

**MONITORING AND REPORTING PROGRAM PLAN**

**SAN DIEGO REGION IRRIGATED LANDS GROUP**

December 16, 2011

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SDRWQCB Conditional Waiver No. 4

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## **MONITORING AND REPORTING PROGRAM PLAN**

### **SAN DIEGO REGION IRRIGATED LANDS GROUP**

#### **1.0 PROJECT PERSONNEL**

The San Diego Region Irrigated Lands Group (SDRILG) was formed to comply with the California Regional Water Quality Control Board, San Diego Region's (SDRWQCB) *Conditional Waiver No. 4 – Discharges from Agriculture and Nursery Operations* (Waiver). Mr. Eric Larson is the Administrator and primary contact for the SDRILG. PW Environmental (PW) was contracted to assist the SDRILG with the technical requirements of the Waiver. Mr. Zachary Moran is the Project Manager for the program, Mr. Bryn Home is the Quality Assurance (QA) Officer, and Mr. Ed De La Llave is the Field Supervisor.

The SDRILG is responsible for organizing and managing the administrative aspect of the SDRILG while PW manages the technical aspect of the SDRILG. The SDRILG assisted the individual participants in completing and submitting the Notice of Intent (NOI) forms. PW developed the required Quality Assurance Project Plan (QAPP) and this Monitoring and Reporting Program Plan (MRPP), on behalf of the SDRILG. PW is also currently responsible for the oversight of field monitoring and sampling at the selected sites for the SDRILG, and all additional reporting. Weck Laboratories, Inc. (Weck) is responsible for the laboratory analytical testing for the group.

Weck is certified by the California Environmental Laboratory Accreditation Program; their certification numbers is 1132. Mr. Brandon Gee of Weck is the Laboratory Project Manager for this waiver program, and Alan Ching is the QA officer. The contact information for Weck is:

Weck Laboratories, Inc.  
Brandon Gee (626) 336-2139 x133  
14859 E. Clark Ave  
Industry, CA 91745

## **2.0 INTRODUCTION AND BACKGROUND**

The SDRWQCB is a State of California Agency that regulates water quality within the San Diego Region. The San Diego Region includes the coastal watersheds of San Diego County, the southern portion of Orange County and a small portion of Riverside County. The SDRILG operates throughout the entirety of the San Diego Region.

All eleven Watersheds in the region have impacted waterbodies that appear on the Federal 303(d) list, and listed contaminants include constituents that could be related to agricultural uses. In accordance with section 303 (d) of the Clean Water Act, the SDRWQCB is in the process of developing Total Maximum Daily Loads (TMDLs) for these impacted waterbodies. Currently, TMDLs have been adopted for Chollas Creek, Rainbow Creek, and the Shelter Island Yacht Basin, and TMDLs are in progress for areas of the San Diego Bay, the Tijuana River and Estuary, Los Penasquitos Lagoon, Santa Margarita Lagoon, Loma Alta Slough, Buena Vista Lagoon, Agua Hedionda Lagoon, lower Agua Hedionda Creek, San Elijo Lagoon, Famosa Slough and Channel, the shoreline of Buena Vista Creek, the shoreline of Escondito Creek, and the shoreline of Loma Alta. The SDRWQCB also adopted indicator bacteria TMDLs for twenty beaches and creeks in the region, and for Baby Beach and Shelter Island Shoreline Park.

Water quality impacts associated with agriculture can be primarily traced to discharges resulting from irrigation or stormwater. These discharges may contain pollutants that have been imported or introduced into the irrigation or stormwater; in addition, irrigation practices can mobilize and or concentrate some pollutants. In order to evaluate the potential impacts of discharges from agricultural land on beneficial uses of water bodies within the San Diego Region, the SDRWQCB adopted Conditional Waiver No. 4 (as part of Resolution R9-2007-0104; Waiver) on October 10, 2007, as mandated by state law and policy.

To comply under the Waiver, agricultural and nursery operations were required to form or join a monitoring group or submit an individual NOI by January 1, 2011. In addition to the general conditions listed in the Waiver, dischargers are required to implement monitoring programs to assess the impacts of discharges from irrigated lands. SDRILG's MRPP is prepared to address this general condition. Monitoring groups are required to submit a MRPP to the SDRWQCB by December 31, 2011. The Waiver was adopted in its current form for five years and is set to expire December 31, 2012.

The key questions that will be addressed by SDRILG throughout the life of the program are as follows:

- 1) Are beneficial uses being protected in waters of the state that receive discharges from members enrolled in the SDRILG, as a result of agricultural activities, as indicated by water quality conditions stated in the San Diego Basin Plan?
- 2) Based on monitoring information, what is the extent and magnitude of water quality issues, in relation to SDRILG's agricultural activities or the affects of agricultural activities?
- 3) What contributing sources from agriculture activities are impairing water quality in receiving water bodies?
- 4) What BMPs are being implemented by SDRILG to reduce impacts, and are these BMPs reducing the impacts from agricultural activities to waters of the State? Where are BMPs being applied?
- 5) Are water quality conditions improving, staying the same, or declining in receiving water bodies after the implementation of BMPs?

As the current Waiver is set to expire at they end of 2012, the entirety of these questions will not be able to be addressed during the first Waiver period. The first year of monitoring and assessment will be focused on providing baseline conditions at sampling sites selected for group monitoring. Until the next Waiver is released by the SDRWQCB, a long-term monitoring and water quality management plan will not be developed. However, the above questions should serve as a general basis for further actions and plans implemented by the SDRILG.

### **3.0 DESCRIPTION OF SAN DIEGO REGION AND AGRICULTURE**

#### **3.1 San Diego Region Geographical Setting**

The San Diego Region includes watersheds south of the Santa Ana River and north of the Mexican border. It is bounded to north by a hydrologic divide that extends from Laguna Beach into the Cleveland National Forest, to the east by the Laguna Mountains and mountains in the Cleveland National Forest, to the south by the Mexican border, and to the west by the Pacific Ocean. It encompasses approximately 3,900 square miles, and contains most of San Diego County, and parts of southwestern Riverside County and southwestern Orange County.

The Region is located in the Peninsula Range Physiographic Province of California. It is generally divided into a coastal plain area, a central mountain-valley area, and an eastern mountain-valley area. The most prominent feature in the area is the northwest-trending Peninsula Range, which includes the Santa Ana, Agua Tibia, Palomar, Volcan, Cuyamaca, and Laguna Mountains. The climate in the area is generally an arid Mediterranean climate. The Region has an average temperature of approximately 65° Fahrenheit and an average precipitation of 10 to 13 inches per year, although precipitation in the mountainous areas can reach up to 45 inches a year. Generally speaking, precipitation and temperature variations increase as you head inland from the Pacific Ocean. The majority of the precipitation falls from November through February throughout the region. Surface and groundwater flow in the region is generally in an east to west direction towards the Pacific Ocean.

Hydrologically, the region is divided into 11 major hydrologic units, 54 hydrologic areas, and 147 hydrologic subareas. The major hydrologic units, listed from north to south, are: the San Juan, Santa Margarita, San Luis Rey, Carlsbad, San Dieguito, Los Penasquitos, San Diego, Pueblo San Diego, Sweetwater, Otay, and Tijuana. A map of the major hydrologic units is presented as Figure 1.



Figure 1 San Diego Hydrologic Units



Land use in the San Diego Region varies significantly. The majority of the coast consists of urban development, although undeveloped swatches of land lay in the northern county near Camp Pendleton Marine Base. Large portions of the interior of the region are open space, and agriculture exists throughout the region, but is concentrated in the San Luis Rey and San Dieguito watersheds. The approximate percentages of land use for the total watershed and each hydrologic unit are presented in Table 1.

Table 1 Land Use, San Diego Hydrologic Units

<b>Watershed</b>	<b>Area (sq mile)</b>	<b>% Open</b>	<b>% Developed</b>	<b>% Agriculture</b>
San Juan	496	92%	7%	1%
Santa Margarita	750	81%	13%	6%
San Luis Rey	560	61%	15%	24%
Carlsbad	211	38%	50%	12%
San Dieguito	346	18%	61%	21%
Los Penasquitos	162	43%	53%	4%
San Diego	440	72%	26%	2%
Pueblo San Diego	56	12%	88%	0%
Sweetwater	230	67%	29%	4%
Otay	154	70%	20%	10%
Tijuana	463	90%	6%	4%
<b>TOTAL</b>	<b>3868</b>	<b>68%</b>	<b>23%</b>	<b>9%</b>

### 3.2 San Diego County Agriculture

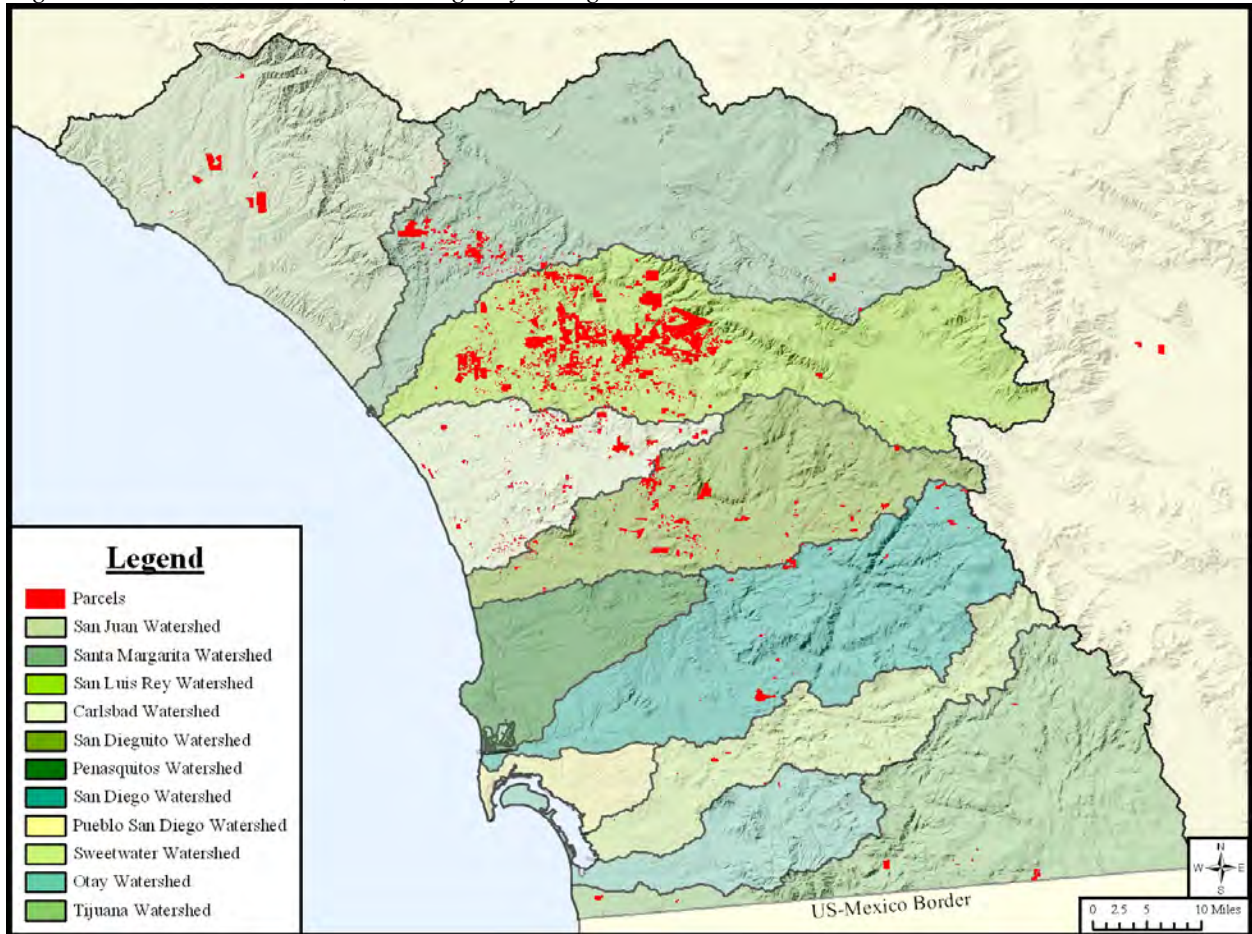
Based on 2010 County of San Diego, Department of Agriculture, Weights and Measures statistics, there was 302,713 total acres of agricultural in production in 2010. General range land accounted for approximately 240,630 of the reported acres, and is not covered under the Waiver. In decreasing order, the largest crops, by acre, were: total avocados, total citrus, nursery products, vegetables, and cut flowers. Generally speaking, total nursery and cut flower products were far and away the largest value of crops in the county, while total fruit and nuts (not including range land) accounted for the largest land area. Please note that these statistics are for San Diego County only, and do not account for land outside of the County lines but within the San Diego Regional Water Board boundaries.

The varied topography of the region creates numerous microclimates, which results in nearly 30 different types of vegetation communities and the ability to grow over 200 different agricultural commodities in the region. A unique aspect of San Diego County agriculture is that a large number of the agricultural community is made up of small farms. There are more farms in the county than any other county in the United States, and it is estimated that of the 6,687 farms in the county, 68% are between one and nine acres. The median size farm in the county is just 4 acres. The high cost of both land and water encourages many growers to raise products with a high dollar per acre value, and San Diego County produces the highest dollar value per acre of any county in California.

#### 4.0 DESCRIPTION OF SDRILG

The SDRILG has members within all eleven of the major watersheds. However, the vast majority of growers and acreage is located within the San Luis Rey Hydrologic Unit (HU). A map presenting the location of SDRILG members throughout the San Diego Region is presented as Figure 2. The complete list of enrolled members is included as Appendix A.

*Figure 2 SDRILG Enrollees, San Diego Hydrologic Units*



For the purpose of the program, crop types in the group were broken into seven major subtypes: container nurseries; field grown nursery or floral crops; grapes, berries and vine fruit; greenhouse crops; row and field crops; tree fruit; and other. The majority of the acreage associated with the SDRILG falls within the tree crop category, which accounts for avocado and citrus fruits. Nursery operations, which account for the container, field grown or floral, and greenhouse subtypes, make up the second largest acreage in the group. Table 2 presents the enrolled total and irrigated acreage of SDRILG within each HU, acreage associated with each crop type in each HU, and the percentage of the crop associated with SDRILG membership.

