

## CHAPTER 17

### SOCIOECONOMICS

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This chapter describes the potential socioeconomic impacts that could occur as a result of implementing the alternatives evaluated in this EIR/EIS. The analysis involves reporting, assessing, and applying data and projections related to population, employment, income and various other sociological and economic factors.

#### 17.1 ENVIRONMENTAL SETTING/AFFECTED ENVIRONMENT

This section describes the current socioeconomic conditions within the various regions of the project study area. The discussion of the Yuba Region provides an overview of the economy of Yuba County, followed by descriptions of the CVP/SWP Upstream of the Delta Region, the Delta Region and the Export Service Area.

##### 17.1.1 YUBA REGION

Yuba County is a relatively economically depressed area of the state. The historical per capita income of the county ranges between 60 percent and 75 percent of the per capita income of California.

This section presents an overview of the current economic conditions of Yuba County. County-level statistics will be compared to the same statistics for California to provide a frame of reference. Statistics that will be used in the overview of the economy include:

- Unemployment rate
- County total personal income per capita income
- Personal income by sector and industry
- On-farm income and expenses

##### 17.1.1.1 UNEMPLOYMENT

Unemployment rates in Yuba County and California from 1999 through 2003 are presented in **Table 17-1**. Yuba County unemployment in 1999 was more than double the unemployment rate for the state, and in every year the unemployment rate in Yuba County was at least 2.8 percent higher than the unemployment rate for the state.

**Table 17-1. Annual Unemployment Rates (1999 through 2003)**

	Annual Unemployment Rate (%)				
	1999	2000	2001	2002	2003
<b>Yuba County</b>	11.7	7.9	8.5	9.9	10.8
<b>California</b>	5.3	5.0	5.4	6.7	6.8

Source: (U.S. Department of Labor Website 2007)

##### 17.1.1.2 TOTAL COUNTY PERSONAL INCOME AND PER CAPITA INCOME

The personal income of an area is the income that is received by, or on behalf of, all the individuals who live in the area (U.S. Department of Commerce Website 2007). The personal incomes calculated for Yuba County and the state of California during the five year period between 1999 and 2003 are presented in **Table 17-2**. The per capita personal income, calculated as personal income divided by population, also is listed in Table 17-2. For the period shown,

per capita personal income in Yuba County ranged between 59 and 66 percent of the per capita personal income of the state.

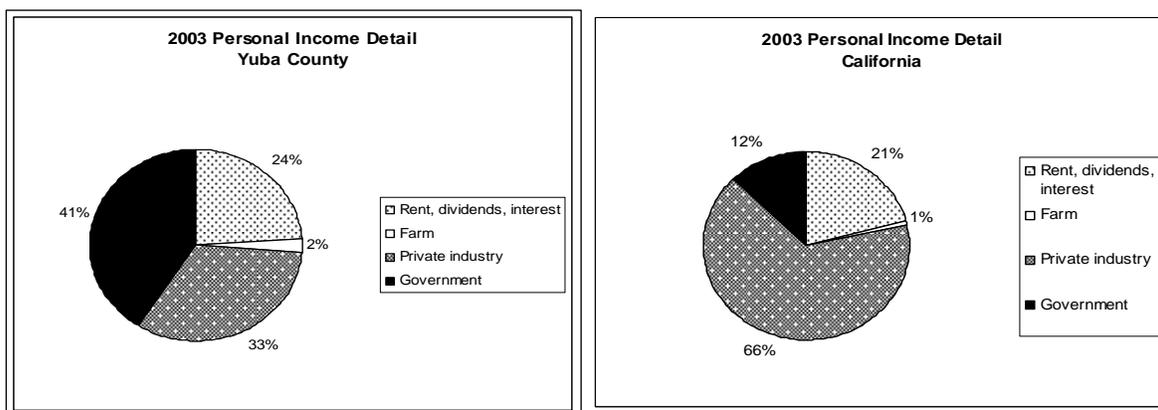
**Table 17-2. Total County Personal Income and Per Capita Personal Income (1999 through 2003) <sup>a</sup>**

	1999	2000	2001	2002	2003
<b>California</b>					
Personal Income <sup>b</sup>	999,228,183	1,103,841,912	1,135,304,060	149,183,269	1,184,996,911
Population	33,499,204	34,002,467	34,532,163	34,988,261	35,462,712
Per Capita Personal Income	29.8	32.5	32.9	32.8	33.4
<b>Yuba County</b>					
Personal Income <sup>b</sup>	1,104,429	1,154,696	1,246,013	1,320,227	1,392,915
Population	59,881	60,330	61,373	62,360	63,594
Per Capita Personal Income	18.4	19.1	20.3	21.2	21.9
As a Percent of State per Capita Income	62%	59%	62%	64%	66%

<sup>a</sup> County personal income and per capita personal income is calculated in thousands of dollars.  
<sup>b</sup> Personal Income is the income that is received by all persons from all sources. It is calculated as the sum of wage and salary disbursements, supplements to wages and salaries, proprietors' income with inventory valuation and capital consumption adjustments, rental income of persons with capital consumption adjustment, personal dividend income, personal interest income, and personal current transfer receipts, less contributions for government social insurance. All state and local area dollar estimates are in current dollars (not adjusted for inflation).  
 Source: (U.S. Department of Commerce Website 2007)

**17.1.1.3 PERSONAL INCOME BY SECTOR AND INDUSTRY**

Personal income is disaggregated into four sectors: (1) farm; (2) private industry; (3) government; and (4) other sources (e.g. rent, interest and dividends). The distribution of 2003 Yuba County and state personal income, by each of these four sectors, is shown on **Figure 17-1**. The government sector, which is the single largest sector, contributes 41 percent of personal income in Yuba County. The large contribution from the government section is from Beale AFB, located in the southeastern part of Yuba County. Comparatively, the government sector only comprises 12 percent of personal income for the state. Private industry contributes the second largest amount to personal income in Yuba County at 33 percent, compared to the 66 percent contribution from the private industry sector at the state level. The farm sector contributes 1 and 2 percent to personal income for Yuba County and the state, respectively.



**Figure 17-1. 2003 Personal Income for Yuba County and California, by Sector**

Two of the four sectors of personal income described above, namely the farm sector and the private industry sector, potentially could be impacted by the Proposed Project/Action and alternatives. The sum of income from the farm sector and the private industry sector is presented in **Table 17-3**. Additionally, Figure 17-1 provides a breakdown of income by specific industry within the private sector. The sum of personal income from the farm and private industry sectors ranged from \$431.2 million to \$454.8 million for the 1999 to 2003 period. The largest individual industries contributing to the total over the years 1999 to 2003 have been health care and social assistance (17.7 percent), construction (13 percent), manufacturing (10.9 percent) and retail trade (10.6 percent). Farming contributes the next largest percent to the sum of the private industry sector and the farm sector after retail trade (7.5 percent).

#### ***17.1.1.4 ON-FARM INCOME AND EXPENSES***

California is the number one agricultural producer in the United States, earning \$27.6 billion in agricultural markets during 2001. The total land acreage dedicated to farming in California is 27.7 million acres, and 13 percent of the national gross cash receipts from farming can be attributed to California farming products (CDFA 2002). Rice production ranks in the top 20 most valuable crops produced in California, and contributes about \$342 million to the state's economy (Bransford 2006). During 2001, rice production accounted for \$209 million of the agricultural production value in California, or approximately 1 percent of California's total gross cash income from farming (CDFA 2002).

Notwithstanding the smaller contribution that the farm sector makes to personal income in Yuba County relative to the private industry sector, the farm sector contributes a relatively substantial amount to the agricultural output of California. Potential impacts on agricultural production and the farm sector that would be expected to result from the Proposed Project/Action and alternatives are discussed in Chapter 16 (Section 16.2).

In 2003 Yuba County ranked fifth in the state for the value of production of rice and second for the value of production of dried plums. The types of crops grown in Yuba County, listed in descending order of value in production, are presented in **Table 17-3**. The crops listed in **Table 17-4** represent 87 percent of the value of crops grown in Yuba County.

In addition to providing flood control, recreation, hydropower and fisheries enhancement, the Yuba Project supplies surface water to many of the agricultural users in Yuba County. Almost a million acre feet of water from the North and Middle Yuba River and Oregon Creek are stored in New Bullards Bar Reservoir. The stored surface water supplies have provided a reliable supply of water to agriculture in the county and reversed groundwater overdraft.

