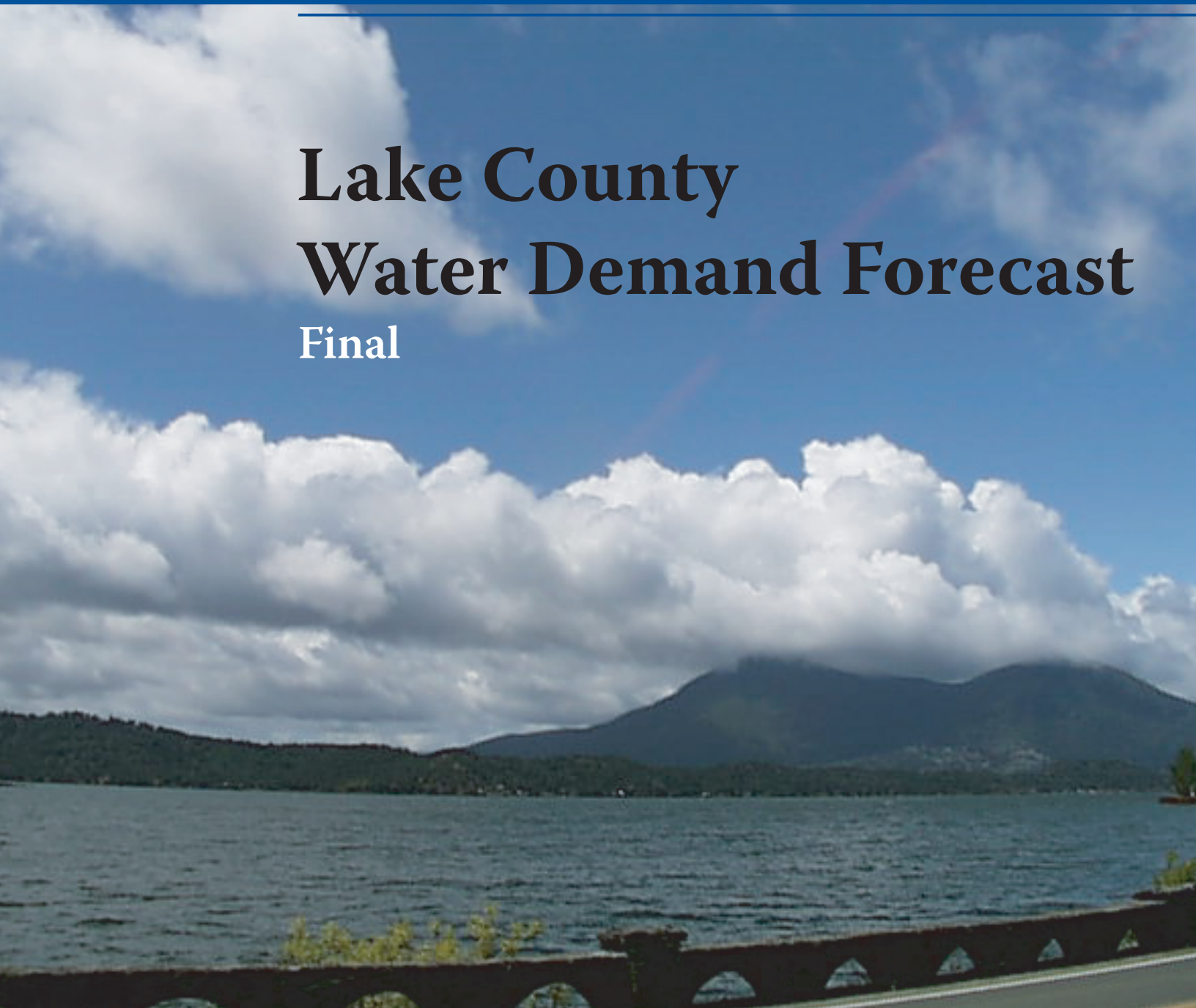




In Cooperation with the

California Department of Water Resources, Northern District

Lake County Water Demand Forecast Final



March 2006



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Section 1

Introduction

Lake County encompasses a largely hilly and mountainous area whose most prominent feature is Clear Lake. Lake County's water supply consists of surface water and groundwater sources. The County's surface water supply is constrained because of limited surface water rights. County residents and farmers are dependent on groundwater obtained from intermountain groundwater basins for current and future municipal, industrial, agricultural, and environmental water supply. Long-term sustainability of groundwater resources requires proactive groundwater management, which includes documentation of current water use and an understanding of future water demand conditions.

This technical memorandum (TM) forecasts the potential future demands within Lake County. The forecast is based on the supply and demand information developed in the Water Inventory and Analysis, described in Section 1.1 below. The Water Inventory and Analysis provides in-depth information about current water resources in the County; however, it does not provide information about potential future water resources. These two documents will complement each other to present related information that provides a complete picture of Lake County water resources.

The water demand forecasts in this TM address the following components: urban, agricultural, environmental and recreational, and lake evaporation.

1.1 Related Efforts

Concurrent with this forecasting effort, Lake County Watershed Protection District is undertaking the Water Inventory and Analysis and Countywide Groundwater Management Plan. The Water Inventory and Analysis will assist water managers in Lake County to better understand and proactively manage the resource in a sustainable manner.

As part of the Water Inventory and Analysis, Lake County will document water facilities and management practices; analyze County applied water supply, water use, and water budgets; and document and analyze groundwater conditions. The California Department of Water Resources, Northern District (DWR) is assisting Lake County to complete the Water Inventory and Analysis by calculating current water supply and demand and providing groundwater data. Lake County is also developing an AB 3030 Countywide Groundwater Management Plan to document groundwater resources and management activities throughout the County.

Similar to the Inventory and Analysis, the demand forecast developed herein uses an applied water methodology. This method calculates only the managed and measurable component of the water cycle. This analysis does not examine the amount of precipitation that contributes to plant growth, and does not calculate the overall amounts of flow in waterways during the wet season. Instead, it focuses on the applied water, or the amount managed and used by people in the County.

1.2 Background

Lake County is in the Coast Ranges of Northern California. Surface elevations in Lake County range from 700 feet above mean sea level (msl) in the east at Cache Creek, to 7,057 feet above msl at Snow Mountain. Lake County has three main watershed drainages: Cache Creek, Putah Creek, and the Eel River. The largest surface water feature in the County is Clear Lake, at an elevation of 1326 feet above sea level. Clear

Lake's watershed drains into the Sacramento River via Cache Creek. The rugged northern portion of the County drains into the Eel River, and the southern portion of the County drains through Putah Creek into Lake Berryessa in Napa County.

The communities of Clearlake, Lakeport, Upper Lake, Glenhaven, Nice, Lucerne, Lower Lake, Spring Valley, Finley, and Kelseyville lie in the drainage of Cache Creek. The communities of Middletown and Hidden Valley lie in the drainage of Putah Creek. The Cobb area is split between the Cache and Putah Creek drainages. The Eel River drainage includes a small community at Lake Pillsbury and a significant number of vacation homes.

The three main watershed basins in Lake County are further subdivided into water Inventory Units. The geographic boundaries of the Inventory Units are based upon the County's hydrologic features, hydrogeologic attributes, and the County borders. The urban and agricultural demands are compiled by Inventory Unit to examine the

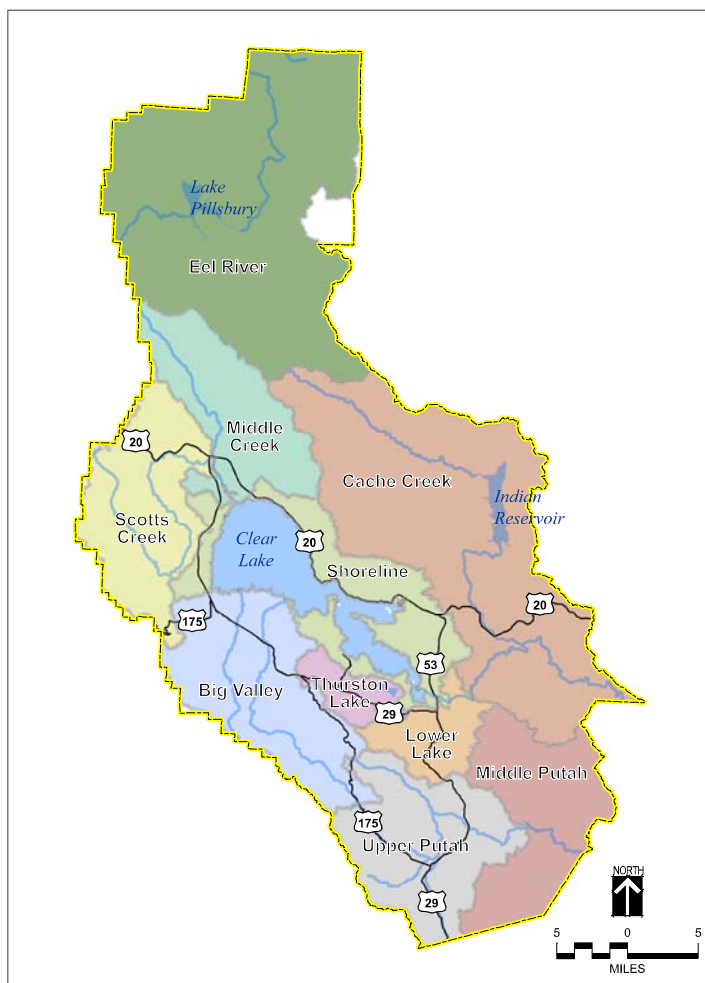


Figure 1-1
Lake County Water Inventory Units

geographic regions that may experience the most change in the future. Environmental and recreational demands are not compiled by inventory unit. Figure 1-1 shows the ten Inventory Units in Lake County.

1.3 Document Contents

This TM describes a water demand forecast prepared for the Lake County Watershed Protection District. This forecast includes:

- Section 2: current and projected urban water use to 2040;
- Section 3: current and projected agricultural use to 2040;
- Section 4: environmental and recreational water use;
- Section 5: calculated evaporation from Clear Lake;
- Section 6: findings; and
- Section 7: references.

Section 2

Urban Water Demand

Urban water demand includes water use for residential, commercial, institutional, industrial and landscape irrigation purposes in both city and rural areas. This section discusses the methods used to forecast urban water demand to 2040 and the results of the forecast.

2.1 Methods

Urban water use varies each year depending on a range of factors, primarily precipitation and temperature. The separate Water Inventory and Analysis project calculated water supply and use for past years that represent a dry year, average year, and wet year. This demand forecast utilizes dry year and average year information from the Water Inventory and Analysis to determine likely future water needs. Rather than utilizing one year-type to represent base year water use, two scenarios of the future can be generated, to provide a range of possible water use. The water use from 2001 represents an historical dry year, and water use rates from 2000 represent an historical average year. These years form the basis to project future (2040) dry year and average year demands.

Water demand varies by sector, which is a group of water users with similar water use attributes. This urban demand forecast projects water use for two sectors, residential users and non-residential users. Within the non-residential sector, the data is disaggregated further to two subsectors: commercial/industrial/institutional (CII) and landscape. Disaggregating use into subsectors that have similar water demands results in a more accurate forecast. While some variables that influence water use among sub-sectors are similar (marginal water price, maximum temperature, and precipitation), other variables are very diverse (median income, housing density, persons per household, cooling degree days). Separating these uses by sector and subsector produces results that consider water use rates that are applicable to the type of use.

The urban water demand forecast uses indicators of growth in the County to project how water demand will change into the future. The forecast assumes that the water demand will grow at the same rate as the growth indicator. Growth indicators for this analysis include number of people (population) and number of employees (jobs). The data is readily available from planning agencies, and demographic indicators can be statistically projected. Table 2-1 shows the growth indicator for each sector and subsector.

Table 2-1
Forecast Growth Indicators

Sector	Subsector	Growth Indicator
Residential	(none)	Population
Nonresidential	Commercial/Industrial/Institutional	Jobs
	Landscape	Population

2.1.1 Residential Demand

Residential water use is water used in single-family homes, multi-family homes, and mobile homes. Lake County provided population data for the larger communities where data was available. Communities that did not have data available were grouped as “rural.” The rural population was represented by the water use rate in the community of Finley because data for Finley is available and Finley is representative of small rural communities in the county.

The water demand per person varies by community because communities have different water use practices. For example, communities in the mountains may not use as much water as communities near Clear Lake because residences in the mountainous areas often do not irrigate yards. A number of factors affect water use rates, including precipitation, temperature, number of households, household income, tourism or second homes, and the urban or rural nature of the area. High per capita rates do not necessarily indicate inefficient use of water; likewise, low water use rates do not indicate efficient use of water because water demand is a function of many different variables.

The steps to forecast residential demands include:

1. Establish current dry year and average year residential demand per capita in each community, utilizing historical 2001 and 2000 water use data.
2. Define current and future population in each community.
3. Apply per capita demands to current and future populations to establish current and future water demands.
4. Compare current demands to the Water Inventory and Analysis for verification.

DWR provides the per capita information for the demand forecast. DWR collects statistics from public water systems throughout California. These statistics form the basis for the Water Inventory and Analysis, and they provide data on the actual amount of water delivered to residents by each participating water purveyor in the County.

Lake County provided current and future populations for communities in the County. Community locations are shown in Figure 2-1. These population estimates were somewhat different than the numbers that DWR used in the Water Inventory and Analysis demand and supply calculations. For consistency, the demand forecast uses both current and future population estimates from Lake County, but compares the results to DWR’s calculations to verify that the results appear reasonable. Lake County projected populations to 2030 as part of its General Plan update, but the forecast required population growth to 2040. The 2040 population was projected with



Figure 2-1
Lake County Communities

the assumption that growth rates would remain consistent with those projected from 2020 to 2030.

DWR's per capita demands provided information for both current and future water demands. Using the current per capita demand to estimate future demand assumes that per capita water demand in each community will remain constant over time. For some communities, no water use information was available. Where information was not available for an entire community, per capita demand was estimated to be a weighted average of the purveyors in the area with available information. Using the weighted average of nearby purveyors provides a reasonable per capita estimate of water use.

2.1.2 Non-Residential Demand Commercial/Industrial/ Institutional

Commercial, industrial, and institutional (CII) demand includes water used for businesses, industry, government buildings, schools, and hospitals. The CII forecast provides countywide demand information because that was the scale of available data. It was not possible to disaggregate this information by community.

CII water demand is forecast using the number of employees as an indicator of growth. Water demand varies by business sectors. Service industries, such as hotels

and restaurants, consume more water than offices. Industrial water use varies by the type of manufacturing process. Like residential demand, high CII water use does not indicate inefficient use of water; nor does low CII water use indicate efficient use. High water use rates in a community could indicate an economic base of tourism that would mean a higher number of hotels and restaurants; low water use rates could indicate a bedroom community with little commercial or industrial development, or one that has many government offices which typically has lower use than commercial or industrial businesses.

The steps to forecast CII demands include:

1. Establish current dry year and average year CII demand per employee in the county, utilizing historical 2001 and 2000 water use data.
2. Define current and future number of jobs in the county.
3. Apply per employee demands to current and future number of jobs to establish current and future water demands.
4. Compare current demands to the Water Inventory and Analysis for verification.

DWR's public water system statistics provide data on the actual amount of water delivered to businesses by each participating water purveyor in the County. The actual CII water use, and the number of employees in the county, allows the calculation of per-employee water demand for the historical dry year and wet year.

The employment projections were based on historical county-level data dating from 1983 to 2001. Current employment numbers for the county were obtained from the Employment Development Department (EDD) of the State of California, Labor Market Information Division. EDD publishes the Industry Employment and Labor Force Statistics by county. Historical employment statistics for Lake County were used to project future employment to 2040 using linear regression.

The resulting per employee demand was used for current and projected water demands. Using the current water demand factor in future projections assumes that per employee water use will remain constant over time.

The total current water use was compared to DWR's current water demand estimate for the county from the Water Inventory and Analysis to verify that the results appear reasonable.

Landscape

Landscape water use is defined as water used to irrigate parks, golf courses, cemeteries, and highway medians. Water demand was forecasted on a countywide level, using available data.

Population is used as an indicator of growth for landscape water use forecasts because public landscaping water use will likely be proportional to residential growth in the County. Water demand is heavily dependent on precipitation, temperature, and the water consumption of plants. Efficiency of irrigation methods (sprinkler or drip, for example) is a factor of landscape demand as well, as more water is lost to evaporation when sprinklers are in use.

The steps to forecast landscape demand includes:

1. Establish current dry year and average year landscape water demand per person in the county, utilizing historical 2001 and 2000 water use data.
2. Define current and future population in the county.
3. Apply per capita demands to current and future population to establish current and future water demands.
4. Compare current demands to the Water Inventory and Analysis for verification.

Similar to the residential demand projection, DWR's public water system statistics provide data on the actual amount of water delivered for landscape use by each participating water purveyor in the County. Lake County provided current and future populations for communities in the County. The resulting per capita landscape water demand was used for current and projected demands. Using the current water demand factor in future projections assumes that per capita water use for landscaping will remain constant over time.

2.2 Results

This section presents a summary of the results of urban water demand calculations for historical use and for 2040. Detailed results are found in Appendix A. Table 2-2 presents data for 2000 and 2001 urban water demand and the 2040 projections of average year water use and dry year water use. These data show that average year urban water use would increase by 8,835 acre-feet, and that dry year urban water use would increase by 9,698 acre feet in 2040.

Table 2-2
2040 Lake County Urban Water Demand Summary (acre-feet per year)

<i>Demand</i>	<i>2000 Water Use (Average Year)</i>	<i>2001 Water Use (Dry Year)</i>	<i>2040 Average Year</i>	<i>2040 Dry Year</i>
Residential Demand	9,084	10,109	16,364	18,317
CII Demand	1,188	1,186	2,222	2,091
Landscape Demand	631	723	1,153	1,308
Total Urban Demand	10,903	12,018	19,738	21,716

Commercial water use is a factor of business types. Water use decreased by 2 acre-feet from 2000 to 2001. Similar levels of water use over the period at tourism-related business (lodging, restaurants, and retail) may be part of the reason for this similarity. Landscape water use showed an increase from 2000 to 2001, by 92 acre-feet. This is directly attributable to increased irrigation use because of low precipitation and higher temperatures.

Dry year use was higher than average year use in all categories, except CII. While 2001 was a dry year, it was not declared as a drought year where users were asked to curtail water use. The increase in dry year water use is because of higher irrigation demand during the year. If 2001 had been a declared a drought year with conservation requested or required of water users, then people would have been asked to conserve and reduce outdoor irrigation, and thereby demand.

Urban demands are met by a combination of surface water and groundwater. Multiple water purveyors within Lake County serve treated Clear Lake surface water to users, including some larger communities like City of Clearlake, City of Lakeport, Nice, Clearlake Oaks, Buckingham, Soda Bay, North Lakeport, Konocti Harbor and Lucerne (Archibald and Wallberg 2002; Dinh 2005). Table 2-3 shows the water demands for only the purveyors that use Clear Lake water to indicate how surface water demands may change into the future. This demand may not entirely be met by surface water either in current or future years because some areas use both groundwater and surface water; however, these demands represent the demands that could be met by surface water deliveries.

Table 2-3
2040 Clear Lake Surface Water Purveyors Urban Water Demand Summary
(Acre-feet per year)

<i>Demand</i>	<i>2000 Water Use (Average Year)</i>	<i>2001 Water Use (Dry Year)</i>	<i>2040 Average Year</i>	<i>2040 Dry Year</i>
Residential Demand	5,156	4,991	8,961	8,587
CII Demand	874	1,194	1,574	1,984
Landscape Demand	565	1,027	1,009	1,730
Total Urban Demand	6,594	7,212	11,544	12,300

CII water use in the 2001 dry year was 74 gallons per employee daily (gped). The number of jobs countywide in 2040 is projected to be 25,100, with projected dry year water use of 2,091 acre feet. Average year water use was 78 gped, and the number of jobs in 2040 stayed constant. Projected 2040 average year water use is 2,222 acre feet.

Landscape per capita water use is based on the same countywide population as shown in Table 2-4. The 2001 dry year water use rate was 11 gallons per capita daily

(gpcd). Countywide 2040 landscape dry year water use is projected to be 1,308 acre feet. The 2000 average year water use rate was 10 gpcd. Countywide 2040 landscape average year water use is projected to be 1,153 acre feet.

Table 2-4 presents the current and projected residential demand by community. The greatest increases in population and water use are in Coyote Valley (Hidden Valley Lake) and the communities surrounding Clear Lake.

Table 2-4
Communities and Water Purveyors of the Residential Water Forecast and Historical Data

Community Area	Water Purveyor Representation	2000 Population *	2001 Population*	2000 Water Use** (Acre-ft/year)	2001 Water Use** (Acre-ft/year)	2000 Use Rate*** (Gallons/Capita/Day)	2001 Use Rate*** (Gallons/Capita/Day)	2040 Est. Population*	2040 Average Year Est. Water Use (Acre-ft/year)	2040 Dry Year Est. Water Use (Acre-ft/year)
Clearlake	Clearlake Park-So. Cal Water	13,142	13,284	2,299	2,435	156	164	20,196	3,532	3,702
	Buckingham Park CWD									
Clearlake Oaks	Clearlake Oaks CWD	2,402	2,414	370	420	137	155	2,932	452	510
Cobb	Cobb Area CWD	1,638	1,655	173	174	94	94	2,478	261	261
Coyote Valley	Hidden Valley Lake CSD	3,777	4,353	602	856	142	176	17,550	2,796	3,452
Kelseyville	Kelseyville CWWD #3	2,928	2,964	482	548	147	165	4,794	790	886
Lakeport	City of Lakeport	4,820	4,865	730	685	135	126	7,008	1,062	987
	Lake County CSA #21 - North Lakeport									
Lower Lake	Lower Lake CWD	1,755	1,781	215	278	109	139	3,184	390	496
Lucerne	Cal. Water Service Co. - Lucerne	2,870	2,913	441	499	137	153	5,206	799	893
Middletown	Callayomi CWD	1,020	1,108	86	231	75	186	2,657	223	554
Nice	Nice Mutual Water Co.	2,509	2,551	230	234	82	82	4,866	446	446
Upper Lake	Upper Lake CWD	989	1,003	69	70	62	62	1,759	123	123
Rural ¹	Lake County CSA #6 - Finley	20,459	20,293	3,388	3,678	148	162	33,144	5,489	6,008
County Total		58,309	59,184	9,084	10,109	--	--	105,774	16,364	18,317

¹Estimated as population of the entire county minus the population of community areas * Source: Lake County **Source: CDM ***Source: DWR

Section 3

Agricultural Water Demand

Agricultural water demand is water used in the production of commercial crops. Agricultural water demand changes based on land use, economic, and hydrologic conditions. This section forecasts agricultural water demand through 2040 to provide local planners with information on future water management needs. The following sections describe 1) methods used to calculate water demand, 2) potential future agricultural scenarios in Lake County that could affect water demand, and 3) Water demand results associated with future agriculture.

3.1 Methods

Agricultural demand is calculated for each Inventory Unit to show how demand in areas with similar physical attributes may change into the future. The agricultural water demand is measured as the evapotranspiration of applied water (ETAW). Evapotranspiration (ET) is a plant's demand for water, and includes evaporation from soils surrounding the plant, water retained by the plant, and the water given off during plant growth (transpiration). The amount of water transpired by crops depends on humidity, temperature, wind, solar radiation, crop stage and type, and irrigation frequency. The ET values are met from a combined source of irrigation and precipitation. This demand forecast only includes the managed irrigation component, or the ETAW, and does not include soil moisture derived from precipitation.

The agricultural demand forecast included the following steps:

- Establish current dry year and average year agricultural demands per acre for each crop.
- Determine current cropped acreage within each Inventory Unit to determine overall demands within the Inventory Unit.
- Create scenarios that represent potential future agricultural development within the County.
- Use the per-acre demands to calculate agricultural demands for each scenario.

DWR maintains unit ETAWs for crops throughout California as part of statewide water planning efforts. These values are specific to a region based on local climate and precipitation data. Similar to the urban demand forecast, year 2001 represents agricultural water information for an average year, and year 2000 represents information for a dry year.

DWR provided information regarding cropped acreage and associated water demand by Inventory Unit (See Figure 1-1) as part of the Water Inventory and Analysis. DWR performs land use surveys in each county approximately every five years. As part of these surveys, DWR determines irrigated acreages by crop using aerial imagery and Geographic Information Systems (GIS) technology. DWR completed a land use survey

in 2001 for Lake County, and updated the survey to 2004 levels with recent data from Lake County. Figure 3-1 identifies the location and extent of crops in Lake County. Figure 3-1 shows that deciduous orchards (including pears and walnuts) and grapes represent the largest percentages of crops grown in the county, approximately 23 percent and 50 percent, respectively. DWR applied the unit water demand information to this land use data to provide current agricultural demands for different hydrologic year types.