Table 2 SDRILG Distribution and Crop Types

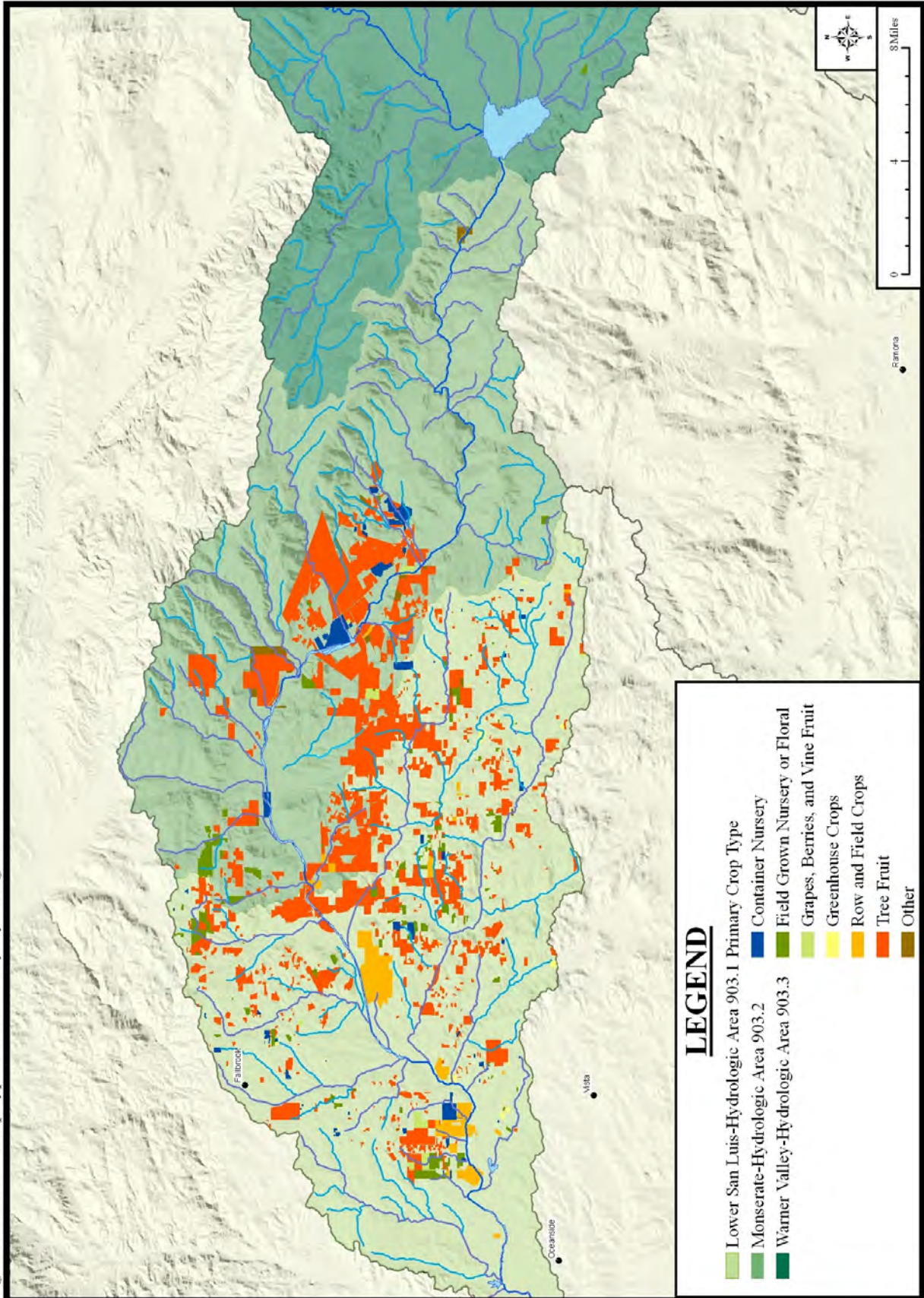
	Container Nursery	Field Nursery or Floral	Vine Fruit	Greenhouse Crops	Other	Row and Field Crop	Tree Fruit	TOTAL ACRES	% TOTAL
<b>Irrigated Acreage</b>									
<b>TOTAL IRRIGATED ACRES</b>	<b>2,155.26</b>	<b>2,073.61</b>	<b>530.75</b>	<b>175.47</b>	<b>191.89</b>	<b>1,320.42</b>	<b>25,020.36</b>	<b>31,467.76</b>	
San Juan Acreage	15.60	8.00	8.00	0.00	14.00	0.00	344.40	390.00	1.24%
Santa Margarita Acreage	244.16	133.30	17.00	3.39	1.00	42.00	2,257.59	2,698.44	8.58%
San Luis Rey Acreage	1,265.46	1,543.62	392.85	60.59	112.59	1,048.95	17,197.82	21,621.88	68.71%
Carlsbad Acreage	448.17	313.23	13.50	104.19	20.75	69.00	1,826.09	2,794.93	8.88%
San Dieguito Acreage	154.01	23.95	65.10	7.00	4.00	80.05	2,574.06	2,908.17	9.24%
Los Penasquitos Acreage	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.30	0.00%
San Diego Acreage	10.57	45.01	9.55	0.00	7.55	35.42	785.10	893.20	2.84%
Pueblo San Diego Acreage	1.00	0.00	0.00	0.30	0.00	0.00	0.00	1.30	0.00%
Sweetwater Acreage	9.29	3.50	1.75	0.00	0.00	0.00	5.00	19.54	0.06%
Otay Acreage	0.00	3.00	3.00	0.00	0.00	0.00	28.00	34.00	0.11%
Tijuana Acreage	7.00	0.00	20.00	0.00	32.00	45.00	2.00	106.00	0.34%
<b>% TOTAL</b>	<b>6.85%</b>	<b>6.59%</b>	<b>1.69%</b>	<b>0.56%</b>	<b>0.61%</b>	<b>4.20%</b>	<b>79.51%</b>		

Table 2(cont) SDRILG Distribution and Crop Types

	Container Nursery	Field Nursery or Floral	Vine Fruit	Greenhouse Crops	Other	Row and Field Crop	Tree Fruit	TOTAL ACRES	% TOTAL
<b>Total Acreage</b>									
<b>TOTAL ACRES</b>	<b>3,021.00</b>	<b>3,435.87</b>	<b>1,646.87</b>	<b>492.02</b>	<b>1,901.27</b>	<b>3,288.58</b>	<b>40,548.11</b>	<b>54,333.72</b>	
San Juan Acreage	16.71	35.50	11.30	0.00	38.41	0.00	2,230.83	2,332.75	4.29%
Santa Margarita Acreage	387.16	392.44	131.47	7.44	111.39	203.06	3,815.40	5,048.36	9.29%
San Luis Rey Acreage	1,800.81	2,467.85	720.12	197.01	733.13	2,493.90	26,631.51	35,044.33	64.50%
Carlsbad Acreage	578.88	435.51	27.40	271.57	252.29	124.00	2,929.32	4,618.97	8.50%
San Dieguito Acreage	192.81	45.91	295.30	15.00	260.58	345.20	3,650.05	4,804.85	8.84%
Los Penasquitos Acreage	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.50	0.00%
San Diego Acreage	14.27	45.01	111.65	0.50	105.47	35.42	1,217.61	1,529.93	2.82%
Pueblo San Diego Acreage	1.00	0.00	0.00	0.50	0.00	0.00	0.00	1.50	0.00%
Sweetwater Acreage	17.86	5.65	17.50	0.00	116.00	0.00	7.89	164.90	0.30%
Otay Acreage	0.00	8.00	15.13	0.00	0.00	0.00	40.00	63.13	0.12%
Tijuana Acreage	11.50	0.00	317.00	0.00	284.00	87.00	25.00	724.50	1.33%
<b>% TOTAL</b>	<b>5.56%</b>	<b>6.32%</b>	<b>3.03%</b>	<b>0.91%</b>	<b>3.50%</b>	<b>6.05%</b>	<b>74.63%</b>		

As is displayed on Table 2, the largest constituent of growers are located within the San Luis Rey Watershed, which accounts for approximately 68.7% of the irrigated acres and 64.5% of the total acres enrolled in the group. Due to the concentration of enrolled growers in the San Luis Rey HU, the SDRILG will focus monitoring efforts on the agricultural impacts to waterbodies in this HU. Figure 3 presents the crop types enrolled in the SDRILG throughout the San Luis Rey HU.

Figure 3 SDRILG Crop Types, San Luis Rey Hydrologic Area



## **5.0 SAN LUIS REY WATERSHED DESCRIPTION**

### **5.1 San Luis Rey Hydrologic Unit**

The San Luis Rey Hydrologic Unit, or San Luis Rey River Watershed (SLR), is located in northern San Diego County and is approximately 560 square miles. It includes the cities of Oceanside and Valley Center, and portions of Fallbrook and Camp Pendleton. Several Indian Reservations are located in the unit. The SLR is bordered to the north by the Santa Margarita Watershed, and is bordered to the south by the Carlsbad and San Dieguito Watersheds.

The main water body in the watershed is the San Luis Rey River, which is ephemeral and dry in the upper and middle reaches for most of the year. The river extends approximately 55 miles, and ultimately discharges to the Pacific Ocean in Oceanside. The San Luis Rey River originates primarily from the Palomar and Hot Springs Mountains, and is interrupted by Lake Henshaw, Henshaw Dam, and the Escondido Canal. Historically, when water is released from Henshaw Dam the Escondido Canal has diverted approximately 90% of the San Luis Rey River from the lower reaches to the Local Entities of the City of Escondido and the Vista Irrigation District. Flood flow in the river is typically limited to short durations. The majority of the river is unchannelized, except the lower seven miles, which are contained within a channel bounded by earthen levees on both sides and generally contains water year round.

The SLR is unique in the aspect that groundwater and surface water have become an integrated system, and are not hydrologically separate. Groundwater impairments can have an impact on surface water quality, and surface water quality impairments may directly influence groundwater quality. There are six shallow alluvial groundwater aquifers that are currently used for agricultural, industrial, and municipal supplies: Warner, Pauma, Pala, Bonsall, Moosa Canyon, and Mission Basin. Groundwater levels in these areas have a direct effect on surface flows present in the region. Additionally, much of the anthropogenic runoff is supplemented with Colorado River water, which inherently has a higher salt content and can affect groundwater conditions.

The SLR HU is comprised of three hydrologic areas (HA) and eleven hydrologic sub areas (HAS), which were delineated by the SDRWQCB based on drainage patterns. Figure 4 presents the HA and HAS located within the SLR HU, and Table 3 presents the acreage enrolled in each HA and HAS.



Figure 4 San Luis Rey Hydrologic Areas and Subareas

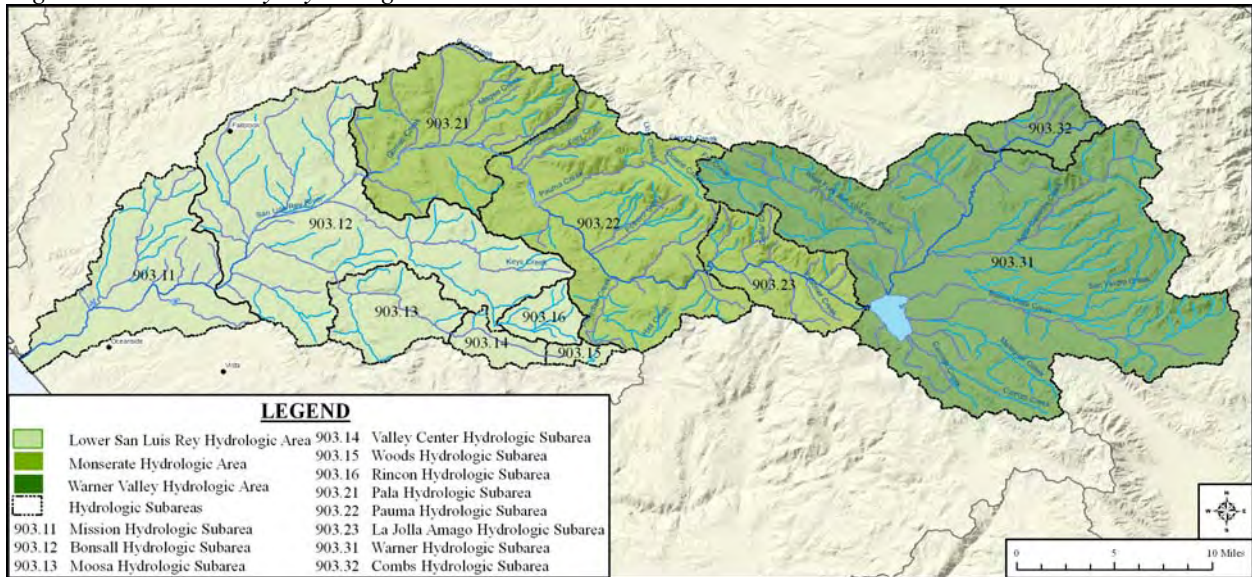


Table 3 SDRILG Distribution in San Luis Rey Hydrologic Unit

Hydrologic Unit	Hydrologic Area	Hydrologic Subarea Code	Hydrologic Subarea Name	Total Acreage	% Acreage
San Luis Rey	Lower San Luis Rey	903.11	Mission	2,710.39	7.73%
		903.12	Bonsall	13,924.04	39.73%
		903.13	Moosa	1,784.46	5.09%
		903.14	Valley Center	312.52	0.89%
		903.15	Woods	135.99	0.39%
		903.16	Rincon	389.64	1.11%
	Monserate	903.21	Pala	5,507.61	15.72%
		903.22	Pauma	10,136.12	28.92%
		903.23	La Jolla Amago	114.87	0.33%
	Warner	903.31	Warner	28.70	0.08%
903.32		Combs	0.00	0.00%	
				35,044.33	

### 5.1.1 Lower San Luis HA

The Lower San Luis HA is the furthest west (most downstream) watershed. From west to east, it contains the communities of Oceanside, the southern portion of Camp Pendleton, portions of Fallbrook, Bonsall, Hidden Valley, and Valley Center. Oceanside is the most densely populated and developed area, while Valley Center is a developing area mostly comprised of large lot, low density areas. Agriculture is prevalent throughout the region, and is often integrated near and within residential areas throughout the HA, increasingly as you travel east from Oceanside.

The Lower San Luis HA is broken into six HAS: Mission, Bonsall, Moosa, Valley Center, Woods, and Rincon. Moosa Creek originates in the Woods HAS, and passes through Valley Center, Moosa, and Bonsal HAS before merging with the San Luis Rey River. The south fork of Keys Creek originates in the Rincon HAS, and merges with the main stem of Keys Creek, which originates in the Bonsall HAS. Gopher Canyon, Ostrich Creek, and Live Oak Creek are additional tributaries in the Bonsall HAS, and Pilgrim Creek is the major tributary in the Mission HAS. Much of the flow in Moosa Creek and Keys Creek is influenced by anthropogenic uses, such as urban, landscaping, and agricultural runoff. The majority of the creeks in the HA are intermittent, with portions of Moosa Creek and Keys Creek maintaining perennial flow, depending on precipitation. Currently, the HAS most populated with SDRILG members is Bonsall.

### 5.1.2 Monserate HA

The Monserate HA extends from the western border of the Lower San Luis HA to below Henshaw Dam. It includes the small communities of Pala, Pauma Valley, and Rincon, and portions of the Pala, Pauma, La Jolla, Rincon, and Yuima Indian Reservations. The area is located in a valley, with tributaries to the San Luis Rey River generally running from mountains to the north and south. A large portion of the HA is undeveloped, and agriculture is the most dominant land use, with smaller residential areas scattered throughout. Industrial activity in the area historically consisted of sand and gravel mining, some of which occurred in-stream. Currently the Rosemary Mountain Quarry operates just to the east of Interstate 15 and directly north of the San Luis Rey River.