#### **17.1.2 CVP/SWP UPSTREAM OF THE DELTA REGION**

Within this region, the primary areas of consideration include the Sacramento Valley portions of Shasta, Glenn, Colusa, Yolo, Solano, Butte, Sutter, Yuba, Nevada, Placer, and Sacramento counties. The Sacramento Valley is an important agricultural region for both the state of California and the United States. Sacramento Valley crop production reached \$1.9 billion in 1997, with rice, tomatoes, and orchard crops providing the highest revenues. Approximately 10 percent of the applied water within the Sacramento Valley is provided through CVP contracts (Reclamation Website 2004). In most of the irrigation districts that serve this region, annual crop patterns have remained stable since the mid-1970s. For most of the districts, water needs have been a function of water year type rather than changes in crop patterns (Reclamation Website 2004).

Table 17-3. Farm and Private Industry Personal Income Detail for Yuba County (1999 through 2003) <sup>a</sup>

	1999	2000	2001	2002	2003	5-Year Average	Average (%)
Farm Earnings	50,434	38,285	26,526	23,880	30,562	33,937	7.5%
Private Industry	380,772	401,797	417,888	441,035	462,860	420,870	92.5%
Health care and social assistance	64,511	68,249	77,009	91,078	101,213	80,412	17.7%
Construction	46,337	50,316	67,664	60,688	70,833	59,168	13.0%
Manufacturing	55,336	58,367	40,226	45,999	49,061	49,798	10.9%
Retail trade	52,031	53,915	45,642	47,675	42,665	48,386	10.6%
Professional and technical services	16,357	19,354	35,747	40,079	42,378	30,783	6.8%
Transportation	51,694	50,641	16,565	15,582	16,532	30,203	6.6%
Administrative and waste services	23,750	25,544	22,795	23,688	D	23,944	5.3%
Other services	NR	NR	20,882	22,199	22,350	21,810	4.8%
Ag services, forestry, fishing, other	20,399	26,158	17,624	17,316	17,679	19,835	4.4%
Finance and Insurance	10,478	10,655	10,113	10,659	12,545	10,890	2.4%
Accommodation and food services	5,254	5,547	12,072	12,998	14,275	10,029	2.2%
Wholesale trade	7,582	6,717	D	D	D	7,150	1.6%
Mining	5,193	5,795	6,937	7,233	8,185	6,669	1.5%
Information	NR	NR	8,444	4,649	5,026	6,040	1.3%
Real estate	3,954	3,151	6,601	6,907	9,112	5,945	1.3%
Art, entertainment and recreation	3,547	3,752	3,655	4,199	3,285	3,688	0.8%
Educational services	1,380	1,201	873	1,122	1,085	1,132	0.2%
Management of companies	NR	NR	1,080	893	D	987	0.2%
Utilities	D	D	D	D	D	D	D
<b>Total Private Industry and Farm Income</b>	<b>431,206</b>	<b>440,082</b>	<b>444,414</b>	<b>464,915</b>	<b>493,422</b>	<b>454,808</b>	<b>100.0%</b>

<sup>a</sup> Calculated as thousands of dollars.

NR – Aggregation method changed between 2000 and 2001. Not reported in 1999 and 2000.

D – Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

Source: (U.S. Department of Commerce Website 2007)

**Table 17-4. Crop Types Grown in Yuba County, Ranked by Value**

Crop	Statistic	Year					2003 Rank in State <sup>b</sup>
		1999	2000	2001	2002	2003	
Rice							
	Value (\$ 000s)	\$29,808	\$41,527	\$35,347	\$35,284	\$43,571	5
	Acres (000s)	36.0	36.6	35.8	35.5	35.6	
	Price/ton (\$)	\$240	\$270	\$253	\$250	\$314	
Peaches							
	Value (\$ 000s)	\$17,188	\$23,831	\$19,265	\$20,765	\$21,289	N/A
	Acres (000s)	5.5	5.7	5.4	5.8	6.0	
	Price/ton (\$)	\$217	\$238	\$230	\$234	\$235	
Prunes							
	Value (\$ 000s)	\$7,302	\$24,336	\$12,210	\$19,983	\$19,596	12
	Acres (000s)	12.2	11.7	11.0	11.1	12.0	
	Price/ton (\$)	\$630	\$800	\$740	\$825	\$710	
Walnuts							
	Value (\$ 000s)	\$14,552	\$16,433	\$17,017	\$14,805	\$18,706	N/A
	Acres (000s)	8.6	9.3	9.1	9.2	9.8	
	Price/ton (\$)	\$1,140	\$1,178	\$1,100	\$1,080	\$1,060	
Irrigated Pasture <sup>a</sup>							
	Value (\$ 000s)	\$1,104	\$1,152	\$1,200	\$1,200	\$1,152	N/A
	Acres (000s)	9.6	9.6	9.6	9.6	9.6	
	Price/ton (\$)	NR	NR	NR	NR	NR	
Other							
	Value (\$ 000s)	\$14,532	\$15,349	\$15,814	\$14,132	\$16,029	
	Acres (000s)	11.3	11.0	10.1	9.6	9.4	
	Price/ton (\$)	NA	NA	NA	NA	NA	
Subtotal Irrigated Cropland							
	Value (\$ 000s)	\$84,486	\$122,628	\$100,853	\$106,169	\$120,343	
	Acres (000s)	83.3	83.9	81.0	80.8	82.3	
	Price/ton (\$)	NA	NA	NA	NA	NA	
Non-irrigated Pasture							
	Value (\$ 000s)	\$1,584	\$1,773	\$2,162	\$2,156	\$2,145	
	Acres (000s)	198.0	197.0	196.5	196.0	195.0	
	Price/ton (\$)	NR	NR	NR	NR	NR	
Total Cropland							
	Value (\$ 000s)	\$86,070	\$124,401	\$103,015	\$108,325	\$122,488	32
	Acres (000s)	281.3	280.9	277.5	276.8	277.3	
	Price/ton (\$)	NA	NA	NA	NA	NA	
NA - Not applicable NR - Not reported <sup>a</sup> The value of irrigated pasture does not rank fifth in the county. However, it is called out separately in this table because of the relatively large number of acres in production. <sup>b</sup> Out of 58 counties throughout the state. Source: (USDA Website 2007)							

Actions associated with the Proposed Yuba Accord alternatives could make additional water supplies available to Reclamation and DWR for delivery to federal and state water project contractors, particularly during drier conditions when water supply deficiencies may occur. However, no changes to existing socioeconomic conditions upstream of the Delta are anticipated, other than the potential for regional growth discussed in Chapter 18, which will likely occur whether or not one of the alternatives evaluated in this EIR/EIS is approved and implemented.

Because a portion of water from the Yuba Accord Alternative would be provided to the EWA Program to supplement CVP/SWP water supplies during drier conditions, it would improve CVP/SWP operational flexibility and federal and state water contractor supply reliability in deficiency years. Supplemental water for CVP and SWP contract allocations provided by the Yuba Accord Alternative would not result in the contractors receiving a quantity of water that

would be in excess of either previously authorized CVP contract allocations or SWP Table A amounts. Although Reclamation and DWR could choose to deliver all or a portion of the supplemental transfer water provided by YCWA to the federal or state water project contractors, the additional quantities that could be delivered would not exceed the water delivery amounts and entitlements authorized through existing CVP/SWP water purchase contracts. Therefore, socioeconomic conditions within the CVP/SWP Upstream of the Delta Region would not be expected to change as a result of implementing an alternative evaluated in this EIR/EIS.

### **17.1.3 DELTA REGION AND EXPORT SERVICE AREA**

As described above, actions associated with the Proposed Project/ Action and alternatives could make additional water supplies available to Reclamation and DWR for delivery to federal and state water project contractors, particularly during drier conditions when deficiencies may occur. For the reasons described in Section 17.1.2 above, the amount of supplemental transfer water deliveries would not exceed the water delivery amounts and entitlements authorized in existing CVP/SWP water purchase contracts. Therefore, socioeconomic conditions within the areas served by the CVP, including the Delta Region, would not be expected to change as a result of implementing an alternative evaluated in this EIR/EIS.

### **17.1.4 REGULATORY SETTING**

#### ***17.1.4.1 FEDERAL AND STATE***

Numerous federal and state agencies are involved in regulating and providing socioeconomic assistance to individuals, businesses, and local government agencies in Yuba County. Particularly in Yuba County, the assistance from these agencies is often focused on supporting rural development, infrastructure improvement, and the creation and maintenance of small businesses. Assistance can come in the form of technical expertise, contracting preferences, tax incentives, grants, and loans, as well as other types of economic, workforce or educational support. A detailed overview of the federal and state incentive programs important to the local setting of Yuba County is in the “*Economic Development Strategic Plan*” for Yuba County (County of Yuba 2006).

