industrial	14	2
Rural/Agricultural	14,813	91
Utilities/Transportation	22	0
Commercial	0	0
Government	171	4
Total	15,023	100

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 18-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 18

RD's: 1 (Union Island), 2089 (Stark)		Relative	Proportionate	Proportionate
		Assessment	Assessment	Share
Land Use Type	Acres	Factor	Acreage	
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	4	1.00	4	0%
Industrial	14	1.02	14	1%
Rural/Agricultural	14,813	0.10	1,481	83%
Utilities/Transportation	22	1.98	43	2%
Commercial	0	1.15	0	0%
Government	171	1.36	232	13%
Total	15,023		1,775	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 18-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 18

RD's: 1 (Union Island), 2089 (Stark)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 18-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	4	\$150	1.29	\$704	\$477	1.24	\$2,149
Industrial	14	\$154	1.29	\$2,714	\$673	1.24	\$11,409
Rural/Agricultural	14,813	\$15	1.29	\$290,951	\$13	1.24	\$230,177
Utilities/Transportation	22	\$298	1.29	\$8,435	\$0	1.24	\$0
Commercial	0	\$173	1.29	\$0	\$999	1.24	\$0
Government	171	\$205	1.29	\$45,089	\$663	1.24	\$140,416
Total	15,023			\$347,893			\$384,150

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 19-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 19A

RD's: 2064 (River Junction)

Land Use Type	Acres	Parcel Count
Residential	16	2
Industrial	0	0
Rural/Agricultural	5,054	119
Utilities/Transportation	1	0
Commercial	65	3
Government	0	39
Total	5,135	163

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 19-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit
Area
19A

RD's: 2064 (River Junction)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	16	1.00	16	3%
Industrial	0	1.02	0	0%
Rural/Agricultural	5,054	0.10	505	85%
Utilities/Transportation	1	1.98	1	0%
Commercial	65	1.15	75	13%
Government	0	1.36	0	0%
Total	5,135		597	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 19-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 19A

RD's: 2064 (River Junction)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 19-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	16	\$150	1.58	\$3,786	\$477	1.52	\$11,565
Industrial	0	\$154	1.58	\$0	\$673	1.52	\$0
Rural/Agricultural	5,054	\$15	1.58	\$121,585	\$13	1.52	\$96,267
Utilities/Transportation	1	\$298	1.58	\$288	\$0	1.52	\$0
Commercial	65	\$173	1.58	\$17,776	\$999	1.52	\$98,730
Government	0	\$205	1.58	\$0	\$663	1.52	\$0
Total	5,135			\$143,435			\$206,562

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 20-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 19B

RD's: 2075 (McMullin)

Land Use Type	Acres	Parcel Count
Residential	0	0
Industrial	0	0
Rural/Agricultural	4,119	57
Utilities/Transportation	17	0
Commercial	0	0
Government	0	9
Total	4,136	66

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 20-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 19B

RD's: 2075 (McMullin)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	0	1.00	0	0%
Industrial	0	1.02	0	0%
Rural/Agricultural	4,119	0.10	412	92%
Utilities/Transportation	17	1.98	34	8%
Commercial	0	1.15	0	0%
Government	0	1.36	0	0%
Total	4,136		446	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 20-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 19B

RD's: 2075 (McMullin)

Land Use Type	Acres	<i>Low</i> <u>Regional Approach</u>			<i>High</i> <u>New AD Approach</u>		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 20-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	0	\$150	1.58	\$0	\$477	1.52	\$0
Industrial	0	\$154	1.58	\$0	\$673	1.52	\$0
Rural/Agricultural	4,119	\$15	1.58	\$99,095	\$13	1.52	\$78,460
Utilities/Transportation	17	\$298	1.58	\$8,171	\$0	1.52	\$0
Commercial	0	\$173	1.58	\$0	\$999	1.52	\$0
Government	0	\$205	1.58	\$0	\$663	1.52	\$0
Total	4,136			\$107,266			\$78,460

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 21-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 19C

RD's: 2094 (Wathal)