3.2 Current Conditions

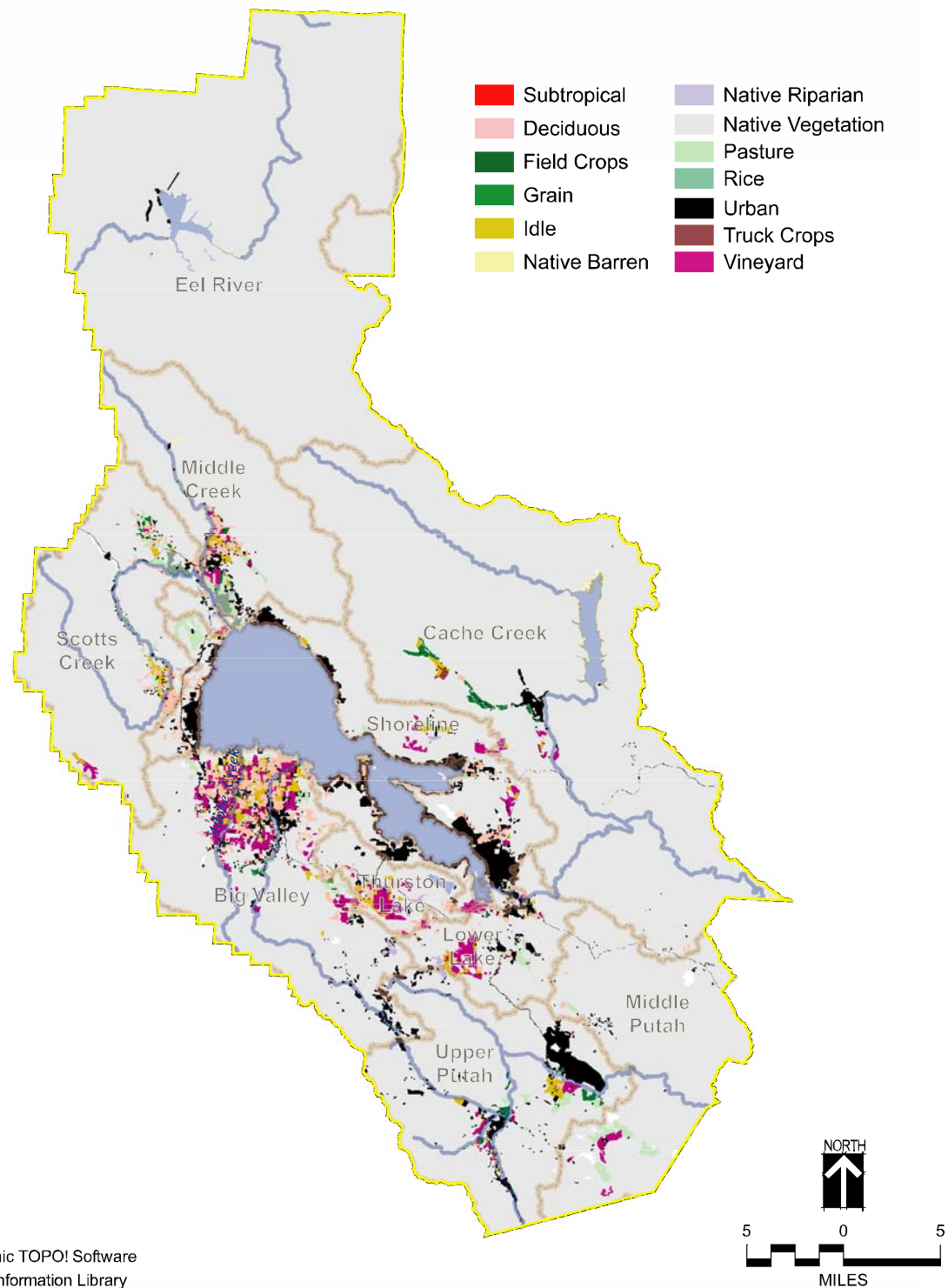
Agriculture is a major industry within Lake County. Currently, 19,978 acres of farmland in Lake County are irrigated, as shown in Table 3-1. The dominant crops include wine grapes, pasture, and pears, with smaller amounts of walnuts, rice, truck crops, and others. Wine grapes require considerably less applied water (0.5 acre-feet/acre) than pears (2.2 acre-feet/acre) and walnuts (2.3 acre-feet/acre) (DWR 2005b). As mentioned above, the demand calculations use the ETAW to represent demand because it includes only the water that the crop uses. These numbers may look less familiar to growers than applied water numbers, which represent the amount of water that growers use on their crops.

Table 3-1
2004 Lake County Crops

Crop	Acreage	Percentage of All Farmland	Unit Applied Water (acre-feet/acre)	Unit ETAW (acre-feet/acre)
Wine Grapes	10,016	50%	0.56	0.5
Pasture	4,050	20%	4.43	3.1
Truck Crops	189	1%	1.92	1.5
Pears	3,419	17%	2.93	2.2
Rice	940	5%	4.5	2.7
Walnuts	1,185	6%	3.03	2.3
Other	179	1%	varies	varies
Total	19,978			

Irrigated farmland uses 39,817 acre-feet of water during an average year, and 46,627 acre-feet during a dry year (Table 3-2). The largest concentration of irrigated agriculture is in Big Valley, where a large groundwater basin and beneficial soil and topography support a large farming area. Several other Inventory Units have substantial farming areas, including Scotts Creek, Middle Creek, Middle Putah, and Shoreline.

Appendix B presents current agricultural water demand calculations by year type and Inventory Unit. Current agricultural water demand will be further discussed in the upcoming Lake County Water Inventory and Analysis Report.



Source:
National Geographic TOPO! Software
California Spatial Information Library

Figure 3-1
Land Use

Table 3-2
Current Agricultural Water Demands

Water Inventory Unit	Total Irrigated Crop Acreage	Current Average Year Applied Water (acre-feet)	Current Dry year Applied Water (acre-feet)
Middle Putah	1,522	4,889	5,522
Upper Putah	945	2,082	2,428
Lower Lake	1,450	923	1,249
Thurston Lake	1,597	1,138	1,510
Big Valley	7,707	13,416	16,091
Scotts Creek	2,205	6,929	7,837
Shoreline	1,867	3,324	3,919
Middle Creek	2,142	6,637	7,467
Cache Creek	543	479	604
Eel River	0	0	0
Total	19,978	39,817	46,627

3.3 Potential Scenarios

In addition to calculating existing agricultural demands, this forecast develops and calculates demands for three potential future scenarios regarding agricultural land use in Lake County. Because future changes in agriculture are not explicitly known, the scenarios provide an appropriate range of future agricultural practices and associated water demand. Future demands are determined by multiplying future scenario crop acreage by current crop unit water demand.

Scenarios forecast the amount and type of irrigated crops in the year 2040. Scenarios do not imply preferred or probable futures; rather, they provide information to quantify varying assumptions about agricultural water demand in the future. Rather than projecting one uncertain future, multiple scenarios allow a range of possibilities that are reasonable in 2040, given the data that is available today.

Each scenario includes changes in crop acreages within each Inventory Unit from the existing condition. The forecasted acreage of irrigated crops and the unit ETAW values per crop determined agricultural water demand for each scenario.

Forecast scenarios for projected agricultural water demand were developed based on opinions and input from Lake County agricultural experts. Agricultural water demand forecasts were developed considering current trends and plausible future changes in county agriculture (Seeley 2005; Hajik 2005; March 2005). Current trends in land use indicate that overall, agricultural acreage in Lake County is increasing:

- Vineyards are increasing because of potential economic net revenues.
- Pear acreage is declining because of global competition in the fresh pear market and a decline in interest in secondary processing (canning).
- Walnut acreage is declining because of economic net revenues.

- Native vegetation, pears, and walnuts are being replaced with vineyards and new housing and ranchette development.

The three scenarios represent different plausible futures using the above trends. All scenarios assume that:

- Any surface water irrigated land that discontinues production of one type of crop begins growing a new crop.
- Any irrigated land that goes out of production was irrigated with groundwater.
- All new agricultural lands are irrigated with groundwater.
- Irrigation efficiency for crops remains constant.
- Irrigated land converted to ranchettes will convert half of the land to non-irrigated uses and convert the other half to irrigated pasture.
- The new irrigated pasture is included in the agricultural water demand forecast and is not included in the urban water demand forecast.

Scenario One

Scenario One is indicative of the future if present trends continue. This scenario assumes that the majority of land with pears and walnuts will convert to wine grapes and housing. Wine grapes will also expand into areas of native vegetation. The growth of wine grapes will be driven by lower land prices in Lake County than those in neighboring Napa and Sonoma counties, where vineyards and the wine industry are well established. The increase in housing is assumed as ranchette development, with homes on acreage, irrigating pasture for domestic farm animals (horses, as well as FFA and 4-H livestock). Scenario One assumes:

- Removal of 3,780 acres, or approximately 80 percent, of pears and walnuts.
- Conversion of land where pears and walnuts are removed to 3,280 acres of wine grapes and 500 acres of ranchettes.
- Conversion of 200 acres of native vegetation to 200 acres of new ranchette acreage.
- Irrigated pasture on 50 percent of ranchette acreage.
- Conversion of 10,320 acres of native vegetation to 10,320 acres of new wine grape acreage.

If current trends continue, predicting the exact amounts that the crops will increase or decrease is somewhat speculative. Scenario One represents a high degree of potential changes to pear and walnut acreage and a somewhat high change to vineyard

acreage. As discussed below, Scenario Two reflects changes to crop acreages at varying levels relative to Scenario One. Including two scenarios provides a better range of how the trends could change future crop acreages.

Scenario Two

Scenario Two is similar to Scenario One, but reflects a smaller reduction in pears and walnuts, and a larger increase in wine grapes. Ranchette development occurs at the same levels as Scenario One. Relative to the current conditions, Scenario Two assumes:

- Removal of 3,024 acres, or approximately 67 percent, of pears and walnuts.
- Conversion of the land where pears and walnuts are removed to 2,524 acres of wine grapes and 500 acres of ranchettes.
- Conversion of 200 acres of native vegetation to 200 acres of new ranchette acreage.
- Irrigated pasture on 50 percent of ranchette acreage.
- Conversion of 14,266 acres of native vegetation to 14,266 acres of new wine grape acreage.

Scenario Three

Scenario Three assumes that growers will keep their land in production by expanding their marketing efforts with value-added production and diversifying their crop choices to alternative crops. Growers may shift to new crops that grow well in the soils and climatic conditions of Lake County. These new crops will likely be better for agritourism or will have “specialty” status. Chestnuts and pecans could replace the more common walnut, which may decrease competition within the economic market for walnuts, making walnut production more profitable. The fig and pomegranate are components of a Mediterranean diet, which has gained public interest for its health potential. Growers could also choose to plant Asian and heritage vegetables, which are perceived as gourmet foods (Tous and Ferguson, 1996; McGourty 2004; Ceran and Elkins 1997). Scenario Three includes:

- Conversion of 3,240 acres pear acreage to 3,240 acres pomegranates and figs.
- Conversion of 540 acres walnuts to 520 acres pecans and chestnuts.
- Conversion of 250 acres of native vegetation to 250 acres of new heritage and Asian vegetable acreage.
- Conversion of 13,600 acres of native vegetation to 13,600 acres of new wine grape acreage.
- Conversion of 200 acres of native vegetation to 200 acres of new ranchette acreage.

- Irrigated pasture on 50 percent of ranchette acreage.

3.3 Results

Irrigated acreage in Scenarios One and Two increases substantially (11,000 to 14,000 acres) from current conditions while water demand in Scenarios One and Two remains similar to the demand under current conditions. This increase in irrigated acreage without a corresponding change in water demand results from the replacement of high water demand crops (pears and walnuts) with low water demand crops (wine grapes). In Scenario Three, irrigated acreage increases as in Scenarios One and Two, but water demand increases substantially because pears and walnuts are replaced with other high water demand crops (pomegranates, figs, pecans, and chestnuts).

Tables 3-3 and 3-4 show the results of the agricultural demand forecast for each of the three scenarios. Table 3-3 shows that future agricultural water demand during an average year decreases by 2 percent (630 acre-feet) under Scenario One, increases by 7 percent (2688 acre-feet) under Scenario Two, and increases by 22 percent (8570 acre-feet) under Scenario Three.

Table 3-4 shows that during a dry year, agricultural water demand increases by 2 percent (1009 acre-feet) under Scenario One, increases by 11 percent (5174 acre-feet) under Scenario Two, and increases by 25 percent (11804 acre-feet) under Scenario Three. Appendix B includes detailed calculations and results of the agricultural demand forecast.

Table 3-3
Projected Average Year Agricultural Water Demand

	2000 Average Year Data		Scenario 1 Average Year		Scenario 2 Average Year		Scenario 3 Average Year	
	2000 Data		2040 Average Year Forecast		2040 Average Year Forecast		2040 Average Year Forecast	
Water Inventory Unit	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)
Middle Putah	1,522	4,889	1,772	5,205	1,802	5,222	1,772	5,205
Upper Putah	945	2,082	2,995	3,406	3,295	3,574	2,995	3,406
Lower Lake	1,450	923	4,450	2,603	4,900	2,855	4,450	2,603
Thurston Lake	1,597	1,138	4,097	2,538	4,472	2,748	4,097	2,538
Big Valley	7,707	13,416	9,057	9,744	10,062	11,368	10,307	14,956
Scotts Creek	2,205	6,929	1,465	4,931	1,648	5,394	2,355	7,351
Shoreline	1,867	3,324	4,847	4,946	5,301	5,210	4,847	4,946
Middle Creek	2,142	6,637	1,722	5,223	1,843	5,526	2,342	6,791
Cache Creek	543	479	743	591	773	608	743	591
Eel River	0	0	0	0	0	0	0	0
Total	19,978	39,817	31,148	39,187	34,096	42,505	33,908	48,387

Table 3-4
Projected Dry year Agricultural Water Demand

	2001 Dry year Data		Scenario 1 Dry Year		Scenario 2 Dry Year		Scenario 3 Dry Year	
	2001 Data		2040 Dry Year Forecast		2040 Dry Year Forecast		2040 Dry Year Forecast	
Water Inventory Unit	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)
Middle Putah	1,522	5,522	1,772	5,909	1,802	5,932	1,772	5,909
Upper Putah	945	2,428	2,995	4,219	3,295	4,453	2,995	4,219
Lower Lake	1,450	1,249	4,450	3,589	4,900	3,940	4,450	3,589
Thurston Lake	1,597	1,510	4,097	3,460	4,472	3,752	4,097	3,460
Big Valley	7,707	16,091	9,057	12,209	10,062	14,184	10,307	18,284
Scotts Creek	2,205	7,837	1,465	5,481	1,648	6,027	2,355	8,349
Shoreline	1,867	3,919	4,847	6,194	5,301	6,558	4,847	6,194
Middle Creek	2,142	7,467	1,722	5,815	1,843	6,172	2,342	7,667
Cache Creek	543	604	743	760	773	783	743	760
Eel River	0	0	0	0	0	0	0	0
Total	19,978	46,627	31,148	47,636	34,096	51,801	33,908	58,431

Section 4

Environmental and Recreational Water Demand

Environmental water demand includes applied water used for managed wetlands and instream flows. Recreational water demand generally includes instream flow and water level requirements. Other than applied water for managed wetlands, water needs for environmental and recreational use are generally non-consumptive. Lake County, while filled with wetland habitat, does not have any managed wetlands where water is applied for environmental water use. Therefore, this section discusses lake levels and instream flows, but not managed wetlands.

These water uses do not fit into the applied water methodology (see Section 1.1); that is, they are not part of the measurable and managed water cycle. This analysis does not quantify these uses because they are not applied water demands; however, providing qualitative information about existing and potential future demands can assist water managers in understanding the future water resources setting in the County.

This section discusses methods and results of the environmental and recreational water demand forecast.

4.1 Methods

The environmental and recreational water use analysis focuses on the three primary drainages for the county: the Eel River drainage in the north; Putah Creek in the south; and Cache Creek, draining Clear Lake, to the east. While Lake County has many seasonal streams, these three watercourses are the main waterways in the county that convey water during most of the year.

Changes in environmental and recreational demands are generally driven by changing regulations or public values. Environmental water provides fish habitat within waterways and a water supply for riparian vegetation growing along the edges of waterways. All three of the main rivers or creeks in the county are used for whitewater rafting and kayaking during months with adequate flows. The environmental and recreational demand forecast included the following steps:

- Outline existing requirements on waterways for environmental or recreational needs;
- Discuss potential future needs with experts;
- Research other potential regulatory changes that could affect environmental and recreational demands; and
- Using the above information, forecast potential future environmental and recreational demands.

4.2 Results

The sections below identify the existing environmental and recreational requirements on each waterway and then discuss potential future changes. Clear Lake has existing water level requirements to protect the recreational opportunities and habitat within the lake. Putah Creek, Eel River, and Cache Creek have recommendations for recreational flows to enable whitewater rafting or kayaking. The state has designated Cache Creek as a State Wild, Scenic, and Recreational River, effective January 1, 2006.

4.2.1 Recreational and Environmental Needs in Clear Lake

Clear Lake is the largest natural freshwater lake in California. The lake has three sections: the dominant Upper Arm, the Lower Arm, and the Oaks Arm. Figure 4-1



Figure 4-1
Clear Lake

shows the locations of the lake sections. The lake is shallow, with mean depths ranging from 23 to 36 feet (Jones & Stokes 2005). The lake is approximately 18 miles long and 7.5 miles wide. The lake is popular for water skiing and bass fishing.

Captain Rumsey established the natural level of Clear Lake in 1872. He determined that the level of the lake at the Grigsby Riffle (a rock sill) was “zero Rumsey.” Lake level measurements are therefore measured by this elevation, which is 1318 feet above mean sea level (Lake County 2004 (a)).

In 1914, the Clear Lake Dam was built at the outlet to Cache Creek. Yolo County Flood Control and Water Conservation District (FCWCD) owns the dam and uses it to regulate the levels of Clear Lake for flood control and water supply.

Three significant legal decrees influence Clear Lake water levels. Of the three decrees, only one controls releases from Clear Lake for recreational and environmental purposes. The Solano Decree, 1978, regulates summer lake levels and the maximum amount of water that can be

withdrawn by Yolo County FCWCD per year. The lake level on May 1st of every year determines the amount of water that can be withdrawn that year. Yolo County FCWCD can withdraw its full allotment of 150,000 acre-feet of water if Clear Lake is full on May 1st (7.56 Rumsey). If Clear Lake is below 3.22 Rumsey, no water can be withdrawn. The decree sets monthly maximum limits as well (Lake County 2004 (b), Ott 1987, US Army Corps of Engineers 1992).

The water levels in Clear Lake are regulated because of the agreements contained in the legal decrees.

4.2.2 Environmental Needs on Cache Creek

The governor signed Assembly Bill 1328 into law on October 6, 2005 (effective January 1, 2006) to protect a 31-mile stretch of Cache Creek, from the Clear Lake dam to the upper end of the Capay Valley, as a State Wild, Scenic, and Recreational River (Logsdon 2005). Lake County and Yolo County FCWCD rescinded their opposition to the bill after negotiating amended language. Negotiations included language to protect water rights, prevent federal Wild and Scenic River status, and continuance of mercury and non-native vegetation cleanup (Hightower 2005).

The California State Wild and Scenic Rivers Act of 1972 protects rivers with significant scenic, recreation, fishery, or wildlife. The Act (Public Resources Code Section 5093.50) states:

“It is the policy of the State of California that certain rivers which possess extraordinary scenic, recreational, fishery, or wildlife values shall be preserved in their free-flowing state, together with their immediate environments, for the benefit and enjoyment of the people of the state. The Legislature declares that such use of these rivers is the highest and most beneficial use and is a reasonable and beneficial use of water within the meaning of Section 2 of Article X of the California Constitution. ”

The Act does not allow dams, reservoirs, or diversions on river segments affected by the Act. State agencies are forbidden to assist any other agency in planning or building any of these structures. The State retains responsibility for fish and wildlife. Water rights are not affected. The “first line” of riparian vegetation is protected (Friends of the River 2003).

The current law specifically states that adding Cache Creek as a protected river will not affect the existing water rights of public water agencies within the Lake County portion of the Cache Creek watershed. The legislation further adds that the Act will not affect Yolo County FCWCD’s range of operations or quantity of water diverted (i.e., water releases from Clear Lake or changes in water flow) permitted under existing water rights.

4.2.3 Environmental Needs on Other Streams

The Cache Creek watershed includes the streams that drain into Clear Lake. The county's mild climate results in little snowmelt to keep streams flowing from the natural reservoir of snow storage. Many streams are dry in summer and fall until they are replenished with winter rainfall. Some streams flow year-round because of natural seepage of near-surface groundwater. Riparian vegetation flourishes along these waterways, which promotes habitat for various species.

One such stream is Middle Creek, which flows from the north into the Upper Arm of Clear Lake, between the shoreline communities of North Lakeport and Nice. Table 4-1 shows fish species occurring in Middle Creek. These species are similar to species found in the other creeks and streams that drain into Clear Lake.

Table 4-1
Middle Creek Fish

Fish Common Name	Species Status
Clear Lake hitch	California Species of Concern
rainbow trout	None
Sacramento sucker	None
California roach	None
threadfin shad	None
green sunfish	None
brown bullhead catfish	none

Source: Northwest Biosurvey 2004

The Clear Lake hitch, found in Middle Creek and other Clear Lake tributaries, is a native fish, and listed as a California Species of Concern. Because of the fish's status, it has the potential to change environmental water demands into the future. The hitch spawn between March and July (Northwest Biosurvey 2004). The loss of spawning and nursery habitat has likely led to the decline of the fish (Windrem 2004).

A survey of Clear Lake hitch populations took place in 2004. The survey found that the hitch were observed primarily in Adobe and Kelsey creeks, which both reported populations of 300 fish counted at one observation time. No hitch were observed in historic spawning runs such as Scotts, Seigler Canyon, and Schindler creeks. Table 4-2 indicates the creeks where the survey observed hitch.

Table 4-2
Clear Lake Hitch Survey

Creek	<i>Estimated maximum number of fish counted at one observation</i>
Adobe Creek	300
Kelsey Creek	300
Manning Creek	50
Cole Creek	25
Hill Creek	12
Middle Creek	12

Source: Windrem 2004

Studies have identified several recommendations to reduce the decline of the hitch, including:

- Removing physical barriers to migration. These include bridge abutments, detention structures, dams, and culverts. In particular, two studies point out the need for change in the channel elevation at the bridge abutment in Middle Creek, at Rancheria Road (Northwest Biosurvey 2004 and Windrem 2004).
- Improving the streambed quality and quantity of gravel for spawning needs for hitch nurseries (Windrem 2004).

These suggestions do not involve changes in flow, and would not likely affect environmental water demands within these waterways. The hitch status, and other environmental issues on Clear Lake tributaries, will not likely affect environmental water demand because the water flow on these tributaries is not controlled by dams or major diversions and cannot easily be increased to enhance the success of the hitch and other fish species.

4.2.4 Instream Flows for Recreation

The Eel River, Putah Creek, and Cache Creek are all used for whitewater rafting or kayaking. All three waterways offer scenic visual resources that include wildlife viewing and riparian vegetation.

Releases from Lake Pillsbury in Lake County affect rafting on the Eel River, and rafters find the run enhanced in October and November when water is released to make room for winter storage. Easiest rafting occurs at 400 cfs, with the preferred level at 800 cfs. Water over 800 cfs creates bigger rapids and requires a higher experience level from the rafter or kayaker. Rapids range from Class III to above IV, depending on water flows. This stretch of the Eel River has a distance of 5.7 to 8.8 miles (depending on takeout location), and can be run in one day (Tuthill 2002). In addition to recreational opportunities on the Eel River, water levels within Lake Pillsbury can affect recreational opportunities within the lake. The Federal Energy Regulatory Commission is working to relicense the Potter Valley Project. This effort is

in court proceedings, but the resulting licensing requirements may include water level requirements for recreation.

Putah Creek from Middletown to Berryessa Reservoir has flows ranging from 500 cfs to 2000 cfs, depending on the season. The creek offers Class II to Class IV+ rapids, with the higher class due to a brushy waterway with overhanging willows. There are two steep gorges and some gentle gradient that requires paddling. The distance of this run is 16 miles, taking one or two days to traverse (Tuthill 2002).

Cache Creek (from North Fork to Bear Creek) has flows ranging from 350 to 3,000 cfs, with an optimal flow of 100 cfs for the North Fork, and 400 cfs at Rumsey Gauge. There are many Class II riffles with one Class III rapid. Commercial rafting companies launch unguided two-seater rafts on the creek. Water in the North Fork is clear water from Indian Reservoir; water that is more turbid is released from Clear Lake. Water is warm in spring and summer. This stretch is 19 miles, generally taking two days to run (Tuthill 2002 and Pike 2001).