#### ***17.1.4.2 LOCAL***

Yuba County released an updated “*Economic Development Strategic Plan*” in March 2006 (County of Yuba 2006), which outlines: (1) goals and objectives regarding attraction, retention and development of targeted industries; (2) county business incentives including availability of loan, grant and contracting programs; (3) coordination with other jurisdictions (i.e., local towns/cities), educational institutions, and development entities; and (4) existing and anticipated infrastructure conditions. This document was produced by the County of Yuba Employment Task Force and Strategic Plan Committee through the coordinating efforts of the Yuba County Economic Development Department. The first strategic plan was produced in 2000, and as a proactive mechanism, has continually undergone regular input and refinements from numerous agencies, constituents and organizations, including Yuba County businesses and residents, the cities of Marysville and Wheatland, Yuba-Sutter Economic Development Corporation, Yuba-Sutter Chamber of Commerce, and Beale AFB.

## 17.2 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES

### 17.2.1 IMPACT ANALYSES METHODOLOGY

The potential impacts of the Proposed Project/Action and alternatives on socioeconomic conditions in Yuba County could include:

- ❑ Potential revenue from groundwater substitution transfers for some agricultural producers in the Yuba Region
- ❑ Changes to the cost or reliability of water supplies, resulting in potential impacts on decisions on use of land

This approach to the analysis follows CEQA Guidelines Section 15131, which states:

- (a) Economic and social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.*

The potential impact of the Proposed Project/Action and alternatives on socioeconomic conditions in Yuba County primarily includes changes to the reliability or cost of pumping groundwater. Under the Proposed Project/Action, groundwater pumping primarily would occur to facilitate groundwater substitution transfers, where participating Member Units would elect to pump groundwater for use on their individual fields in lieu of receiving surface water deliveries. Because the Member Units would use the groundwater directly on their fields, and because the majority of crops would be planted prior to the voluntary election to participate in the current year's groundwater substitution transfer, Member Units with sensitive crops could elect not to pump groundwater. Therefore, cropping patterns are not anticipated to change due to implementation of any of the Proposed Project/Action or an alternative.

The portion of Yuba County that could be impacted by groundwater pumping is defined by the boundaries of both the North Yuba Subbasin and the South Yuba Subbasin (see Chapter 2, Figure 2-2). The majority of land overlying those two groundwater subbasins is contained within the boundaries of one of the seven participating YCWA Member Units. Through the Conjunctive Use Agreements, the participating Member Units would receive compensation to offset the cost of pumping groundwater.

Parties within Yuba County that could potentially be impacted by groundwater pumping under the Proposed Project/Action or an alternative are municipal and industrial water purveyors, non-participating Member Units, other agricultural purveyors and independent groundwater users (both agricultural and domestic).

Local impacts are estimated by calculating the increased cost of groundwater pumping that could occur under the Proposed Project/Action or an alternative. The potential change in the cost of pumping will be evaluated based on estimated changes in groundwater elevations, published rates for electricity, and industry standard averages for pump efficiency.

**Table 17-5** shows a range of pumping costs (per acre-foot) varying over increasing pump lift and pump efficiency. The cost of lifting an acre-foot of water 10 feet, representative of pumping water out of a canal when pump efficiency is 65 percent, is estimated to be \$2.84. In

comparison, the cost of lifting an acre-foot of water 60 feet, such as from a groundwater aquifer, at the same efficiency, is \$17.01.<sup>1</sup> As a result, the relative change in cost per acre foot to farmers could be substantial, and is used as the primary evaluation parameter. The impact of potentially higher groundwater costs to the farm sector will be calculated using the Enterprise Budgets available from University of California Cooperative Extension (as available) for the top five crops in Yuba County.

**Table 17-5. Varying Costs of Pumping Groundwater, Per Acre-foot**

Electricity Cost of Groundwater Pumping per Acre-foot						
Dollars per KWH 0.18						
Pump Efficiency (percent)	Head (feet)					
		10.00	30.00	60.00	90.00	120.00
	0.585	\$3.15	\$9.45	\$18.90	\$28.36	\$37.81
	0.618	\$2.98	\$8.95	\$17.91	\$26.86	\$35.82
	0.650	\$2.84	\$8.51	\$17.01	\$25.52	\$34.03
	0.683	\$2.70	\$8.10	\$16.20	\$24.31	\$32.41
0.715	\$2.58	\$7.73	\$15.47	\$23.20	\$30.93	

Minimum electricity cost per acre-foot = \$2.58.  
Maximum electricity cost per acre-foot = \$37.81.

## 17.2.2 IMPACT INDICATORS AND SIGNIFICANCE CRITERIA

Impact indicators and significance criteria in this analysis first consider the socioeconomic changes that may result from the project. If any significant socioeconomic changes are identified, then the resulting physical changes will be considered. This approach to the analysis follows CEQA Guidelines Section 15131, which states:

- (b) Economic and social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.*

The largest potential impact to regional socioeconomic conditions from the implementation of the Proposed Project/Action or an alternative could be the retirement of farmland as a consequence of a reduction in the existing highly reliable supply of water for irrigation. As stated in Chapter 16, alternatives analyzed in this EIR/EIS assume that estimated shortages in surface water deliveries for irrigation will be met by substituting groundwater, at sustainable volumes, to meet total local agricultural demand. Therefore whether existing farm land is retired as a consequence of implementing the Proposed Project/Action depends upon individual decisions by growers in Yuba County as to whether they will continue to farm.

Whether a grower will choose to continue to farm, using groundwater as a substitute for shortages in surface water supplies depends in large part on the following.

- The availability of groundwater;
- The sustainability of groundwater extraction;
- The pumping capacity of the growers;

<sup>1</sup> As discussed later in this chapter, a reasonable assumption is that these groundwater pumping costs average \$20 per acre-foot.

- ❑ Whether pumping groundwater is economically feasible; and
- ❑ The growers' expectation that irrigation water will continue to be highly reliable throughout the eight-year term of the Proposed Project/ Action.

The availability of groundwater is discussed in Chapter 6. Both the sustainable extraction volumes of groundwater and the existing pumping capacity of growers were taken into account during the development of the Conjunctive Use Agreements for the Proposed Project/Action and the modeling (see Chapter 6 and Appendix D). The economic feasibility of substituting pumped groundwater for surface water shortages is discussed in this chapter.

The impact indicators and significance criteria for the socioeconomic evaluation are presented in **Table 17-6**.

**Table 17-6 Impact Indicators and Significance Criteria for Socioeconomics**

Impact Indicator	Significance Criteria
Cost of pumping groundwater in the agricultural sector Net cost or benefit of pumping groundwater in the regional area	An increase in the average annual cost of pumping groundwater that would result in a decrease to the net returns for a single crop during that year, relative to the basis of comparison. If the cost of pumping groundwater in the regional area is greater than the price received for pumping then individual growers are facing new cost structures in their decisions to continue to farm.
Cost of pumping groundwater in the M&I sector	An increase in the average annual cost of pumping groundwater for M&I uses over the 8-year duration of the project, relative to the basis of comparison.

For M&I pumping, Yuba County is anticipated to experience significant urban development over the next 10 to 15 years. The majority of new development will occur in the South Yuba Subbasin in the Linda, Olivehurst, and Plumas Lakes regions. Based on the projected land use conversion from existing irrigated land to urban, total increase in demand within these areas is estimated to be 30 TAF (SWRCB 2000). In the absence of new surface water supplies, this demand would be met by groundwater pumping. As described in Chapter 6, there is 40 TAF less groundwater pumping in the WWD under all scenarios analyzed. This is anticipated to offset the 30 TAF increase in M&I demand, so the net effect in groundwater levels and storage would be minimal. With minimal changes to pumping levels (and therefore minimal impacts to pumping costs), the additional costs of pumping for M&I are expected to be negligible for all scenarios.

Because impacts to M&I pumping costs are anticipated to be negligible, the primary socioeconomic impact indicator used in this chapter to estimate the potential regional socioeconomic impact is the cost to growers, within the participating member units, of pumping the volume of groundwater estimated by the model, relative to the CEQA Existing Condition and/or the CEQA No Project Alternative. If the per acre-foot payment for pumping groundwater is greater than or equal to the estimated cost of pumping groundwater, then it is assumed that land will not be retired by individual growers as a consequence of actions proposed under this EIR/EIS. The analysis of impacts and significance presented below calculates the compensation for pumping groundwater, estimated under each proposed alternative, and compares the compensation to an estimate for the cost of pumping groundwater.

**Table 17-7** presents various categories of groundwater pumping considered under the actions proposed in this EIR/EIS. Reasons for groundwater pumping under the categories listed in Table 17-7 are to: (1) make up for surface water shortages (deficiency pumping), (2) meet

instream flow requirements in Schedule 6 years (which occur only under the Proposed Project/Action), (3) meet YCWA's contribution to the SVWMP Settlement Agreement, and (4) for groundwater substitution transfers. Under the Proposed Project/Action, YCWA's Member Units would receive payment under every category of groundwater pumping. The Member Units would not be paid to pump groundwater to make up for surface water shortages under the CEQA basis of comparison (Existing Condition and Cumulative Without Project Condition), the NEPA No Action Alternative, or the Modified Flow Alternative.