The Monserate HA is broken into three HAS: Pala, Pauma, and La Jolla Amago. Pala Creek is the major tributary in the Pala HAS; Pauma Creek, Agua Tibia Creek, Frey Creek, Paradise Creek and Hells Creek are the major tributaries in the Pauma HAS; and Cedar Creek and Lusardi Canyon are the major tributaries in the La Jolla Amago HAS. The vast majority of the creeks in the HA are intermittent, although portions of some streams will contain perennial flow, depending on precipitation and releases from Henshaw Dam. Currently, the HAS most populated with SDRILG members is Pauma.

### 5.1.3 Warner Valley HA

The Warner Valley HA is the furthest east, and contains the headwaters of the San Luis Rey, the Henshaw Dam and Henshaw Reservoir, and the Escondito Canal. It is generally high elevation brush and forest land, and the area drains directly to Lake Henshaw. The majority of the Warner Valley HA is undeveloped, with open space and rangeland the predominant land uses. Residences are sparsely scattered throughout the area, but the residential area is centered on and around Warner Springs. Although there is some agriculture also situated around Warner Springs, there are no SDRILG enrolled growers in the area.

The Warner Valley HA is also broken into two HAS: Warner and Combs. The West Fork of the San Luis Rey River, Agua Caliente Creek, Buena Vista Creek, San Ysidro Creek, and Carrita Creek are the major tributaries in the Warner HAS. Creeks in the area are primarily intermittent, although sections of the West Fork, Agua Caliente, and San Ysidro contain perennial flow. Currently, there is only 28.7 acres associated with the SDRILG located in the Warner Valley HA.

## **5.2 Beneficial Uses and Impaired Waterbodies**

The San Luis Rey HU is listed for a number of beneficial uses, including: municipal; industrial; agricultural; freshwater replenishment; hydropower; recreation 1 and recreation 2; warm and cold freshwater habitats; wildlife habitats; spawning habitats; and rare, threatened, or endangered species habitats. Table 4 presents the beneficial uses of inland surface waters of the San Luis Rey, as determined by the SDRWQCB.

Table 4 Beneficial Uses, San Luis Rey Hydrologic Unit

INLAND SURFACE WATERBODY <sup>1,2</sup>	Hydrologic Unit	MUM	AGR	IND	PROC	GWR	FRSH	POW	REC1	REC2	BIOL	WARM	COLD	WILD	RARE	SPWN
San Luis Rey River	3.32	X	X	X			X	X	X	X		X	X	X		
Johnson Canyon	3.32	X	X	X			X	X	X	X		X	X	X		
San Luis Rey River	3.31	X	X	X			X	X	X	X		X	X	X		
Canada Aguanga	3.31	X	X	X			X	X	X	X		X	X	X		
Dark Canyon	3.31	X	X	X			X	X	X	X		X	X	X		
Bear Canyon	3.31	X	X	X			X	X	X	X		X	X	X		
Cow Canyon	3.31	X	X	X			X	X	X	X		X	X	X		
Blue Canyon	3.31	X	X	X			X	X	X	X		X	X	X		
Rock Canyon	3.31	X	X	X			X	X	X	X		X	X	X		
Agua Caliente Creek	3.31	X	X	X			X	X	X	X		X	X	X		
unnamed Tributary	3.31	X	X	X			X	X	X	X		X	X	X		X
Canada Agua Caliente	3.31	X	X	X			X	X	X	X		X	X	X		
Canada Verde	3.31	X	X	X			X	X	X	X		X	X	X		
Ward Canyon	3.31	X	X	X			X	X	X	X		X	X	X		
Lake Henshaw	3.31	See Reservoirs and Lakes Below														
West Fork San Luis Rey River	3.31	X	X	X			X	X	X	X		X	X	X		X
Fry Creek	3.31	X	X	X			X	X	X	X		X	X	X		
Iron Springs Creek	3.31	X	X	X			X	X	X	X		X	X	X		X
Buena Vista Creek	3.31	X	X	X			X	X	X	X		X	X	X		
Cherry Canyon	3.31	X	X	X			X	X	X	X		X		X		
Bertha Canyon	3.31	X	X	X			X	X	X	X		X		X		
Hoover Canyon	3.31	X	X	X			X	X	X	X		X		X		
Buck Canyon	3.31	X	X	X			X	X	X	X		X		X		
Bergstrom Canyon	3.31	X	X	X			X	X	X	X		X		X		
San Ysidro Creek	3.31	X	X	X			X	X	X	X		X		X		
Matagual Creek	3.31	X	X	X			X	X	X	X		X	X	X		
Carrizo Creek	3.31	X	X	X			X	X	X	X		X	X	X		
Carrista Creek	3.31	X	X	X			X	X	X	X		X		X		
Kumpohui Creek	3.31	X	X	X			X	X	X	X		X		X		
San Luis Rey River	3.31	X	X	X			X	X	X	X		X	X	X		
San Luis Rey River	3.23	X	X	X				X	X	X		X	X	X		X
Wigham Creek	3.23	X	X	X				X	X	X		X	X	X		
Prisoner Creek	3.23	X	X	X				X	X	X		X	X	X		
Lusardi Canyon	3.23	X	X	X				X	X	X		X	X	X		
Cedar Creek	3.23	X	X	X				X	X	X		X	X	X		

Table 4 (cont.) Beneficial Uses, San Luis Rey Hydrologic Unit

<b>INLAND SURFACE WATERBODY<sup>1,2</sup></b>	Hydrologic Unit	MUM	AGR	IND	PROC	GWR	FRSH	POW	REC1	REC2	BIOL	WARM	COLD	WILD	RARE	SPWN
San Luis Rey River	3.22	X	X	X				X	X	X		X	X	X		
Bee Canyon	3.22	X	X	X				X	X	X		X	X	X		
Paradise Creek	3.22	X	X	X				X	X	X		X	X	X		
Hell Creek	3.22	X	X	X				X	X	X		X	X	X		
Horsethief Canyon	3.22	X	X	X				X	X	X		X	X	X		
Potrero Creek	3.22	X	X	X				X	X	X		X	X	X		
Plaisted Creek	3.22	X	X	X				X	X	X	X	X	X	X		
Yuima Creek	3.22	X	X	X				X	X	X		X	X	X		
Sycamore Canyon	3.22	X	X	X				X	X	X		X	X	X		
Pauma Creek	3.22	X	X	X				X	X	X		X	X	X		X
Doane Creek	3.22	X	X	X				X	X	X		X	X	X		X
Chimney Creek	3.22	X	X	X				X	X	X		X	X	X		
French Creek	3.22	X	X	X				X	X	X		X	X	X		X
Lion Creek	3.22	X	X	X				X	X	X		X	X	X		X
Harrison Canyon	3.22	X	X	X				X	X	X		X	X	X		
Jaybird Creek	3.22	X	X	X				X	X	X		X	X	X		
Frey Creek	3.22	X	X	X				X	X	X		X	X	X		
Agua Tibia Creek	3.22	X	X	X				X	X	X		X	X	X		X
San Luis Rey River	3.21	X	X	X					X	X		X	X	X		
Marion Canyon	3.21	X	X	X					X	X		X	X	X		
Magee Creek	3.21	X	X	X					X	X		X	X	X		
Castro Canyon	3.21	X	X	X					X	X		X	X	X		
Trujillo Creek	3.21	X	X	X					X	X		X	X	X		
Pala Creek	3.21	X	X	X					X	X		X	X	X		X
Gomez Creek	3.21	X	X	X					X	X		X	X	X		
Couser Canyon	3.21	X	X	X					X	X		X	X	X		
Double Canyon	3.21	X	X	X					X	X		X	X	X		
Rice Canyon	3.21	X	X	X					X	X		X	X	X		
San Luis Rey River	3.12	O	X	X					X	X	X	X		X	X	
Live Oak Creek	3.12	O	X	X					X	X		X		X	X	
Keys Creek	3.12	O	X	X					X	X		X		X		
Moosa Canyon	3.15	O	X	X					X	X		X		X		
unnamed intermittent streams	3.16	O	X	X				X	X			X		X		
Moosa Canyon	3.14	O	X	X				X	X			X		X		

Table 4 (cont.) Beneficial Uses, San Luis Rey Hydrologic Unit

INLAND SURFACE WATERBODY <sup>1,2</sup>	Hydrologic Unit	MUM	AGR	IND	PROC	GWR	FRSH	POW	REC1	REC2	BIOL	WARM	COLD	WILD	RARE	SPWN
Moosa Canyon	3.13	O	X	X				X	X			X		X		
Turner Lake	3.13	See Reservoirs and Lakes Below														
South Fork Moosa Canyon	3.13	O	X	X				X	X			X		X		
Moosa Canyon	3.12	O	X	X				X	X			X		X		
Gopher Canyon	3.12	O	X	X				X	X			X		X		
South Fork Gopher Canyon	3.12	O	X	X				X	X			X		X		
San Luis Rey River	3.11	O	X	X				X	X			X		X		
Pilgrim Creek	3.11	O	X	X				X	X		X	X	X	X	X	
Windmill Canyon	3.11	O	X	X				X	X			X	X	X	X	
Tuley Canyon	3.11	O	X	X				X	X			X		X		
Lawrence Canyon	3.11	O	X	X				X	X			X		X		
Mouth of San Luis Rey River	3.11	See Coastal Waters Below														
RESEVOIRS AND LAKES	Hydrologic Unit	MUM	AGR	IND	PROC	GWR	FRSH	REC1	REC2	WARM	COLD	WILD	RARE	POW		
Turner Lake	3.13	X	X	X				P	X	X						
Lake Henshaw	3.31	X	X	X	X		X	X	X	X		X	X	X		
COASTAL WATERS	Hydrologic Unit	IND	NAV	REC1	REC2	COMM	BIOL	EST	WILD	RARE	MAR	AQUA	MIGR	SPWN	WARM	SHELL
Mouth of San Luis Rey River	3.11			X	X				X	X	X		X			

<sup>1</sup> Waterbodies are listed multiple times if they cross hydrologic area or sub area boundaries

<sup>2</sup> Beneficial use designations apply to all tributaries to the indicated waterbody, if not listed separately.

X Existing Beneficial Use  
P Potential Beneficial Use  
O Exempted from MUN

MUN	Municipal and Domestic Supply	WILD	Wildlife Habitat
AGR	Agricultural Supply	RARE	Rare, Threatened, or Endangered Species
IND	Industrial Service Supply	SPWN	Spawning, Reproduction, and/or Early Development
PROC	Industrial Process Supply	IND	Industrial service supply
GRW	Ground Water Recharge	NAV	Navigation
FRSH	Freshwater Replenishment	COMM	Commercial and sport fishing
POW	Hydropower Generation	EST	Estuarine habitat
REC1	Contact Water Recreation	MAR	Marine habitat
REC2	Non-Contact Water Recreation	AQUA	Aquaculture
WARM	Warm Freshwater Habitat	MIGR	Migration of aquatic organisms
COLD	Cold Freshwater Habitat	SHELL	Shellfish harvesting
BIOL	Preservation of Biological Habitats of Special Significance		

In the SLR HU, the San Luis Rey River south of Lake Henshaw and Keys Creek are on the 303(d) list. Figure 5 and Table 5 present the specific impairments associated with the watershed.

Figure 5 303 (d) Waterbodies, San Luis Rey Hydrologic Unit

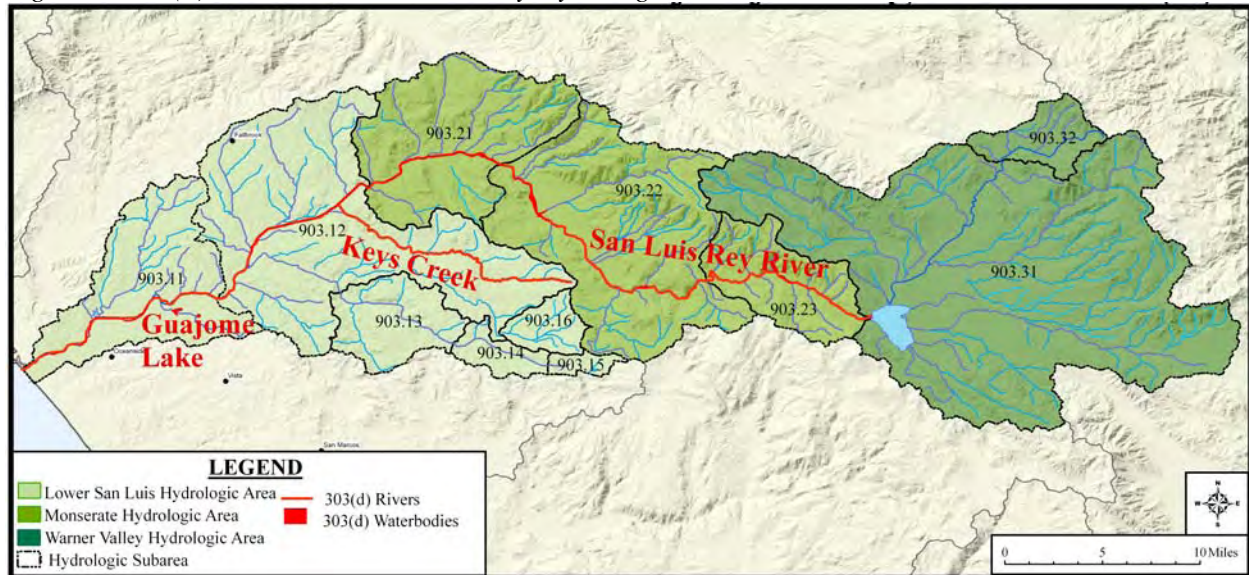


Table 5 303 (d) Listed Waterbodies, San Luis Rey Hydrologic Units

WATER BODY NAME	WATER BODY TYPE	HA	ESTIMATED SIZE	UNIT	POLLUTANT	POLLUTANT CATEGORY
Keys Creek	River & Stream	903.12	13	Miles	Selenium	Metals
SLR River, Upper <sup>1</sup>	River & Stream	903.12	35	Miles	Total Nitrogen as N	Nutrients
Guajome Lake	Lake & Reservoir	903.11	33	Acres	Eutrophic	Nutrients
Pacific Ocean Shoreline, at SLR River mouth	Coastal & Bay Shoreline	903.11	0	Miles	Enterococcus, Total Coliform	Pathogens
SLR River, Lower <sup>2</sup>	River & Stream	903.11	lower 13	Miles	Chloride	Salinity
SLR River, Lower <sup>2</sup>	River & Stream	903.11	19	Miles	Enterococcus, Fecal Coliform	Pathogens
SLR River, Lower <sup>2</sup>	River & Stream	903.11	19	Miles	Phosphorus, Total Nitrogen as N	Nutrients
SLR River, Lower <sup>2</sup>	River & Stream	903.11	19	Miles	Total Dissolved Solids	Salinity
SLR River, Lower <sup>2</sup>	River & Stream	903.11	19	Miles	Toxicity	Toxicity