Table 4-3 shows flows in each river during the years 2000 (an average year) and 2001 (a dry year).

Table 4-3
Monthly Streamflow Statistics for the Eel River, Putah Creek, and Cache Creek

YEAR	Monthly Mean Streamflow (cfs)											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Eel River⁽¹⁾												
2000	328	2,556	1,189	193	221	175	139	142	154	182	310	118
2001	95	63.4	476	329	218	137	101	103	103	118	242	1,579
Putah Creek⁽²⁾												
2000	386	1,224	477	111	55.5	19	4.78	0.83	0.53	3.95	9.65	20.7
2001	133	534	296	54.2	20.3	4.56	0.52	0.39	0.34	0.35	128	808
Cache Creek⁽³⁾												
2000	4.16	99.5	827	137	622	702	543	455	282	122	4.18	4.04
2001	4.03	4.27	7.13	11.1	175	180	154	266	8.81	4.89	2.67	2.81
Notes: (1) USGS Station 11470500: Eel River below Scott Dam near Potter Valley (2) USGS Station 11453500: Putah Creek near Guenoc (3) USGS Station 11451000: Cache Creek near Lower Lake												

Source: USGS 2005.

In general, 500-800 cfs is an appropriate range for rafting needs (Wilson 2005). Table 4-4 identifies the Eel River, Putah Creek, and Cache Creek rafting classes and recommended flows.

Table 4-4
River Rafting Reaches with Headwaters in Lake County

<i>River Reach Description</i>	<i>Class</i>	<i>Minimum Suggested Flow (cfs)</i>	<i>Maximum Suggested Flow (cfs)</i>
Eel River	III-IV	400	800
Putah Creek	IV-V	500	800
Cache Creek	II-III	250	750

Source: American Whitewater 2005 and Tuthill 2002

Comparing Tables 4-3 and 4-4 shows that the waterways are currently only useable for recreational purposes during a few months of some years. In future years, increasing public pressure may create a demand to increase flows on these waterways to enable additional recreational opportunities; however, these changes would likely be expensive to implement.

Section 5

Clear Lake Evaporation

Evaporation from Clear Lake, the largest water body in the county, is included as a water demand. Evaporation from Clear Lake is significant because its large surface area (41,643 acres on average) creates the potential for a large volume of water to evaporate.

5.1 Methods

Clear Lake evaporation was calculated using three methods: the pan coefficient method, the Penman-Monteith equation method, and the water balance method. The results of each method were compared to determine if the results are reasonable.

Pan Coefficient Method

The pan coefficient method uses evaporation measured from a pan (E_{pan}) and multiplies the E_{pan} by a factor to obtain lake evaporation. Typically, evaporation from a pan will be greater than a large body of water because of the heat through the pan's sides (Linacre 2002). This calculation using the pan coefficient method uses measured evaporation from California Irrigation Management Information System (CIMIS) station #106, located in Sanel Valley, Mendocino County (Hopland). This station was selected because it is the closest station to Clear Lake with pan evaporation data. Pan evaporation data for station #106 was averaged by month for a period of record from 1998-2004.

The E_{pan} was multiplied by a coefficient to determine the evaporation of the lake. Published pan to lake coefficients include 0.60, 0.77, and 0.88 (Yates 2003, Linacre 2005, and Orang 2005). This calculation used an estimate of 0.77, the median of published coefficients and the one seen in multiple documents. The result was multiplied by the average surface area of Clear Lake (41,643 acres) to estimate monthly lake evaporation in acre-feet.

Penman-Monteith Equation

Because of the lack of pan evaporation data within Lake County, the Penman-Monteith equation can use local temperature and climate data to estimate local evaporation. The Penman-Monteith equation derives a reference evapotranspiration ($\text{RefET}_{\text{pot}}$) for a location, which can then be converted to pan evaporation (and further converted to lake evaporation as described above).

The Penman-Monteith (shown below) equation includes the variables as described in Table 5-1 (Washington State University 2005).

$$\text{RefET}_{\text{pot}} = \frac{\text{Slope}_{\text{vpf}} \cdot (\text{Rad}_{\text{net}} - \text{SoilHeatFlux}) + (\text{DayFract} \cdot \text{VPD} \cdot C_{\text{va}}) / R_a}{\text{Slope}_{\text{vpf}} + \gamma \cdot (1 + r_c/r_a)}$$

Table 5-1
Penman-Monteith Equation Parameters

SoilHeatFlux	Soil Heat Flux
DayFract	Fraction of the day in daylight
C _{va}	Specific Capacity of the air
γ	Psychometric Constant
Slope _{v_{pf}}	Slope of Saturation Vapor Pressure as a Function of Temperature
VPD	Vapor Pressure Deficit
Rad _{net}	Net Radiation
rc	Surface Resistance Constant
ra	Aerodynamic Resistance

RefET_{pot} is an estimate of the amount of ET from a field of fetch (grass) in the area where the meteorological measurements were taken. The meteorological station closest to Clear Lake is the UC Integrated Pest Management Program weather station in Kelseyville. The station collects raw daily data of solar radiation, maximum and minimum temperature, dew point temperature, and wind speed data. This data was available for the years of 1998-2004.

Calculation of the RefET_{pot} using the Penman-Monteith equation is very complicated, and DWR has developed the Consumptive Use Program (CUP) model to calculate RefET_{pot}. After using the CUP model to determine RefET_{pot}, the RefET_{pot} was divided by a conversion factor of 0.8 to estimate E_{pan}. The conversion factor incorporates local humidity and wind speed to information from the report *Simplified Estimation of Reference Evapotranspiration from Pan Evaporation Data in California*, by Snyder, Orang, and others. The estimated E_{pan} was multiplied by a coefficient to determine the evaporation of the lake. After determining the pan evaporation, the methods described above (Pan Coefficient Method) derived lake evaporation.

Water Balance Method

The Lake County Watershed Protection District performed water balance calculations that are presented in Appendix C. Water balance calculations estimate evaporation from Clear Lake by using the following steps:

- Determine the physical change in storage by lake level changes.
- Determine change in storage due to releases into Cache Creek.
- Subtract change in storage due to releases from the physical change in storage.

This method is only applicable during the summer when precipitation does not cause other unmeasured inflows.

5.2 Results

The three calculation methods estimated similar amounts of evaporation from Clear Lake during the summer months of June through October. Table 5-2 presents the estimated monthly and annual evaporation from Clear Lake determined from the pan coefficient method, the Penman-Monteith method, and the water balance calculation method.

Figure 5-1 shows that monthly Clear Lake evaporation is strongly influenced by temperature and humidity, with high evaporation in June, July, August, and September and low evaporation in November, December, and January. The greatest difference between the methods appears in August, when the Penman-Monteith and pan coefficient methods produce much less evaporation than the water balance method. One possible explanation of the difference is that actual evaporation is greater than estimated evaporation because the estimation methods (Penman-Monteith and pan coefficient) do not consider the build-up of solar energy throughout the summer. The lake absorbs solar radiation throughout the summer, producing a warmer lake with more evaporation in the late summer and early fall. This factor is not considered in using pan evaporation, which sees very little change from stored solar energy. This change in stored energy in the lake could be accounted for by adjusting the E_{pan} to lake evaporation coefficient (Orang 2005a). The rate and amount of change of this coefficient is unknown, resulting in the difference between the methods.

Table 5-2
Comparison of Clear Lake Evaporation Calculations over the Summer Period and Calendar Year

<i>Month</i>	<i>Penman-Monteith Equation Method (acre-ft)</i>	<i>Pan Coefficient Method (acre-ft)</i>	<i>Water Balance Calculation (acre-ft)</i>
January	2,901	3,452	--
February	3,894	5,083	--
March	9,154	9,846	--
April	12,085	12,375	--
May	16,727	17,739	--
June	20,022	23,222	19,399
July	21,537	24,902	27,346
August	18,781	22,875	28,768
September	14,216	17,066	19,329
October	9,520	12,074	12,493
November	3,768	5,171	--
December	2,821	3,962	--
Summer Period Total	84,075	100,138	107,335
Calendar Year Total	135,425	157,765	--

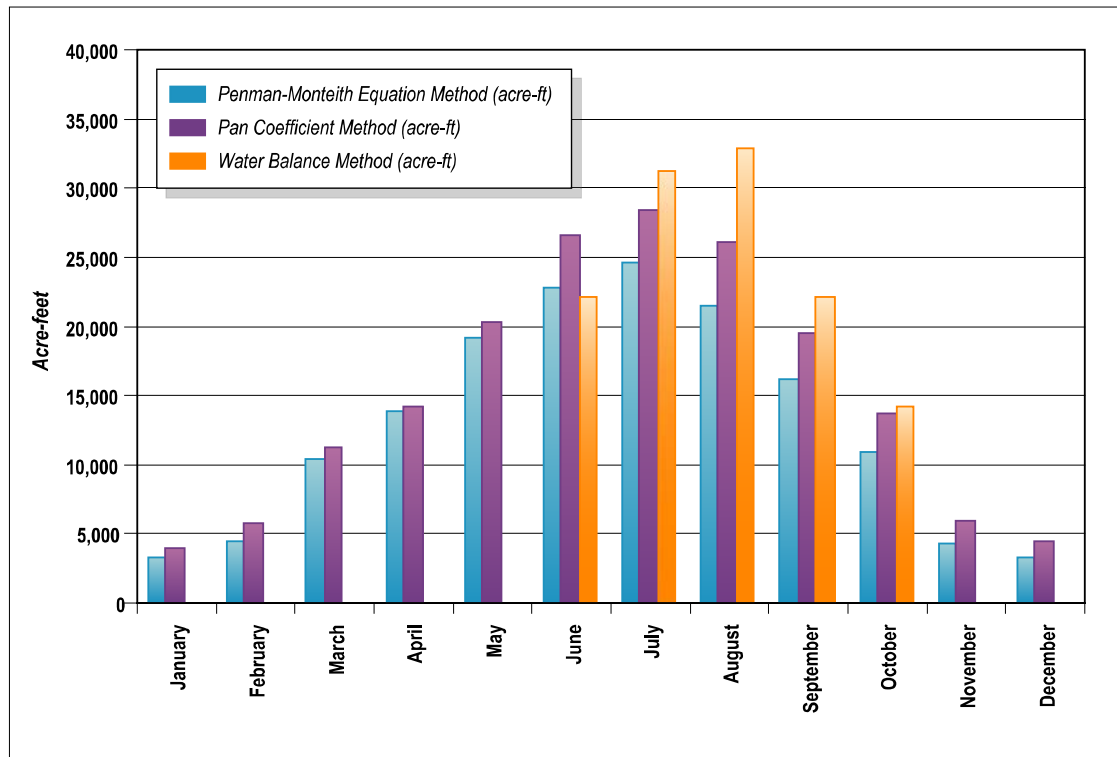


Figure 5-1
Monthly Clear Lake Evaporation Estimates

Section 6

Findings

Lake County will undergo many changes in the next 35 years leading up to 2040. Many communities are growing, particularly those in the south County where residents commute to jobs in Napa and Sonoma Counties. Pears and walnuts, historically prominent crops within the County, are on a decline. Grapes and vineyards are expanding rapidly because of Lake County's reasonable land prices and good climate. These land use changes will drive changes in water demands through 2040.

6.1 Urban Demand Projections

Figure 6-1 shows the results of the urban water demand forecast by inventory unit for a dry year. The "Rural Unincorporated" demand is spread throughout the County in different inventory units, and it is not associated with specific communities. While growth occurs throughout the County, much of the growth is focused in the Upper Putah and Shoreline inventory units.

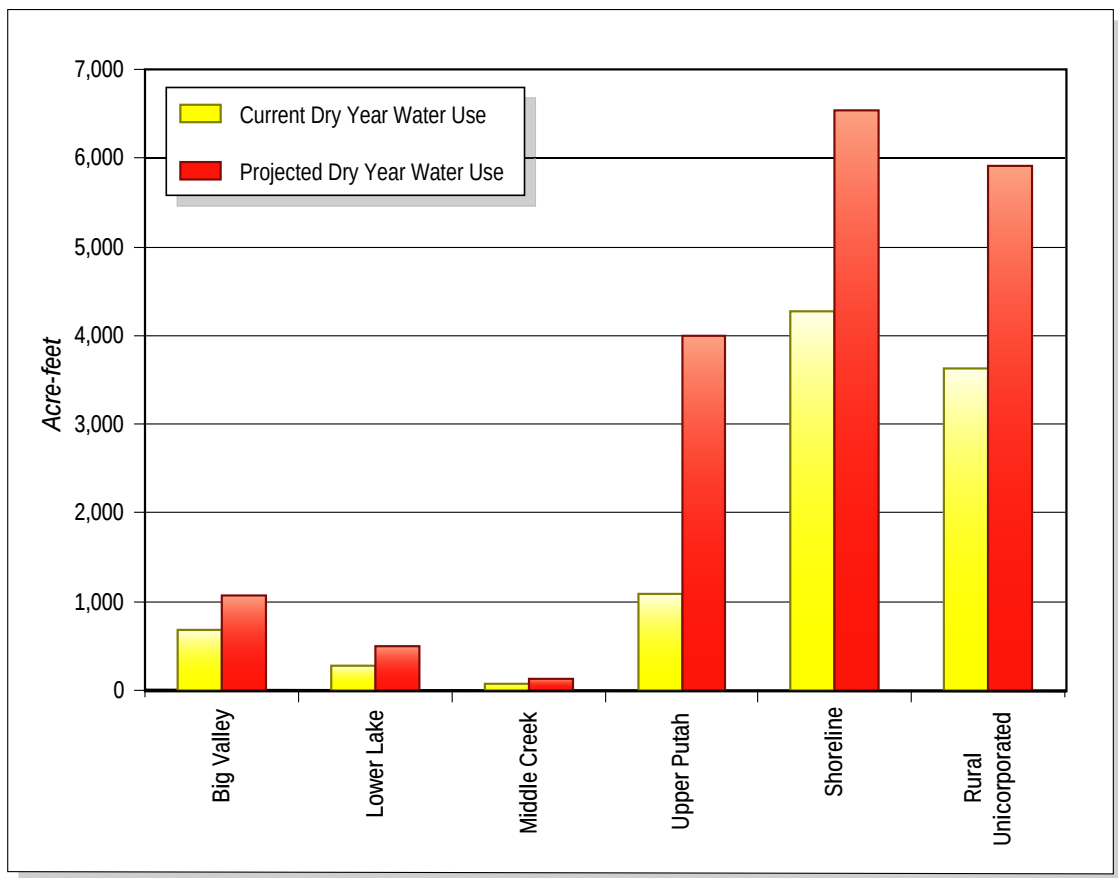


Figure 6-1
Dry Year Residential Water Use

Upper Putah includes the rapidly growing communities of Hidden Valley Lake (or Coyote Valley) and Middletown, both of which serve as commuter towns for Napa and Sonoma Counties. The communities within Upper Putah use groundwater as their primary water supply; therefore, growth in this area will likely increase groundwater pumping.

Shoreline includes many of the urban communities within the County because people are interested in living along the shore of Clear Lake. Communities within this inventory unit include Nice, Lucerne, Clearlake Oaks, Clearlake, Lower Lake, and Lakeport. These communities use a combination of groundwater and surface water.

Table 6-1 summarizes urban demands throughout the county. Urban demands are generally greater during dry years, when less water is available from precipitation to offset applied water needs.

Table 6-1
Urban Demand Summary

<i>Time Period</i>	<i>Dry Year Urban Demands (acre-feet)</i>	<i>Average Year Urban Demands (acre-feet)</i>
Current	12,018	10,903
2040	21,716	19,738

6.2 Agricultural Demand Projections

Figure 6-2 illustrates the results of the agricultural demand forecast compared to current demands in a dry year. Demands vary by inventory unit, primarily based on whether those areas currently have substantial acreage of pears and walnuts.

Big Valley, Scotts Creek, and Middle Creek currently include pears and walnuts, but these acreages are projected to decline into the future. Scenarios One and Two retire varying amounts of pears and walnuts, and replace these crops with grapes. Grapes have a much lower water demand; therefore, Scenarios One and Two show a decreased agricultural water demand in these areas. Scenario Three, however, would replace pears and walnuts with crops that have similar water demands, as well as converting native vegetation areas to vineyards. Scenario Three shows an increase in agricultural demand from current demand in all inventory units.

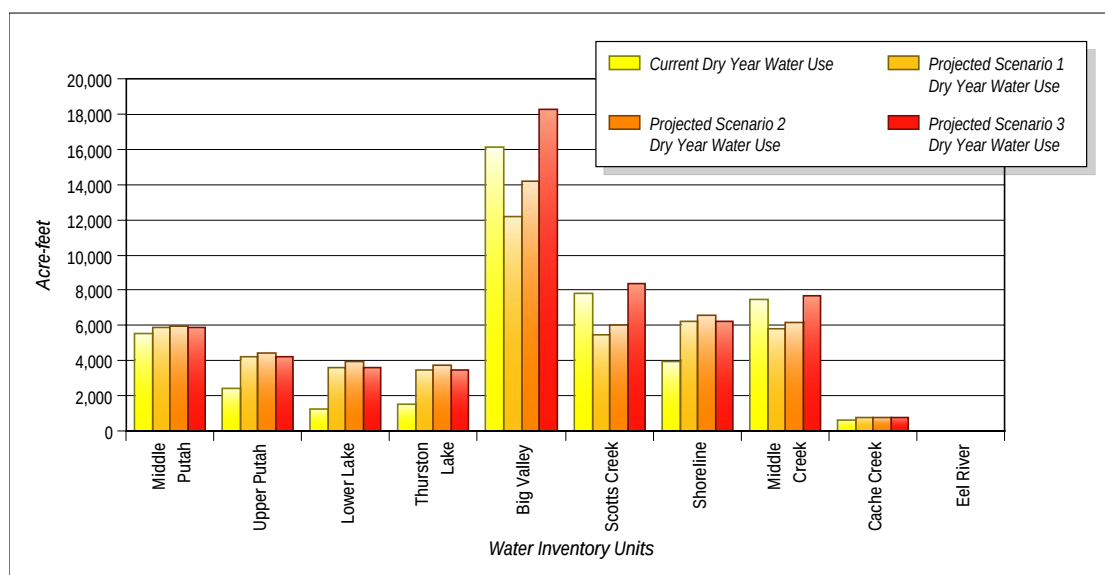


Figure 6-2
Dry Year Agricultural Water Use

The remaining inventory units show a relatively constant increase in agricultural demand for all three scenarios. These inventory units include Middle Putah, Upper Putah, Lower Lake, Thurston Lake, Shoreline, and Cache Creek. In these areas, the main changes are conversions from native vegetation to grapes or ranchettes (with some irrigated pasture). The decrease in pears and walnuts would not substantially affect these areas.

Table 6-2 shows the differences in dry year demands for each scenario. These scenarios bracket a range of potential plausible conditions. Based on the three scenarios, future agricultural water demand within the County will likely range from approximately 40,000 to 49,000 acre-feet in average years and 48,000 to 59,000 acre-feet in dry years.

Table 6-2
Agricultural Demand Summary

	Dry Year Agricultural Demands (acre-feet)	Average Year Agricultural Demands (acre-feet)
Current	46,627	39,817
2040 – Scenario 1	47,636	39,187
2040 – Scenario 2	51,801	42,505
2040 – Scenario 3	58,431	48,387
Scenario 1: Large decreases in pears and walnuts, increases in vineyards and ranchettes. Scenario 2: Moderate decreases in pears and walnuts, increases in vineyards and ranchettes. Scenario 3: Conversion of pears and walnuts to specialty crops, increases in vineyards and ranchettes.		

If agricultural water demand grows in the future, the increased water demands will likely cause increased groundwater pumping. Areas that are currently irrigated with

surface water will continue to receive surface water, but most new farming areas will not likely be able to secure new surface water rights. These users will look to groundwater as their primary supply.

6.3 Environmental and Recreational Demand Projections

Many of Lake County's waterways provide environmental and recreational benefits. Environmental water uses include instream flows for fish habitat and riparian vegetation. Recreational uses include maintaining Clear Lake levels for boating and fishing, and whitewater rafting or kayaking on several rivers and creeks in the County. These uses are not applied water; therefore, the analysis does not quantify this information. The forecast instead provides qualitative information about potential future environmental and recreational demands to improve understanding of the future water resources setting.

While recreational uses would benefit from additional flows or water levels, water facility operators are unlikely to increase releases or water levels because it would restrict water supply, flood protection, or hydropower generation. Many environmental needs in the County are upstream of major dams or diversion facilities; therefore, water flow in these areas cannot be increased by water facility managers.

The state has passed AB 1328, a law that inducts Cache Creek into the state's Wild, Scenic, and Recreational Rivers program. Induction into this program is not intended to change the environmental requirements on the creek, but instead to preserve the existing flow regime into the future.

6.4 Clear Lake Evaporation

Clear Lake has a relatively large surface area and shallow depths, which result in a substantial amount of annual evaporation. Understanding Clear Lake evaporation helps in managing Clear Lake inflows and outflows by quantifying one "outflow" of water. Figure 6-3 shows evaporation from June through October (the months with the greatest evaporation) based on three different methods of calculation. All three methods yield similar values. Only the Penman-Monteith equation and Pan Coefficient methods calculated year-round evaporation. These two methods found evaporation would be approximately 135,000 to 158,000 acre-feet per year, respectively.

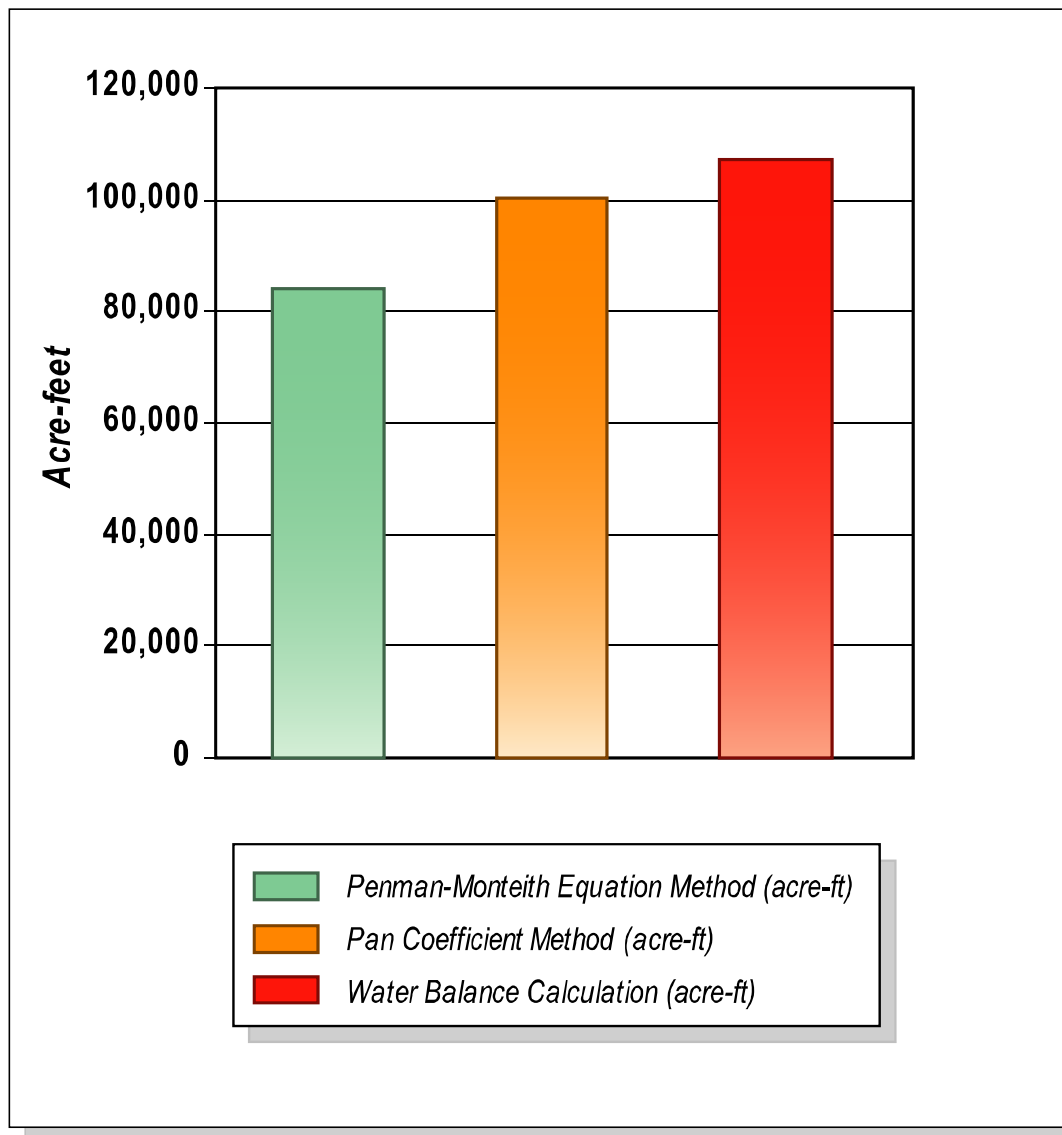


Figure 6-3
Clear Lake June-October Evaporation Volume

6.5 Overall Conclusions

Water demand in Lake County is increasing, and will likely continue to increase through 2040. Figure 6-4 shows both urban and agricultural demand changes over the next 35 years. These demand changes will increase pressure on surface water and groundwater resources in the county, which will require additional planning and management to ensure that this increased demand does not cause harm to existing users or the environment.