**Table 17-7. Assumed Payments per Acre-foot, by Groundwater Pumping Category**

Category of Pumping	Category Description	Occurrence in Baseline and Alternatives	Estimated per Acre-foot Payment	
			CEQA and NEPA Baselines, Modified Flow Alternative	Yuba Accord Alternative
Surface Water Shortages (Deficiencies)	Groundwater that is pumped for irrigation purposes when surface water supplies are insufficient to meet demand	Occurs in CEQA and NEPA baselines (CEQA Existing Condition, and NEPA No Action Alternative) and every alternative examined	\$0	Cost of pumping groundwater <sup>a</sup>
Schedule 6	Pumping up to 30 TAF to meet instream flow requirements	Yuba Accord Alternative	Not applicable	\$50 per acre-foot upfront for the commitment to pump and \$50 per acre-foot when pumped <sup>b</sup>
Payments for SVWMP Pumping	Pumping to meet YCWA's support of the settlement of the SVWMP SWRCB's Bay-Delta Hearings	Occurs in all NEPA alternatives Does not occur under CEQA Existing Condition, or CEQA alternatives, except for the Cumulative Condition with Proposed Project	At minimum, the energy cost of pumping groundwater <sup>c</sup>	
Groundwater Substitution Transfers	As possible and sustainable in addition to the Yuba Accord Alternative and SVWMP	Occurs in CEQA Existing Condition, and all other NEPA and CEQA alternatives	For the purposes of estimating potential impacts under this EIR/EIS, the price of water is assumed the same as under the SVWMP (\$50, \$75, \$100 or \$125 per acre-foot for YRI water year types; above normal, below normal, dry and critical). YCWA would pass through to the participating Member Units the purchase price less \$10 per acre-foot to administer the transfer <sup>d</sup>	
<p><sup>a</sup> Stated in the Conjunctive Use Agreement as "\$20 per acre-foot (i.e., an amount to reimburse for groundwater pumping energy costs..." (Paragraph 9, Page 5).</p> <p><sup>b</sup> See Paragraph 6 of the Conjunctive Use Agreement.</p> <p><sup>c</sup> Under the SVWMP Agreement, YCWA will receive \$50, \$75, \$100 or \$125 per acre-foot, depending upon the YRI water year type. The difference between the energy costs of pumping and the payment to YCWA will be deposited into an account that YCWA uses to fund the ongoing cost of its Groundwater Management Program (GPM). If there were any unused revenues in this account, they would be split between the Member Units and YCWA. See Paragraph 8 of the Conjunctive Use Agreement.</p> <p><sup>d</sup> See Paragraph 12 of the Conjunctive Use Agreement.</p>				

**Table 17-8** shows the estimated payments to growers net of estimated costs for every category listed in Table 17-7. The costs are both administrative costs paid to YCWA and the variable costs of pumping. For the calculations shown in Table 17-8, the variable cost of pumping groundwater is assumed to be \$20 per acre-foot. Under the Proposed Project/Action, the growers recover, at a minimum, the cost of pumping groundwater under each category.

**Table 17-8 Per Acre-foot Payment to Individual Growers for Pumping Groundwater, Net of Costs, by Category**

	Groundwater Substitution Transfers							SVWMP				
	Deficiency	Schedule 6	Wet <sup>a</sup>	Above Normal	Below Normal	Dry	Critical	Wet <sup>a</sup>	Above Normal <sup>b</sup>	Below Normal	Dry	Critical
<b>Yuba Accord Alternative</b>												
Payment to Growers	\$20	\$100	N/A	\$50	\$75	\$100	\$125	N/A	N/A	\$75	\$100	\$125
<b>Costs</b>												
YCWA Admin/ GMP	\$0	\$0	N/A	\$10	\$10	\$10	\$10	N/A	N/A	\$55	\$80	\$105
Pumping	\$20	\$20	N/A	\$20	\$20	\$20	\$20	N/A	N/A	\$20	\$20	\$20
Payment Net of Costs	\$0	\$80	N/A	\$20	\$45	\$70	\$95	N/A	N/A	\$0	\$0	\$0
<b>CEQA Existing Condition, NEPA No Action Alternative, Modified Flow Alternative</b>												
Payment to Growers	\$0	N/A	N/A	\$50	\$75	\$100	\$125	N/A	N/A	\$75	\$100	\$125
<b>Costs</b>												
YCWA Admin/GMP	\$0	N/A	N/A	\$10	\$10	\$10	\$10	N/A	N/A	\$55	\$80	\$105
Pumping	\$20	N/A	N/A	\$20	\$20	\$20	\$20	N/A	N/A	\$20	\$20	\$20
Payment Net of Costs	\$-20	N/A	N/A	\$20	\$45	\$70	\$95	N/A	N/A	\$0	\$0	\$0
<sup>a</sup> SRI wet year type groundwater substitutions are not assumed. Under the SVWMP, wet year transfers are not required. <sup>b</sup> In above normal year types, water is transferred under the SVWMP at the discretion of YCWA. For modeling purposes, it was assumed no transfers would occur under the SVWMP in above normal year types. <sup>c</sup> Under the SVWMP, YCWA will pay individual growers variable pumping costs. The remainder of the funds will be deposited into a fund to pay the costs of implementing the Yuba County GMP. Any remaining funds will be distributed back to the growers.												

For deficiency pumping the growers are reimbursed at variable cost. The growers would receive payments of \$100 per acre-foot for pumping groundwater in Schedule 6 years.

The payments to growers for groundwater substitution based transfers would vary by year-type. For this example, the per acre-foot water price is assumed to be the same as the SVWMP Settlement Agreement Block 1 water. Because growers would be compensated under every category of groundwater pumping under the Proposed Project/Action, it is assumed that growers would find pumping groundwater economically feasible and therefore would not choose to retire land as a consequence of implementing the Proposed Project/Action.

Under all other baselines and alternatives, the growers would not recover the costs of pumping groundwater to make up for deficiencies in surface water supplies. However, growers would receive payments for groundwater substitution transfers. Therefore, the economic feasibility of other alternatives considered in this EIR/EIS depends on the comparison of the volume of deficiency pumping that the growers would pay for, to the volume of groundwater substitution transfer income that they would receive. The groundwater substitution income could be used to offset costs incurred for deficiency pumping. If the groundwater substitution income is greater than the cost of pumping for deficiencies, then the action would not have an impact on the financial viability of individual growers to continue to farm.

The following sections contain descriptions of the difference in net payments available to the grower between the CEQA/Existing Condition and alternatives. The net payments to the grower used are the same shown in Table 17-8. The descriptions detail: (1) the deficiency payments; (2) the revenue from groundwater substitutions; and (3) the cumulative total. With the exception of the comparisons of the CEQA No Project Alternative to the CEQA Existing Condition, each of the comparisons of modeled cumulative income indicates that there would be an increase in revenue to growers who participated in groundwater pumping. The range of income would be between \$180,000 to \$690,000 per year, depending on water year type. Therefore, no negative socioeconomic impacts would occur under the Proposed Project/Action and alternatives evaluated in this EIR/EIS.

As discussed in Chapter 4, CEQA and NEPA have different legal and regulatory standards that require slightly different assumptions in the modeling runs used to compare the Proposed Project/Action and alternatives to the appropriate CEQA and NEPA bases of comparison in the impact assessments. Although only one project (the Yuba Accord Alternative) and one action alternative (the Modified Flow Alternative) are evaluated in this EIR/EIS, it is necessary to use separate NEPA and CEQA modeling scenarios for the Proposed Project/Action, alternatives and bases of comparisons to make the appropriate comparisons. As a result, the scenarios compared in the impact assessments below have either a "CEQA" or a "NEPA" prefix before the name of the alternative being evaluated. A detailed discussion of the different assumptions used for the CEQA and NEPA scenarios is included in Appendix D, Modeling Technical Memorandum.