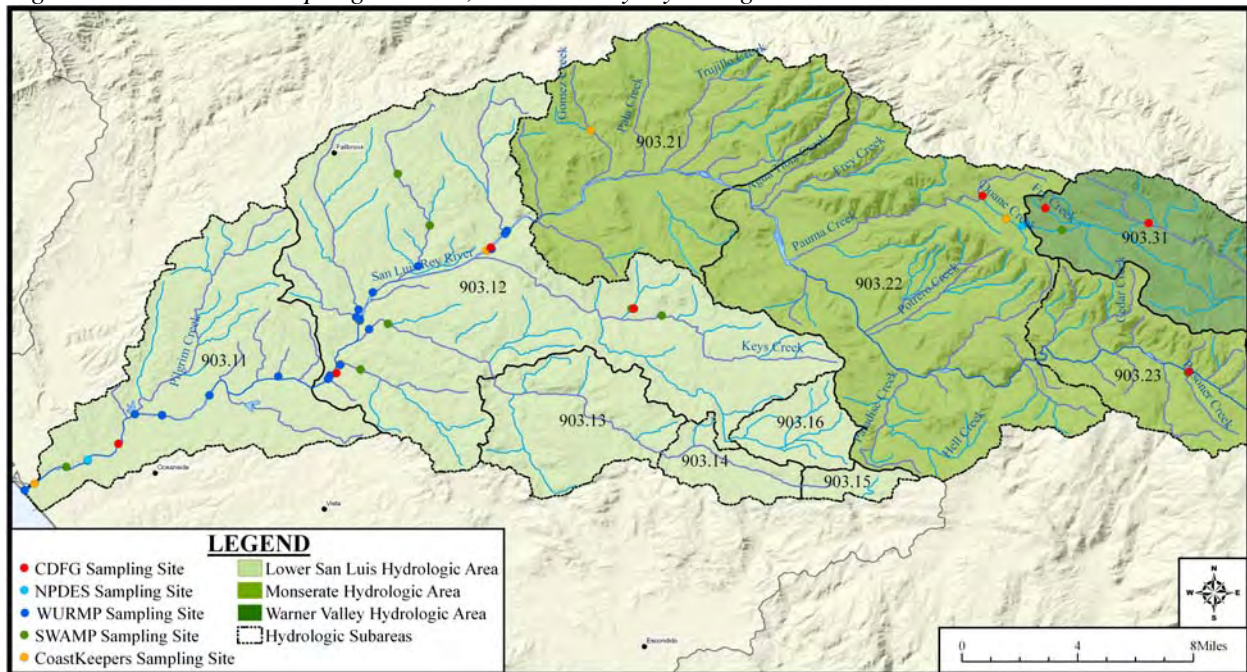
1 East of Interstate 15  
 2 West of Interstate 15

SLR San Luis Rey  
 HA Hydrologic Area

### 5.3 Review of Current Monitoring Data in San Luis Rey

Currently, the SLR HU is being sampled by a number of programs, including, but not limited to: National Pollution Discharge Elimination System Permittees, the California Surface Water Ambient Monitoring Program, the Watershed Urban Runoff Management Program, the California Department of Fish and Game, and the San Diego Coastkeepers. While the sampling sites are spread throughout the HU, the majority of the sites focus on the San Luis Rey River, west of Interstate 15. Water quality impairments in this area have been extensively studied and well defined through the existing monitoring programs. Figure 6 displays the location of current and recent sampling sites that were monitored under the programs listed above.

Figure 6 Watershed Sampling Stations, San Luis Rey Hydrologic Unit





## 6.0 SAMPLING SITE SELECTION APPROACH

Based on the distribution of members and previous conversations with the SDRWQCB and its affiliates, SDRILG will focus on the SLR for the monitoring and sampling portion of the program from the onset. The SLR is the most representative population of growers and the most densely utilized area for the group.

Water samples will be collected from sites evenly distributed throughout the portions of the SLR that contain members associated with the SDRILG. The following criteria was used in the selection of sampling sites:

- ♦ Potential runoff characteristics;
- ♦ Watershed and Subwatershed representation;
- ♦ Proximity to members enrolled in the SDRILG;
- ♦ Previous or existing monitoring locations;
- ♦ Ultimate drainage into waterbodies listed on the 303 (d) list of impaired waterbodies;
- ♦ Types of crops grown near each site;
- ♦ Safety considerations for the sampling crew; and
- ♦ Access to sampling locations.

Sampling locations were not selected in major waterbodies located in the SLR. Previous programs have extensively studied the lower section of the San Luis Rey River (below Interstate 15), much of which is perennial, and the associated impacts have been well established. While impacts in Moosa Creek and Keys Creek have not been studied extensively, these tributaries drain large areas that may also be impacted by anthropogenic sources not related to agricultural operations. Discerning the direct agricultural contributions to impacts reported in these waterbodies would be difficult, if not impossible, due to the variety of uses that ultimately drain to the streams.

In general, sampling locations were selected in waterbodies that are primarily influenced and surrounded by agricultural land, in locations that will provide the most representative data on SDRILG's potential impacts to the watershed. This will allow the SDRILG evaluate various growing areas, impacts directly related to agricultural operations, and to disseminate results throughout the group from these areas in order to implement Best Management Practices (BMPs) in the most efficient and practical manner. A background site was also selected upstream from agricultural operations in the San Luis Rey River, in order to determine the conditions of water primarily influenced by open space land prior to entering the portion of the watershed containing agricultural land. A residential background sample was not selected for the program, as other programs being conducted in the SLR are studying impact associated with residentially developed land.

Sampling locations were primarily selected at the lower ends of tributaries, or directly downstream from agriculturally drained areas. Much of the smaller tributaries, especially in the southern portion throughout the SLR, run through private land and would not be readily accessible without obtaining permission from multiple landowners to cross and sample streams on their land. With these considerations in mind, sampling sites were selected that were near public roads, and had unfettered access.

Water samples collected from the sites will be analyzed for constituents typically associated with agricultural activities, including suspended sediment and nutrients. Water sampling will be focused on the wet season. Field measurements and observations of the general stream conditions will be recorded as discussed in Section 9. Generated data will be compared to benchmarks set in the San Diego Basin Plan, where applicable, and estimated loading rates of contaminants of concern will be calculated to determine potential impacts to the watershed.

## 7.0 SAMPLING SITES

The SDRILG will collect water quality data at 10 sampling sites in the SLR. A regional map showing sampling locations, growing parcels enrolled in the SDRILG, blue stream waters in the region, and crop types in HA and HAS is presented as Figures 7 through 7.6. Table 6 presents information on the sample site locations.

*Table 6 Sampling Sites, SDRILG*

<b>Sampling Site ID</b>	<b>Geographic Coordinates</b>	<b>San Luis Rey Hydrologic Sub-Area</b>	<b>Sampling River</b>	<b>City</b>
SDRILG01	N 33° 15' 31.78" W 117° 16' 33.0"	903.11	San Luis Rey Unnamed Tributary	Oceanside, CA
SDRILG02	N 33° 16' 24.23" W 117° 09' 11.60"	903.12	Moosa Creek Tributary	Escondido, CA
SDRILG03	N 33° 22' 7.07" W 117° 09' 41.77"	903.12	San Luis Rey Unnamed Tributary	Fallbrook, CA
SDRILG04	N 33° 19' 44.73" W 117° 07' 4.48"	903.21	Couser Canyon	Valley Center, CA
SDRILG05	N 33° 21' 50.25" W 117° 05' 56.53"	903.21	Gomez Creek	Bonsall, CA
SDRILG06	N 33° 17' 46.32" W 117° 05' 8.83"	903.12	Weaver Creek	Valley Center, CA
SDRILG07	N 33° 16' 19.32" W 117° 03' 52.84"	903.21	Keys Creek Tributary	Valley Center, CA
SDRILG08	N 33° 19' 25.95" W 116° 59' 47.05"	903.22	Pauma Creek	Pauma Valley, CA
SDRILG09	N 33° 17' 9.43" W 116° 57' 22.18"	903.22	Potrero Creek	Pauma Valley, CA
SDRILG10	N 33° 15' 38.05" W 116° 56' 41.89"	903.22	San Luis Rey River	Valley Center, CA