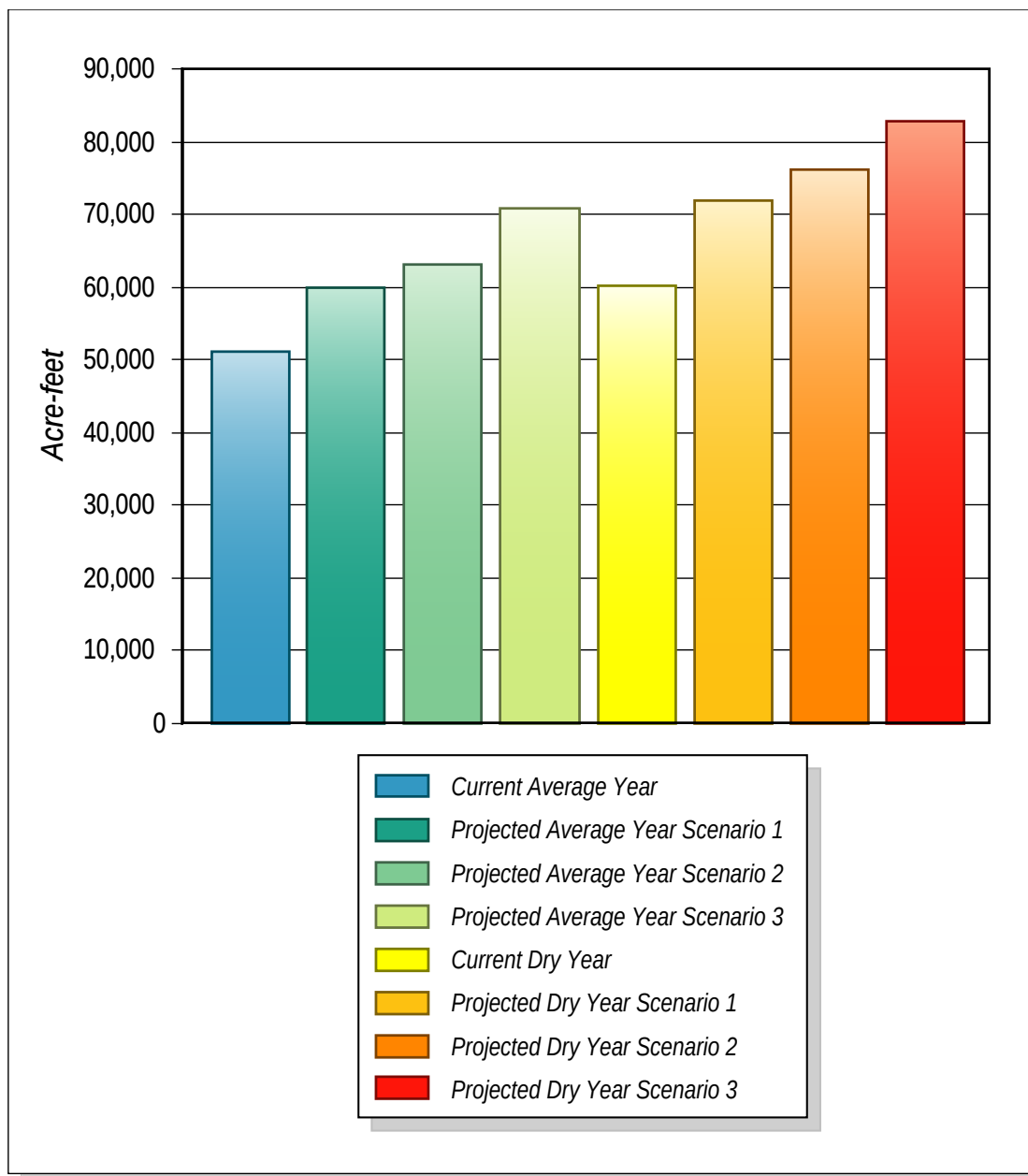


Figure 6-4
Urban and Agricultural Water Demand

Section 7

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Appendix A

Urban Water Demand Calculations

Total Urban Water Demand Summary (Acre-feet/year)

Demand	Current Average Year Water Use	Current Dry Year Water Use	Projected Average Year Water Use	Projected Dry Year Water Use
Residential Demand	9,084	10,109	16,364	18,317
CII Demand	1,188	1,186	2,222	2,091
Landscape Demand	631	723	1,153	1,308
Total Urban Demand	10,903	12,018	19,739	21,716

Total Urban Water Demand Calculations For Lake County

Residential Demand Calculations										
Community Area	Water Purveyor Representation	2000 Population	2001 Population	2000 Water Use (Acre-ft/year)	2001 Water Use (Acre-ft/year)	2000 Use Rate (Gallons/ Capita/ Day)	2001 Use Rate (Gallons/ Capita/ Day)	2040 Est. Population	2040 Average Year Est. Water Use (Acre-ft/year)	2040 Dry Year Est. Water Use (Acre-ft/year)
Clearlake	Clearlake Park Buckingham	13,142	13,284	2,299	2,435	156	164	20,196	3,532	3,702
Clearlake Oaks	Clearlake Oaks	2,402	2,414	370	420	137	155	2,932	452	510
Cobb	Cobb	1,638	1,655	173	174	94	94	2,478	261	261
Coyote Valley	Hidden Valley Lake CSD	3,777	4,353	602	856	142	176	17,550	2,796	3,452
Kelseyville	Kelseyville	2,928	2,964	482	548	147	165	4,794	790	886
Lakeport	City of Lakeport North Lakeport	4,820	4,865	730	685	135	126	7,008	1,062	987
Lower Lake	Lower Lake	1,755	1,781	215	278	109	139	3,184	390	496
Lucerne	Lucerne	2,870	2,913	441	499	137	153	5,206	799	893
Middletown	Callayomi Water District	1,020	1,108	86	231	75	186	2,657	223	554
Nice	Nice	2,509	2,551	230	234	82	82	4,866	446	446
Upper Lake	Upper Lake	989	1,003	69	70	62	62	1,759	123	123
Rural Unincorporated	Finley	20,459	20,293	3,388	3,678	148	162	33,144	5,489	6,008
County Total		58,309	59,184	9,084	10,109	--	--	105,774	16,364	18,317

Commercial, Industrial and Institutional Demand Calculations									
Type	2000 Employees	2001 Employees	2000 Water Use (Acre-ft/ year)	2001 Water Use (Acre-ft/ year)	2000 Use Rate (Acre-ft/person/ year)	2001 Use Rate (Acre-ft/person/ year)	2040 Est. Employees	2040 Average Year Est. Water Use (Acre-ft/year)	2040 Dry Year Est. Water Use (Acre-ft/year)
Commercial, Industrial and Institutional	13,730	14,240	1,188	1,186	0.09	0.08	25,100	2,222	2,091

Landscape Demand Calculations									
Type	2000 Population	2001 Population	2000 Water Use (Acre-ft/ year)	2001 Water Use (Acre-ft/ year)	2000 Use Rate (Acre-ft/person/ year)	2001 Use Rate (Acre-ft/person/ year)	2040 Est. Population	2040 Average Year Est. Water Use (Acre-ft/ year)	2040 Dry Year Est. Water Use (Acre-ft/year)
Landscape	58,309	59,184	631	723	0.01	0.01	105,774	1,153	1,308

Total Average Year Residential Demand Calculations for Lake County

Rural Unincorporated Weighted Gallons per Capita Calculations					
Inventory Unit	gpcd	2000 Pop Rural DWR	Water Use (gpd)	Rural Unincorporated Weighted gpcd	2000 Rural Water Use (Acre-feet/Year)
Upper Putah	130	1,582	205,090	--	230
Middle Putah	141	223	31,479	--	35
Shoreline	145	8,883	1,291,055	--	1,450
Thurston Lake	145	98	14,219	--	16
Middle Creek	168	899	151,176	--	169
Scotts Creek	160	637	101,971	--	114
Big Valley	156	2,836	443,295	--	496
Lower Lake	157	305	47,754	--	53
Cache Creek	145	234	34,000	--	38
Eel River	145	26	3,781	--	4
Total	--	15,723	2,323,820	148	2,605

Projected Average Year Urban Demand Calculations						
Community	Inventory Unit	2000 gpcd (Gallons/ Capita/ Day)	2040 Population	2040 Water Use (Gallons/Day)	2040 Water Use (Acre-feet/Day)	2040 water use (Acre-feet/Year)
Clearlake	Shoreline	156	20,196	3,152,332	9.68	3,532
Clearlake Oaks	Shoreline	137	2,932	403,121	1.24	452
Cobb	Big Valley	94	2,478	232,932	0.72	261
Coyote Valley	Upper Putah	142	17,550	2,495,610	7.66	2,796
Kelseyville	Big Valley	147	4,794	703,376	2.16	788
Lakeport	Shoreline	135	7,008	947,538	2.91	1,062
Lower Lake	Lower Lake	109	3,184	348,393	1.07	390
Lucerne	Shoreline	137	5,206	713,118	2.19	799
Middletown	Upper Putah	75	2,657	199,275	0.61	223
Nice	Shoreline	82	4,866	397,844	1.22	446
Upper Lake	Middle Creek	62	1,759	109,533	0.34	123
Rural Unincorporated	Countywide	148	33,144	4,898,600	15.04	5,489
Lake County Total		--	105,774	14,601,672	44.83	16,362

Current Average Year Water Use Calculations				
Community	gpcd	2000 Pop Lake County	2000 Water Use (gpd)	2000 Water Use (Acre-feet/Year)
Clearlake	156	13,142	2,051,295	2,299
Clearlake Oaks	137	2,402	330,251	370
Cobb	94	1,638	153,972	173
Coyote Valley	142	3,777	537,089	602
Kelseyville	147	2,928	429,596	481
Lakeport	135	4,820	651,703	730
Lower Lake	109	1,755	192,032	215
Lucerne	137	2,870	393,133	441
Middletown	75	1,020	76,500	86
Nice	82	2,509	205,136	230
Upper Lake	62	989	61,585	69
Rural Unincorporated	148	20,459	3,023,789	3,388
Total	--	58,309	8,106,081	9,083

Total Average Year Commercial, Industrial and Institutional (CII) Demand Calculations for Lake County

Current Average Year CII Water Use		
Inventory Unit	Gallons/Year	Acre-Feet/Year
Upper Putah	18,220,000	55
Middle Putah	570,000	2
Shoreline	250,230,000	752
Scotts Creek	1,850,000	6
Middle Creek	7,050,000	22
Big Valley	44,710,000	138
Lower Lake	64,790,000	199
Cache Creek	3,580,000	11
Thurston Lake	810,000	2
Eel River	220,000	1
Lake County Total	392,030,000	1,188
Total # of Employees in 2000:		13,730
Gallons per Employee per Year		28,553
Gallons per Employee per Day		78

Projected Average Year CII Water Use			
Projected # of Employees	2000 GPED	Projected Water Use (gpd)*	Projected Water Use (Acre-Feet/Year)
25,100	78	1,963,494	2,222

*number difference due to rounding of 2000 GPED

Total Average Year Landscape Demand for Lake County

Current Average Year Landscape Water Use		
Inventory Unit	Gallons/Year	Acre-Feet/Year
Upper Putah	19,680,000	60
Middle Putah	0	0
Shoreline	168,390,000	519
Scotts Creek	0	0
Middle Creek	4,690,000	14
Big Valley	9,990,000	31
Lower Lake	2,270,000	7
Cache Creek	0	0
Thurston Lake	0	0
Eel River	0	0
Lake County Total	205,020,000	631
Total Population in 2000:		58,309
Gallons per Capita per Year		3,516
Gallons per Capita per Day		10

Projected Average Year Landscape Water Use			
Projected Population	2000 GPCD	Projected Water Use (gpd)	Projected Water Use (Acre-Feet/Year)
105,774	10	1,018,936	1,153

Total Dry Year Residential Demand Calculations for Lake County

Rural Unincorporated Weighted Gallons per Capita Calculations					
Inventory Unit	gpcd	2001 Pop Rural DWR	Water use (Gallons/Day)	Rural Unincorporated Weighted GPCD	2001 Rural Water Use (Acre-feet/Year)
Upper Putah	163	1,663	271,202	--	303
Middle Putah	147	229	33,645	--	38
Shoreline	162	9,974	1,612,297	--	1,811
Thurston Lake	148	98	14,493	--	16
Middle Creek	162	917	148,215	--	166
Scotts Creek	167	650	108,245	--	121
Big Valley	162	2,928	474,336	--	481
Lower Lake	162	311	50,357	--	56
Cache Creek	161	239	38,575	--	14
Eel River	161	26	4,192	--	5
Total	--	17,035	2,755,556	162	3,011

Projected Dry Year Urban Demand Calculations						
Community	Inventory Unit	2001 GPCD Gallons/Capita /Day	2040 Population	2040 Water Use (Gallons/Day)	2040 Water Use (Acre-feet/Day)	2040 water use (Acre-feet/Year)
Clearlake	Shoreline	164	20,196	3,303,820	10.14	3,702
Clearlake Oaks	Shoreline	155	2,932	455,105	1.40	510
Cobb	Big Valley	94	2,478	232,932	0.72	261
Coyote Valley	Upper Putah	176	17,550	3,080,727	9.46	3,452
Kelseyville	Big Valley	165	4,794	791,010	2.43	886
Lakeport	Shoreline	126	7,008	880,793	2.70	987
Lower Lake	Lower Lake	139	3,184	442,767	1.36	496
Lucerne	Shoreline	153	5,206	796,518	2.45	893
Middletown	Upper Putah	186	2,657	494,202	1.52	554
Nice	Shoreline	82	4,866	397,796	1.22	446
Upper Lake	Middle Creek	62	1,759	109,885	0.34	123
Rural Unincorporated	Countywide	162	33,144	5,361,323	16.46	6,008
Lake County Total		--	105,774	16,346,877	50.18	18,317

Current Dry Year Water Use Calculations				
Community	gpcd	2001 Pop Lake County	2001 Water Use (gpd)	2001 Water Use (Acre-feet/Year)
Clearlake	164	13,284	2,173,101	2,435
Clearlake Oaks	155	2,414	374,701	420
Cobb	94	1,655	155,570	174
Coyote Valley	176	4,353	764,126	856
Kelseyville	165	2,964	489,060	548
Lakeport	126	4,865	611,452	685
Lower Lake	139	1,781	247,666	278
Lucerne	153	2,913	445,689	499
Middletown	186	1,108	206,088	231
Nice	82	2,551	208,544	234
Upper Lake	62	1,003	62,657	70
Rural Unincorporated	162	20,293	3,282,565	3,678
Total	--	59,184	9,021,219	10,109

Total Dry Year Commercial, Industrial, and Institutional Demand Calculations for Lake County

Current Dry Year CII Water Use Calculations		
Inventory Unit	Gallons/Year	Acre-Feet/Year
Upper Putah	9,320,000	29
Middle Putah	110,000	0
Shoreline	251,350,000	771
Scotts Creek	350,000	1
Middle Creek	10,140,000	31
Big Valley	42,860,000	131
Lower Lake	69,160,000	213
Cache Creek	2,320,000	7
Thurston Lake	710,000	2
Eel River	200,000	1
Lake County Total	386,520,000	1,186
Total # of Employees in 2001:		14,240
Gallons per Employee per Year		27,143
Gallons per Employee per Day (GPED)		74

Projected Dry Year CII Water Use Calculations			
Projected # of Employees	2001 GPED	Projected Water Use (gpd)	Projected Water Use (Acre-Feet/Year)
25,100	74	1,866,564	2,091

Total Dry Year Landscape Demand Calculations for Lake County

Current Dry Year Landscape Water Use Calculations		
Inventory Unit	Gallons/Year	Acre-Feet/Year
Upper Putah	0	0
Middle Putah	0	0
Shoreline	213,830,000	656
Scotts Creek	0	0
Middle Creek	4,710,000	14
Big Valley	11,210,000	34
Lower Lake	6,260,000	19
Cache Creek	0	0
Thurston Lake	0	0
Eel River	0	0
Lake County Total	236,010,000	723
Total Population in 2001:		59,184
Gallons per Capita per Year		3,988
Gallons per Capita per Day (GPCD)		11

Projected Dry Year Landscape Water Use Calculations			
Projected Population	2001 GPCD	Projected Water Use (gpd)*	Projected Water Use (Acre-Feet/Year)
105,774	11	1,155,612	1,308

*number difference due to rounding

**Surface Water Purveyor Urban Water Demand Totals for Clear Lake
in Acre-feet per Year**

Demand	Current Average Year Water Use	Current Dry Year Water Use	Projected Average Year Water Use	Projected Dry Year Water Use
Residential Demand	5,156	4,991	8,961	8,587
CII Demand	874	1,194	1,574	1,984
Landscape Demand	565	1,027	1,009	1,730
Total Urban Demand	6,594	7,212	11,544	12,300

Surface Water Purveyors Residential Water Demand Calculations for Clear Lake

Surface Water Purveyors Residential Water Demand Calculations									
Clear Lake Surface Water Purveyor	2000 Population	2001 Population	2000 Water Use (Acre-ft/year)	2001 Water Use (Acre-ft/year)	2000 Use Rate (Gallons/Capita/Day)	2001 Use Rate (Gallons/Capita/Day)	2040 Est. Population	2040 Average Year Est. Water Use (Acre-ft/year)	2040 Dry Year Est. Water Use (Acre-ft/year)
Buckingham Park Water District	1230	1230	172	178	125.00	129.00	2,198	318	318
Cache Creek Mobile Home Park	150	150	21	20	127.84	116.65	268	38	35
California Cities Water Company	5,195	5,195	744	679	127.84	116.65	9,285	1,330	1,214
California Water Service Company - Lucerne	2,872	2,883	441	494	137.00	153.00	5,133	880	880
Clearlake Oaks County Water District	2,405	2,430	369	422	137.00	155.00	4,298	746	746
Clearwater Mutual Water Company	137	9	20	1	127.84	116.65	245	35	32
City of Lakeport	4,820	4,820	718	675	133.00	125.00	8,614	1,207	1,207
Crescent Bay Improvement Company	18	18	3	2	127.84	116.65	32	5	4
Highlands Water Company	4,452	4,452	638	582	127.84	116.65	7,957	1,140	1,040
Konocti County Water District	4,500	4,500	645	588	127.84	116.65	8,042	1,152	1,051
Konocti Harbor Resort & Spa	300	300	43	39	127.84	116.65	536	77	70
Lake County Special Districts – North Lakeport	2,879	2,967	448	422	139.00	127.00	5,145	732	732
Lake County Special Districts - Soda Bay	1,335	1,335	191	175	127.84	116.65	2,386	342	312
Lazy S Mobile Ranch	50	50	7	7	127.84	116.65	89	13	12
Mt. Konocti Mutual Water Company	2,540	4,733	379	398	133.00	75.00	4,540	382	382
Nice Mutual Water Company	2,509	2,509	231	231	82.00	82.00	4,484	412	412
Pine Grove Water System	35	35	5	5	127.84	116.65	63	9	8
Richmond Park Resort	25	25	4	3	127.84	116.65	45	6	6
Riviera West Mutual Water Company	500	500	72	65	127.84	116.65	894	128	117
Westwind Mobile Home Park	39	39	6	5	127.84	116.65	70	10	9
Clear Lake Surface Water Purveyor Total	35,991	38,180	5,156	4,991			64,324	8,961	8,587

Commercial, Industrial and Institutional Demand Calculations for Clear Lake Surface Water Purveyors							
Type	2000 Employees	2001 Employees	2000 Water Use (Acre-ft/year)	2001 Water Use (Acre-ft/year)	2040 Est. Employees	2040 Average Year Est. Water Use (Acre-ft/year)	2040 Dry Year Est. Water Use (Acre-ft/year)
CII	8,475	9,186	874	1,194	15,264	1,574	1,984

Landscape Demand Summary for Clear Lake Surface Water Purveyors							
Type	2000 Population	2001 Population	2000 Water Use (Acre-ft/year)	2001 Water Use (Acre-ft/year)	2040 Est. Population	2040 Average Year Est. Water Use (Acre-ft/year)	2040 Dry Year Est. Water Use (Acre-ft/year)
Landscape	35,991	38,180	565	1,027	64,324	1,009	1,730

Dry Year Surface Water Purveyors Residential Demand for Clear Lake

Clear Lake Surface Water Purveyors Weighted Gallons per Capita Calculations					
Clear Lake Surface Water Purveyors	gpcd	2001 Pop	Water Use (gallons)	Rural Unincorporated Weighted GPCD	2001 Water Use (Acre-feet/Year)
Buckingham Park Water District	129	1,230	158,670		177.80
Cache Creek Mobile Home Park	117	150	17,498		19.61
California Cities Water Company	117	5,195	606,013		679.07
California Water Service Company - Lucerne	153	2,883	441,099		494.27
Clearlake Oaks County Water District	155	2,430	376,650		422.06
Clearwater Mutual Water Company	117	9	1,050		1.18
City of Lakeport	125	4,820	602,500		675.13
Crescent Bay Improvement Company	117	18	2,100		2.35
Highlands Water Company	117	4,452	519,340		581.95
Konocti County Water District	117	4,500	524,939		588.22
Konocti Harbor Resort & Spa	117	300	34,996		39.21
Lake County Special Districts – North Lakeport	127	2,967	376,809		422.23
Lake County Special Districts - Soda Bay	117	1,335	155,732		174.51
Lazy S Mobile Ranch	117	50	5,833		6.54
Mt. Konocti Mutual Water Company	75	4,733	354,975		397.77
Nice Mutual Water Company	82	2,509	205,738		230.54
Pine Grove Water System	117	35	4,083		4.58
Richmond Park Resort	117	25	2,916		3.27
Riviera West Mutual Water Company	117	500	58,327		65.36
Westwind Mobile Home Park	117	39	4,549		5.10
Total Population and Water Use (gallons)		38,180	4,453,816		4,990.72
Totals for Weighted Average Calculation		21,572	2,516,441	117	

Clear Lake Surface Water Purveyors Projected Dry Year Residential Demand Calculations					
Clear Lake Surface Water Purveyors	2001 GPCD Gallons/Capita/Day	2040 Population	2040 Water Use (Gallons/Day)	2040 Water Use (Acre-feet/Day)	2040 water use (Acre-feet/Year)
Buckingham Park Water District	129	2,198	283,542	0.87	318
Cache Creek Mobile Home Park	117	268	31,263	0.10	35
California Cities Water Company	117	9,285	1,083,124	3.33	1,214
California Water Service Company - Lucerne	153	5,133	785,349	2.41	880
Clearlake Oaks County Water District	155	4,298	666,190	2.05	746
Clearwater Mutual Water Company	117	245	28,580	0.09	32
City of Lakeport	125	8,614	1,076,750	3.31	1,207
Crescent Bay Improvement Company	117	32	3,733	0.01	4
Highlands Water Company	117	7,957	928,209	2.85	1,040
Konocti County Water District	117	8,042	938,124	2.88	1,051
Konocti Harbor Resort & Spa	117	536	62,526	0.19	70
Lake County Special Districts – North Lakeport	127	5,145	653,415	2.01	732
Lake County Special Districts - Soda Bay	117	2,386	278,334	0.85	312
Lazy S Mobile Ranch	117	89	10,382	0.03	12
Mt. Konocti Mutual Water Company	75	4,540	340,500	1.05	382
Nice Mutual Water Company	82	4,484	367,688	1.13	412
Pine Grove Water System	117	63	7,349	0.02	8
Richmond Park Resort	117	45	5,249	0.02	6
Riviera West Mutual Water Company	117	894	104,288	0.32	117
Westwind Mobile Home Park	117	70	8,166	0.03	9
Clear Lake Surface Water Purveyors Total	--	64,324	7,662,762	23.52	8,587