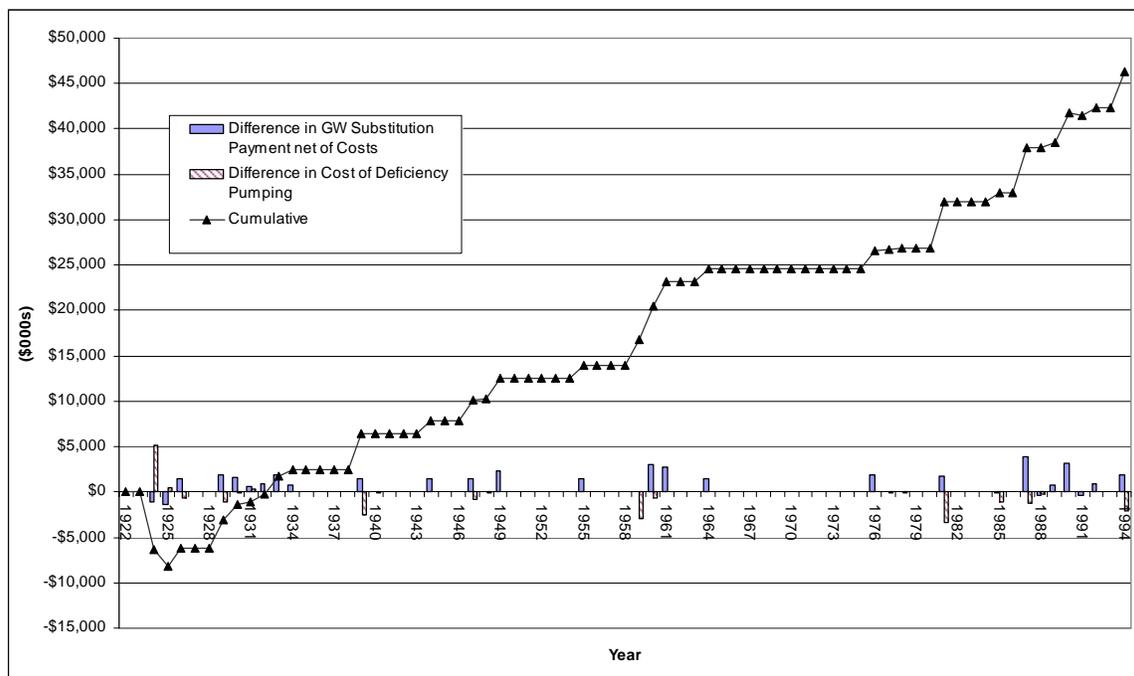
As also discussed in Chapter 4, while the CEQA and NEPA analyses in this EIR/EIS refer to "potentially significant," "less than significant," "no" and "beneficial" impacts, the first two comparisons (CEQA Yuba Accord Alternative compared to the CEQA No Project Alternative and CEQA Modified Flow Alternative compared to the CEQA No Project Alternative) presented below instead refer to whether or not the proposed change would "unreasonably affect" the evaluated parameter. This is because these first two comparisons are made to determine whether the action alternative would satisfy the requirement of Water Code section

1736 that the proposed change associated with the action alternative “would not unreasonably affect fish, wildlife, or other instream beneficial uses.”

### 17.2.3 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE CEQA YUBA ACCORD ALTERNATIVE COMPARED TO THE CEQA NO PROJECT ALTERNATIVE

*Impact 17.2.3-3: Decreases in cumulative net revenues that could result in adverse impacts to the annual incomes of local growers*

Figure 17-2 shows the differences in revenue from groundwater substitutions, cost of deficiency pumping and the cumulative net revenues between the CEQA Yuba Accord Alternative and the CEQA No Project Alternative. For the 72 years modeled, the difference in total net revenues to growers would be \$45 million. The annual average would be \$625,000 per year. The number of growers participating in the program may vary year to year but, based on historical groundwater substitution based transfers, would likely be between 60 and 100, resulting in annual average increase in revenue to an individual grower of between \$10,500 and \$6,000. Because there would be an increase in revenue, there would not be any adverse socioeconomic impacts or any resulting physical impacts.

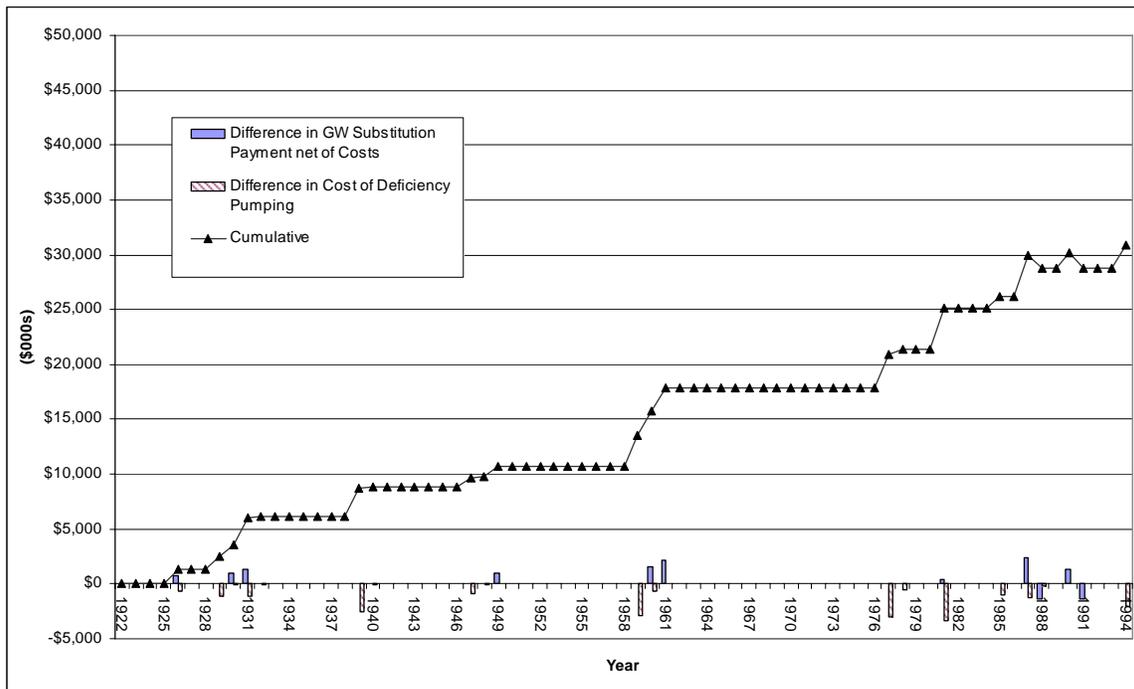


**Figure 17-2. Difference in Net Payments Available Between the CEQA Yuba Accord Alternative and the CEQA No Project Alternative**

### 17.2.4 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE CEQA MODIFIED FLOW ALTERNATIVE COMPARED TO THE CEQA NO PROJECT ALTERNATIVE

*Impact 17.2.4-1: Decreases in cumulative net revenues that could result in adverse impacts to the annual income of local growers*

Figure 17-3 shows the differences in revenue from groundwater substitutions, cost of deficiency pumping and the cumulative net revenues between the CEQA Modified Flow Alternative and the CEQA No Project Alternative. For the 72 years modeled, the difference in total net revenues to growers would be \$30 million. The annual average would be \$410,000 per year. The number of growers participating in the program may vary year to year but, based on historical groundwater substitution based transfers, would likely be between 60 and 100, resulting in annual average increase in revenue to an individual grower of between \$6,800 and \$4,100. Because there would be an increase in revenue, there would not be any adverse socioeconomic impacts or any resulting physical impacts.



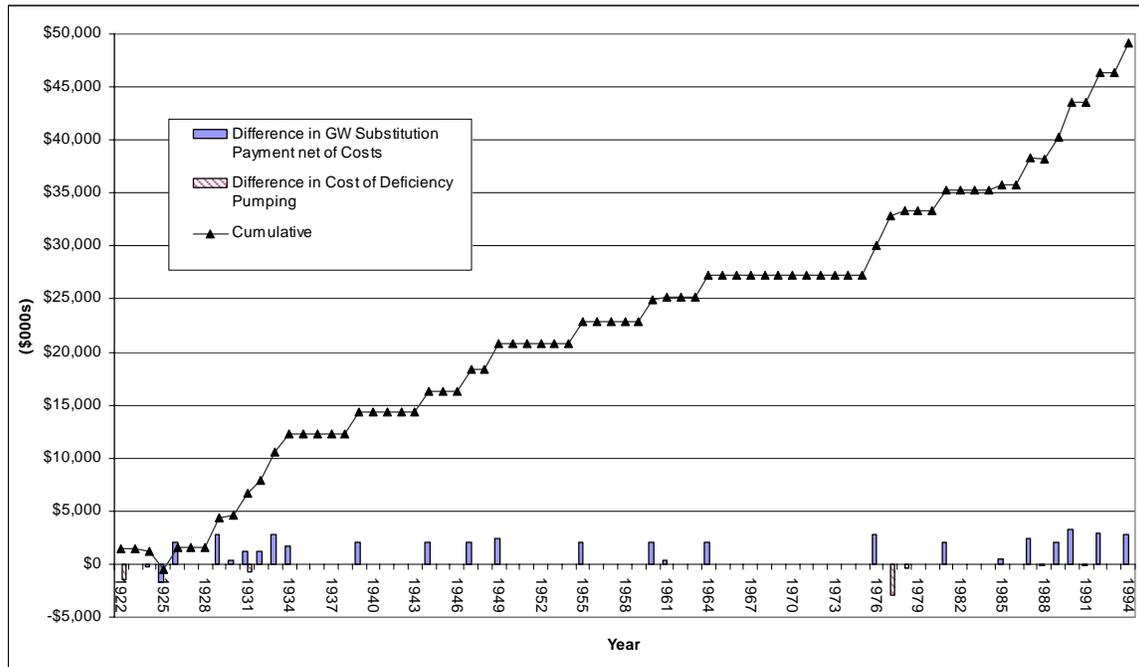
**Figure 17-3. Difference in Net Payment Available Between the CEQA Modified Flow Alternative and the CEQA Existing Condition**