Land Use Type	Acres	Parcel Count
Residential	0	0
Industrial	0	0
Rural/Agricultural	2,259	22
Utilities/Transportation	0	0
Commercial	0	0
Government	0	1
Total	2,259	23

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 21-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit
Area
19C

RD's: 2094 (Wathal)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	0	1.00	0	0%
Industrial	0	1.02	0	0%
Rural/Agricultural	2,259	0.10	226	100%
Utilities/Transportation	0	1.98	0	0%
Commercial	0	1.15	0	0%
Government	0	1.36	0	0%
Total	2,259		226	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 21-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit
Area
19C

RD's: 2094 (Wathal)

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 21-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	0	\$150	1.58	\$0	\$477	1.52	\$0
Industrial	0	\$154	1.58	\$0	\$673	1.52	\$0
Rural/Agricultural	2,259	\$15	1.58	\$54,349	\$13	1.52	\$43,032
Utilities/Transportation	0	\$298	1.58	\$0	\$0	1.52	\$0
Commercial	0	\$173	1.58	\$0	\$999	1.52	\$0
Government	0	\$205	1.58	\$0	\$663	1.52	\$0
Total	2,259			\$54,349			\$43,032

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 22-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 19D

RD's: 2096 (Wetherbee Lake)

Land Use Type	Acres	Parcel Count
Residential	30	87
Industrial	0	0
Rural/Agricultural	16	3
Utilities/Transportation	0	0
Commercial	45	2
Government	0	3
Total	91	95

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 22-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 19D

RD's: 2096 (Wetherbee Lake)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	30	1.00	30	36%
Industrial	0	1.02	0	0%
Rural/Agricultural	16	0.10	2	2%
Utilities/Transportation	0	1.98	0	0%
Commercial	45	1.15	52	62%
Government	0	1.36	0	0%
Total	91		83	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 22-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 19D

RD's: 2096 (Wetherbee Lake)

Land Use Type	Acres	<i>Low</i> <u>Regional Approach</u>			<i>High</i> <u>New AD Approach</u>		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 22-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	30	\$150	1.58	\$7,172	\$477	1.52	\$21,905
Industrial	0	\$154	1.58	\$0	\$673	1.52	\$0
Rural/Agricultural	16	\$15	1.58	\$378	\$13	1.52	\$300
Utilities/Transportation	0	\$298	1.58	\$0	\$0	1.52	\$0
Commercial	45	\$173	1.58	\$12,272	\$999	1.52	\$68,162
Government	0	\$205	1.58	\$0	\$663	1.52	\$0
Total	91			\$19,822			\$90,366

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 23-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit
Area
20

RD's: N/A

Land Use Type	Acres	Parcel Count
Residential	11	6
Industrial	73	1
Rural/Agricultural	4,632	185
Utilities/Transportation	30	0
Commercial	192	4
Government	11	9
Total	4,948	205

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 23-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 20

RD's: N/A

Land Use Type	Acres	Relative Assessment Factor	Proportionate Acreage	Proportionate Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	11	1.00	11	1%
Industrial	73	1.02	74	9%
Rural/Agricultural	4,632	0.10	463	55%
Utilities/Transportation	30	1.98	58	7%
Commercial	192	1.15	221	26%
Government	11	1.36	16	2%
Total	4,948		843	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 23-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 20

RD's: N/A

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 23-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	11	\$150	1.09	\$1,722	\$477	1.04	\$5,217
Industrial	73	\$154	1.09	\$12,202	\$673	1.04	\$50,917
Rural/Agricultural	4,632	\$15	1.09	\$76,869	\$13	1.04	\$60,363
Utilities/Transportation	30	\$298	1.09	\$9,602	\$0	1.04	\$0
Commercial	192	\$173	1.09	\$36,228	\$999	1.04	\$199,562
Government	11	\$205	1.09	\$2,561	\$663	1.04	\$7,918
Total	4,948			\$139,185			\$323,977

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 24-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area
21

RD's: None

Land Use Type	Acres	Parcel Count
Residential	370	1,795
Industrial	81	13
Rural/Agricultural	4,525	852
Utilities/Transportation	149	0
Commercial	227	26
Government	42	144
Total	5,394	2,830