# Figure 7 SDRILG Sampling Stations and Surrounding Crop Type

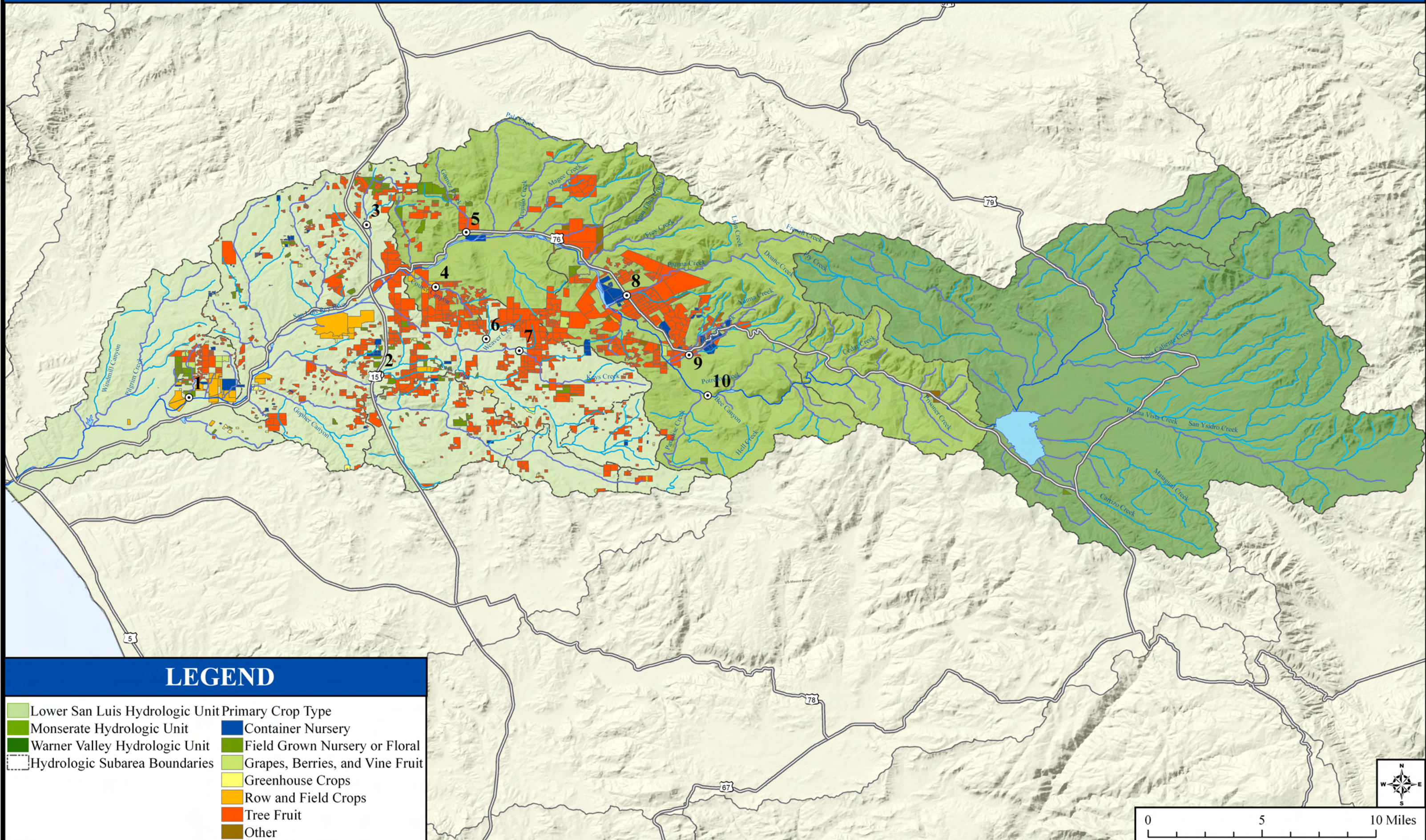
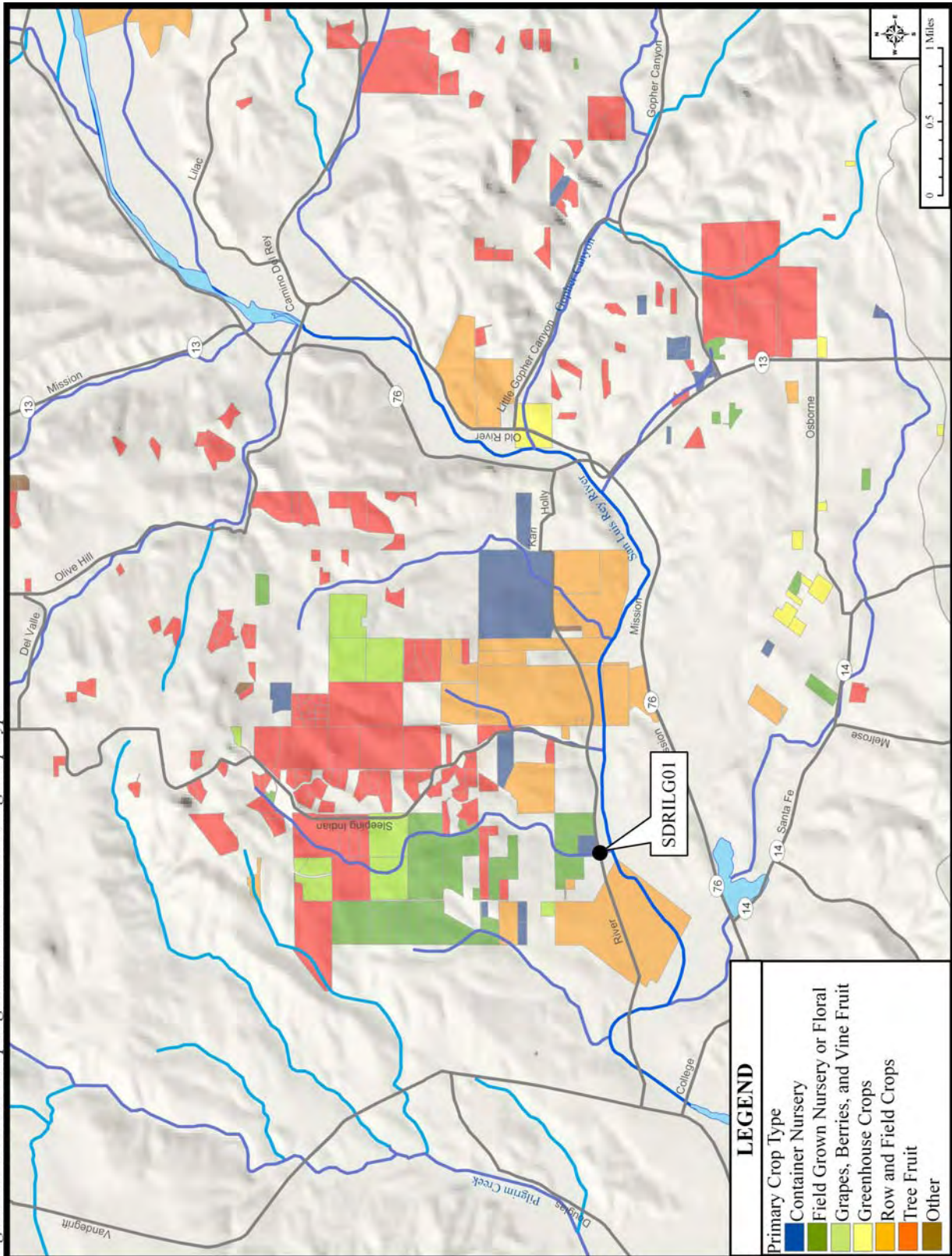
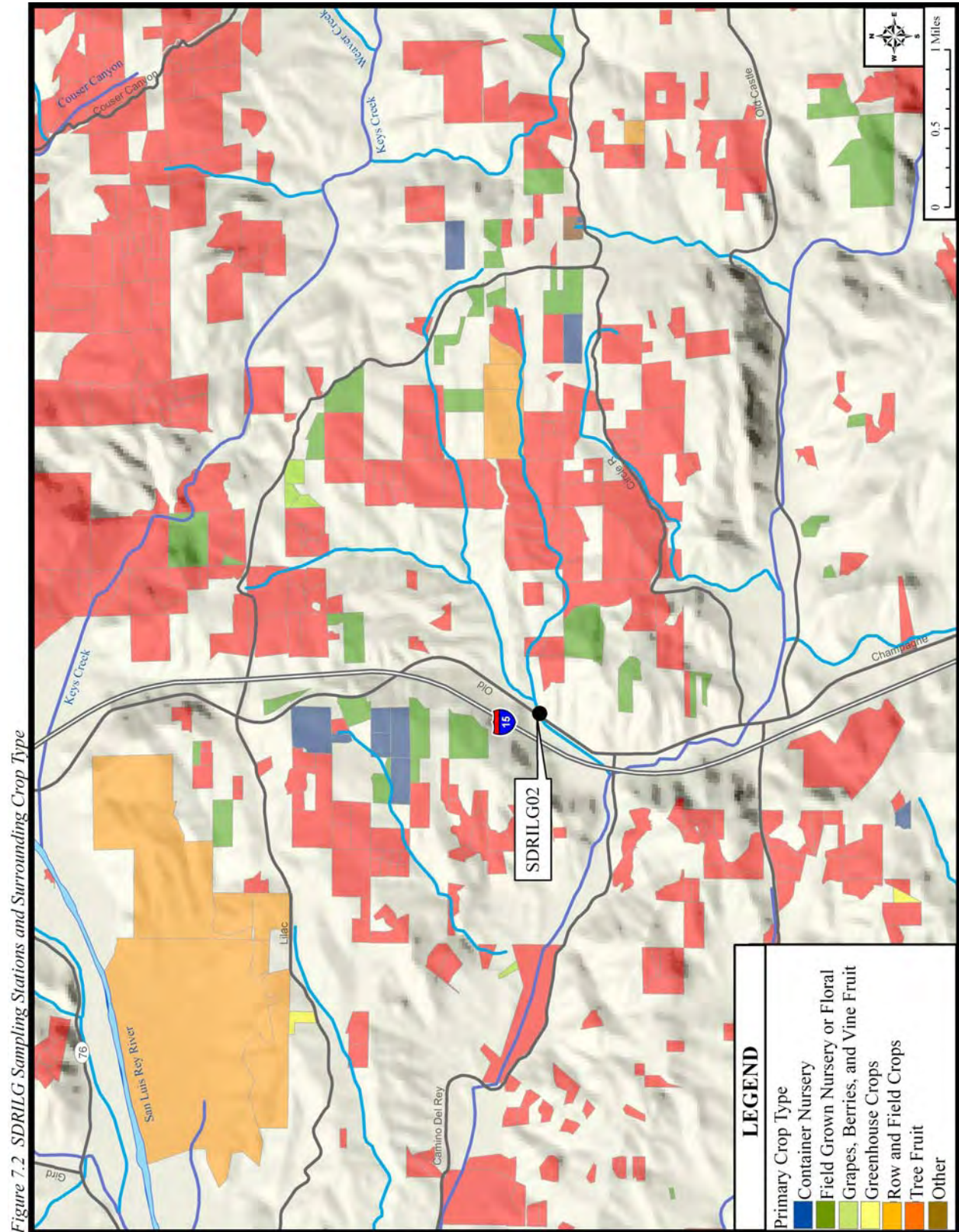
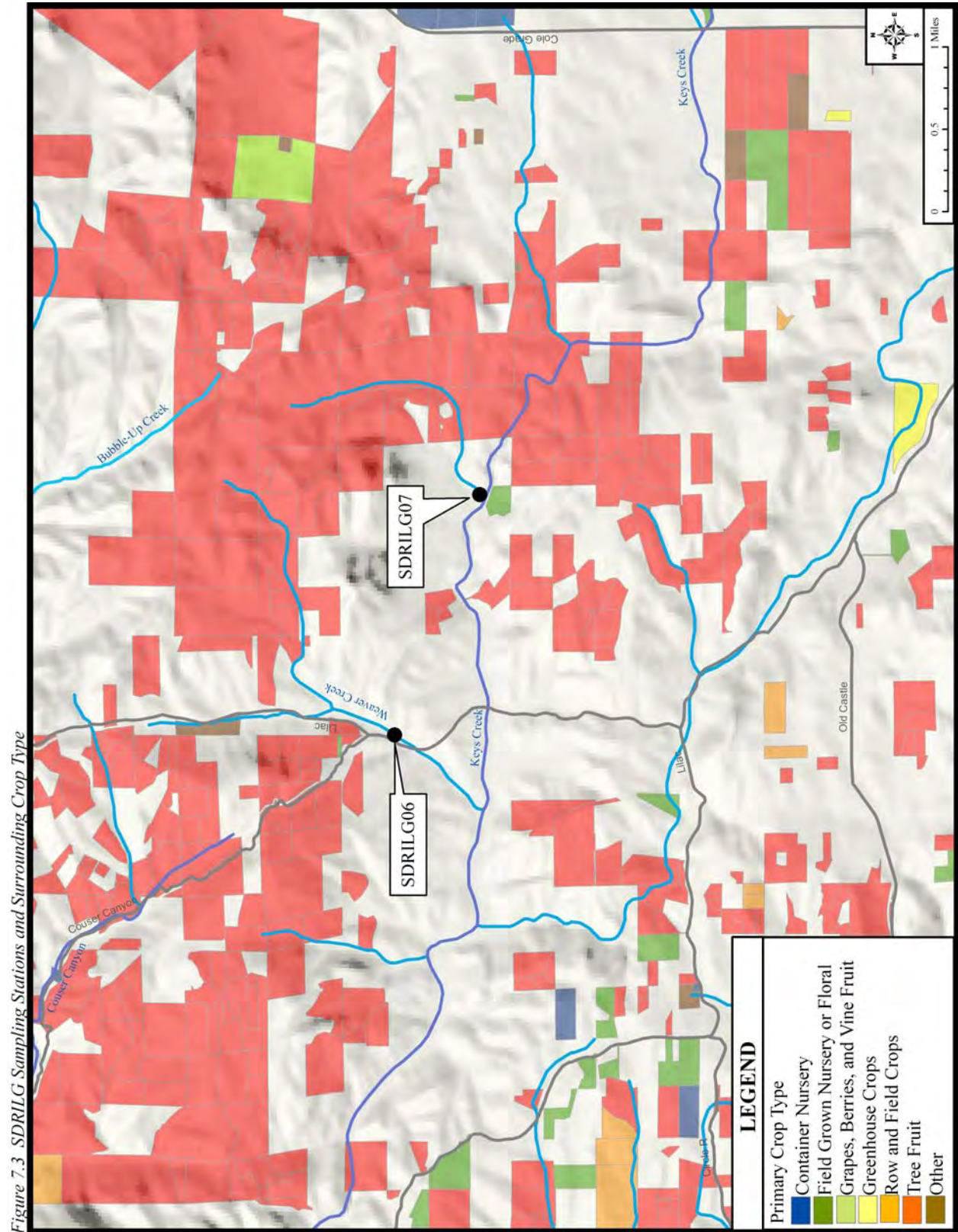
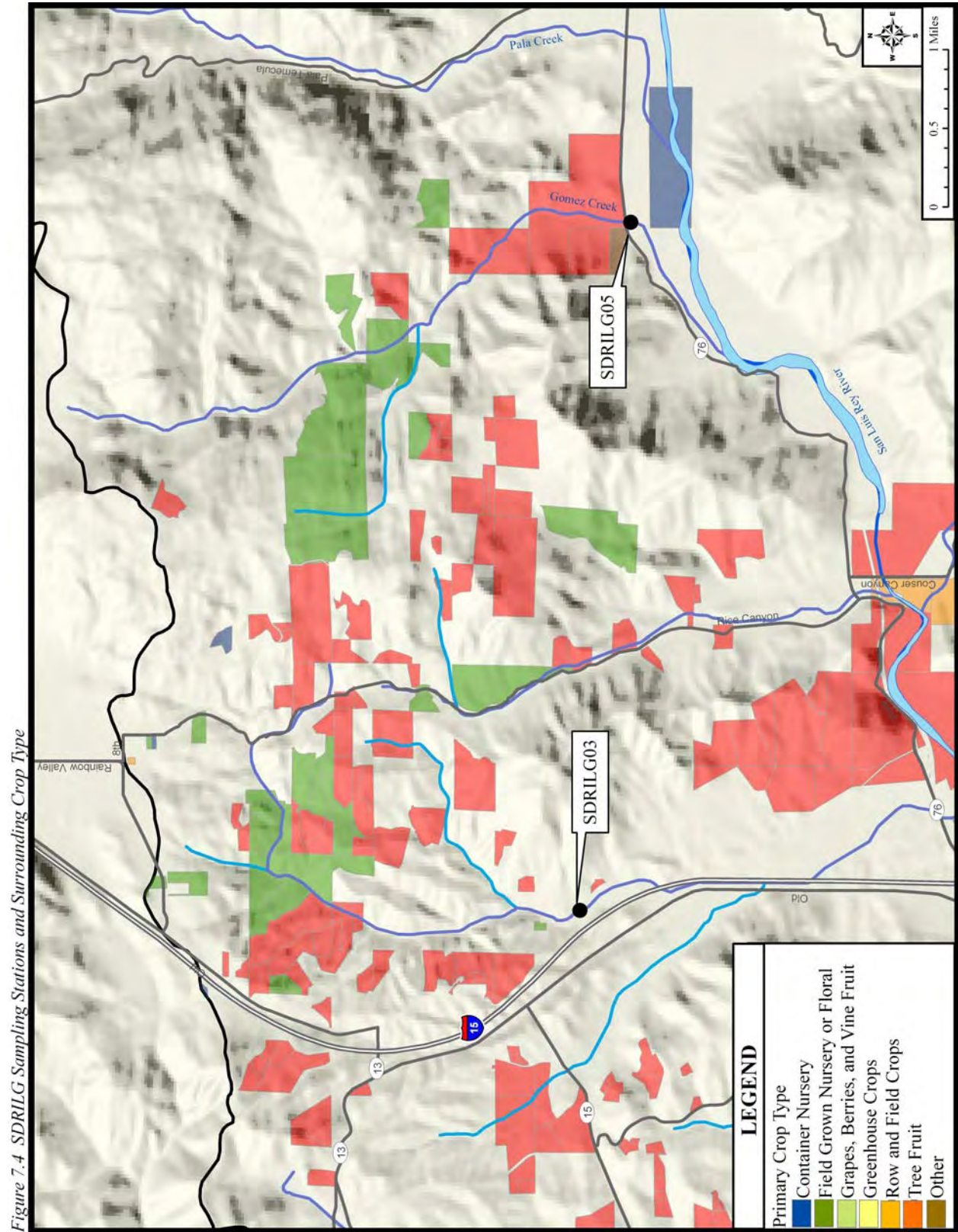