### 17.2.5 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE CEQA YUBA ACCORD ALTERNATIVE COMPARED TO THE CEQA EXISTING CONDITION

*Impact 17.2.5-1: Decreases in cumulative net revenues that could result in adverse impacts to the annual income of local growers*

Figure 17-4 shows the differences in revenue from groundwater substitutions, cost of deficiency pumping and the cumulative net revenues between the CEQA Yuba Accord Alternative and the CEQA Existing Condition. For the 72 years modeled, instead of the eight-year agreement, the

difference in total net revenues to growers would be just under \$50 million. The annual average would be \$690,000 per year. The number of growers participating in the program may vary year to year but, based on historical groundwater substitution based transfers, would likely be between 60 and 100, resulting in annual average increase in revenue to an individual grower of between \$11,500 and \$6,900. Because there would be an increase in revenue, there would not be any significant socioeconomic impacts or any resulting physical impacts.

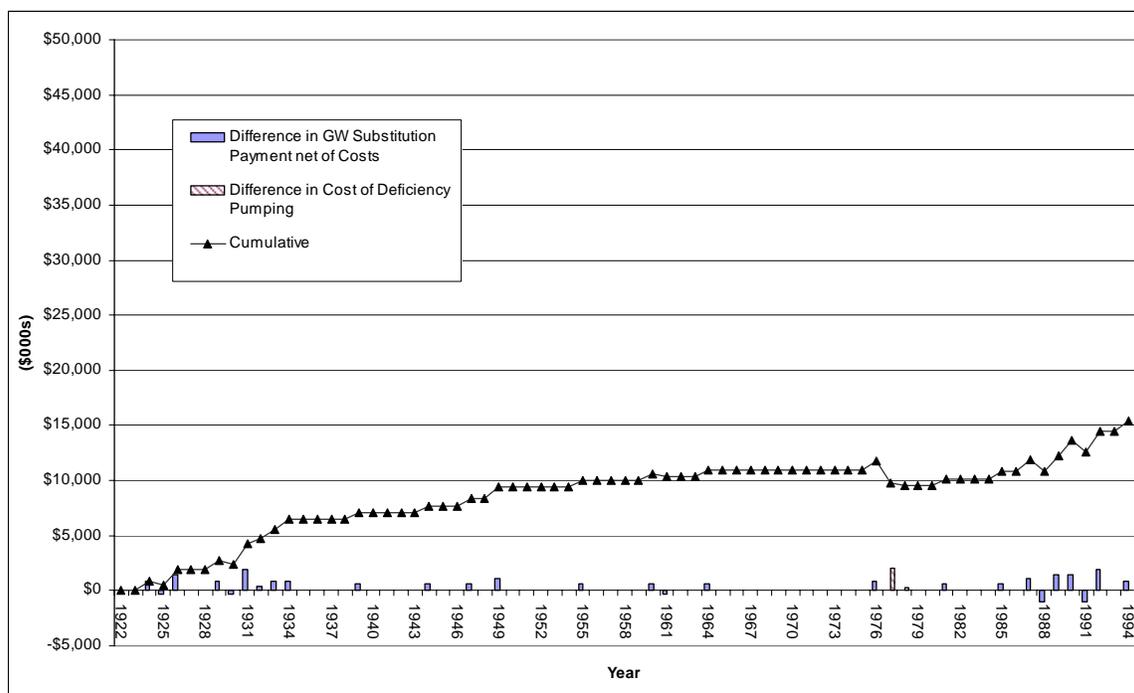


**Figure 17-4. Difference in Net Payment Available Between the CEQA Yuba Accord Alternative and the CEQA Existing Condition**

### 17.2.6 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE CEQA MODIFIED FLOW ALTERNATIVE COMPARED TO THE CEQA EXISTING CONDITION

*Impact 17.2.6-1: Decreases in cumulative net revenues that could result in adverse impacts to the annual income of local growers*

Figure 17-5 shows the differences in revenue from groundwater substitutions, cost of deficiency pumping and the cumulative net revenues between the CEQA Modified Flow Alternative and the CEQA Existing Condition. For the 72 years modeled, the difference in total net revenues to growers would be just under \$15 million. The annual average would be \$205,000 per year. The number of growers participating in the program may vary year to year but, based on historical groundwater substitution based transfers, would likely be between 60 and 100, resulting in annual average increase in revenue to an individual grower of between \$3,400 and \$2,050. Because there would be an increase in revenue, there would not be any significant socioeconomic impacts or any resulting physical impacts.



**Figure 17-5. Difference in Net Payment Available Between the CEQA Modified Flow Alternative and the CEQA Existing Condition**

### 17.2.7 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE CEQA NO PROJECT ALTERNATIVE/NEPA NO ACTION ALTERNATIVE COMPARED TO THE CEQA EXISTING CONDITION/NEPA AFFECTED ENVIRONMENT

As discussed in Chapter 3, the key elements and activities (e.g., implementation of the RD-1644 Long-term instream flow requirements) for the CEQA No Project Alternative would be the same for the NEPA No Action Alternative. The primary differences between the CEQA No Project and NEPA No Action alternatives are various hydrologic and other modeling assumptions (see Section 4.5 and Appendix D). Because of these differences between the No Project and No Action alternatives, these alternatives are distinguished as separate alternatives for CEQA and NEPA evaluation purposes.

Based on current plans and consistent with available infrastructure and community services, the CEQA No Project Alternative in this EIR/EIS is based on current environmental conditions (e.g., project operations, water demands, and level of land development) plus potential future operational and environmental conditions (e.g., implementation of the RD-1644 Long-term instream flow requirements in the lower Yuba River) that probably would occur in the foreseeable future in the absence of the Proposed Project/Action or another action alternative. The NEPA No Action Alternative also is based on conditions without the proposed project, but uses a longer-term future timeframe that is not restricted by existing infrastructure or physical and regulatory environmental conditions. The differences between these modeling characterizations and assumptions for the CEQA No Project and the NEPA No Action

alternatives, including the rationale for developing these two different scenarios for this EIR/EIS, are explained in Chapter 4<sup>2</sup>.

Although implementation of the RD-1644 Long-term instream flow requirements would occur under both the CEQA No Project and the NEPA No Action alternatives, the resultant model outputs for both scenarios are different because of variations in the way near-term and long-term future operations are characterized for other parameters in the CEQA and NEPA assumptions. As discussed in Chapter 4, the principal difference between the CEQA No Project Alternative and the NEPA No Action Alternative is that the NEPA No Action Alternative includes several potential future water projects in the Sacramento and San Joaquin valleys (e.g., CVP/SWP Intertie, FRWP, SDIP and a long-term EWA Program or a program equivalent to the EWA), while the CEQA No Project Alternative does not. Because many of the other assumed conditions for these two scenarios are similar, the longer-term analysis of the NEPA No Action Alternative compared to the NEPA Affected Environment builds upon the nearer-term analysis of the CEQA No Project Alternative compared to the CEQA Existing Condition.

Because the same foundational modeling base (OCAP Study 3) was used to characterize near-term conditions (2001 level of development) both the CEQA No Project Alternative and the CEQA Existing Condition, it was possible to conduct a detailed analysis to quantitatively evaluate the hydrologic changes in the Yuba Region and the CVP/SWP system that would be expected to occur under these conditions. Building on this CEQA analysis, the analysis of the NEPA No Action Alternative compared to the NEPA Affected Environment consists of two components: (1) an analysis of near-term future without project conditions quantified through the CEQA No Project Alternative, relative to the CEQA Existing Condition, and (2) a qualitative analysis of longer-term future without project conditions (the NEPA No Action Alternative)<sup>3</sup>.