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 24-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 21

RD's: None		Relative	Proportionate	Proportionate
		Assessment	Acreage	Share
Land Use Type	Acres	Factor		
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	370	1.00	370	24%
Industrial	81	1.02	83	5%
Rural/Agricultural	4,525	0.10	452	30%
Utilities/Transportation	149	1.98	295	19%
Commercial	227	1.15	261	17%
Government	42	1.36	57	4%
Total	5,394		1,518	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 24-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 21

RD's: None

Land Use Type	Acres	Low Regional Approach			High New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
Source	Table 24-b						
formula	a	d	e	f=axdxe	g	h	i=axgxh
Residential	370	\$150	1.83	\$101,846	\$477	1.76	\$310,989
Industrial	81	\$154	1.83	\$22,906	\$673	1.76	\$96,348
Rural/Agricultural	4,525	\$15	1.83	\$126,081	\$13	1.76	\$99,798
Utilities/Transportation	149	\$298	1.83	\$81,236	\$0	1.76	\$0
Commercial	227	\$173	1.83	\$71,769	\$999	1.76	\$398,499
Government	42	\$205	1.83	\$15,637	\$663	1.76	\$48,722
Total	5,394			\$419,475			\$954,355

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 25-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit
Area
22

RD's: 2126 (Atlas Tract)

Land Use Type	Acres	Parcel Count
Residential	0	0
Industrial	0	0
Rural/Agricultural	619	4
Utilities/Transportation	0	0
Commercial	0	0
Government	0	0
Total	619	4

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 25-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 22

RD's: 2126 (Atlas Tract)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=axb</i>	<i>d=c/total</i>
Residential	0	1.00	0	0%
Industrial	0	1.02	0	0%
Rural/Agricultural	619	0.10	62	100%
Utilities/Transportation	0	1.98	0	0%
Commercial	0	1.15	0	0%
Government	0	1.36	0	0%
Total	619		62	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 25-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 22

RD's: 2126 (Atlas Tract)

Land Use Type	Acres	<i>Low</i> <u>Regional Approach</u>			<i>High</i> <u>New AD Approach</u>		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 25-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	0	\$150	1.46	\$0	\$477	1.40	\$0
Industrial	0	\$154	1.46	\$0	\$673	1.40	\$0
Rural/Agricultural	619	\$15	1.46	\$13,762	\$13	1.40	\$10,861
Utilities/Transportation	0	\$298	1.46	\$0	\$0	1.40	\$0
Commercial	0	\$173	1.46	\$0	\$999	1.40	\$0
Government	0	\$205	1.46	\$0	\$663	1.40	\$0
Total	619			\$13,762			\$10,861

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 26-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit
Area
23

RD's: 2042 (Delta Farms)

Land Use Type	Acres	Parcel Count
Residential	578	3,317
Industrial	4	2
Rural/Agricultural	3,846	52
Utilities/Transportation	101	0
Commercial	173	35
Government	142	137
Total	4,843	3,543

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 26-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 23

RD's: 2042 (Delta Farms)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	578	1.00	578	37%
Industrial	4	1.02	4	0%
Rural/Agricultural	3,846	0.10	385	25%
Utilities/Transportation	101	1.98	200	13%
Commercial	173	1.15	199	13%
Government	142	1.36	193	12%
Total	4,843		1,558	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 26-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 23

RD's: 2042 (Delta Farms)

Land Use Type	Acres	<i>Low</i> <u>Regional Approach</u>			<i>High</i> <u>New AD Approach</u>		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 26-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	578	\$150	1.81	\$157,170	\$477	1.74	\$479,711
Industrial	4	\$154	1.81	\$1,142	\$673	1.74	\$4,802
Rural/Agricultural	3,846	\$15	1.81	\$105,985	\$13	1.74	\$83,854
Utilities/Transportation	101	\$298	1.81	\$54,536	\$0	1.74	\$0
Commercial	173	\$173	1.81	\$54,083	\$999	1.74	\$300,166
Government	142	\$205	1.81	\$52,651	\$663	1.74	\$163,981
Total	4,843			\$425,568			\$1,032,513