Clear Lake Surface Water Purveyors Current Dry Year Water Use Calculation:				
Clear Lake Surface Water Purveyors	gpcd	2001 pop Lake County	2001 water use in gpd	2001 water use afy
Buckingham Park Water District	129	1,230	158,670	177.80
Cache Creek Mobile Home Park	117	150	17,498	19.61
California Cities Water Company	117	5,195	606,013	679.07
California Water Service Company - Lucerne	153	2,883	441,099	494.27
Clearlake Oaks County Water District	155	2,430	376,650	422.06
Clearwater Mutual Water Company	117	9	1,050	1.18
City of Lakeport	125	4,820	602,500	675.13
Crescent Bay Improvement Company	117	18	2,100	2.35
Highlands Water Company	117	4,452	519,340	581.95
Konocti County Water District	117	4,500	524,939	588.22
Konocti Harbor Resort & Spa	117	300	34,996	39.21
Lake County Special Districts – North Lakeport	127	2,967	376,809	422.23
Lake County Special Districts - Soda Bay	117	1,335	155,732	174.51
Lazy S Mobile Ranch	117	50	5,833	6.54
Mt. Konocti Mutual Water Company	75	4,733	354,975	397.77
Nice Mutual Water Company	82	2,509	205,738	230.54
Pine Grove Water System	117	35	4,083	4.58
Richmond Park Resort	117	25	2,916	3.27
Riviera West Mutual Water Company	117	500	58,327	65.36
Westwind Mobile Home Park	117	39	4,549	5.10
Total		38,180	4,453,816	4,990.72

**Dry Year Surface Water Purveyors Commercial, Industrial, and Institutional
Demand Calculations for Clear Lake**

Clear Lake Surface Water Purveyors Current Dry Year CII Water Use Calculations			
2001 # of Employees	2001 GPED	2001 Water Use (gpd)	Current Water Use (AFY)
9,186	116	1,065,613	1,194

Clear Lake Surface Water Purveyors Projected Dry Year CII Water Use Calculations			
2040 Projected # of Employees	2001 GPED	2040 Projected Water Use (gpd)	Projected Water Use (AFY)
15,264	116	1,770,624	1,984

Water Purveyor Jobs	
Surface Water Purveyors Jobs in 2001:	
Lake County 2001 Total Pop:	59,184
Lake County 2001 Jobs:	14,240
Jobs per Person:	0.24
Surface Water Purveyors 2001 Pop:	38,180
Surface Water Purveyors 2001 Jobs:	9,186
Projected Surface Water Purveyors Jobs in 2040:	
Lake County 2040 Total Pop:	105,774
Lake County 2040 Jobs:	25,100
Jobs per Person:	0.24
Surface Water Purveyors 2040 Pop:	64,324
Surface Water Purveyors 2040 Jobs:	15,264

Dry Year Clear Lake Surface Water Purveyors Landscape Demand Calculations

Clear Lake Surface Water Purveyors Current Dry Year Landscape Water Use			
2001 Population	2001 GPCD	2001 Water Use (gpd)	Current Water Use (Acre-feet/Year)
38,180	24	916,320	1,027

Clear Lake Surface Water Purveyors Projected Dry Year Landscape Water Use			
2040 Projected Population	2001 GPCD	2040 Projected Water Use (gpd)	Projected Water Use (Acre-Feet/Year)
64,324	24	1,543,776	1,730

Average Year Surface Water Purveyors Residential Demand Calculations

Surface Water Purveyors Weighted Gallons per Capita Calculations					
Clear Lake Surface Water Purveyors	gpcd	2000 Pop	Water Use (gallons)	Rural Unincorporated Weighted GPCD	2000 Water Use (Acre-feet/Year)
Buckingham Park Water District	125	1230	153,750.00	--	172.28
Cache Creek Mobile Home Park	128	150	19,175.52	--	21.49
California Cities Water Company	128	5,195	664,112.29	--	744.17
California Water Service Company - Lucerne	137	2,872	393,464.00	--	440.90
Clearlake Oaks County Water District	137	2,405	329,485.00	--	369.20
Clearwater Mutual Water Company	128	137	17,513.64	--	19.62
City of Lakeport	133	4,820	641,060.00	--	718.34
Crescent Bay Improvement Company	128	18	2,301.06	--	2.58
Highlands Water Company	128	4,452	569,129.53	--	637.74
Konocti County Water District	128	4,500	575,265.70	--	644.61
Konocti Harbor Resort & Spa	128	300	38,351.05	--	42.97
Lake County Special Districts – North Lakeport	139	2,879	400,181.00	--	448.42
Lake County Special Districts - Soda Bay	128	1,335	170,662.16	--	191.24
Lazy S Mobile Ranch	128	50	6,391.84	--	7.16
Mt. Konocti Mutual Water Company	133	2,540	337,820.00	--	378.54
Nice Mutual Water Company	82	2,509	205,738.00	--	230.54
Pine Grove Water System	128	35	4,474.29	--	5.01
Richmond Park Resort	128	25	3,195.92	--	3.58
Riviera West Mutual Water Company	128	500	63,918.41	--	71.62
Westwind Mobile Home Park	128	39	4,985.64	--	5.59
Total Population and Water Use (gallons)	--	35,991	4,600,975.05	--	5,155.62
Totals for Weighted Average Calculations	--	19,255	2,461,498	128	--

Surface Water Purveyors Projected Average Year Residential Water Use Calculations					
Clear Lake Surface Water Purveyors	2000 GPCD (Gallons/Capita/Day)	2040 Population	2040 Water Use (Gallons/Day)	2040 Water Use (Acre-feet/Day)	2040 water use (Acre-feet/Year)
Buckingham Park Water District	129	2,198	283,542	0.87	317.72
Cache Creek Mobile Home Park	128	268	34,260	0.11	38.39
California Cities Water Company	128	9,285	1,186,965	3.64	1,330.05
California Water Service Company - Lucerne	153	5,133	785,349	2.41	880.02
Clearlake Oaks County Water District	155	4,298	666,190	2.05	746.50
Clearwater Mutual Water Company	128	245	31,320	0.10	35.10
City of Lakeport	125	8,614	1,076,750	3.31	1,206.55
Crescent Bay Improvement Company	128	32	4,091	0.01	4.58
Highlands Water Company	128	7,957	1,017,198	3.12	1,139.82
Konocti County Water District	128	8,042	1,028,064	3.16	1,152.00
Konocti Harbor Resort & Spa	128	536	68,521	0.21	76.78
Lake County Special Districts – North Lakeport	127	5,145	653,415	2.01	732.18
Lake County Special Districts - Soda Bay	128	2,386	305,019	0.94	341.79
Lazy S Mobile Ranch	128	89	11,377	0.03	12.75
Mt. Konocti Mutual Water Company	75	4,540	340,500	1.05	381.55
Nice Mutual Water Company	82	4,484	367,688	1.13	412.01
Pine Grove Water System	128	63	8,054	0.02	9.02
Richmond Park Resort	128	45	5,753	0.02	6.45
Riviera West Mutual Water Company	128	894	114,286	0.35	128.06
Westwind Mobile Home Park	128	70	8,949	0.03	10.03
Clear Lake Surface Water Purveyors Total	--	64,324	7,997,289	24.55	8,961.36

Surface Water Purveyors Current Average Year Residential Water Use Calculations				
Clear Lake Surface Water Purveyors	gpcd	2000 Pop Lake County	2000 Water Use (gpd)	2000 Water Use (Acre-feet/Year)
Buckingham Park Water District	125	1,230	153,750.00	172.28
Cache Creek Mobile Home Park	128	150	19,175.52	21.49
California Cities Water Company	128	5,195	664,112.29	744.17
California Water Service Company - Lucerne	137	2,872	393,464.00	440.90
Clearlake Oaks County Water District	137	2,405	329,485.00	369.20
Clearwater Mutual Water Company	128	137	17,513.64	19.62
City of Lakeport	133	4,820	641,060.00	718.34
Crescent Bay Improvement Company	128	18	2,301.06	2.58
Highlands Water Company	128	4,452	569,129.53	637.74
Konocti County Water District	128	4,500	575,265.70	644.61
Konocti Harbor Resort & Spa	128	300	38,351.05	42.97
Lake County Special Districts – North Lakeport	139	2,879	400,181.00	448.42
Lake County Special Districts - Soda Bay	128	1,335	170,662.16	191.24
Lazy S Mobile Ranch	128	50	6,391.84	7.16
Mt. Konocti Mutual Water Company	133	2,540	337,820.00	378.54
Nice Mutual Water Company	82	2,509	205,738.00	230.54
Pine Grove Water System	128	35	4,474.29	5.01
Richmond Park Resort	128	25	3,195.92	3.58
Riviera West Mutual Water Company	128	500	63,918.41	71.62
Westwind Mobile Home Park	128	39	4,985.64	5.59
Total	--	35,991	4,600,975.05	5,156

Average Year Clear Lake Surface Water Purveyors Commercial, Industrial and Institutional (CII) Demand Calculations

Clear Lake Surface Water Purveyors Current Average Year CII Water Use			
2000 # of Employees	2000 GPED	2000 Water Use (gpd)	Current Water Use (AFY)
8,475	92	779,681	874

Clear Lake Surface Water Purveyors Projected Average Year CII Water Use			
2040 Projected # of Employees	2000 GPED	2040 Projected Water Use (gpd)	Projected Water Use (AFY)
15,264	92	1,404,286	1,574

Water Purveyor Jobs	
Surface Water Purveyors Jobs in 2000:	
Lake County 2001 Total Pop:	58,309
Lake County 2000 Jobs:	13,730
Jobs per Person:	0.24
Surface Water Purveyors 2000 Pop:	35,991
Surface Water Purveyors 2000 Jobs:	8,475
Projected Surface Water Purveyors Jobs in 2040:	
Lake County 2040 Total Pop:	105,774
Lake County 2040 Jobs:	25,100
Jobs per Person:	0.24
Surface Water Purveyors 2040 Pop:	64,324
Surface Water Purveyors 2040 Jobs:	15,264

Average Year Clear Lake Surface Water Purveyors Landscape Demand Calculations

Surface Water Purveyors Current Average Year Landscape Water Use Calculations			
2000 Population	2000 GPCD	2000 Water Use (gpd)	Current Water Use (Acre-feet/Year)
35,991	14	503,874	565

Surface Water Purveyors Projected Average Year Landscape Water Use Calculations			
2040 Projected Population	2000 GPCD	2040 Projected Water Use (gpd)	Projected Water Use (Acre-Feet/Year)
64,324	14	900,536	1,009

Population Growth Prediciton Calculations

Year	Clear Lake Purveyors		Buckingham Park WD		Cache Creek MHP		California Cities WC		Cal. Water Lucerne		Clear Lake Oaks		Clearwater MWC		Lakeport		Crescent Bay Improvement Co.		Highlands WC		Konocti CWD		Konocti Harbor R&S		North Lakeport		Soda Bay		Lazy S		Mt. Konocti MWC		Nice		Pine Grove		Richmond Park		Riveria West MWC		Westwind MHP	
	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase	Total Pop	Increase		
1/1/2001	35,991		1,230		150		5,195		2,872		2,405		137		4,820		18		4,452		4,500		300		2,879		1,335		50		2,540		2,509		35		25		500		39	
1/1/2002	36,531	540	1,248	18	152	2	5,273	78	2,915	43	2,441	36	139	2	4,892	72	18	0	4,519	67	4,568	68	305	4	2,922	43	1,355	20	51	1	2,578	38	2,547	38	36	1	25	0	508	7	40	1
1/1/2003	37,079	548	1,267	19	155	2	5,352	79	2,959	44	2,478	37	141	2	4,966	73	19	0	4,587	68	4,636	69	309	5	2,966	44	1,375	20	52	1	2,617	39	2,585	38	36	1	26	0	515	8	40	1
1/1/2004	37,635	556	1,286	19	157	2	5,432	80	3,003	44	2,515	37	143	2	5,040	74	19	0	4,655	69	4,706	70	314	5	3,011	44	1,396	21	52	1	2,656	39	2,624	39	37	1	26	0	523	8	41	1
1/1/2005	38,200	565	1,305	19	159	2	5,514	81	3,048	45	2,553	38	145	2	5,116	76	19	0	4,725	70	4,776	71	318	5	3,056	45	1,417	21	53	1	2,696	40	2,663	39	37	1	27	0	531	8	41	1
1/1/2006	38,773	573	1,325	20	162	2	5,596	83	3,094	46	2,591	38	148	2	5,193	77	19	0	4,796	71	4,848	72	323	5	3,102	46	1,438	21	54	1	2,736	40	2,703	40	38	1	27	0	539	8	42	1
1/1/2007	39,354	582	1,345	20	164	2	5,680	84	3,140	46	2,630	39	150	2	5,270	78	20	0	4,868	72	4,920	73	328	5	3,148	47	1,460	22	55	1	2,777	41	2,743	41	38	1	27	0	547	8	43	1
1/1/2008	39,944	590	1,365	20	166	2	5,766	85	3,187	47	2,669	39	152	2	5,349	79	20	0	4,941	73	4,994	74	333	5	3,195	47	1,482	22	55	1	2,819	42	2,785	41	39	1	28	0	555	8	43	1
1/1/2009	40,544	599	1,386	20	169	2	5,852	86	3,235	48	2,709	40	154	2	5,430	80	20	0	5,015	74	5,069	75	338	5	3,243	48	1,504	22	56	1	2,861	42	2,826	42	39	1	28	0	563	8	44	1
1/1/2010	41,152	608	1,406	21	172	3	5,940	88	3,284	49	2,750	41	157	2	5,511	81	21	0	5,090	75	5,145	76	343	5	3,292	49	1,526	23	57	1	2,904	43	2,869	42	40	1	29	0	572	8	45	1
1/1/2011	41,769	617	1,427	21	174	3	6,029	89	3,333	49	2,791	41	159	2	5,594	83	21	0	5,167	76	5,222	77	348	5	3,341	49	1,549	23	58	1	2,948	44	2,912	43	41	1	29	0	580	9	45	1
1/1/2012	42,396	627	1,449	21	177	3	6,119	90	3,383	50	2,833	42	161	2	5,678	84	21	0	5,244	78	5,301	78	353	5	3,391	50	1,573	23	59	1	2,992	44	2,955	44	41	1	29	0	589	9	46	1
1/1/2013	43,031	636	1,471	22	179	3	6,211	92	3,434	51	2,875	42	164	2	5,763	85	22	0	5,323	79	5,380	80	359	5	3,442	51	1,596	24	60	1	3,037	45	3,000	44	42	1	30	0	598	9	47	1
1/1/2014	43,677	645	1,493	22	182	3	6,304	93	3,485	52	2,919	43	166	2	5,849	86	22	0	5,403	80	5,461	81	364	5	3,494	52	1,620	24	61	1	3,082	46	3,045	45	42	1	30	0	607	9	47	1
1/1/2015	44,332	655	1,515	22	185	3	6,399	95	3,538	52	2,962	44	169	2	5,937	88	22	0	5,484	81	5,543	82	370	5	3,546	52	1,644	24	62	1	3,129	46	3,090	46	43	1	31	0	616	9	48	1
1/1/2016	44,997	665	1,538	23	188	3	6,495	96	3,591	53	3,007	44	171	3	6,026	89	23	0	5,566	82	5,626	83	375	6	3,599	53	1,669	25	63	1	3,176	47	3,137	46	44	1	31	0	625	9	49	1
1/1/2017	45,672	675	1,561	23	190	3	6,592	97	3,645	54	3,052	45	174	3	6,117	90	23	0	5,650	83	5,710	84	381	6	3,653	54	1,694	25	63	1	3,223	48	3,184	47	44	1	32	0	634	9	49	1
1/1/2018	46,357	685	1,584	23	193	3	6,691	99	3,699	55	3,098	46	176	3	6,208	92	23	0	5,734	85	5,796	86	386	6	3,708	55	1,720	25	64	1	3,272	48	3,232	48	45	1	32	0	644	10	50	1
1/1/2019	47,052	695	1,608	24	196	3	6,792	100	3,755	55	3,144	46	179	3	6,301	93	24	0	5,820	86	5,883	87	392	6	3,764	56	1,745	26	65	1	3,321	49	3,280	48	46	1	33	0	654	10	51	1
1/1/2020	47,758	706	1,632	24	199	3	6,894	102	3,811	56	3,191	47	182	3	6,396	95	24	0	5,908	87	5,971	88	398	6	3,820	56	1,771	26	66	1	3,370	50	3,329	49	46	1	33	0	663	10	52	1
1/1/2021	48,475	716	1,657	24	202	3	6,997	103	3,868	57	3,239	48	185	3	6,492	96	24	0	5,996	89	6,061	90	404	6	3,878	57	1,798	27	67	1	3,421	51	3,379	50	47	1	34	0	673	10	53	1
1/1/2022	49,202	727	1,681	25	205	3	7,102	105	3,926	58	3,288	49	187	3	6,589	97	25	0	6,086	90	6,152	91	410	6	3,936	58	1,825	27	68	1	3,472	51	3,430	51	48	1	34	1	684	10	53	1
1/1/2023	49,940	738	1,707	25	208	3	7,208	107	3,985	59	3,337	49	190	3	6,688	99	25	0	6,177	91	6,244	92	416	6	3,995	59	1,852	27	69	1	3,524	52	3,481	51	49	1	35	1	694	10	54	1
1/1/2024	50,689	749	1,732	26	211	3	7,317	108	4,045	60	3,387	50	193	3	6,788	100	25	0	6,270	93	6,338	94	423	6	4,055	60	1,880	28	70	1	3,577	53	3,534	52	49	1	35	1	704	10	55	1
1/1/2025	51,449	760	1,758	26	214	3	7,426	110	4,106	61	3,438	51	196	3	6,890	102	26	0	6,364	94	6,433	95	429	6	4,116	61	1,908	28														

Appendix B

Agricultural Water Demand Calculations

Scenario 1- Reduction in Pears and Walnuts, Increase in Grapes and Housing

Water Inventory Unit	Change	Existing Amount	Amount of Change	Change	Existing Amount	Amount of Change	Change	Existing Amount	Amount of Change	Changes	Existing Amount	Amount of Change
Middle Putah	Increase in Vineyards	400	+200							Increase in Pasture (Ranchettes)	1100	+50
Upper Putah	Increase in Vineyards	500	+2000							Increase in Pasture (Ranchettes)	410	+50
Lower lake	Increase in Vineyards	1400	+3000									
Thurston Lake	Increase in Vineyards	1500	+2500									
Big Valley	Increase in Vineyards	4000	+3500	Decrease in Pears	2140	-2000	Decrease in Walnuts	830	-400	Increase in Pasture (Ranchettes)	640	+250
Scotts Creek	Increase in Vineyards	180	+100	Decrease in Pears	830	-800	Decrease in Walnuts	80	-40			
Shoreline	Increase in Vineyards	1100	+3000				Decrease in Walnuts	40	-20			
Middle Creek	Increase in Vineyards	420	+100	Decrease in Pears	440	-440	Decrease in Walnuts	180	-80			
Cache Creek	Increase in Vineyards	410	+200									
Eel River												

Scenario 2- 20% Smaller Reduction in Pears and Walnuts, 15% Larger Increase in Grapes

Water Inventory Unit	Change	Existing Amount	Amount of Change	Change	Existing Amount	Amount of Change	Change	Existing Amount	Amount of Change	Changes	Existing Amount	Amount of Change
Middle Putah	Increase in Vineyards	400	230							Increase in Pasture (Ranchettes)	1100	+50
Upper Putah	Increase in Vineyards	500	2300							Increase in Pasture (Ranchettes)	410	+50
Lower lake	Increase in Vineyards	1400	3450									
Thurston Lake	Increase in Vineyards	1500	2875									
Big Valley	Increase in Vineyards	4000	4025	Decrease in Pears	2140	-1600	Decrease in Walnuts	830	-320	Increase in Pasture (Ranchettes)	640	+250
Scotts Creek	Increase in Vineyards	180	115	Decrease in Pears	830	-640	Decrease in Walnuts	80	-32	Increase in Pasture (Ranchettes)	423	
Shoreline	Increase in Vineyards	1100	3450				Decrease in Walnuts	40	-16			
Middle Creek	Increase in Vineyards	420	115	Decrease in Pears	440	-352	Decrease in Walnuts	180	-64			
Cache Creek	Increase in Vineyards	410	230									
Eel River												

Scenario 3- Conversion of Pears to Pomegranates and Figs, Conversion of Walnuts to Pecans and Chestnuts, Increase in Grapes.

Water Inventory Unit	Change	Existing Amount	Amount of Change	Change	Existing Amount	Amount of Change	Change	Existing Amount	Amount of Change	Changes	Existing Amount	Amount of Change	Changes	Existing Amount	Amount of Change	Changes	Existing Amount	Amount of Change	Changes	Existing Amount	Amount of Change
Middle Putah	Increase in Vineyards	400	+200		0			0											Increase in Pasture	1100	+50
Upper Putah	Increase in Vineyards	500	+2000		0			0											Increase in Pasture	410	+50
Lower lake	Increase in Vineyards	1400	+3000		0		Walnuts	42													
Thurston Lake	Increase in Vineyards	1500	+2500		0			0													
Big Valley	Increase in Vineyards	4000	+2500	Decrease in Pears	2140	-2000	Decrease in Walnuts	830	-400	Increase in Pomegranates	0	+1000	Increase in Figs	0	+1000	Increase in Pecans and Chestnuts	0	+400	Increase in Heritage and Asian Vegetables	0	+100
Scotts Creek	Increase in Vineyards	180	+100	Decrease in Pears	830	-800	Decrease in Walnuts	80	-40	Increase in Pomegranates	0	+400	Increase in Figs	0	+400	Increase in Pecans and Chestnuts	0	+40	Increase in Heritage and Asian Vegetables	0	+50
Shoreline	Increase in Vineyards	1100	+3000		0		Decrease in Walnuts	40	-20												
Middle Creek	Increase in Vineyards	420	+100	Decrease in Pears	440	-440	Decrease in Walnuts	180	-80	Increase in Pomegranates	0	+220	Increase in Figs	0	+220	Increase in Pecans and Chestnuts	0	+80	Increase in Heritage and Asian Vegetables	0	+100
Cache Creek	Increase in Vineyards	410	+200																		
Eel River																					

	2001 Dry Year Data		Scenario 1 Dry Year		Scenario 2 Dry Year		Scenario 3 Dry Year	
	2001 Data		2040 Forecast		2040 Forecast		2040 Forecast	
Water Inventory Unit	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)
Middle Putah	1,522	5,522	1,772	5,909	1,802	5,932	1,772	5,909
Upper Putah	945	2,428	2,995	4,219	3,295	4,453	2,995	4,219
Lower Lake	1,450	1,249	4,450	3,589	4,900	3,940	4,450	3,589
Thurston Lake	1,597	1,510	4,097	3,460	4,472	3,752	4,097	3,460
Big Valley	7,707	16,091	9,057	12,209	10,062	14,184	10,307	18,284
Scotts Creek	2,205	7,837	1,465	5,481	1,648	6,027	2,355	8,349
Shoreline	1,867	3,919	4,847	6,194	5,301	6,558	4,847	6,194
Middle Creek	2,142	7,467	1,722	5,815	1,843	6,172	2,342	7,667
Cache Creek	543	604	743	760	773	783	743	760
Eel River	0	0	0	0	0	0	0	0
Total	19,978	46,627	31,148	47,636	34,096	51,801	33,908	58,431

Assumptions:

All surface irrigated lands that are removed from production for one crop are replaced with another surface irrigated crop

All other new ag lands are irrigated by groundwater

	2000 Average Year Data		Scenario 1 Average Year		Scenario 2 Average Year		Scenario 3 Average Year	
	2000 Data		2040 Forecast		2040 Forecast		2040 Forecast	
Water Inventory Unit	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)	Total Irrigated Crop Acreage	Applied Water (acre-feet)
Middle Putah	1,522	4,889	1,772	5,205	1,802	5,222	1,772	5,205
Upper Putah	945	2,082	2,995	3,406	3,295	3,574	2,995	3,406
Lower Lake	1,450	923	4,450	2,603	4,900	2,855	4,450	2,603
Thurston Lake	1,597	1,138	4,097	2,538	4,472	2,748	4,097	2,538
Big Valley	7,707	13,416	9,057	9,744	10,062	11,368	10,307	14,956
Scotts Creek	2,205	6,929	1,465	4,931	1,648	5,394	2,355	7,351
Shoreline	1,867	3,324	4,847	4,946	5,301	5,210	4,847	4,946
Middle Creek	2,142	6,637	1,722	5,223	1,843	5,526	2,342	6,791
Cache Creek	543	479	743	591	773	608	743	591
Eel River	0	0	0	0	0	0	0	0
Total	19,978	39,817	31,148	39,187	34,096	42,505	33,908	48,387