### ***17.2.7.1 CEQA NO PROJECT ALTERNATIVE COMPARED TO THE CEQA EXISTING CONDITION***

***Impact 17.2.7.1-1: Decreases in cumulative net revenues that could result in adverse impacts to the annual income of local growers***

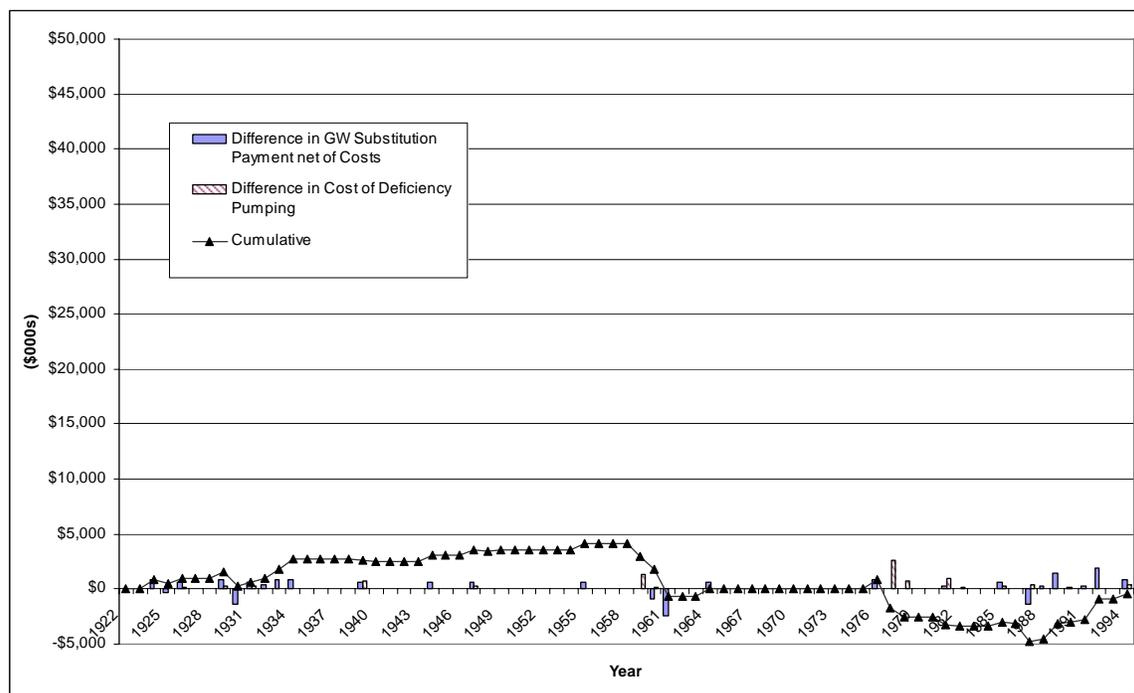
**Figure 17-6** shows the differences in revenue from groundwater substitutions, cost of deficiency pumping and the cumulative net revenues between the CEQA No Project Alternative and the CEQA Existing Condition. For the 72 years modeled, the difference in total net revenues to growers would be relatively small, and the results are dependent on the pattern of water year types. For example, Figure 17-6 shows periods of time when growers would suffer cumulative losses, specifically beginning in 1977 and turning around beginning in 1989. During such periods, there could be resulting significant physical impacts, potentially including those that could result from the fallowing of farmlands or the abandonment of some agricultural

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<sup>2</sup> For modeling purposes related to CEQA analytical requirements, OCAP Study 3 (2001 level of development) is used as the foundational study upon which the modeling scenarios for the CEQA No Project Alternative and the CEQA Existing Condition were developed. For modeling purposes related to NEPA analytical requirements, OCAP Study 5 (2020 level of development) is used as the foundational study upon which the modeling scenarios for the NEPA No Action Alternative was developed.

<sup>3</sup> The second analytical component cannot be evaluated quantitatively due to the differences in the underlying baseline assumptions for OCAP Study 3 and OCAP Study 5.

production. Therefore, the CEQA No Project Alternative, relative to the CEQA Existing Condition, would be anticipated to result in potentially significant socioeconomic impacts.



**Figure 17-6. Difference in Net Payment Available Between the CEQA No Project Alternative and the CEQA Existing Condition**

### ***17.2.7.2 NEPA NO ACTION ALTERNATIVE COMPARED TO THE NEPA AFFECTED ENVIRONMENT***

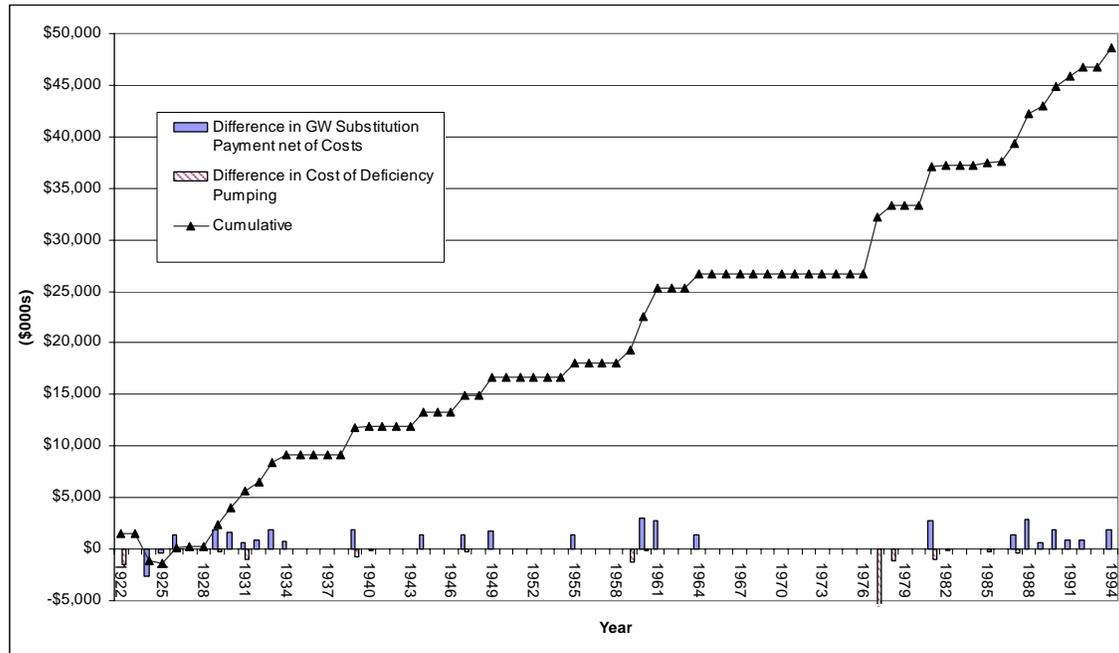
In the Yuba Region, differences between the NEPA No Action Alternative and the NEPA Affected Environment include implementation of the Wheatland Project that will increase surface water diversions at Daguerre Point Dam because of decreases in groundwater pumping volumes and groundwater substitution pumping associated with the SVWMP.

In the Yuba Region, the difference between the CEQA No Project and the Existing Condition includes implementation the Wheatland Project. Therefore, in the Yuba Region, assumptions regarding the volume of groundwater substitution pumping that may occur in the future are the only difference between the NEPA No Action and the CEQA No Project alternatives. Although groundwater substitution transfers may take place under different programs (single-year transfers versus SVWMP), the total volume of groundwater substitution is similar. Quantitative analysis for the CEQA No Project Alternative compared to the CEQA Existing Condition is presented in Section 17.2.7.1 above. Trends in evaluation parameters previously presented for the CEQA No Project Alternative relative to the CEQA Existing Condition (Appendix F4, 2 vs. 1) are similar to the comparison of the NEPA No Action Alternative relative to the NEPA Affected Environment. Therefore, the NEPA No Action Alternative, relative to the NEPA Affected Environment, would be anticipated to result in potentially significant socioeconomic impacts.

### 17.2.8 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE NEPA YUBA ACCORD ALTERNATIVE COMPARED TO THE NEPA NO ACTION ALTERNATIVE

*Impact 17.2.8-1: Decreases in cumulative net revenues that could result in adverse impacts to the annual income of local growers*

Figure 17-7 shows the differences in revenue from groundwater substitutions, cost of deficiency pumping and the cumulative net revenues between the NEPA Yuba Accord Alternative and the NEPA No Action Alternative. For the 72 years modeled, the difference in total net revenues to growers would be just under \$50 million. The annual average would be \$685,000 per year. The number of growers participating in the program may vary year to year but, based on historical groundwater substitution based transfers, would likely be between 60 and 100, resulting in annual average increase in revenue to an individual grower of between \$11,400 and \$6,850. Because there would be an increase in revenue, there would not be any significant socioeconomic impacts or any resulting physical impacts.