Figure 7.1 SDRILG Sampling Stations and Surrounding Crop Type

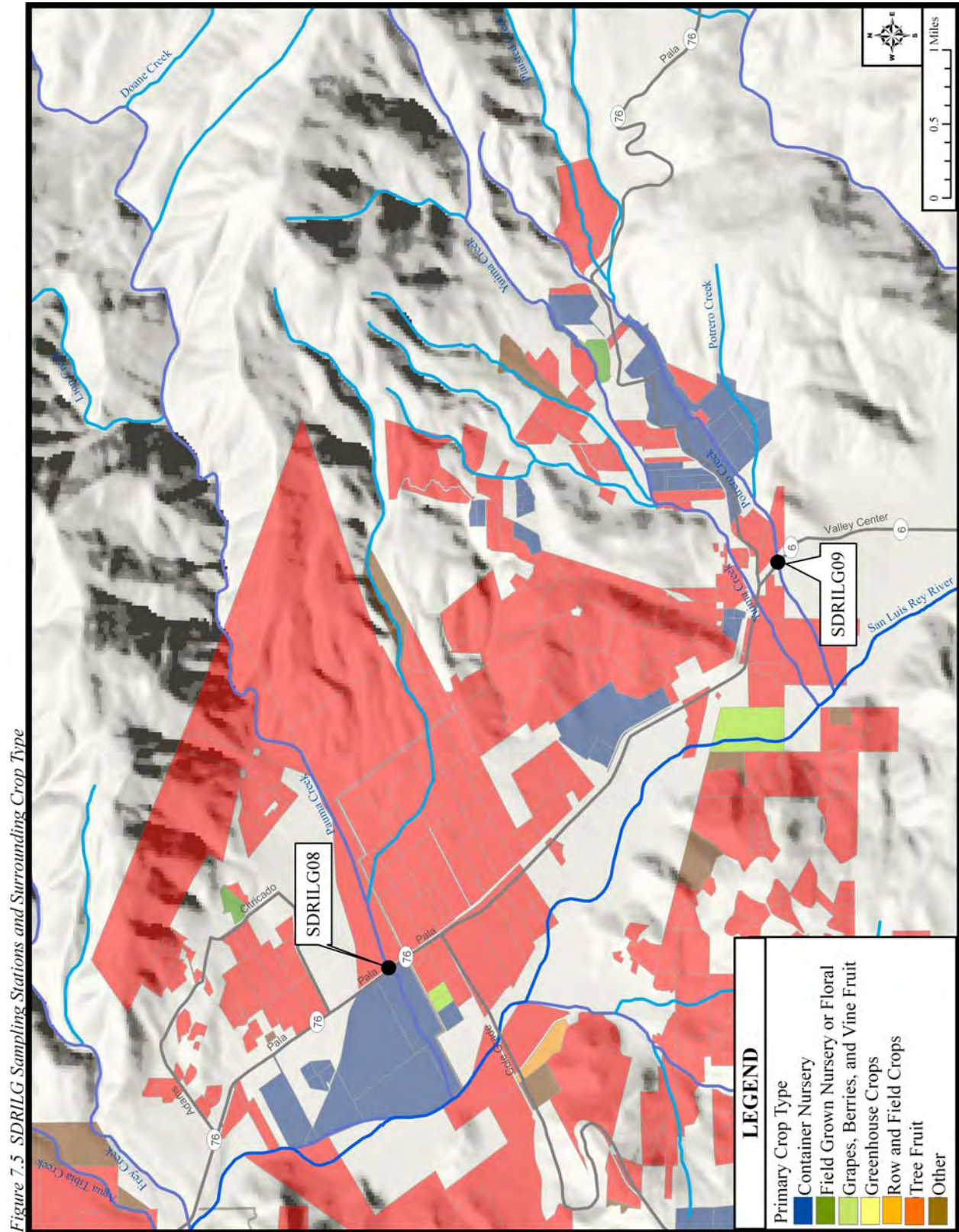


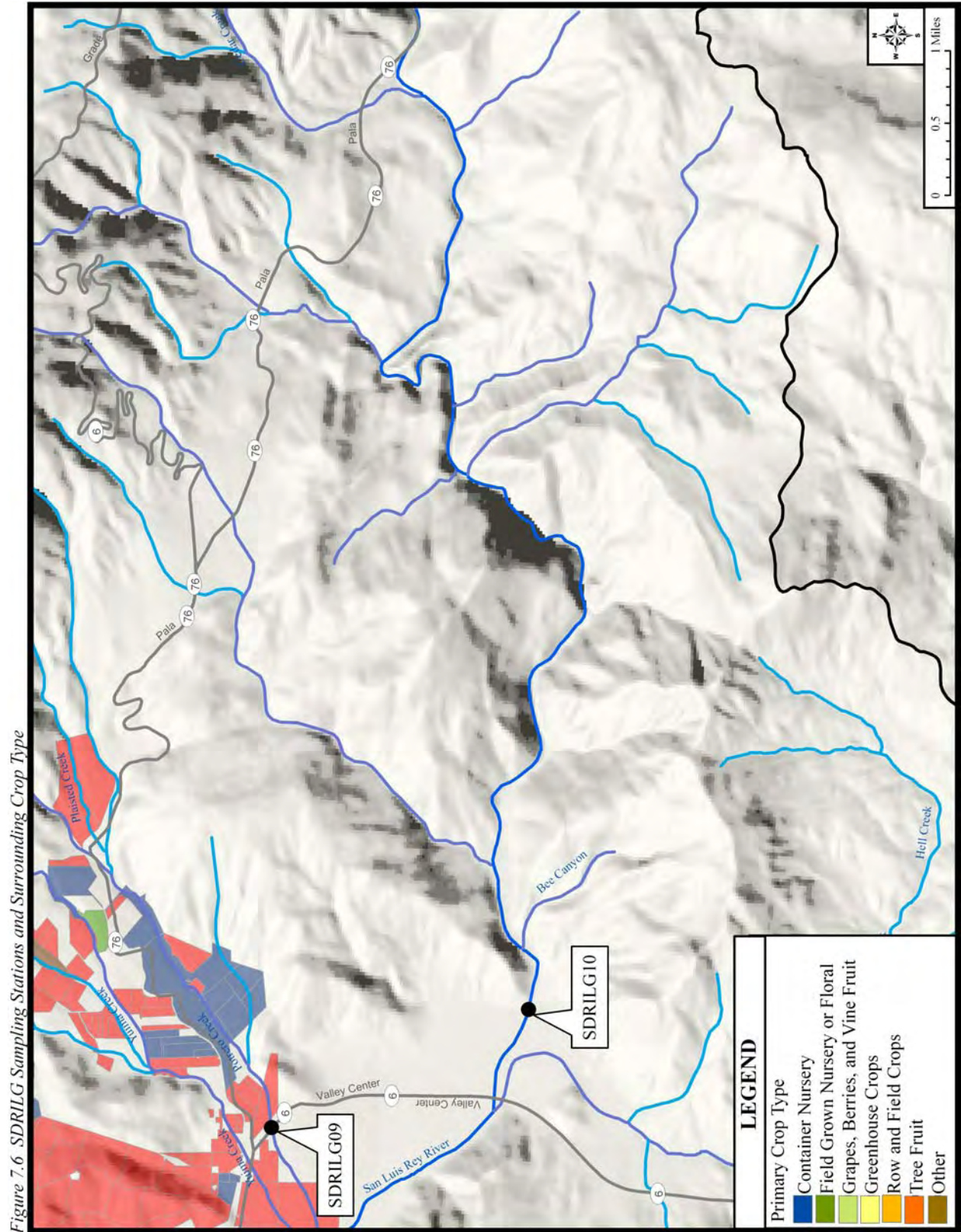












## 7.1 Sampling Site 1-SLR Unnamed Tributary

Station ID: SDRILG01  
Sub basin: 903.11  
Primary Crop Type Draining to Site:  
Field Grown Nursery or Floral  
Nearest City: Oceanside  
Stream Type: Intermittent or Ephemeral  
Sample site GPS location:  
N 33° 15' 31.78" W 117° 16' 33.0"

### Nearest Cross Streets

North River Road and Wilshire Road.

### Site Description



During the site visit on October 26, 2011, no running water was observed. The dry streambed was approximated to be 4 feet wide and 1-1 1/2 feet deep. The streambed contained a low to moderate amount of large rocks and a moderate amount of vegetation on the banks. Low hanging stream canopy cover appeared moderate to heavy.

Two large corrugated drainpipes (approximately 5 in feet diameter) channel the stream under North River Road. Locations directly up and down stream from the site are only accessible by wading in the stream, however heavy vegetation is present and there is evidence of periodic high flows.

## 7.2 Sampling Site 2-Moosa Creek Tributary

Station ID: SDRILG02  
Sub basin: 903.12  
Primary Crop Type Draining to Site:  
Tree Fruit  
Nearest City: Bonsall  
Stream Type: Perennial or Intermittent  
Sample site GPS location:  
N 33° 16' 24.23" W 117° 09' 11.60"



### Nearest Cross Streets

Old Highway 395 and Nelson Way.

### Site Description

During the site visit on October 27, 2011, running water was observed with low flow. The wet streambed was approximated to be 1-2 feet wide and ¼-½ foot deep. The streambed appeared absent of large boulders and contained a moderate to heavy amount of vegetation on the banks. Low hanging stream canopy cover appeared heavy.

A large corrugated drainpipe (approximately 8 feet in diameter) channels the stream under Highway 395. Locations directly up and down stream from the site are only accessible by wading in the stream, however heavy vegetation is present. A man made dam consisting of sand bags pools the creek on the west side of Old Highway 395.

### 7.3 Sampling Site 3-SLR Unnamed Tributary

Station ID: SDRILG03  
Sub basin: 903.12  
Primary Crop Type Draining to Site:  
Tree Fruit  
Nearest City: Fallbrook  
Stream Type: Perennial or Intermittent  
Sample site GPS location:  
N 33° 22' 7.07" W 117° 09' 41.77"



#### Nearest Cross Streets

Pankey Road and Stewart Canyon Drive.

#### Site Description

During the site visit on October 26, 2011, running water was observed with low flow. The wet streambed was approximated to be 4 feet wide and ½-1 foot deep. The streambed appeared absent of large boulders and contained a moderate amount of live tree roots and heavy vegetation on the banks. Low hanging stream canopy cover appeared heavy.

A corrugated drainpipe that would discharge water directly to the creek during rain events was located nearby. Locations directly up and down stream from the site are only accessible by wading in the stream, however heavy vegetation is present.

#### 7.4 Sampling Site 4-SLR Unnamed Tributary

Station ID: SDRILG04  
Sub basin: 903.21  
Primary Crop Type Draining to Site:  
Tree Fruit  
Nearest City: Bonsall  
Stream Type: Perennial or Intermittent  
Sample site GPS location:  
N 33° 19' 44.73" W 117° 07' 4.48"

##### Nearest Cross Streets

Couser Canyon Road and Deseret Road.

##### Site Description

During the site visit on October 27, 2011, running water was observed with low flow. The wet streambed was approximated to be 6 feet wide and ½ foot deep. The streambed appeared absent of large boulders and contained a heavy amount of live tree roots and vegetation on the banks. Low hanging stream canopy cover appeared heavy.

The streambed crosses a concrete paved portion of Deseret Road. Locations directly up and down stream from the site are not accessible due to heavy vegetation.



## 7.5 Sampling Site 5-Gomez Creek

Station ID: SDRILG05  
Sub basin: 903.21  
Primary Crop Type Draining to Site:  
Field Grown Nursery or Floral / Tree  
Fruit  
Nearest City: Pala  
Stream Type: Intermittent or Ephemeral  
Sample site GPS location:  
N 33° 21' 50.25" W 117° 05' 56.53"

### Nearest Cross Streets

Highway 76, dirt road approximately 0.25 miles west of Rancho Luna Ranch Road.



### Site Description

During the site visit on October 26, 2011, no running water was observed. The dry streambed was approximated to be 5-8 feet wide and ½-1 foot deep. The streambed ranged from only sand to portions with moderate amount of large rocks, and had contained a moderate amount of vegetation on the banks. Low hanging stream canopy cover ranged from sparse to heavy.

Signs of human influences (drain pipes, diversions, concrete channels, etc.) were not noted in or near the stream channel. The creek passes directly under a bridge on Highway 76. Locations directly up and down stream from the site are only accessible by wading in the stream. The right bank south of Highway 76 appears to be eroding, and evidence of periodic high flows is evident.

## 7.6 Sampling Site 6-Weaver Creek

Station ID: SDRILG06  
Sub basin: 903.12  
Primary Crop Type Draining to Site:  
Tree Fruit  
Nearest City: Valley Center  
Stream Type: Perennial or Intermittent  
Sample site GPS location:  
N 33° 17' 46.32" W 117° 05' 8.83"

### Nearest Cross Streets

Lilac Road and Old Lilac Road.

### Site Description



During the site visit on October 27, 2011, running water was observed with low flow. The wet streambed was approximated to be 5 feet wide and ½-1 foot deep. The streambed appeared absent of large boulders and contained a heavy amount of live tree roots and vegetation. Low hanging stream canopy cover appeared very heavy and made access to the streambed unlikely. Samples will need to be collected from the Lilac Bridge using a drop sampler, or another access point directly up or down stream will need to be found.

Signs of human influences (drain pipes, diversions, concrete channels, etc.) were not noted in or near the stream channel. The majority of the stream channel appears inaccessible near the sampling location.



## 7.7 Sampling Site 7-Keys Creek Tributary

Station ID: SDRILG07  
Sub basin: 903.21  
Primary Crop Type Draining to Site:  
Tree Fruit  
Nearest City: Valley Center  
Stream Type: Perennial or Intermittent  
Sample site GPS location:  
N 33° 17' 19.32" W 117° 03' 52.84"

### Nearest Cross Streets

Keys Creek Road, dirt turnoff  
approximately 0.1 miles east of Gentle Oaks  
Trail.



### Site Description

During the site visit on October 27, 2011, running water was observed with low flow. The wet streambed was approximated to be 2 feet wide and 1/4 foot deep. The streambed appeared absent of large boulders and contained a moderate amount of live tree roots and moderate to heavy vegetation. Low hanging stream canopy cover appeared moderate to heavy up and down stream.

Signs of human influences (drain pipes, diversions, concrete channels, etc.) were not noted in or near the stream channel. Locations directly up and down stream from the site are easy accessible by wading in the stream.

## 7.8 Sampling Site 8-Pauma Creek

Station ID: SDRILG08  
Sub basin: 903.22  
Primary Crop Type Draining to Site:  
Tree Fruit  
Nearest City: Pauma Valley  
Stream Type: Intermittent or Ephemeral  
Sample site GPS location:  
N 33° 19' 25.95" W 116° 59' 47.05"

### Nearest Cross Streets

Highway 76, bridge crossing labeled Pauma Creek, approximately 0.15 miles northwest of Grassy Meadow Road.



### Site Description

During the site visit on October 26, 2011, no running water was observed. The stream channel was approximately 60 feet wide and 10-15 feet deep at its maximum point. The streambed is rocky and the banks moderately vegetated. The stream transitions to a concrete channel as the streambed passes beneath Highway 76. Stream cover is sparse to nonexistent, with the exception of the freeway bridge.

Locations directly up and down stream from the site are accessible along the stream. Wading may not be safe during high flows.

## 7.9 Sampling Site 9-Potrero Creek

Station ID: SDRILG09  
Sub basin: 903.22  
Primary Crop Type Draining to Site:  
Container Nursery  
Nearest City: Pauma Valley  
Stream Type: Intermittent or Ephemeral  
Sample site GPS location:  
N 33° 17' 9.43 W 116° 57' 22.18"

### Nearest Cross Streets

Co Highway S6, bridge crossing, near  
Valley Circle Road.



### Site Description

During the site visit on October 26, 2011, no running water was observed. The dry streambed was approximated to be 10 feet wide and 1 foot deep. The streambed was rocky at intervals and contained a moderate amount of woody shrubs and dry grasses. Stream cover appeared was sparse with some large trees.

The streambed passes through a concrete lined channel as it passes under the Highway S6 freeway. Locations directly up and down stream from the site are accessible along the stream.

## 7.10 Sampling Site 10-Background, Open Space

Station ID: SDRILG10  
Sub basin: 903.22  
Primary Crop Type Draining to Site:  
Open Space  
Nearest City: Pauma Valley  
Stream Type: Perennial  
Sample site GPS location:  
N 33° 15' 38.05" W 116° 56' 41.89"

### Nearest Cross Streets

North Calac Road, dirt road crossing river approximately 0.4 miles south of Morales Road.



### Site Description

During the site visit on October 26, 2011, running water was observed with moderate flow. The wet streambed was approximated to be 6-8 feet wide and ½-1 foot deep. The streambed contained sparse large boulders and contained a moderate amount of vegetation. Water conditions were noted to be clear. Stream cover appeared sparse to nonexistent.

Signs of human influences (drain pipes, diversions, concrete channels, etc.) were not noted in or near the stream channel, except where North Calac Road passes through the river. Locations directly up and down stream from the site are accessible along the stream. There is evidence of periodic high flows in the area, and wading may not be safe during high flows.

## 8.0 SAMPLING SCHEDULE

The field studies will be initiated once the Notice of Applicability is received from the SDRWQCB. The seasons will be broken into the wet season and the dry season. In conformance with similar monitoring programs throughout the State, the wet season is from October 1 – April 30, and the dry season is from May 1 – September 30. As the majority of the sampling sites are located within intermittent, ephemeral streams, sampling will only be conducted during the wet season. Wet season samples will be conducted following the first rain event with at least 1.0 inches of rain.