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 1**

Name: Middle Putah WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)					
		Surface		Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	
ALFALFA																			
ALFALFA - X																			
ALMONDS																			
CORN																			
EUCALYPTUS																			
GRAIN																			
GRAPES	0.7	90%	0.78		90%	0.78		391.0		224.0	615.0			157.0	157.0		175.0	175.0	
MEADOW PASTURE																			
MEADOW PASTURE - X																			
OLIVES - CITRUS																			
OTHER DECIDUOUS																			
OTHER FIELD																			
OTHER TRUCK																			
PASTURE	3.5	70%	5.00		76%	4.61		1,025.0		132.0	1,157.0	3,588.0		462.0	4,050.0	5,125.0	609.0	5,734.0	
PASTURE - X																			
PEARS																			
PISTACHIOS																			
RICE																			
STRAWBERRIES																			
WALNUTS																			
Total Crop Acreage								1,416.0		356.0	1,772.0	3,588.0		619.0	4,207.0	5,125.0		784.0	5,909.0
Double Crop Acreage								0.0		0.0	0.0								
Total Irrigated Land Area								1,416.0		356.0	1,772.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS
 MARSH LAND, TULE AND SEDGES
 NATURAL HIGH WATER TABLE MEADOWS
 TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION
 DRY FARMED ALMONDS
 DRY FARMED GRAIN
 DRY FARMED GRAPES
 DRY FARMED PASTURE
 DRY FARMED WALNUTS

67.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

67.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds 3.38
 Eucalyptus 3.22
 Grain 0.57
 Grapes 0.78
 Pasture 5.18
 Pears 3.38
 Walnuts 3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

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**Agricultural Land and Water Use
Dry Year Projection, Scenario 1**

Name: Upper Putah WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.4	70%	0.57		70%	0.57		20.0	20.0			8.0	8.0			11.0	11.0
GRAPES	0.7	90%	0.78		90%	0.78		2,504.0	2,504.0			1,753.0	1,753.0			1,953.0	1,953.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25		80%	3.25		10.0	10.0	0.0		26.0	26.0			33.0	33.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.5	70%	5.00		76%	4.61	247.0	214.0	461.0	865.0		749.0	1,614.0	1,235.0		987.0	2,222.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						247.0		2,748.0	2,995.0	865.0		2,536.0	3,401.0	1,235.0		2,984.0	4,219.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						247.0		2,748.0	2,995.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	514.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	76.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	432.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	226.0
DRY FARMED WALNUTS	162.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 1410.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 1**

Name: Lower Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78		90%	0.78		4,400.0	4,400.0			3,080.0	3,080.0			3,432.0	3,432.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25		80%	3.25		2.0	2.0			5.0	5.0			7.0	7.0
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18		78%	2.18		6.0	6.0			10.0	10.0			13.0	13.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.6	76%	3.42		80%	3.25		42.0	42.0			109.0	109.0			137.0	137.0
Total Crop Acreage						0.0		4,450.0	4,450.0	0.0		3,204.0	3,204.0	0.0		3,589.0	3,589.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,450.0	4,450.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	24.0
MARSH LAND, TULES AND SEDGES	3.0
NATURAL HIGH WATER TABLE MEADOWS	95.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	23.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	42.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	371.0
DRY FARMED WALNUTS	406.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres) 964.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 1**

Name: Thurston Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78		90%	0.78		4,028.0	4,028.0			2,820.0	2,820.0			3,142.0	3,142.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.5	70%	5.00		76%	4.61		69.0	69.0			242.0	242.0			318.0	318.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		4,097.0	4,097.0	0.0		3,062.0	3,062.0	0.0		3,460.0	3,460.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,097.0	4,097.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	190.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	10.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	959.0
TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	1159.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 1**

Name: Big Valley WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)				
		Surface		Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																		
ALFALFA - X																		
ALMONDS																		
CORN	1.8	73%	2.47		78%	2.31		8.0	8.0			14.0	14.0			18.0	18.0	
EUCALYPTUS																		
GRAIN	0.4	70%	0.57		70%	0.57		39.0	39.0			16.0	16.0			22.0	22.0	
GRAPES	0.7	90%	0.78		89%	0.79		3.0	7,495.0	7,498.0	2.0	5,247.0	5,249.0	2.0		5,921.0	5,923.0	
MEADOW PASTURE																		
MEADOW PASTURE - X																		
OLIVES - CITRUS																		
OTHER DECIDUOUS	2.6	80%	3.25		80%	3.25		20.0	20.0			52.0	52.0			65.0	65.0	
OTHER FIELD																		
OTHER TRUCK	1.7	78%	2.18		78%	2.18			24.0	24.0		41.0	41.0			52.0	52.0	
PASTURE*	3.5	70%	5.00		76%	4.61	371.0	521.0	892.0	1,299.0		1,824.0	3,123.0	1,855.0		2,402.0	4,257.0	
PASTURE - X																		
PEARS	2.6	75%	3.47		80%	3.25		141.0	141.0	0.0		367.0	367.0	0.0		458.0	458.0	
PISTACHIOS																		
RICE																		
STRAWBERRIES																		
WALNUTS	2.6	76%	3.42		80%	3.25			435.0	435.0		1,131.0	1,131.0			1,414.0	1,414.0	
Total Crop Acreage							374.0	0.0	8,683.0	9,057.0	1,301.0	0.0	8,692.0	9,993.0	1,857.0	0.0	10,352.0	12,209.0
Double Crop Acreage							0.0		0.0	0.0								
Total Irrigated Land Area							374.0		8,683.0	9,057.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	1543.0
MARSH LAND, TULE AND SEDGES	217.0
NATURAL HIGH WATER TABLE MEADOW	247.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	14.0
DRY FARMED GRAIN	171.0
DRY FARMED GRAPES	7.0
DRY FARMED PASTURE	342.0
DRY FARMED WALNUTS	1793.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 4334.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 130.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 1**

Name: Scotts Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	3.2	70%	4.57					22.0	22.0			70.0	70.0			101.0	101.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.4	70%	0.57			9.0			9.0	4.0			4.0	5.0			5.0
GRAPES	0.7	90%	0.78			251.0		32.0	283.0			22.0	22.0			25.0	25.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25					11.0	11.0			29.0	29.0			36.0	36.0
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18					5.0	5.0			9.0	9.0			11.0	11.0
PASTURE	3.5	70%	5.00			231.0		423.0	654.0	809.0	0.0	1,481.0	2,290.0	1,155.0	0.0	1,950.0	3,105.0
PASTURE - X																	
PEARS	2.6	75%	3.47			0.0		34.0	34.0			88.0	88.0			111.0	111.0
PISTACHIOS	2.7	90%	3.00					5.0	5.0			14.0	14.0			15.0	15.0
RICE	2.9	60%	4.83			402.0			402.0	1,166.0			1,166.0	1,942.0			1,942.0
STRAWBERRIES																	
WALNUTS	2.6	76%	3.42					40.0	40.0			104.0	104.0			130.0	130.0
Total Crop Acreage						893.0		572.0	1,465.0	1,979.0		1,817.0	3,796.0	3,102.0		2,379.0	5,481.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						893.0		572.0	1,465.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	520.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	115.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	3.0
DRY FARMED ALMONDS	
DRY FARMED EUCALYPTUS	2.0
DRY FARMED GRAIN	109.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	355.0
DRY FARMED WALNUTS	600.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

1704.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 1**

Name: Shoreline WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS	2.7	80%	3.38	80%	3.38			7.0	7.0			19.0	19.0	0.0		24.0	24.0
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES*	0.7	90%	0.78	90%	0.78	33.0		4,121.0	4,154.0			2,885.0	2,885.0			3,214.0	3,214.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25	80%	3.25			7.0	7.0			18.0	18.0			23.0	23.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE**	3.5	80%	4.38	80%	4.38	648.0			648.0	2,268.0		0.0	2,268.0	2,838.0			2,838.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES	1.7	70%	2.43	70%	2.43			7.0	7.0	0.0		12.0	12.0			17.0	17.0
WALNUTS	2.6	76%	3.42	80%	3.25			24.0	24.0	0.0		62.0	62.0			78.0	78.0
Total Crop Acreage						681.0		4,166.0	4,847.0	2,268.0		2,996.0	5,264.0	2,838.0		3,356.0	6,194.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						681.0		4,166.0	4,847.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	262.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	55.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	108.0
DRY FARMED EUCALYPTUS	3.0
DRY FARMED GRAIN	9.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	177.0
DRY FARMED WALNUTS	1521.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

2135.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Grape values in table for Surface Water include 7.0 acres Reclaimed Water.

**Pasture values in table for Surface Water include 622.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 1**

Name: Middle Creek WIU

Lake County

 PSA: Southwest
 HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	3.2	70%	4.57					10.0	10.0			32.0	32.0			46.0	46.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78			179.0		340.0	519.0			238.0	238.0			265.0	265.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18					27.0	27.0			46.0	46.0			59.0	59.0
PASTURE*	3.5	70%	5.00			257.0		262.0	519.0	900.0		917.0	1,817.0	1,285.0		1,208.0	2,493.0
PASTURE - X																	
PEARS	2.6	75%	3.47			0.0		4.0	4.0	0.0		10.0	10.0	0.0		13.0	13.0
PISTACHIOS																	
RICE	2.9	60%	4.83			538.0			538.0	1,560.0			1,560.0	2,599.0			2,599.0
STRAWBERRIES	1.7	70%	2.43			2.0			2.0	3.0			3.0	5.0			5.0
WALNUTS	2.6	76%	3.42					103.0	103.0			268.0	268.0			335.0	335.0
Total Crop Acreage						976.0		746.0	1,722.0	2,463.0		1,511.0	3,974.0	3,889.0		1,926.0	5,815.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						976.0		746.0	1,722.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	369.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	419.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	51.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	112.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	259.0
DRY FARMED PEARS	12.0
DRY FARMED WALNUTS	537.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)

1759.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 7.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 1**

Name: Cache Creek WIU

Lake County

 PSA: Southwest
 HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78		90%	0.78		615.0	615.0			431.0	431.0			480.0	480.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18		78%	2.18		127.0	127.0			216.0	216.0			277.0	277.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.6	76%	3.42		80%	3.25		1.0	1.0			3.0	3.0			3.0	3.0
Total Crop Acreage						0.0		743.0	743.0	0.0		650.0	650.0	0.0		760.0	760.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		743.0	743.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	111.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	661.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	10.0
DRY FARMED WALNUTS	97.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 879
Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 1

Name: Eel River WIU

Lake County

PSA: Coastal
HR: North Coast

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES																	
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		0.0	0.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	28.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	28.0
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Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 1

Name: Middle Putah WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		391.0				112.0	112.0			125.0	125.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.1	70%	4.43		76%	4.08		1,025.0		132.0	1,157.0	3,178.0		409.0	3,587.0	4,541.0	5,080.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage								1,416.0		356.0	1,772.0	3,178.0		521.0	3,699.0	4,541.0	5,205.0
Double Crop Acreage								0.0		0.0	0.0						
Total Irrigated Land Area								1,416.0		356.0	1,772.0						

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS
MARSH LAND, TULE AND SEDGES
NATURAL HIGH WATER TABLE MEADOWS
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION
DRY FARMED ALMONDS
DRY FARMED GRAIN
DRY FARMED GRAPES
DRY FARMED PASTURE
DRY FARMED WALNUTS

67.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)

67.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds 3.00
Eucalyptus 2.85
Grain 0.43
Grapes 0.56
Pasture 4.59
Pears 2.97
Walnuts 3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 1**

Name: Upper Putah WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.3	70%	0.43		70%	0.43		20.0	20.0			6.0	6.0			9.0	9.0
GRAPES	0.5	90%	0.56		90%	0.56		2,504.0	2,504.0			1,252.0	1,252.0			1,402.0	1,402.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75		80%	2.75		10.0	10.0			22.0	22.0			28.0	28.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.1	70%	4.43		76%	4.08	247.0	214.0	461.0	766.0		663.0	1,429.0	1,094.0		873.0	1,967.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						247.0		2,748.0	2,995.0	766.0		1,943.0	2,709.0	1,094.0		2,312.0	3,406.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						247.0		2,748.0	2,995.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	514.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	76.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	432.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	226.0
DRY FARMED WALNUTS	162.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 1410.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 1**

Name: Lower Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56	90%	0.56			4,400.0	4,400.0			2,200.0	2,200.0			2,464.0	2,464.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75	80%	2.75			2.0	2.0			4.0	4.0			6.0	6.0
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92	78%	1.92			6.0	6.0			9.0	9.0			12.0	12.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.3	76%	3.03	80%	2.88			42.0	42.0			97.0	97.0			121.0	121.0
Total Crop Acreage						0.0		4,450.0	4,450.0	0.0		2,310.0	2,310.0	0.0		2,603.0	2,603.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,450.0	4,450.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	24.0
MARSH LAND, TULE AND SEDGES	3.0
NATURAL HIGH WATER TABLE MEADOWS	95.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	23.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	42.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	371.0
DRY FARMED WALNUTS	406.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres) 964.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 1**

Name: Thurston Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		4,028.0	4,028.0			2,014.0	2,014.0			2,256.0	2,256.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.1	70%	4.43		76%	4.08		69.0	69.0			214.0	214.0			282.0	282.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		4,097.0	4,097.0	0.0		2,228.0	2,228.0	0.0		2,538.0	2,538.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,097.0	4,097.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULES AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	190.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	10.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	959.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 1159.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 1

Name: Big Valley WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN	1.6	73%	2.19		78%	2.05		8.0	8.0			13.0	13.0			16.0	16.0
EUCALYPTUS																	
GRAIN	0.3	70%	0.43		70%	0.43		39.0	39.0			12.0	12.0			17.0	17.0
GRAPES	0.5	90%	0.56		89%	0.56	3.0	7,495.0	7,498.0	2.0	0.0	3,748.0	3,750.0	2.0		4,197.0	4,199.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75		80%	2.75		20.0	20.0			44.0	44.0			55.0	55.0
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92		78%	1.92		24.0	24.0			36.0	36.0			46.0	46.0
PASTURE*	3.1	70%	4.43		76%	4.08	371.0	521.0	892.0	1,150.0		1,615.0	2,765.0	1,644.0		2,126.0	3,770.0
PASTURE - X																	
PEARS	2.2	75%	2.93		80%	2.75		141.0	141.0	0.0		310.0	310.0	0.0		388.0	388.0
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.3	75%	3.07		80%	2.88		435.0	435.0			1,001.0	1,001.0			1,253.0	1,253.0
Total Crop Acreage						374.0		8,683.0	9,057.0	1,152.0		6,779.0	7,931.0	1,646.0		8,098.0	9,744.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						374.0		8,683.0	9,057.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	1717.0
MARSH LAND, TULE AND SEDGES	217.0
NATURAL HIGH WATER TABLE MEADOW	247.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	14.0
DRY FARMED GRAIN	171.0
DRY FARMED GRAPES	7.0
DRY FARMED PASTURE	342.0
DRY FARMED WALNUTS	1793.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 4508.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 130.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 1**

Name: Scotts Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	2.8	70%	4.00					22.0	22.0			62.0	62.0			88.0	88.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.3	70%	0.43	70%	0.43	9.0			9.0	3.0			3.0	4.0			4.0
GRAPES	0.5	90%	0.56	90%	0.56	251.0		32.0	283.0	126.0		16.0	142.0			18.0	18.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75	80%	2.75			11.0	11.0			24.0	24.0			30.0	30.0
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92	78%	1.92			5.0	5.0			8.0	8.0			10.0	10.0
PASTURE	3.1	70%	4.43	76%	4.08	231.0		423.0	654.0	716.0		1,311.0	2,027.0	1,023.0		1,726.0	2,749.0
PASTURE - X																	
PEARS	2.2	75%	2.93	80%	2.75	0.0		34.0	34.0			75.0	75.0			94.0	94.0
PISTACHIOS	2.5	90%	2.78	90%	2.78			5.0	5.0			13.0	13.0			14.0	14.0
RICE	2.7	60%	4.50	60%	4.50	402.0			402.0	1,085.0		0.0	1,085.0	1,809.0			1,809.0
STRAWBERRIES																	
WALNUTS	2.3	76%	3.03	80%	2.88			40.0	40.0			92.0	92.0			115.0	115.0
Total Crop Acreage						893.0		572.0	1,465.0	1,930.0		1,601.0	3,531.0	2,836.0		2,095.0	4,931.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						893.0		572.0	1,465.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	520.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	115.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	3.0
DRY FARMED ALMONDS	
DRY FARMED EUCALYPTUS	2.0
DRY FARMED GRAIN	109.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	355.0
DRY FARMED WALNUTS	600.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

1704.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 1**

Name: Shoreline WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS	2.4	80%	3.00	80%	3.00			7.0	7.0			17.0	17.0			21.0	21.0
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES*	0.5	90%	0.56	90%	0.56	33.0		4,121.0	4,154.0			2,061.0	2,061.0			2,308.0	2,308.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75	80%	2.75			7.0	7.0			15.0	15.0			19.0	19.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE**	3.1	80%	3.88	80%	3.88	648.0			648.0	2,009.0		0.0	2,009.0	2,514.0		0.0	2,514.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES	1.5	70%	2.14	70%	2.14			7.0	7.0			11.0	11.0			15.0	15.0
WALNUTS	2.3	76%	3.03	80%	2.88			24.0	24.0			55.0	55.0			69.0	69.0
Total Crop Acreage						681.0		4,166.0	4,847.0	2,009.0		2,159.0	4,168.0	2,514.0		2,432.0	4,946.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						681.0		4,166.0	4,847.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	262.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	55.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	108.0
DRY FARMED EUCALYPTUS	3.0
DRY FARMED GRAIN	9.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	171.0
DRY FARMED WALNUTS	1521.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

2129.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Grape values in table for Surface Water include 7.0 acres Reclaimed Water.

**Pasture values in table for Surface Water include 622.0 acres Reclaimed Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 1

Name: Middle Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	2.8	70%	4.00					10.0	10.0			28.0	28.0			40.0	40.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56			179.0		340.0	519.0			170.0	170.0			190.0	190.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92					27.0	27.0			41.0	41.0			52.0	52.0
PASTURE*	3.1	70%	4.43			257.0		262.0	519.0	797.0		812.0	1,609.0	1,139.0		1,069.0	2,208.0
PASTURE - X																	
PEARS	2.2	75%	2.93			0.0		4.0	4.0	0.0		9.0	9.0	0.0		11.0	11.0
PISTACHIOS																	
RICE	2.7	60%	4.50			538.0			538.0	1,453.0			1,453.0	2,421.0			2,421.0
STRAWBERRIES	1.5	70%	2.14			2.0			2.0	3.0			3.0	4.0			4.0
WALNUTS	2.3	76%	3.03					103.0	103.0			237.0	237.0			297.0	297.0
Total Crop Acreage						976.0		746.0	1,722.0	2,253.0		1,297.0	3,550.0	3,564.0		1,659.0	5,223.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						976.0		746.0	1,722.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	369.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	419.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	51.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	112.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	259.0
DRY FARMED PEARS	12.0
DRY FARMED WALNUTS	537.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)

1759.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 7.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 1**

Name: Cache Creek WIU

Lake County

 PSA: Southwest
 HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		615.0	615.0			308.0	308.0			344.0	344.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92		78%	1.92		127.0	127.0			191.0	191.0			244.0	244.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.3	76%	3.03		80%	2.88		1.0	1.0			2.0	2.0			3.0	3.0
Total Crop Acreage						0.0		743.0	743.0	0.0		501.0	501.0	0.0		591.0	591.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		743.0	743.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	111.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	661.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	10.0
DRY FARMED WALNUTS	97.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 879
Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 1

Name: Eel River WIU

Lake County

PSA: Coastal
HR: North Coast

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES																	
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		0.0	0.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULES AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	28.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	
TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	28.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 2**

Name: Middle Putah WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78		90%	0.78		391.0				254.0	645.0			178.0	178.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.5	70%	5.00		76%	4.61		1,025.0				132.0	1,157.0	3,588.0		462.0	4,050.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage								1,416.0				386.0	1,802.0	3,588.0		640.0	4,228.0
Double Crop Acreage								0.0				0.0	0.0				
Total Irrigated Land Area								1,416.0				386.0	1,802.0				

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS
 MARSH LAND, TULE AND SEDGES
 NATURAL HIGH WATER TABLE MEADOWS
 TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION
 DRY FARMED ALMONDS
 DRY FARMED GRAIN
 DRY FARMED GRAPES
 DRY FARMED PASTURE
 DRY FARMED WALNUTS

67.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)

67.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds 3.38
 Eucalyptus 3.22
 Grain 0.57
 Grapes 0.78
 Pasture 5.18
 Pears 3.38
 Walnuts 3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 2

Name: Upper Putah WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.4	70%	0.57		70%	0.57		20.0	20.0			8.0	8.0			11.0	11.0
GRAPES	0.7	90%	0.78		90%	0.78		2,804.0	2,804.0			1,963.0	1,963.0			2,187.0	2,187.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25		80%	3.25		10.0	10.0	0.0		26.0	26.0			33.0	33.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.5	70%	5.00		76%	4.61		247.0	214.0	865.0		749.0	1,614.0	1,235.0		987.0	2,222.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						247.0		3,048.0	3,295.0	865.0		2,746.0	3,611.0	1,235.0		3,218.0	4,453.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						247.0		3,048.0	3,295.0								

NON-IRRIGATED CROP ACREAGE (Acres)	
IDLE LANDS	514.0
MARSH LAND, TULES AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	76.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	432.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	226.0
DRY FARMED WALNUTS	162.0
TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	1410.0

Unit Applied Water for irrigated crops (acre-feet/acre)	
Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 2

Name: Lower Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78		90%	0.78		4,850.0	4,850.0			3,395.0	3,395.0			3,783.0	3,783.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25		80%	3.25		2.0	2.0			5.0	5.0			7.0	7.0
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18		78%	2.18		6.0	6.0			10.0	10.0			13.0	13.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.6	76%	3.42		80%	3.25		42.0	42.0			109.0	109.0			137.0	137.0
Total Crop Acreage						0.0		4,900.0	4,900.0	0.0		3,519.0	3,519.0	0.0		3,940.0	3,940.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,900.0	4,900.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	24.0
MARSH LAND, TULES AND SEDGES	3.0
NATURAL HIGH WATER TABLE MEADOWS	95.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	23.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	42.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	371.0
DRY FARMED WALNUTS	406.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres) 964.0**Unit Applied Water for irrigated crops** (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 2**

Name: Thurston Lake WIU

Lake County

 PSA: Southwest
 HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78	90%	0.78			4,403.0	4,403.0			3,082.0	3,082.0			3,434.0	3,434.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.5	70%	5.00	76%	4.61			69.0	69.0			242.0	242.0			318.0	318.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		4,472.0	4,472.0	0.0		3,324.0	3,324.0	0.0		3,752.0	3,752.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,472.0	4,472.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULES AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	190.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	10.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	959.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	1159.0
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Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 2**

Name: Big Valley WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN	1.8	73%	2.47		78%	2.31		8.0	8.0			14.0	14.0			18.0	18.0
EUCALYPTUS																	
GRAIN	0.4	70%	0.57		70%	0.57		39.0	39.0			16.0	16.0			22.0	22.0
GRAPES	0.7	90%	0.78		89%	0.79	3.0	8,020.0	8,023.0	2.0		5,614.0	5,616.0	2.0		6,336.0	6,338.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25		80%	3.25		20.0	20.0			52.0	52.0			65.0	65.0
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18		78%	2.18		24.0	24.0			41.0	41.0			52.0	52.0
PASTURE*	3.5	70%	5.00		76%	4.61	371.0	521.0	892.0	1,299.0		1,824.0	3,123.0	1,855.0		2,402.0	4,257.0
PASTURE - X																	
PEARS	2.6	75%	3.47		80%	3.25		541.0	541.0	0.0		1,407.0	1,407.0	0.0		1,758.0	1,758.0
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.6	76%	3.42		80%	3.25		515.0	515.0			1,339.0	1,339.0			1,674.0	1,674.0
Total Crop Acreage						374.0	0.0	9,688.0	10,062.0	1,301.0	0.0	10,307.0	11,608.0	1,857.0	0.0	12,327.0	14,184.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						374.0		9,688.0	10,062.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	1543.0
MARSH LAND, TULES AND SEDGES	217.0
NATURAL HIGH WATER TABLE MEADOW	247.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	14.0
DRY FARMED GRAIN	171.0
DRY FARMED GRAPES	7.0
DRY FARMED PASTURE	342.0
DRY FARMED WALNUTS	1793.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 4334.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 130.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 2**

Name: Scotts Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	3.2	70%	4.57					22.0	22.0			70.0	70.0			101.0	101.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.4	70%	0.57	70%	0.57	9.0			9.0	4.0			4.0	5.0			5.0
GRAPES	0.7	90%	0.78	90%	0.78	266.0		32.0	298.0			22.0	22.0			25.0	25.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25	80%	3.25			11.0	11.0			29.0	29.0			36.0	36.0
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18	78%	2.18			5.0	5.0			9.0	9.0			11.0	11.0
PASTURE	3.5	70%	5.00	76%	4.61	231.0		423.0	654.0	809.0	0.0	1,481.0	2,290.0	1,155.0	0.0	1,950.0	3,105.0
PASTURE - X																	
PEARS	2.6	75%	3.47	80%	3.25	0.0		194.0	194.0			504.0	504.0			631.0	631.0
PISTACHIOS	2.7	90%	3.00	90%	3.00			5.0	5.0			14.0	14.0			15.0	15.0
RICE	2.9	60%	4.83	60%	4.83	402.0			402.0	1,166.0			1,166.0	1,942.0			1,942.0
STRAWBERRIES																	
WALNUTS	2.6	76%	3.42	80%	3.25			48.0	48.0			125.0	125.0			156.0	156.0
Total Crop Acreage						908.0		740.0	1,648.0	1,979.0		2,254.0	4,233.0	3,102.0		2,925.0	6,027.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						908.0		740.0	1,648.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	520.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	115.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	3.0
DRY FARMED ALMONDS	
DRY FARMED EUCALYPTUS	2.0
DRY FARMED GRAIN	109.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	355.0
DRY FARMED WALNUTS	600.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

1704.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 2

Name: Shoreline WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS	2.7	80%	3.38	80%	3.38			7.0	7.0			19.0	19.0	0.0		24.0	24.0
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES*	0.7	90%	0.78	90%	0.78	33.0		4,571.0	4,604.0			3,200.0	3,200.0			3,565.0	3,565.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25	80%	3.25			7.0	7.0			18.0	18.0			23.0	23.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE**	3.5	80%	4.38	80%	4.38	648.0			648.0	2,268.0		0.0	2,268.0	2,838.0			2,838.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES	1.7	70%	2.43	70%	2.43			7.0	7.0	0.0		12.0	12.0			17.0	17.0
WALNUTS	2.6	76%	3.42	80%	3.25			28.0	28.0	0.0		73.0	73.0			91.0	91.0
Total Crop Acreage						681.0		4,620.0	5,301.0	2,268.0		3,322.0	5,590.0	2,838.0		3,720.0	6,558.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						681.0		4,620.0	5,301.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	262.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	55.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	108.0
DRY FARMED EUCALYPTUS	3.0
DRY FARMED GRAIN	9.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	177.0
DRY FARMED WALNUTS	1521.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

2135.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Grape values in table for Surface Water include 7.0 acres Reclaimed Water.