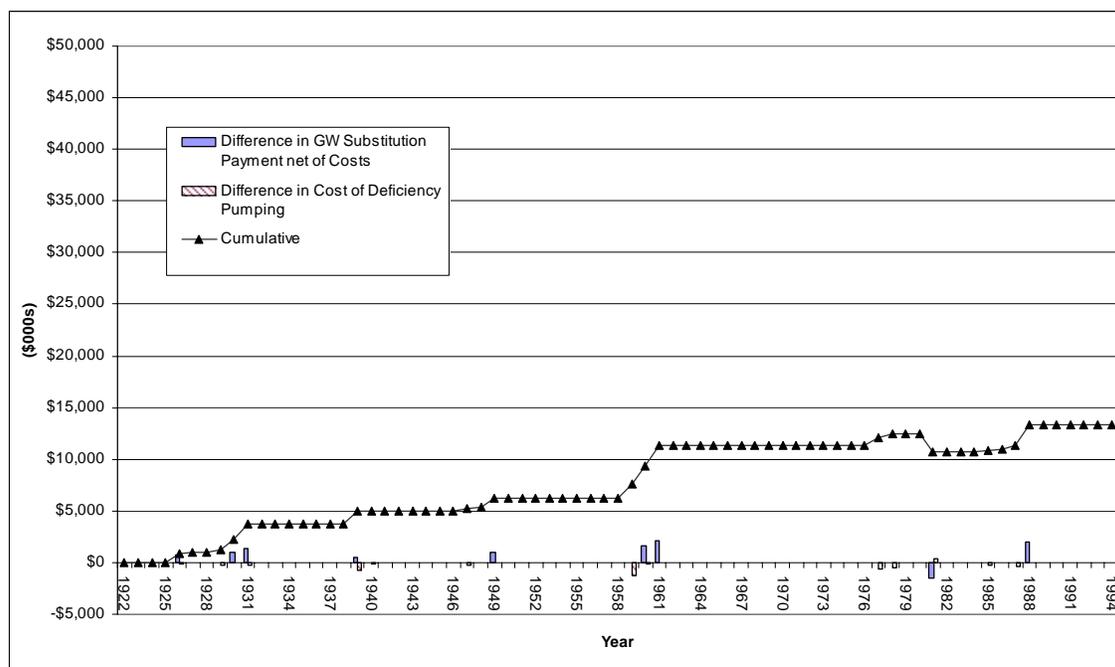
**Figure 17-7. Difference in Net Payment Available Between the NEPA Yuba Accord Alternative and the NEPA No Action Alternative**

### 17.2.9 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE NEPA MODIFIED FLOW ALTERNATIVE COMPARED TO THE NEPA NO ACTION ALTERNATIVE

*Impact 17.2.9-1: Decreases in cumulative net revenues that could result in adverse impacts to the annual income of local growers*

Figure 17-8 shows the differences in revenue from groundwater substitutions, cost of deficiency pumping and the cumulative net revenues between the NEPA Modified Flow Alternative and the NEPA No Action Alternative. For the 72 years modeled, the difference in total net revenues to growers would be just under \$15 million. The annual average would be approximately

\$205,000 per year. The number of growers participating in the program may vary year to year but, based on historical groundwater substitution based transfers, would likely be between 60 and 100, resulting in annual average increase in revenue to an individual grower of between \$3,400 and \$2,050. Because there would be an increase in revenue, there would not be any significant socioeconomic impacts or any resulting physical impacts.



**Figure 17-8. Difference in Net Payment Available Between the NEPA Modified Flow Alternative and the NEPA No Action Alternative**

With the exception of the comparisons of the CEQA No Project Alternative, relative to the CEQA Existing Condition, and the NEPA No Action Alternative, relative to the NEPA Affected Environment, each of the above comparisons of simulated cumulative income indicates that there would be an increase in revenue to growers who participate in groundwater pumping. The range of income, over the 72-year simulation period would range from about \$13 million to just under \$50 million, or from \$180,000 to \$690,000, depending on water year type. Therefore, no potentially significant socioeconomic impacts and no associated physical impacts would be anticipated to occur under the Proposed Project/Action and alternatives evaluated in this EIR/EIS, relative to the bases of comparison.

### 17.3 CUMULATIVE IMPACTS

Hydrologic modeling was used to evaluate the cumulative effects of the Yuba Accord Alternative and other likely changes in CVP/SWP operations on hydrology and other resources. The proposed projects that have been adequately defined (e.g., in recent project-level environmental documents or CALSIM II modeling) and that have the potential to contribute to cumulative impacts are included in the quantitative assessment of the Yuba Accord's impacts. For analytical purposes of this EIR/EIS, the projects that are considered well defined and "reasonably foreseeable" are described in Chapter 21. Additionally, the assumptions used to characterize future hydrologic cumulative conditions that are quantitatively simulated using CALSIM II are presented in Appendix D. To the extent feasible, potential cumulative impacts

on resources (e.g., aquatic resources, water quality) dependent on hydrology or water supply are analyzed quantitatively. Because several projects cannot be accurately characterized for hydrologic modeling purposes at this time, either due to the nature of a particular project or because specific operational details are only in the preliminary phases of development, these projects are evaluated qualitatively.

Only those projects that could affect socioeconomics are included in the qualitative evaluation that is presented in subsequent sections of this chapter. Although most of the proposed projects described in Chapter 21 could have project-specific impacts that will be addressed in future project-specific environmental documentation, the future implementation of these projects is not expected to result in cumulative impacts to regional water supply operations, or water-related and water dependent resources that also could be affected by the Proposed Project/Action or an action alternative (see Chapter 21). For this reason, only one project has the potential to cumulatively impact socioeconomics in the project study area. That project is the relicensing of the Yuba Project, which will occur in 2016.

For CEQA, the purpose of the cumulative analysis is to determine whether the incremental effects of the Proposed Project (Yuba Accord Alternative) would be expected to be “cumulatively considerable” when viewed in connection with the effects of past projects, other current projects, and probable future projects (Public Resources Code Section 21083, subdivision (b)(2)).<sup>4</sup>

For NEPA, the scope of an EIS must include “*cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement*” (40 CFR §1508.25(a)(2)).

Because the CEQ regulations for implementing NEPA and the CEQA guidelines contain very similar requirements for analyzing, and definitions of, cumulative impacts, the discussions of cumulative impacts of the Yuba Accord Alternative Cumulative Condition relative to the Existing Condition will be the basis for evaluation of cumulative impacts for both CEQA and NEPA. In addition, an analysis of the Modified Flow Alternative Cumulative Condition relative to the Existing Condition is provided to fulfill NEPA requirements.

### **17.3.1 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE YUBA ACCORD ALTERNATIVE CUMULATIVE CONDITION COMPARED TO THE EXISTING CONDITION**

Because the Yuba Accord Alternative will not have any socioeconomic impacts, relative to the Existing Condition, the Yuba Accord Alternative will not have any cumulative socioeconomics impacts or any associated cumulative physical impacts.

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<sup>4</sup> The “Guide to the California Environmental Quality Act” (Remy *et al.* 1999) states that “...although a project may cause an “individually limited” or “individually minor” incremental impact that, by itself, is not significant, the increment may be “cumulatively considerable”, and thus significant, when viewed against the backdrop of past, present, and probable future projects.” (CEQA Guidelines, § 15064, subd. (i)(1), 15065, subd. (c), 15355, subd. (b)).

### **17.3.2 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES OF THE MODIFIED FLOW ALTERNATIVE CUMULATIVE CONDITION COMPARED TO THE EXISTING CONDITION**

It is anticipated that the Modified Flow Alternative Cumulative Condition will have the same potential for cumulative impacts as the Yuba Accord Alternative Cumulative Condition. Therefore, the description of the potential impacts in Section 17.2.1 also serves as the description of cumulative impacts associated with the Modified Flow Alternative. Thus, the Modified Flow Alternative Cumulative Condition would have no potentially significant impacts compared to the Existing Condition.

### **17.4 POTENTIAL CONDITIONS TO SUPPORT APPROVAL OF YCWA'S WATER RIGHTS PETITION**

No unreasonable adverse socioeconomic effects would occur under the Proposed Project/Action or an action alternative and, thus, no impact avoidance measures or other protective conditions are identified for the SWRCB's consideration in determining whether or not to approve YCWA's petitions to implement the Yuba Accord.

### **17.5 MITIGATION MEASURES/ENVIRONMENTAL COMMITMENTS**

No adverse socioeconomic impacts would occur under the Proposed Project/Action or an action alternative, relative to the bases of comparison, and, thus, no mitigation measures are required.

### **17.6 POTENTIALLY SIGNIFICANT UNAVOIDABLE IMPACTS**

There are no potentially significant unavoidable impacts to socioeconomics associated with the implementation of the Proposed Project/Action or an action alternative, relative to the bases of comparison.