In order to identify the storm events large enough to trigger a wet season monitoring event, a third party weather forecasting service will be contracted to monitor the 10-day forecast for the sampling region. Once a rain event starts, data provided by the weather forecasting service will be used to evaluate when a threshold of 1.0 inch of rain throughout the sampling area has been met. Once the rain threshold has been met, sampling personnel will be mobilized for sample collection. If required, sampling events may be initiated on weekends as well as weekdays; however, sampling will not be performed during late nighttime hours due to safety concerns involving field crews. If 1.0 inch of rain has fallen but the rain event has ceased, SDRILG will evaluate if there is enough potential runoff to yield sufficient water for sampling based on communications with contacts in the area.

The primary tasks presented in this MRPP are the collection of field data and the reporting of monitoring results to the SDRWQCB. Table 7 shows an anticipated schedule for when monitoring will be conducted and when annual reports demonstrating the monitoring results are due to the SDRWQCB.

*Table 7 Anticipated Schedule for Monitoring and Reporting*

TASK	SCHEDULE	ANTICIPATED SAMPLING SCHEDULE	NUMBER OF SAMPLING EVENTS
Submit NOI	January 1, 2011		
Submit MRPP and QAPP	January 1, 2012		
Conduct Monitoring	Schedule starts two weeks after receipt of NOA	October 1- April 30	1
Submit MPR	Reporting period ends Septebmer 30. Report due by December 31, 2012.		

## **9.0 FIELD MONITORING AND LABORATORY ANALYTICAL METHODS**

### **9.1 MONITORING AND SAMPLING PROCEDURES**

Although no specialized training is required, field sampling employees have received training in water sampling techniques as outlined in ASTM standard D3370 and SWAMP guidelines for surface water collection; are 40-hour HAZWOPR certified under CCR Title 8, Section 5192 guidelines and 29 CFR (Code of Federal Regulations) 1910.120; and have received first aid and CPR training. Standard Operating Procedures (SOPs) for inputting data on field sheets, collecting field measurements, and the collection of water samples that are applicable to this MRPP will follow the guidelines outlined in the *Marine Pollution Studies Laboratory – Department of Fish and Game Standard Operating Procedures for Conduction Field Measurements and Field Collections of Water and Bed Sediment Samples in the Surface Water Ambient Monitoring Program* (Appendix B; parts not applicable are omitted). An in-house refresher course will be undertaken prior to sampling on a yearly basis. The Project Manager and the QA Officer will supervise training.

#### *Field Observations and Records*

Field data sheets will be utilized to record field observations, sampling information, water measurements, stream characteristics, and flow at each sampling station. Each sampling station will have a dedicated field logbook that contains the field data sheets, maps of the site, directions to and from sample locations, and copies of all pertinent SOPs and guidelines. The original copies and digital copies of field logbooks will be kept on-file for future review.

General observation that are included on the field data sheets include: the dominant substrate, wadeability, wind speed and direction (Beaufort scale), picture identification, odors, weather, water and stream appearance, precipitation amounts, sampling method, sampling crew, sampling coordinates, hydromodifications, biological activity, sample location and personnel access to the stream, stream characteristics, and any other pertinent information, as determined by the sampling crew. Sampling information, including the time of sampling, sample code, station ID, analysis and matrix type, project ID, and date will be recorded on the field data sheets and verified to match the COC submitted for laboratory samples collected at the site. The field data sheets to be utilized during the duration of the program are included in Appendix C. Detailed information on the SOPs for recording data and information on the field data sheets is included in Appendix B.

### Sample Collection

Sample containers will be provided by Weck, certified clean, and delivered to field personnel before each sampling event. The sample containers will be properly labeled, and the labels completed before filling the container with sample water. Water samples will be collected prior to collecting field measurements, to limit unnatural disturbances to the stream. When feasible, based on stream conditions, samples will be collected as grabs by filling the container directly from the most completely mixed portion of the stream flow (generally the centroid of the stream). For sampling containers that do not contain a preservative agent, this will be accomplished by directly submerging the container approximately 0.1 meters (4 inches) below the water surface, opening, filling, and recapping the container while submerged. If the stream depth is less than 0.1 meters, samples will be collected from the surface. Sample containers that are pre-prepped with preservatives will not be directly submerged in the stream. An intermediary sampling bottle or device will collect the sample under the aforementioned conditions, and the contents of the bottle and/or device will be immediately transferred to the preserved sample container.

All intermediary containers will be pre-cleaned prior to sample collection, in between sampling stations, and blank QAQC samples will be collected from the equipment, as outlined in the QAPP for this program. The Chain of Custody (COC) for each sample will be completed in the field, and water samples will be stored at the appropriate temperature and delivered to the laboratory for analysis within the allocated time for each sample type, as outlined in the QAPP. Please refer to Appendix B for a more in-depth discussion of sample collection procedures.

### Field Measurements

The recording of field measurements will take place after water sample collection has been undertaken at the site. A multiparameter probe will be utilized to collect routine field measurements, such as dissolved oxygen, pH, electrical conductivity, temperature, and turbidity. When feasible, based on stream conditions, field measurements will be collected by directly submerging the probe approximately 0.2 meters (8 inches) in the most completely mixed portion of the stream flow (generally the centroid of the stream). The probe will be allowed to equilibrate for at least one minute, and measurements will be recorded in triplicate approximately one minute apart. If measurements are not able to be conducted in-stream, stream water will be transferred to an intermediary container for measurements. When utilizing an intermediary device, care must be taken to ensure that the container is at the same temperature of the stream, is shaded from sunlight and breezes, and that the probe is allowed to equilibrate. Please refer to Appendix B for a more in-depth discussion of collecting field measurements with a multiparameter probe.

Flow measurements will be collected at each site to determine the potential loading of contaminants of concern at each sampling station. Any sampling station located near an active United States Geological Survey (USGS) gauging station will utilize information from the flow gauge height and communications with the USGS to determine the flow in the stream. If there are no nearby USGS flow gauges, instantaneous flow measurements will be recorded and calculated in the stream.

Instantaneous flows will be calculated using an electromagnetic meter or a vertical axis meter (AA and Pygmy types), a top-setting wading rod, and a tape measure. Prior to taking measurements, a reach of the stream will be selected with straight, laminar, bank to bank flow and an even streambed that has a limited amount of turbulence, back eddies, and dead water areas, to the extent practical. A flat cross section of the streambed will be generated by measuring the stream width, dividing the width into flow cross sections, and locating the midpoint of each cross section. Flow measurements will then be taken at the midpoint of each cross section, at depths outlined in the SOP. A detailed description of calculating instantaneous flow, including determining cross sections, measuring velocity, recording measurements, and calculating flow is included in Appendix B.

## **9.2 SAMPLING CONSTITUENTS**

Table 4 presents a listing of the constituents to be tested under the Waiver monitoring program. Field measurements and laboratory Analytical methods for each constituent shall be US Environmental Protection Agency Standard or Approved Methods. A detailed description of monitoring constituents, reporting requirements, and QAQC parameters is presented in the QAPP.



Table 8 List of Constituents for Testing

CONSTITUENT	UNITS	FIELD/LABORATORY TEST
Total Phosphorous (TP)	mg/L	Laboratory
Orthohosphate (as P)	mg/L	Laboratory
Nitrate as N (NO <sub>3</sub> )	µg/L	Laboratory
Nitrate + Nitrite (Sum as N)	mg/L	Laboratory
Nitrite (as nitrogen)	µg/L	Laboratory
Ammonia as N	mg/L	Laboratory
Total Kjeldahl Nitrogen	mg/L	Laboratory
Chloride	mg/L	Laboratory
Sulfate	mg/L	Laboratory
Total Dissolved Solids	mg/L	Laboratory
Total Suspended Solids	mg/L	Laboratory
pH	pH units	Field
Temperature	°C	Field
Dissolved Oxygen	mg/L	Field
Conductivity	µS/cm	Field
Flow Volume	cfs	Field
Flow Velocity	ft/sec	Field
Stream Depth and Width	ft	Field
Percent Canopy Cover Over Stream	%	Field
Water Turbidity	NTU	Field

mg/l                milligrams per liter  
µg/L                micrograms per liter  
°C                    degrees Celsius  
NTU                 nephelitic turbidity units  
µS/cm               micro Siemens  
ft                     feet

### 9.3 QUALITY ASSURANCE QUALITY CONTROL

In addition to regular samples, equipment blanks, field blanks, and field duplicates will be used to ensure data quality. The laboratory will also employ the use of method control blanks, laboratory duplicates, laboratory control samples and surrogates, matrix spikes, matrix spike duplicates, and surrogate spikes. Matrix Spikes, matrix spike duplicates, equipment blanks, field blanks and field duplicates will be collected at a frequency of one per 20 normal samples, or one per sampling event or lab batch, whichever is greater. The laboratory will report the results of the equipment blank, field blank, and the field duplicate along with the results of the regular field samples.

The SDRILG will follow procedures outlined by SWAMP to ensure the quality of the field monitoring data. Additionally, sampling teams will conduct a pre-field meeting prior to completing sampling events to review sampling protocol and site specific considerations, to ensure the field data is most representative of actual watershed or surface water conditions. A detailed description of quality assurance quality control methods is presented in the QAPP.

## **10.0 DATA MANAGEMENT AND REPORTING**

### **10.1 FIELD DOCUMENTS**

Prior to collecting water samples, sample identification labels will be completed. Labels will be applied directly after the collection of samples at each location. During field monitoring and sampling, the SDRILG will record monitoring data and the required COC documentation in the field, including visual inspections and observations of the conditions of the monitoring sites. An example of the COC documentation to be used during the project is included in Appendix D. Once the field monitoring is completed, the field records will be entered into a computer database immediately following completion of field activities. Copies will be submitted to the SDRWQCB upon request. Handwritten copies of the field records will be filed and maintained following data entry.

### **10.2 MONITORING PROGRAM REPORT**

The Monitoring Program Report (MPR) will include data collected up to September 30 of each calendar year, and will be submitted to the SDRWQCB by December 31 of each year. Any data collected from September 30 to December 31 will be included in the subsequent year's monitoring report. The MPR will contain, at a minimum, the following components:

1. Introduction: title page, table of contents, description of group membership, updated membership list, and objectives of MPR.
2. Monitoring: location of samples collected, descriptions and photographs of sampling sites, location map of sampling sites and enrolled growers, constituents monitored and frequency, objective, and analytical methods.
3. Results and Discussion: tabulated data, summary of data to demonstrate compliance or non-compliance, comparison of data to basin plan goals, quality control results, data interpretation.
4. Quality control data interpretation and affirmation that analyses were with the QA limits, as stated in the QAPP.
5. Perjury Statement.
6. Conclusion and recommendations.
7. References and Appendices including, but not limited to, copies of field data/sample log sheets, COC forms and laboratory and field quality control samples results.

### **10.3 CHAIN OF CUSTODY DOCUMENTATION**

Upon collection of samples in the field, the Field Technician will complete standard COC documentation in the field, recording the sample identification, site location/address, sample time, and the required analytical suite. The COC documents will be maintained and kept with the samples upon transport to Weck. Once the samples are delivered to the laboratory, the SDRILG will release the samples to a laboratory representative and retain a copy of the COC record. This copy will be maintained in the SDRILG files.

### **10.4 LABORATORY ANALYTICAL RESULTS**

Analytical data from the laboratory will be included in the MPR. Data will be tabulated and maintained in an electronic database, and digital and hard copies of the original reports will be maintained on file for future review. All data that does not meet the Quality Control and Quality Assurance parameters outline in the QAPP will either be flagged and considered estimated, or flagged as unusable with an explanation, and will not be utilized for data interpretation.

### **10.5 USABLE DATA, PROGRAMS NOT ASSOCIATED WITH SDRILG**

Any data not collected directly by SDRILG, but used as reference or to assist in evaluating the watershed, will be verified to comply with requirements outlined in the QAPP and this MRPP. Collected watershed sampling data that does not conform to SWAMP or comparable standards will not be utilized by SDRILG. All data that is collected outside of the SDRILG program will be noted as such on all applicable reports.

## 11.0 REFERENCES

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## **APPENDIX A**

### **ENROLLED MEMBERS SAN DIEGO REGION IRRIGATED LANDS GROUP**

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
112	C419896	1852604600	4.00	2.00	Field Grown Nursery or Floral
112	C419896	1852604800	6.00	4.00	Field Grown Nursery or Floral
112	C419896	1852604700	14.00	12.00	Field Grown Nursery or Floral
116	C402763	1820720900	17.00	6.00	Greenhouse Crops
117	C786950	2900901700	55.00	5.00	Tree Fruit
118	ME70681	2761301700	7.00	1.00	Tree Fruit
119	C665677	1322800700	9.00	3.00	Container Nursery
120	C182378	2256616200	2.00	2.00	Tree Fruit
121	W251887	1072903100	2.00	2.00	Tree Fruit
122	C753595	1691900900	2.00	1.00	Greenhouse Crops
123	C990672	7601704500	40.00	25.00	Field Grown Nursery or Floral
124	C664853	2770413900	10.00	9.00	Tree Fruit
124	C664853	2770414000	11.00	11.00	Tree Fruit
125	C180838	2760806400	6.00	4.00	Tree Fruit
126	C181813	277050011	16.00	7.00	Tree Fruit
127	C182232	2660921300	2.00	1.00	Tree Fruit
131	C182637	2324910200	5.00	1.00	Grapes, Berries, and Vine Fruit
132	C182454	1084410100	9.00	9.00	Tree Fruit
133	C182616	2671471900	2.00	1.00	Tree Fruit
134	C708214	1073704400	10.00	4.00	Container Nursery
134	C708214	1073704500	2.00	1.00	Container Nursery
135	C182425	1270903300	8.00	7.00	Tree Fruit
135	C182425	1270903500	6.00	4.00	Tree Fruit
136	ME97580	1274901300	4.00	2.00	Tree Fruit
137	C182463	1071704400	2.00	1.00	Field Grown Nursery or Floral
138	C905729	1223100200	4.00	4.00	Tree Fruit
139	C182688	1321700300	3.00	3.00	Container Nursery
139	C182688	1321703800	10.00	10.00	Container Nursery
139	C182688	1321703900	10.00	10.00	Container Nursery
139	C182688	1322300400	38.00	35.00	Container Nursery
139	C182688	1322802700	4.00	4.00	Container Nursery
139	C182688	1322802800	4.00	2.00	Container Nursery
140	C512985	2761004900	7.00	0.00	Tree Fruit
141	0026274	1812602500	2.00	2.00	Container Nursery
141	0026274	1812602600	2.00	2.00	Container Nursery
141	0026274	1812004900	3.00	2.00	Container Nursery
141	0026274	1812005000	3.00	2.00	Container Nursery
141	0026274	1812005100	3.00	2.00	Container Nursery
143	C182365	1332032400	2.00	2.00	Tree Fruit
144	C182625	1291621100	30.00	8.00	Tree Fruit
145	C182248	1212601300	2.00	2.00	Tree Fruit
146	C574454	1274000100	3.00	3.00	Tree Fruit
146	C574454	1274000200	2.00	2.00	Tree Fruit
147	C531794	2771111500	10.00	5.00	Tree Fruit
148	C622865	1213210600	1.49	0.75	Container Nursery
148	C622865	1213220100	4.83	2.90	Container Nursery
148	C622865	1213220200	4.85	3.70	Container Nursery
148	C622865	1213220300	1.92	1.50	Container Nursery