**Pasture values in table for Surface Water include 622.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 2**

Name: Middle Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	3.2	70%	4.57					10.0	10.0			32.0	32.0			46.0	46.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78			179.0		355.0	534.0			249.0	249.0			277.0	277.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18					27.0	27.0			46.0	46.0			59.0	59.0
PASTURE*	3.5	70%	5.00			257.0		262.0	519.0	900.0		917.0	1,817.0	1,285.0		1,208.0	2,493.0
PASTURE - X																	
PEARS	2.6	75%	3.47			0.0		94.0	94.0	0.0		244.0	244.0	0.0		306.0	306.0
PISTACHIOS																	
RICE	2.9	60%	4.83			538.0			538.0	1,560.0			1,560.0	2,599.0			2,599.0
STRAWBERRIES	1.7	70%	2.43			2.0			2.0	3.0			3.0	5.0			5.0
WALNUTS	2.6	76%	3.42					119.0	119.0			309.0	309.0			387.0	387.0
Total Crop Acreage						976.0		867.0	1,843.0	2,463.0		1,797.0	4,260.0	3,889.0		2,283.0	6,172.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						976.0		867.0	1,843.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	369.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	419.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	51.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	112.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	259.0
DRY FARMED PEARS	12.0
DRY FARMED WALNUTS	537.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)

1759.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 7.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 2**

Name: Cache Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78		90%			645.0	645.0			452.0	452.0			503.0	503.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18		78%			127.0	127.0			216.0	216.0			277.0	277.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.6	76%	3.42		80%			1.0	1.0			3.0	3.0			3.0	3.0
Total Crop Acreage						0.0		773.0	773.0	0.0		671.0	671.0	0.0		783.0	783.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		773.0	773.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	111.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	661.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	10.0
DRY FARMED WALNUTS	97.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 879**Unit Applied Water for irrigated crops (acre-feet/acre)**

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 2

Name: Eel River WIU

Lake County

PSA: Coastal
HR: North Coast

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES																	
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		0.0	0.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	28.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 28.0**Unit Applied Water for irrigated crops** (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 2

Name: Middle Putah WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		391.0				254.0	645.0			127.0	127.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.1	70%	4.43		76%	4.08		1,025.0				132.0	1,157.0	3,178.0		409.0	3,587.0
PASTURE - X														4,541.0		539.0	5,080.0
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage								1,416.0				386.0	1,802.0	3,178.0		536.0	3,714.0
Double Crop Acreage								0.0				0.0	0.0				
Total Irrigated Land Area								1,416.0				386.0	1,802.0				

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS
MARSH LAND, TULE AND SEDGES
NATURAL HIGH WATER TABLE MEADOWS
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION
DRY FARMED ALMONDS
DRY FARMED GRAIN
DRY FARMED GRAPES
DRY FARMED PASTURE
DRY FARMED WALNUTS

67.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)

67.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds 3.00
Eucalyptus 2.85
Grain 0.43
Grapes 0.56
Pasture 4.59
Pears 2.97
Walnuts 3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 2

Name: Upper Putah WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface		Mixed		Ground		Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.3	70%	0.43		70%	0.43		20.0	20.0			6.0	6.0			9.0	9.0
GRAPES	0.5	90%	0.56		90%	0.56		2,804.0	2,804.0			1,402.0	1,402.0			1,570.0	1,570.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75		80%	2.75		10.0	10.0			22.0	22.0			28.0	28.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.1	70%	4.43		76%	4.08		247.0	214.0	461.0	766.0		663.0	1,429.0	1,094.0	873.0	1,967.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						247.0		3,048.0	3,295.0	766.0		2,093.0	2,859.0	1,094.0		2,480.0	3,574.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						247.0		3,048.0	3,295.0								

NON-IRRIGATED CROP ACREAGE (Acres)	
IDLE LANDS	514.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	76.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	432.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	226.0
DRY FARMED WALNUTS	162.0
TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	1410.0

Unit Applied Water for irrigated crops (acre-feet/acre)	
Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 2

Name: Lower Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		4,850.0	4,850.0			2,425.0	2,425.0			2,716.0	2,716.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75		80%	2.75		2.0	2.0			4.0	4.0			6.0	6.0
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92		78%	1.92		6.0	6.0			9.0	9.0			12.0	12.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.3	76%	3.03		80%	2.88		42.0	42.0			97.0	97.0			121.0	121.0
Total Crop Acreage						0.0		4,900.0	4,900.0	0.0		2,535.0	2,535.0	0.0		2,855.0	2,855.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,900.0	4,900.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	24.0
MARSH LAND, TULE AND SEDGES	3.0
NATURAL HIGH WATER TABLE MEADOWS	95.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	23.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	42.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	371.0
DRY FARMED WALNUTS	406.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres) 964.0**Unit Applied Water for irrigated crops** (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 2**

Name: Thurston Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		4,403.0	4,403.0			2,202.0	2,202.0			2,466.0	2,466.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.1	70%	4.43		76%	4.08		69.0	69.0			214.0	214.0			282.0	282.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		4,472.0	4,472.0	0.0		2,416.0	2,416.0	0.0		2,748.0	2,748.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,472.0	4,472.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULES AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	190.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	10.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	959.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 1159.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 2

Name: Big Valley WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN	1.6	73%	2.19		78%	2.05		8.0	8.0			13.0	13.0			16.0	16.0
EUCALYPTUS																	
GRAIN	0.3	70%	0.43		70%	0.43		39.0	39.0			12.0	12.0			17.0	17.0
GRAPES	0.5	90%	0.56		89%	0.56	3.0	8,020.0	8,023.0	2.0	0.0	4,010.0	4,012.0	2.0		4,491.0	4,493.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75		80%	2.75		20.0	20.0			44.0	44.0			55.0	55.0
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92		78%	1.92		24.0	24.0			36.0	36.0			46.0	46.0
PASTURE*	3.1	70%	4.43		76%	4.08	371.0	521.0	892.0	1,150.0		1,615.0	2,765.0	1,644.0		2,126.0	3,770.0
PASTURE - X																	
PEARS	2.2	75%	2.93		80%	2.75		541.0	541.0	0.0		1,190.0	1,190.0	0.0		1,488.0	1,488.0
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.3	75%	3.07		80%	2.88		515.0	515.0			1,185.0	1,185.0			1,483.0	1,483.0
Total Crop Acreage						374.0		9,688.0	10,062.0	1,152.0		8,105.0	9,257.0	1,646.0		9,722.0	11,368.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						374.0		9,688.0	10,062.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	1717.0
MARSH LAND, TULE AND SEDGES	217.0
NATURAL HIGH WATER TABLE MEADOW	247.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	14.0
DRY FARMED GRAIN	171.0
DRY FARMED GRAPES	7.0
DRY FARMED PASTURE	342.0
DRY FARMED WALNUTS	1793.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 4508.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 130.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 2**

Name: Scotts Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	2.8	70%	4.00					22.0	22.0			62.0	62.0			88.0	88.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.3	70%	0.43			9.0			9.0	3.0			3.0	4.0			4.0
GRAPES	0.5	90%	0.56			266.0		32.0	298.0	133.0		16.0	149.0			18.0	18.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75					11.0	11.0			24.0	24.0			30.0	30.0
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92					5.0	5.0			8.0	8.0			10.0	10.0
PASTURE	3.1	70%	4.43			231.0		423.0	654.0	716.0		1,311.0	2,027.0	1,023.0		1,726.0	2,749.0
PASTURE - X																	
PEARS	2.2	75%	2.93			0.0		194.0	194.0			427.0	427.0			534.0	534.0
PISTACHIOS	2.5	90%	2.78					5.0	5.0			13.0	13.0			14.0	14.0
RICE	2.7	60%	4.50			402.0			402.0	1,085.0		0.0	1,085.0	1,809.0			1,809.0
STRAWBERRIES																	
WALNUTS	2.3	76%	3.03					48.0	48.0			110.0	110.0			138.0	138.0
Total Crop Acreage						908.0		740.0	1,648.0	1,937.0		1,971.0	3,908.0	2,836.0		2,558.0	5,394.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						908.0		740.0	1,648.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	520.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	115.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	3.0
DRY FARMED ALMONDS	
DRY FARMED EUCALYPTUS	2.0
DRY FARMED GRAIN	109.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	355.0
DRY FARMED WALNUTS	600.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

1704.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 2**

Name: Shoreline WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS	2.4	80%	3.00	80%	3.00			7.0	7.0			17.0	17.0			21.0	21.0
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES*	0.5	90%	0.56	90%	0.56	33.0		4,571.0	4,604.0			2,286.0	2,286.0			2,560.0	2,560.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75	80%	2.75			7.0	7.0			15.0	15.0			19.0	19.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE**	3.1	80%	3.88	80%	3.88	648.0			648.0	2,009.0		0.0	2,009.0	2,514.0		0.0	2,514.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES	1.5	70%	2.14	70%	2.14			7.0	7.0			11.0	11.0			15.0	15.0
WALNUTS	2.3	76%	3.03	80%	2.88			28.0	28.0			64.0	64.0			81.0	81.0
Total Crop Acreage						681.0		4,620.0	5,301.0	2,009.0		2,393.0	4,402.0	2,514.0		2,696.0	5,210.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						681.0		4,620.0	5,301.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	262.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	55.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	108.0
DRY FARMED EUCALYPTUS	3.0
DRY FARMED GRAIN	9.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	171.0
DRY FARMED WALNUTS	1521.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

2129.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Grape values in table for Surface Water include 7.0 acres Reclaimed Water.

**Pasture values in table for Surface Water include 622.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 2**

Name: Middle Creek WIU

Lake County

 PSA: Southwest
 HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	2.8	70%	4.00					10.0	10.0			28.0	28.0			40.0	40.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56			179.0		355.0	534.0			178.0	178.0			199.0	199.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92					27.0	27.0			41.0	41.0			52.0	52.0
PASTURE*	3.1	70%	4.43			257.0		262.0	519.0	797.0		812.0	1,609.0	1,139.0		1,069.0	2,208.0
PASTURE - X																	
PEARS	2.2	75%	2.93			0.0		94.0	94.0	0.0		207.0	207.0	0.0		259.0	259.0
PISTACHIOS																	
RICE	2.7	60%	4.50			538.0			538.0	1,453.0			1,453.0	2,421.0			2,421.0
STRAWBERRIES	1.5	70%	2.14			2.0			2.0	3.0			3.0	4.0			4.0
WALNUTS	2.3	76%	3.03					119.0	119.0			274.0	274.0			343.0	343.0
Total Crop Acreage						976.0		867.0	1,843.0	2,253.0		1,540.0	3,793.0	3,564.0		1,962.0	5,526.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						976.0		867.0	1,843.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	369.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	419.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	51.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	112.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	259.0
DRY FARMED PEARS	12.0
DRY FARMED WALNUTS	537.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)

1759.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 7.0 acres Reclaimed Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 2

Name: Cache Creek WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		645.0	645.0			323.0	323.0			361.0	361.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92		78%	1.92		127.0	127.0			191.0	191.0			244.0	244.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.3	76%	3.03		80%	2.88		1.0	1.0			2.0	2.0			3.0	3.0
Total Crop Acreage						0.0		773.0	773.0	0.0		516.0	516.0	0.0		608.0	608.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		773.0	773.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	111.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	661.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	10.0
DRY FARMED WALNUTS	97.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 879

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 2

Name: Eel River WIU

Lake County

PSA: Coastal
HR: North Coast

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES																	
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		0.0	0.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULES AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	28.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 28.0**Unit Applied Water for irrigated crops** (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 3**

Name: Middle Putah WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)					
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total		
ALFALFA																			
ALFALFA - X																			
ALMONDS																			
CORN																			
EUCALYPTUS																			
GRAIN																			
GRAPES	0.7	90%	0.78		90%	0.78		391.0		224.0	615.0		157.0	157.0		175.0	175.0		
MEADOW PASTURE																			
MEADOW PASTURE - X																			
OLIVES - CITRUS																			
OTHER DECIDUOUS																			
OTHER FIELD																			
OTHER TRUCK																			
PASTURE	3.5	70%	5.00		76%	4.61		1,025.0		132.0	1,157.0	3,588.0		462.0	4,050.0	5,125.0	609.0	5,734.0	
PASTURE - X																			
PEARS																			
PISTACHIOS																			
RICE																			
STRAWBERRIES																			
WALNUTS																			
Total Crop Acreage								1,416.0		356.0	1,772.0	3,588.0		619.0	4,207.0	5,125.0		784.0	5,909.0
Double Crop Acreage								0.0		0.0	0.0								
Total Irrigated Land Area								1,416.0		356.0	1,772.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS
 MARSH LAND, TULE AND SEDGES
 NATURAL HIGH WATER TABLE MEADOWS
 TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION
 DRY FARMED ALMONDS
 DRY FARMED GRAIN
 DRY FARMED GRAPES
 DRY FARMED PASTURE
 DRY FARMED WALNUTS

67.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

67.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds 3.38
 Eucalyptus 3.22
 Grain 0.57
 Grapes 0.78
 Pasture 5.18
 Pears 3.38
 Walnuts 3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 3**

Name: Upper Putah WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.4	70%	0.57		70%	0.57		20.0	20.0			8.0	8.0			11.0	11.0
GRAPES	0.7	90%	0.78		90%	0.78		2,504.0	2,504.0			1,753.0	1,753.0			1,953.0	1,953.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25		80%	3.25		10.0	10.0	0.0		26.0	26.0			33.0	33.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.5	70%	5.00		76%	4.61		247.0	214.0	865.0		749.0	1,614.0	1,235.0		987.0	2,222.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						247.0		2,748.0	2,995.0	865.0		2,536.0	3,401.0	1,235.0		2,984.0	4,219.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						247.0		2,748.0	2,995.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	514.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	76.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	432.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	226.0
DRY FARMED WALNUTS	162.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	1410.0
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Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 3**

Name: Lower Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78		90%	0.78		4,400.0	4,400.0			3,080.0	3,080.0			3,432.0	3,432.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25		80%	3.25		2.0	2.0			5.0	5.0			7.0	7.0
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18		78%	2.18		6.0	6.0			10.0	10.0			13.0	13.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.6	76%	3.42		80%	3.25		42.0	42.0			109.0	109.0			137.0	137.0
Total Crop Acreage						0.0		4,450.0	4,450.0	0.0		3,204.0	3,204.0	0.0		3,589.0	3,589.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,450.0	4,450.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	24.0
MARSH LAND, TULE AND SEDGES	3.0
NATURAL HIGH WATER TABLE MEADOWS	95.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	23.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	42.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	371.0
DRY FARMED WALNUTS	406.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres) 964.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 3**

Name: Thurston Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78		90%	0.78		4,028.0	4,028.0			2,820.0	2,820.0			3,142.0	3,142.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.5	70%	5.00		76%	4.61		69.0	69.0			242.0	242.0			318.0	318.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		4,097.0	4,097.0	0.0		3,062.0	3,062.0	0.0		3,460.0	3,460.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,097.0	4,097.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	190.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	10.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	959.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 1159.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 3**

Name: Big Valley WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN	1.8	73%	2.47		78%	2.31		8.0	8.0			14.0	14.0			18.0	18.0
EUCALYPTUS																	
GRAIN	0.4	70%	0.57		70%	0.57		39.0	39.0			16.0	16.0			22.0	22.0
GRAPES	0.7	90%	0.78		89%	0.79	3.0	6,495.0	6,498.0	2.0		4,547.0	4,549.0	2.0		5,131.0	5,133.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25		80%	3.25		20.0	20.0			52.0	52.0			65.0	65.0
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18		78%	2.18		124.0	124.0			211.0	211.0			270.0	270.0
PASTURE*	3.5	70%	5.00		76%	4.61	371.0	271.0	642.0	1,299.0		949.0	2,248.0	1,855.0		1,249.0	3,104.0
PASTURE - X																	
PEARS	2.6	75%	3.47		80%	3.25		141.0	141.0	0.0		367.0	367.0	0.0		458.0	458.0
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
POMEGRANATES	2.6	80%	3.25		80%	3.25		1,000.0	1,000.0			2,600.0	2,600.0	0.0		3,250.0	3,250.0
FIGS	2.6	80%	3.25		80%	3.25		1,000.0	1,000.0			2,600.0	2,600.0	0.0		3,250.0	3,250.0
PECANS AND CHESNUTS	2.6	80%	3.25		80%	3.25		400.0	400.0			1,040.0	1,040.0	0.0		1,300.0	1,300.0
WALNUTS	2.6	76%	3.42		80%	3.25		435.0	435.0			1,131.0	1,131.0			1,414.0	1,414.0
Total Crop Acreage						374.0	0.0	9,933.0	10,307.0	1,301.0	0.0	13,527.0	14,828.0	1,857.0	0.0	16,427.0	18,284.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						374.0		9,933.0	10,307.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	1543.0
MARSH LAND, TULE AND SEDGES	217.0
NATURAL HIGH WATER TABLE MEADOW	247.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	14.0
DRY FARMED GRAIN	171.0
DRY FARMED GRAPES	7.0
DRY FARMED PASTURE	342.0
DRY FARMED WALNUTS	1793.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 4334.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 130.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 3**

Name: Scotts Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	3.2	70%	4.57					22.0	22.0			70.0	70.0			101.0	101.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.4	70%	0.57			9.0			9.0	4.0			4.0	5.0			5.0
GRAPES	0.7	90%	0.78			151.0		132.0	283.0			92.0	92.0			103.0	103.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25					11.0	11.0			29.0	29.0			36.0	36.0
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18					55.0	55.0			94.0	94.0			120.0	120.0
PASTURE	3.5	70%	5.00			231.0		423.0	654.0	809.0	0.0	1,481.0	2,290.0	1,155.0	0.0	1,950.0	3,105.0
PASTURE - X																	
PEARS	2.6	75%	3.47			15.0		19.0	34.0			49.0	49.0			62.0	62.0
PISTACHIOS	2.7	90%	3.00					5.0	5.0			14.0	14.0			15.0	15.0
RICE	2.9	60%	4.83			402.0			402.0	1,166.0			1,166.0	1,942.0			1,942.0
STRAWBERRIES																	
POMEGRANATES	2.6	80%	3.25					400.0	400.0			1,040.0	1,040.0	0.0		1,300.0	1,300.0
FIGS	2.6	80%	3.25					400.0	400.0			1,040.0	1,040.0	0.0		1,300.0	1,300.0
PECANS AND CHESNUTS	2.6	80%	3.25					40.0	40.0			104.0	104.0	0.0		130.0	130.0
WALNUTS	2.6	76%	3.42					40.0	40.0			104.0	104.0			130.0	130.0
Total Crop Acreage						808.0		1,547.0	2,355.0	1,979.0		4,117.0	6,096.0	3,102.0		5,247.0	8,349.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						808.0		1,547.0	2,355.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	520.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	115.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	3.0
DRY FARMED ALMONDS	
DRY FARMED EUCALYPTUS	2.0
DRY FARMED GRAIN	109.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	355.0
DRY FARMED WALNUTS	600.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres) 1704.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 3**

Name: Shoreline WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS	2.7	80%	3.38	80%	3.38			7.0	7.0			19.0	19.0	0.0		24.0	24.0
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES*	0.7	90%	0.78	90%	0.78	33.0		4,121.0	4,154.0			2,885.0	2,885.0			3,214.0	3,214.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.6	80%	3.25	80%	3.25			7.0	7.0			18.0	18.0			23.0	23.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE**	3.5	80%	4.38	80%	4.38	648.0			648.0	2,268.0		0.0	2,268.0	2,838.0			2,838.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES	1.7	70%	2.43	70%	2.43			7.0	7.0	0.0		12.0	12.0			17.0	17.0
WALNUTS	2.6	76%	3.42	80%	3.25			24.0	24.0	0.0		62.0	62.0			78.0	78.0
Total Crop Acreage						681.0		4,166.0	4,847.0	2,268.0		2,996.0	5,264.0	2,838.0		3,356.0	6,194.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						681.0		4,166.0	4,847.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	262.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	55.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	108.0
DRY FARMED EUCALYPTUS	3.0
DRY FARMED GRAIN	9.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	177.0
DRY FARMED WALNUTS	1521.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

2135.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Grape values in table for Surface Water include 7.0 acres Reclaimed Water.