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 27-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit
Area
24

RD's: 2115 (Shima Tract)

Land Use Type	Acres	Parcel Count
Residential	0	0
Industrial	0	0
Rural/Agricultural	1,979	7
Utilities/Transportation	0	0
Commercial	0	0
Government	0	0
Total	1,979	7

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 27-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 24

RD's: 2115 (Shima Tract)		Relative	Proportionate	Proportionate
Land Use Type	Acres	Assessment Factor	Acreage	Share
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	0	1.00	0	0%
Industrial	0	1.02	0	0%
Rural/Agricultural	1,979	0.10	198	100%
Utilities/Transportation	0	1.98	0	0%
Commercial	0	1.15	0	0%
Government	0	1.36	0	0%
Total	1,979		198	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 27-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 24

RD's: 2115 (Shima Tract)

Land Use Type	Acres	<i>Low</i> <u>Regional Approach</u>			<i>High</i> <u>New AD Approach</u>		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 27-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	0	\$150	1.46	\$0	\$477	1.40	\$0
Industrial	0	\$154	1.46	\$0	\$673	1.40	\$0
Rural/Agricultural	1,979	\$15	1.46	\$43,995	\$13	1.40	\$34,720
Utilities/Transportation	0	\$298	1.46	\$0	\$0	1.40	\$0
Commercial	0	\$173	1.46	\$0	\$999	1.40	\$0
Government	0	\$205	1.46	\$0	\$663	1.40	\$0
Total	1,979			\$43,995			\$34,720

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 28-a
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area
25

RD's: 2119 (Wrights-Elmwood)

Land Use Type	Acres	Parcel Count
Residential	0	0
Industrial	0	0
Rural/Agricultural	3,330	37
Utilities/Transportation	0	0
Commercial	0	0
Government	114	2
Total	3,445	39

"a-landuse"

Source: PBI Parcel Inventory, SJ County Assessor / CD

Appendix B
Table 28-b
Breakdown of Funding by Land Use
Lower San Joaquin/Delta South RFMP

Benefit Area 25

RD's: 2119 (Wrights-Elmwood)		Relative	Proportionate	Proportionate
		Assessment	Assessment	Share
Land Use Type	Acres	Factor	Acreage	
<i>formula</i>	<i>a</i>	<i>b</i>	<i>c=a*x</i>	<i>d=c/total</i>
Residential	0	1.00	0	0%
Industrial	0	1.02	0	0%
Rural/Agricultural	3,330	0.10	333	68%
Utilities/Transportation	0	1.98	0	0%
Commercial	0	1.15	0	0%
Government	114	1.36	156	32%
Total	3,445		489	100%

"b-copy1"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA

Appendix B
Table 28-c
Land Use & Parcel Count by Zone
Lower San Joaquin/Delta South RFMP

Benefit Area 25

RD's: 2119 (Wrights-Elmwood)

Land Use Type	Acres	<i>Low</i> Regional Approach			<i>High</i> New AD Approach		
		Average Assessment / Acre for Region	Economic Adjustment Factor	Assumed Budget Based on Regional Approach	Average Assessment / Acre for New CV AD	Economic Adjustment Factor	Assumed Budget Based on Avg CV AD Approach
<i>Source</i>	<i>Table 28-b</i>						
<i>formula</i>	<i>a</i>	<i>d</i>	<i>e</i>	<i>f=axdxe</i>	<i>g</i>	<i>h</i>	<i>i=axgxh</i>
Residential	0	\$150	1.46	\$0	\$477	1.40	\$0
Industrial	0	\$154	1.46	\$0	\$673	1.40	\$0
Rural/Agricultural	3,330	\$15	1.46	\$74,037	\$13	1.40	\$58,430
Utilities/Transportation	0	\$298	1.46	\$0	\$0	1.40	\$0
Commercial	0	\$173	1.46	\$0	\$999	1.40	\$0
Government	114	\$205	1.46	\$34,157	\$663	1.40	\$106,113
Total	3,445			\$108,194			\$164,543

"c-copy2"

Source: PBI Parcel Inventory, SJ County Assessor / CD DATA, LWA