**Pasture values in table for Surface Water include 622.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 3**

Name: Middle Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	3.2	70%	4.57	70%	4.57			10.0	10.0			32.0	32.0			46.0	46.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78	90%	0.78	139.0		380.0	519.0			266.0	266.0			296.0	296.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18	78%	2.18	40.0		87.0	127.0			148.0	148.0			190.0	190.0
PASTURE*	3.5	70%	5.00	76%	4.61	257.0		262.0	519.0	900.0		917.0	1,817.0	1,285.0		1,208.0	2,493.0
PASTURE - X																	
PEARS	2.6	75%	3.47	80%	3.25	0.0		4.0	4.0	0.0		10.0	10.0	0.0		13.0	13.0
PISTACHIOS																	
RICE	2.9	60%	4.83	60%	4.83	538.0			538.0	1,560.0			1,560.0	2,599.0			2,599.0
STRAWBERRIES	1.7	70%	2.43	70%	2.43	2.0			2.0	3.0			3.0	5.0			5.0
POMEGRANATES	2.6	80%	3.25	80%	3.25			220.0	220.0			572.0	572.0	0.0		715.0	715.0
FIGS	2.6	80%	3.25	80%	3.25			220.0	220.0			572.0	572.0	0.0		715.0	715.0
PECANS AND CHESNUTS	2.6	80%	3.25	80%	3.25			80.0	80.0			208.0	208.0	0.0		260.0	260.0
WALNUTS	2.6	76%	3.42	80%	3.25			103.0	103.0			268.0	268.0			335.0	335.0
Total Crop Acreage						976.0		1,366.0	2,342.0	2,463.0		2,993.0	5,456.0	3,889.0		3,778.0	7,667.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						976.0		1,366.0	2,342.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	369.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	419.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	51.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	112.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	259.0
DRY FARMED PEARS	12.0
DRY FARMED WALNUTS	537.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 1759.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 7.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 3**

Name: Cache Creek WIU

Lake County

 PSA: Southwest
 HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.7	90%	0.78		90%	0.78		615.0	615.0			431.0	431.0			480.0	480.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.7	78%	2.18		78%	2.18		127.0	127.0			216.0	216.0			277.0	277.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.6	76%	3.42		80%	3.25		1.0	1.0			3.0	3.0			3.0	3.0
Total Crop Acreage						0.0		743.0	743.0	0.0		650.0	650.0	0.0		760.0	760.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		743.0	743.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	111.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	661.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	10.0
DRY FARMED WALNUTS	97.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres) **879**
Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Dry Year Projection, Scenario 3**

Name: Eel River WIU

Lake County

PSA: Coastal
HR: North Coast

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES																	
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		0.0	0.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULES AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	28.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	
TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	28.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.38
Eucalyptus	3.22
Grain	0.57
Grapes	0.78
Pasture	5.18
Pears	3.38
Walnuts	3.56

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 3

Name: Middle Putah WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		391.0				112.0	112.0			125.0	125.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.1	70%	4.43		76%	4.08		1,025.0		132.0	1,157.0	3,178.0		409.0	3,587.0	4,541.0	5,080.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						1,416.0		356.0	1,772.0	3,178.0		521.0	3,699.0	4,541.0		664.0	5,205.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						1,416.0		356.0	1,772.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS
MARSH LAND, TULE AND SEDGES
NATURAL HIGH WATER TABLE MEADOWS
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION
DRY FARMED ALMONDS
DRY FARMED GRAIN
DRY FARMED GRAPES
DRY FARMED PASTURE
DRY FARMED WALNUTS

67.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)

67.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds 3.00
Eucalyptus 2.85
Grain 0.43
Grapes 0.56
Pasture 4.59
Pears 2.97
Walnuts 3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 3**

Name: Upper Putah WIU

Lake County

 PSA: Southwest
 HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.3	70%	0.43		70%	0.43		20.0	20.0			6.0	6.0			9.0	9.0
GRAPES	0.5	90%	0.56		90%	0.56		2,504.0	2,504.0			1,252.0	1,252.0			1,402.0	1,402.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75		80%	2.75		10.0	10.0			22.0	22.0			28.0	28.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.1	70%	4.43		76%	4.08	247.0	214.0	461.0	766.0		663.0	1,429.0	1,094.0		873.0	1,967.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						247.0		2,748.0	2,995.0	766.0		1,943.0	2,709.0	1,094.0		2,312.0	3,406.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						247.0		2,748.0	2,995.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	514.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	76.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	432.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	226.0
DRY FARMED WALNUTS	162.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 1410.0
Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 3

Name: Lower Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		4,400.0	4,400.0			2,200.0	2,200.0			2,464.0	2,464.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75		80%	2.75		2.0	2.0			4.0	4.0			6.0	6.0
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92		78%	1.92		6.0	6.0			9.0	9.0			12.0	12.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.3	76%	3.03		80%	2.88		42.0	42.0			97.0	97.0			121.0	121.0
Total Crop Acreage						0.0		4,450.0	4,450.0	0.0		2,310.0	2,310.0	0.0		2,603.0	2,603.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,450.0	4,450.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	24.0
MARSH LAND, TULE AND SEDGES	3.0
NATURAL HIGH WATER TABLE MEADOWS	95.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	23.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	42.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	371.0
DRY FARMED WALNUTS	406.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	964.0
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Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 3**

Name: Thurston Lake WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		4,028.0	4,028.0			2,014.0	2,014.0			2,256.0	2,256.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE	3.1	70%	4.43		76%	4.08		69.0	69.0			214.0	214.0			282.0	282.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		4,097.0	4,097.0	0.0		2,228.0	2,228.0	0.0		2,538.0	2,538.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		4,097.0	4,097.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	190.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	10.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	959.0
TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	1159.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 3

Name: Big Valley WIU

Lake County

PSA: Southwest

HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN	1.6	73%	2.19		78%	2.05		8.0	8.0			13.0	13.0			16.0	16.0
EUCALYPTUS																	
GRAIN	0.3	70%	0.43		70%	0.43		39.0	39.0			12.0	12.0			17.0	17.0
GRAPES	0.5	90%	0.56		89%	0.56	3.0	6,495.0	6,498.0	2.0	0.0	3,248.0	3,250.0	2.0		3,637.0	3,639.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75		80%	2.75		20.0	20.0			44.0	44.0			55.0	55.0
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92		78%	1.92		124.0	124.0			186.0	186.0			238.0	238.0
PASTURE*	3.1	70%	4.43		76%	4.08	371.0	271.0	642.0	1,150.0		840.0	1,990.0	1,644.0		1,106.0	2,750.0
PASTURE - X																	
PEARS	2.2	75%	2.93		80%	2.75		141.0	141.0	0.0		310.0	310.0	0.0		388.0	388.0
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
POMEGRANATES	2.2	80%	2.75		80%	2.75		1,000.0	1,000.0			2,200.0	2,200.0	0.0		2,750.0	2,750.0
FIGS	2.2	80%	2.75		80%	2.75		1,000.0	1,000.0			2,200.0	2,200.0	0.0		2,750.0	2,750.0
PECANS AND CHESNUTS	2.2	80%	2.75		80%	2.75		400.0	400.0			880.0	880.0	0.0		1,100.0	1,100.0
WALNUTS	2.3	75%	3.07		80%	2.88		435.0	435.0			1,001.0	1,001.0			1,253.0	1,253.0
Total Crop Acreage						374.0		9,933.0	10,307.0	1,152.0		10,934.0	12,086.0	1,646.0		13,310.0	14,956.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						374.0		9,933.0	10,307.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	1717.0
MARSH LAND, TULE AND SEDGES	217.0
NATURAL HIGH WATER TABLE MEADOW	247.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	14.0
DRY FARMED GRAIN	171.0
DRY FARMED GRAPES	7.0
DRY FARMED PASTURE	342.0
DRY FARMED WALNUTS	1793.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 4508.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 130.0 acres Reclaimed Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 3**

Name: Scotts Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	2.8	70%	4.00					22.0	22.0			62.0	62.0			88.0	88.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN	0.3	70%	0.43			9.0			9.0	3.0			3.0	4.0			4.0
GRAPES	0.5	90%	0.56			151.0		132.0	283.0	76.0		66.0	142.0			74.0	74.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75					11.0	11.0			24.0	24.0			30.0	30.0
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92					55.0	55.0			83.0	83.0			106.0	106.0
PASTURE	3.1	70%	4.43			231.0		423.0	654.0	716.0		1,311.0	2,027.0	1,023.0		1,726.0	2,749.0
PASTURE - X																	
PEARS	2.2	75%	2.93			15.0		19.0	34.0			42.0	42.0			52.0	52.0
PISTACHIOS	2.5	90%	2.78					5.0	5.0			13.0	13.0			14.0	14.0
RICE	2.7	60%	4.50			402.0			402.0	1,085.0		0.0	1,085.0	1,809.0			1,809.0
STRAWBERRIES																	
POMEGRANATES	2.2	80%	2.75					400.0	400.0			880.0	880.0	0.0		1,100.0	1,100.0
FIGS	2.2	80%	2.75					400.0	400.0			880.0	880.0	0.0		1,100.0	1,100.0
PECANS AND CHESNUTS	2.2	80%	2.75					40.0	40.0			88.0	88.0	0.0		110.0	110.0
WALNUTS	2.3	76%	3.03					40.0	40.0			92.0	92.0			115.0	115.0
Total Crop Acreage						808.0		1,547.0	2,355.0	1,880.0		3,541.0	5,421.0	2,836.0		4,515.0	7,351.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						808.0		1,547.0	2,355.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	520.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	115.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	3.0
DRY FARMED ALMONDS	
DRY FARMED EUCALYPTUS	2.0
DRY FARMED GRAIN	109.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	355.0
DRY FARMED WALNUTS	600.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres) 1704.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

**Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 3**

Name: Shoreline WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS	2.4	80%	3.00	80%	3.00			7.0	7.0			17.0	17.0			21.0	21.0
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES*	0.5	90%	0.56	90%	0.56	33.0		4,121.0	4,154.0			2,061.0	2,061.0			2,308.0	2,308.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS	2.2	80%	2.75	80%	2.75			7.0	7.0			15.0	15.0			19.0	19.0
OTHER FIELD																	
OTHER TRUCK																	
PASTURE**	3.1	80%	3.88	80%	3.88	648.0			648.0	2,009.0		0.0	2,009.0	2,514.0		0.0	2,514.0
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES	1.5	70%	2.14	70%	2.14			7.0	7.0			11.0	11.0			15.0	15.0
WALNUTS	2.3	76%	3.03	80%	2.88			24.0	24.0			55.0	55.0			69.0	69.0
Total Crop Acreage						681.0		4,166.0	4,847.0	2,009.0		2,159.0	4,168.0	2,514.0		2,432.0	4,946.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						681.0		4,166.0	4,847.0								

NON-IRRIGATED CROP ACREAGE(Acres)

IDLE LANDS	262.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	55.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	108.0
DRY FARMED EUCALYPTUS	3.0
DRY FARMED GRAIN	9.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	171.0
DRY FARMED WALNUTS	1521.0

TOTAL NON-IRRIGATED CROP ACREAGE(Acres)

2129.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Grape values in table for Surface Water include 7.0 acres Reclaimed Water.

**Pasture values in table for Surface Water include 622.0 acres Reclaimed Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 3

Name: Middle Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA	2.8	70%	4.00					10.0	10.0			28.0	28.0			40.0	40.0
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56			139.0		380.0	519.0			190.0	190.0			213.0	213.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92			40.0		87.0	127.0			131.0	131.0			167.0	167.0
PASTURE*	3.1	70%	4.43			257.0		262.0	519.0	797.0		812.0	1,609.0	1,139.0		1,069.0	2,208.0
PASTURE - X																	
PEARS	2.2	75%	2.93			0.0		4.0	4.0	0.0		9.0	9.0	0.0		11.0	11.0
PISTACHIOS																	
RICE	2.7	60%	4.50			538.0			538.0	1,453.0			1,453.0	2,421.0			2,421.0
STRAWBERRIES	1.5	70%	2.14			2.0			2.0	3.0			3.0	4.0			4.0
POMEGRANATES	2.2	80%	2.75					220.0	220.0			484.0	484.0	0.0		605.0	605.0
FIGS	2.2	80%	2.75					220.0	220.0			484.0	484.0	0.0		605.0	605.0
PECANS AND CHESNUTS	2.2	80%	2.75					80.0	80.0			176.0	176.0	0.0		220.0	220.0
WALNUTS	2.3	76%	3.03					103.0	103.0			237.0	237.0			297.0	297.0
Total Crop Acreage						976.0		1,366.0	2,342.0	2,253.0		2,551.0	4,804.0	3,564.0		3,227.0	6,791.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						976.0		1,366.0	2,342.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	369.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	419.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	51.0
DRY FARMED ALMONDS	
DRY FARMED GRAIN	112.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	259.0
DRY FARMED PEARS	12.0
DRY FARMED WALNUTS	537.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 1759.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

*Pasture values in table for Surface Water include 7.0 acres Reclaimed Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 3

Name: Cache Creek WIU

Lake County

PSA: Southwest
HR: Sacramento River

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES	0.5	90%	0.56		90%	0.56		615.0	615.0			308.0	308.0			344.0	344.0
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK	1.5	78%	1.92		78%	1.92		127.0	127.0			191.0	191.0			244.0	244.0
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS	2.3	76%	3.03		80%	2.88		1.0	1.0			2.0	2.0			3.0	3.0
Total Crop Acreage						0.0		743.0	743.0	0.0		501.0	501.0	0.0		591.0	591.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		743.0	743.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	111.0
MARSH LAND, TULE AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	661.0
DRY FARMED GRAPES	
DRY FARMED PASTURE	10.0
DRY FARMED WALNUTS	97.0

TOTAL NON-IRRIGATED CROP ACREAGE (Acres) 879**Unit Applied Water for irrigated crops (acre-feet/acre)**

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Lake County Water Inventory
Agricultural Land and Water Use
Average Year Projection, Scenario 3

Name: Eel River WIU

Lake County

PSA: Coastal
HR: North Coast

Crop	Unit ET of Applied Water (acre-feet/acre)	Unit Applied Water (acre-feet/acre)				Irrigated Acreage (Acres)				ET of Applied Water (Acre-feet)				Applied Water (Acre-feet)			
		Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total	Surface	Mixed	Ground	Total
ALFALFA																	
ALFALFA - X																	
ALMONDS																	
CORN																	
EUCALYPTUS																	
GRAIN																	
GRAPES																	
MEADOW PASTURE																	
MEADOW PASTURE - X																	
OLIVES - CITRUS																	
OTHER DECIDUOUS																	
OTHER FIELD																	
OTHER TRUCK																	
PASTURE																	
PASTURE - X																	
PEARS																	
PISTACHIOS																	
RICE																	
STRAWBERRIES																	
WALNUTS																	
Total Crop Acreage						0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
Double Crop Acreage						0.0		0.0	0.0								
Total Irrigated Land Area						0.0		0.0	0.0								

NON-IRRIGATED CROP ACREAGE (Acres)

IDLE LANDS	
MARSH LAND, TULES AND SEDGES	
NATURAL HIGH WATER TABLE MEADOWS	28.0
TREES, SHRUBS OR OTHER LARGER WATERCOURSE VEGETATION	
DRY FARMED ALMONDS	
DRY FARMED GRAIN	
DRY FARMED GRAPES	
DRY FARMED PASTURE	
DRY FARMED WALNUTS	
TOTAL NON-IRRIGATED CROP ACREAGE (Acres)	28.0

Unit Applied Water for irrigated crops (acre-feet/acre)

Almonds	3.00
Eucalyptus	2.85
Grain	0.43
Grapes	0.56
Pasture	4.59
Pears	2.97
Walnuts	3.15

If Dry Farmed acreage is irrigated, multiply Unit Applied Water by Acres to arrive at Applied Water.

Appendix C

Clear Lake Evaporation Water Balance Calculations

CLEAR LAKE EVAPORATION LOSS CALCULATIONS

May through October

Surface Area = $39551 \cdot e^{(.0133 \cdot \text{Stage})}$ Storage = $284.05 \cdot \text{Stage}^2 + 39455 \cdot \text{Stage} + 841683$

Year	Month	Cache Cr Release, ac-ft	Clear Lake				Evap Loss, ac ft	Evap Loss, feet	Evap Loss, inches
			EOM Stage	EOM Storage	Chg Storage	EOM Acreage			
1985	April		6.1	1092928		42894			
1985	May	17353	5.24	1056227	36701	42406	19348	0.46	5.48
1985	June	26249	4.15	1010313	45913	41795	19664	0.47	5.65
1985	July	19617	3.04	964251	46062	41183	26445	0.64	7.71
1985	August	5715	2.23	931080	33171	40742	27456	0.67	8.09
1985	September	8836	1.69	909173	21907	40450	13071	0.32	3.88
1985	October	223	1.46	899893	9280	40327	9057	0.22	2.70
1986	April		7.47	1152262		43682			
1986	May	31041	6.64	1116188	36074	43203	5033	0.12	1.40
1986	June	35845	5.24	1056227	59961	42406	24116	0.57	6.82
1986	July	30900	3.85	997795	58431	41629	27531	0.66	7.94
1986	August	24984	2.61	946596	51200	40948	26216	0.64	7.68
1986	September	11363	1.9	917673	28923	40563	17560	0.43	5.19
1986	October	1704	1.68	908769	8904	40445	7200	0.18	2.14
1987	April		4.74	1035082		42125			
1987	May	251	4.32	1017430	17652	41890	17401	0.42	4.98
1987	June	7708	3.59	986987	30442	41485	22734	0.55	6.58
1987	July	14941	2.5	942096	44892	40888	29951	0.73	8.79
1987	August	6416	1.8	913622	28473	40509	22057	0.54	6.53
1987	September	10312	1.06	883824	29798	40113	19486	0.49	5.83
1987	October	243	0.89	877023	6802	40022	6559	0.16	1.97
1988	April		5.6	1071539		42609			
1988	May	17031	4.95	1043945	27594	42242	10563	0.25	3.00
1988	June	14715	4.17	1011150	32796	41807	18081	0.43	5.19
1988	July	16776	3.13	967960	43190	41232	26414	0.64	7.69
1988	August	14692	2.11	926198	41762	40677	27070	0.67	7.99
1988	September	7807	1.35	895465	30733	40268	22926	0.57	6.83
1988	October	107	1.07	884225	11240	40118	11133	0.28	3.33
1989	April		5.28	1057924		42428			
1989	May	11283	4.65	1031291	26634	42074	15351	0.36	4.38
1989	June	16352	3.73	992802	38489	41563	22137	0.53	6.39
1989	July	6173	2.85	956437	36365	41079	30192	0.73	8.82
1989	August	8571	2.05	923759	32677	40644	24106	0.59	7.12
1989	September	7725	1.63	906749	17010	40418	9285	0.23	2.76
1989	October	51	1.61	905942					
1990	April		3.16	969197		41249			
1990	May	24	2.97	961370	7827	41145	7803	0.19	2.28
1990	June	27	2.56	944549	16821	40921	16794	0.41	4.92
1990	July	62	1.92	918484	26066	40574	26004	0.64	7.69
1990	August	74	1.21	889839	28644	40193	28570	0.71	8.53
1990	September	88	0.83	874626	15213	39990	15125	0.38	4.54
1990	October	46	0.55	863469	11157	39841	11111	0.28	3.35
1991	April		3.94	1001545		41679			
1991	May	34	3.67	990309	11236	41529	11202	0.27	3.24
1991	June	17	3.18	970022	20286	41260	20269	0.49	5.90
1991	July	1682	2.58	945368	24655	40932	22973	0.56	6.73

Year	Month	Cache Cr Release, ac-ft	Clear Lake				Evap Loss, ac ft	Evap Loss, feet	Evap Loss, inches
			EOM Stage	EOM Storage	Chg Storage	EOM Acreage			
1991	August	10461	1.61	905942	39426	40407	28965	0.72	8.60
1991	September	6470	1.01	881822	24120	40086	17650	0.44	5.28
1991	October	747	0.61	865856	15966	39873	15219	0.38	4.58
1992	April		4.49	1024562		41985			
1992	May	183	4.09	1007806	16757	41762	16574	0.40	4.76
1992	June	10975	3.2	970848	36958	41271	25983	0.63	7.55
1992	July	14565	2.23	931080	39767	40742	25202	0.62	7.42
1992	August	6542	1.38	896672	34408	40284	27866	0.69	8.30
1992	September	1991	0.84	875026	21646	39995	19655	0.49	5.90
1992	October	1959	0.69	869042					
1993	April		7.6	1157948		43758			
1993	May	30095	6.93	1128748	29200	43370			
1993	June	29544	6	1088639	40109	42837	10565	0.25	2.96
1993	July	35274	4.45	1022883	65756	41962	30482	0.73	8.72
1993	August	25561	3.17	969610	53273	41254	27712	0.67	8.06
1993	September	18442	2.22	930673	38937	40736	20495	0.50	6.04
1993	October	1220	1.92	918484	12189	40574	10969	0.27	3.24
1994	April		4.17	1011150		41807			
1994	May	573	3.93	1001128	10021	41673	9448	0.23	2.72
1994	June	2230	3.31	975391	25737	41331	23507	0.57	6.83
1994	July	10681	2.38	937195	38196	40823	27515	0.67	8.09
1994	August	10796	1.39	897074	40121	40289	29325	0.73	8.73
1994	September	5031	0.8	873429	23645	39974	18614	0.47	5.59
1994	October	104	0.44	859098	14331	39783	14227	0.36	4.29
1995	April		7.59	1157510		43752			
1995	May	38398	7.51	1154010	3500	43706			
1995	June	15100	6.91	1127880	26131	43358	11031	0.25	3.05
1995	July	29683	5.65	1073671	54209	42638	24526	0.58	6.90
1995	August	1991	4.44	1022463	51208	41957	49217	1.17	14.08
1995	September	15037	3.49	982841	39622	41430	24585	0.59	7.12
1995	October	11750	2.86	956848	25993	41084	14243	0.35	4.16
1996	April		7.51	1154010		43706			
1996	May	31360	7.07	1134828	19182	43450			
1996	June	36700	5.74	1077513	57315	42689	20615	0.48	5.79
1996	July	38580	4.32	1017430	60084	41890	21504	0.51	6.16
1996	August	15360	3.3	974978	42452	41326	27092	0.66	7.87
1996	September	4210	2.74	951922	23056	41019	18846	0.46	5.51
1996	October	9640	2.12	926604	25318	40682	15678	0.39	4.62
1997	April		6.59	1114027		43174			
1997	May	23340	5.81	1080505	33522	42728	10182	0.24	2.86
1997	June	27310	4.61	1029607	50898	42052	23588	0.56	6.73
1997	July	24500	3.51	983670	45938	41441	21438	0.52	6.21
1997	August	24260	2.38	937195	46475	40823	22215	0.54	6.53
1997	September	14850	1.63	906749	30446	40418	15596	0.39	4.63
1997	October	1505	1.31	893857	12893	40246	11388	0.28	3.40
1998	April		7.47	1152262		43682			
1998	May	34748	7.51	1154010	-1748	43706			
1998	June	36077	6.8	1123111	30899	43295			
1998	July	35148	5.31	1059198	63913	42445	28765	0.68	8.13
1998	August	23544	4.05	1006135	53063	41740	29519	0.71	8.49
1998	September	12901	3.11	967135	38999	41221	26098	0.63	7.60

Year	Month	Cache Cr Release, ac-ft	Clear Lake				Evap Loss, ac ft	Evap Loss, feet	Evap Loss, inches
			EOM Stage	EOM Storage	Chg Storage	EOM Acreage			
1998	October	3181	2.79	953974	13162	41046	9981	0.24	2.92
1999	April		7.6	1157948		43758			
1999	May	34526	6.49	1109710	48238	43117	13712	0.32	3.82
1999	June	23359	5.31	1059198	50512	42445	27153	0.64	7.68
1999	July	25368	3.85	997795	61403	41629	36035	0.87	10.39
1999	August	23426	2.6	946186	51609	40943	28183	0.69	8.26
1999	September	13430	1.84	915242	30944	40531	17514	0.43	5.19
1999	October	5326	1.38	896672	18570	40284	13244	0.33	3.95
2000	April		7.54	1155322		43723			
2000	May	34528	6.63	1115756	39567	43197	5039	0.12	1.40
2000	June	37676	5.27	1057500	58256	42423	20580	0.49	5.82
2000	July	30451	3.88	999045	58455	41646	28004	0.67	8.07
2000	August	25520	2.41	938419	60625	40839	35105	0.86	10.32
2000	September	15325	1.67	908365	30054	40439	14729	0.36	4.37
2000	October	6895	1.23	890642	17723	40203	10828	0.27	3.23
2001	April		5.11	1050715		42332			
2001	May	10150	4.49	1024562	26153	41985	16003	0.38	4.57
2001	June	10110	3.6	987402	37160	41491	27050	0.65	7.82
2001	July	8992	2.72	951102	36300	41008	27308	0.67	7.99
2001	August	14901	1.68	908769	42333	40445	27432	0.68	8.14
2001	September	372	1.21	889839	18930	40193	18558	0.46	5.54
2001	October		0.91	877822	12017	40033	12017	0.30	3.60
2002	April		6.79	1122678		43289			
2002	May	28576	5.88	1083499	39179	42768	10603	0.25	2.98
2002	June	27938	4.69	1032975	50524	42097	22586	0.54	6.44
2002	July	26388	3.34	976631	56343	41348	29955	0.72	8.69
2002	August	22253	2.15	927824	48807	40698	26554	0.65	7.83
2002	September	14378	1.24	891044	36780	40209	22402	0.56	6.69
2002	October	322	0.87	876224	14820	40011	14498	0.36	4.35
2003	April		7.84	1168470		43898			
2003	May	49117	7.35	1147022	21447	43613			
2003	June	27194	6.25	1099372	47650	42979	20456	0.48	5.71
2003	July	32335	4.92	1042677	56695	42226	24360	0.58	6.92
2003	August	25199	3.8	995714	46964	41601	21765	0.52	6.28
2003	September	13800	2.86	956848	38866	41084	25066	0.61	7.32
2003	October	8133	2.21	930266	26582	40731	18449	0.45	5.44
Average	April		6.14	1095109		42923			
Average	May	20664	5.59	1071492	23618	42609			
Average	June	20270	4.65	1031657	39835	42079	20939	0.50	5.59
Average	July	21164	3.50	983409	48248	41438	27084	0.65	7.88
Average	August	15277	2.44	939899	43510	40859	28233	0.69	8.29
Average	September	9598	1.74	911497	28402	40481	18803	0.46	5.57
Average	October	2953	1.40	897616	15114	40312	12106	0.30	3.60