<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
148	C622865	1213221800	2.60	1.75	Container Nursery
148	C622865	1213210900	5.18	3.50	Container Nursery
148	C622865	1213221600	1.29	0.95	Greenhouse Crops
148	C622865	1213221700	1.01	0.75	Greenhouse Crops
149	C893035	2791511700	4.00	2.00	Other
149	C893035	2791511800	4.00	2.00	Tree Fruit
150	C846481	1875402800	14.00	12.00	Container Nursery
152	C180785	1290802100	44.00	19.00	Tree Fruit
152	C180785	1290802400	24.00	19.00	Tree Fruit
154	C182034	1057612500	3.00	2.50	Tree Fruit
155	C180761	1330601000	22.51	12.00	Container Nursery
155	C180761	1330602700	15.45	10.00	Container Nursery
155	C180761	1330603100	17.73	10.00	Container Nursery
155	C180761	1330603300	33.80	0.00	Container Nursery
155	C180761	1330603400	8.51	8.51	Container Nursery
155	C180761	1330603500	10.22	0.00	Container Nursery
155	C180761	1330603600	14.31	10.00	Container Nursery
155	C180761	1330603700	113.45	57.49	Container Nursery
155	C180761	2370905100	5.00	5.00	Container Nursery
155	C180761	2371003800	6.00	6.00	Container Nursery
155	C180761	2371003910	9.00	9.00	Container Nursery
157	C180660	1300905300	25.52	3.00	Row and Field Crops
157	C180660	1300905500	59.39	25.00	Tree Fruit
158	C182549	1292913300	4.25	3.00	Tree Fruit
159	C182440	1021805600	4.70	4.00	Tree Fruit
160	C783581	1853420300	29.50	4.00	Tree Fruit
161	C867299	1111004600	2.74	2.30	Tree Fruit
162	C880176	1213120600	10.00	10.00	Tree Fruit
162	C880176	1890211000	43.37	43.37	Tree Fruit
163	C182649	2861012000	6.30	1.00	Grapes, Berries, and Vine Fruit
164	9752470	1272808100	14.49	12.00	Tree Fruit
165	C772802	1741420700	1.00	1.00	Container Nursery
166	9752470	1272808200	10.20	10.20	Tree Fruit
167	W251726	1212010300	2.70	2.00	Tree Fruit
168	C182415	1272710500	8.00	6.00	Tree Fruit
169	W251758	2670101300	1.00	1.00	Tree Fruit
171	W250136	1222800900	5.50	5.00	Tree Fruit
172	C901721	1210905600	2.83	2.00	Tree Fruit
172	C901721	1243405000	8.93	8.93	Tree Fruit
172	C901721	1243405100	2.02	2.02	Tree Fruit
172	C901721	1243405200	3.77	3.77	Tree Fruit
172	C901721	1243405300	63.36	63.36	Tree Fruit
173	C182223	1025800600	21.00	4.80	Tree Fruit
174	C990434	1272902000	18.89	6.00	Tree Fruit
175	C292428	2411801100	30.00	7.50	Tree Fruit
176	C182030	2780304700	8.86	2.00	Tree Fruit
177	C182268	1850901500	20.00	12.00	Tree Fruit
178	C182543	1274401400	3.00	1.00	Row and Field Crops

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
179	C564069	1721902400	1.00	1.00	Greenhouse Crops
179	C564069	1742408400	1.00	1.00	Greenhouse Crops
179	C564069	1781703000	4.00	3.00	Greenhouse Crops
179	C564069	1822004900	7.00	4.00	Greenhouse Crops
180	C182396	1271510100	4.00	4.00	Tree Fruit
181	C789137	1020820200	33.00	2.00	Field Grown Nursery or Floral
181	C789137	1020820400	72.00	5.00	Field Grown Nursery or Floral
181	C789137	1853410300	2.80	2.00	Field Grown Nursery or Floral
181	C789137	1853410400	2.80	2.00	Field Grown Nursery or Floral
181	C789137	1853410700	2.80	2.00	Field Grown Nursery or Floral
182	C781029	1050204900	7.09	4.50	Tree Fruit
183	8978712	1822302400	1.81	0.50	Container Nursery
183	8978712	1822302500	9.59	3.00	Container Nursery
184	C182393	1054911800	2.00	1.00	Tree Fruit
184	C182393	1954911700	2.00	1.00	Tree Fruit
185	5723440	1283300700	16.00	16.00	Tree Fruit
186	C182533	2671202100	10.00	10.00	Tree Fruit
187	C182244	1013614100	4.70	3.50	Tree Fruit
188	C182261	2650621500	11.84	3.60	Tree Fruit
189	C181976	1332020700	17.00	9.00	Tree Fruit
190	C876405	1852307300	17.00	8.00	Tree Fruit
191	C905671	1700901300	1.50	1.00	Field Grown Nursery or Floral
191	C905671	1702500700	3.50	3.00	Field Grown Nursery or Floral
191	C905671	1270714100	4.00	3.00	Field Grown Nursery or Floral
191	C905671	1270714200	4.00	3.00	Field Grown Nursery or Floral
191	C905671	1270714300	4.00	3.00	Field Grown Nursery or Floral
191	C905671	1270714400	4.00	3.00	Field Grown Nursery or Floral
192	C182361	1311502600	22.04	22.04	Tree Fruit
192	C182361	1311502700	15.00	2.00	Tree Fruit
193	C944643	2841410900	3.75	1.25	Grapes, Berries, and Vine Fruit
193	C944643	2841510500	8.75	3.50	Tree Fruit
194	C713904	1072902900	3.50	3.00	Tree Fruit
195	C180864	1853900100	19.80	9.00	Tree Fruit
196	C182567	2814903600	5.75	3.00	Grapes, Berries, and Vine Fruit
197	C181887	1323203000	30.00	27.00	Container Nursery
197	C181887	1323520100	30.00	27.00	Container Nursery
197	C181887	1323520200	44.00	30.00	Container Nursery
198	W251868	1212209100	3.75	3.00	Tree Fruit
199	C182402	1021800900	12.60	8.00	Tree Fruit
200	C643066	2341604400	2.10	1.10	Tree Fruit
201	C182557	1021044600	6.36	2.00	Row and Field Crops
202	A031049	1322202500	41.00	22.00	Other
203	C182285	1275123200	9.00	8.00	Tree Fruit
204	C733747	1232003500	1.32	1.00	Container Nursery
205	C182343	1073102300	2.50	1.00	Tree Fruit
206	C181644	1222802100	2.91	1.50	Tree Fruit
206	C181644	1222802200	2.62	2.50	Tree Fruit
206	C181644	1222802400	3.16	3.00	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
207	C990124	5961803600	6.00	6.00	Container Nursery
208	C180863	1012904900	5.08	5.08	Field Grown Nursery or Floral
208	C180863	1012903200	9.81	9.00	Tree Fruit
208	C180863	1012904000	7.12	6.00	Tree Fruit
208	C180863	1012905000	4.85	4.00	Tree Fruit
209	ME65063	1026103200	3.19	2.10	Tree Fruit
210	C739928	1293906700	3.00	1.00	Tree Fruit
210	C739928	1293903800	15.00	10.00	Tree Fruit
211	C899491	1027321300	10.00	8.00	Tree Fruit
212	C899491	1014401200	14.00	13.00	Tree Fruit
212	C899491	1015720400	41.00	34.00	Tree Fruit
212	C899491	1020713100	15.50	14.00	Tree Fruit
212	C899491	1020713200	8.70	7.00	Tree Fruit
212	C899491	1020713300	8.00	7.00	Tree Fruit
212	C899491	1242031500	3.00	1.00	Tree Fruit
213	C182277	1021805900	16.00	8.00	Tree Fruit
214	W251827	1271110200	5.00	1.00	Tree Fruit
215	C182361	1311501200	1.29	1.00	Tree Fruit
216	C182294	1281011800	1.50	1.00	Tree Fruit
216	C182294	1281011900	3.50	3.00	Tree Fruit
218	C777848	2543621300	1.00	1.00	Container Nursery
218	C777848	2543621400	2.00	2.00	Container Nursery
218	C777848	2543624500	1.00	1.00	Container Nursery
218	C777848	2620412500	1.50	1.00	Container Nursery
218	C777848	7601654500	1.00	1.00	Container Nursery
219	C180854	1093201800	7.00	1.00	Container Nursery
220	C182363	1024402000	1.20	0.30	Tree Fruit
220	C182363	1024404100	3.63	3.33	Tree Fruit
220	C182363	1024404200	2.12	2.12	Tree Fruit
221	C770003	1060512300	12.00	9.00	Tree Fruit
222	C182284	1281704200	2.68	2.68	Tree Fruit
222	C182284	1281704300	2.75	2.75	Tree Fruit
223	C182516	1014602200	8.93	4.60	Tree Fruit
235	C777799	1274204300	5.00	3.00	Tree Fruit
236	C182523	1290802200	20.00	20.00	Tree Fruit
237	1639129	2683200100	53.00	47.00	Tree Fruit
238	C665133	1283104900	2.00	1.00	Tree Fruit
239	C292009	1030103100	3.50	2.50	Field Grown Nursery or Floral
240	C182392	1275902700	4.50	4.00	Tree Fruit
241	9236844	1891713400	37.00	14.00	Tree Fruit
241	9236844	1290915600	16.00	10.00	Tree Fruit
242	C182482	1283103400	7.00	3.00	Tree Fruit
243	C361349	1285210400	27.00	17.00	Tree Fruit
244	H061261	2371600600	9.77	1.00	Tree Fruit
245	C182031	1860423100	5.40	4.00	Tree Fruit
246	C180714	1021043900	3.01	1.00	Container Nursery
247	C182650	1290700700	9.22	9.00	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
248	C182569	1000000000	8.70	3.50	Tree Fruit
249	C291937	1054724800	5.34	4.00	Tree Fruit
250	C182453	2641103400	3.00	3.00	Container Nursery
251	C990379	7601076000	128.00	110.00	Field Grown Nursery or Floral
251	C990379	7601708700	250.00	250.00	Field Grown Nursery or Floral
251	C990379	7602422000	63.93	0.00	Field Grown Nursery or Floral
252	C182408	1651120300	5.00	3.00	Tree Fruit
253	C378351	2441203700	9.88	1.00	Grapes, Berries, and Vine Fruit
254	C361303	1101300200	40.00	0.00	Other
254	C361303	1101900700	15.00	0.00	Other
254	C361303	1110500200	40.00	0.00	Other
254	C361303	1110500300	120.00	0.00	Other
254	C361303	1110700300	40.00	0.00	Other
254	C361303	1110700900	69.00	0.00	Other
254	C361303	1110800100	10.00	0.00	Other
254	C361303	1101300300	160.00	25.00	Tree Fruit
254	C361303	1101901100	60.00	29.00	Tree Fruit
254	C361303	1110500100	520.00	100.00	Tree Fruit
254	C361303	1110700100	198.00	50.00	Tree Fruit
254	C361303	1110700200	80.00	45.00	Tree Fruit
255	C657621	1013604000	130.00	55.00	Tree Fruit
256	W252375	1221801200	5.00	5.00	Tree Fruit
257	C940299	1275002300	10.45	8.00	Tree Fruit
258	C182258	1242012600	4.00	3.00	Tree Fruit
259	8331300	7601701800	330.00	330.00	Field Grown Nursery or Floral
259	8331300	7601700300	40.00	40.00	Tree Fruit
259	8331300	7601701900	32.00	32.00	Tree Fruit
259	8331300	7601703600	17.00	17.00	Tree Fruit
259	8331300	7601704300	155.00	120.00	Tree Fruit
259	8331300	7601704900	85.00	40.00	Tree Fruit
259	8331300	7601705400	33.00	33.00	Tree Fruit
259	8331300	7601705700	135.00	135.00	Tree Fruit
259	8331300	7601706200	2.00	2.00	Tree Fruit
259	8331300	7601706800	25.00	25.00	Tree Fruit
259	8331300	7602440105	52.00	52.00	Tree Fruit
260	C772943	1293905900	4.10	4.10	Tree Fruit
260	C772943	1293906000	3.80	3.80	Tree Fruit
260	C772943	1293905700	2.30	2.30	Tree Fruit
260	C772943	1293905800	2.50	2.50	Tree Fruit
260	C772943	1293906100	6.00	6.00	Tree Fruit
261	W252132	2660915500	4.50	2.50	Tree Fruit
262	C955253	2861022800	10.00	10.00	Grapes, Berries, and Vine Fruit
262	C955253	2861022100	48.10	48.10	Tree Fruit
262	C955253	2861112400	31.50	31.50	Tree Fruit
263	C182538	1212601200	2.53	1.50	Tree Fruit
264	C738098	277012050	9.50	8.50	Tree Fruit
265	C182706	1027113800	2.50	2.00	Tree Fruit
267	C990324	1294002000	4.50	3.00	Tree Fruit

SDRILG ID	SDRILG Member Number	Parcel Number	Total Acres	Irrigated Acres	Primary Crop Type
267	C990324	1294002100	4.50	3.00	Tree Fruit
269	C406791	1281221200	19.44	16.00	Tree Fruit
269	C406791	1281705000	10.57	9.00	Tree Fruit
269	C406791	1285001000	20.87	16.00	Tree Fruit
269	C406791	1285001200	20.00	16.00	Tree Fruit
269	C406791	1285001300	16.00	12.00	Tree Fruit
270	C182526	1071510700	5.14	3.50	Tree Fruit
271	C182622	1074002600	2.00	1.50	Tree Fruit
272	ME10667	1850714900	2.50	1.00	Tree Fruit
273	C182636	5240600900	9.00	0.25	Grapes, Berries, and Vine Fruit
273	C182636	5240601100	7.50	0.50	Grapes, Berries, and Vine Fruit
274	C762713	1701110300	2.79	2.00	Container Nursery
274	C762713	1701110500	1.13	1.00	Container Nursery
274	C762713	1701620500	4.50	3.00	Container Nursery
274	C762713	1702301600	4.79	3.50	Container Nursery
275	C842407	2410803500	14.51	8.00	Tree Fruit
276	C990272	2241001200	40.00	35.00	Tree Fruit
276	C990272	2241005700	11.43	5.00	Tree Fruit
276	C990272	2241005800	55.40	45.00	Tree Fruit
276	C990272	2241005900	37.90	30.00	Tree Fruit
276	C990272	2241006000	5.22	2.00	Tree Fruit
276	C990272	2250100800	80.00	60.00	Tree Fruit
276	C990272	2250101900	8.26	5.00	Tree Fruit
276	C990272	2250102500	39.52	30.00	Tree Fruit
276	C990272	2250102600	31.62	20.00	Tree Fruit
276	C990272	2257003200	3.56	1.00	Tree Fruit
276	C990272	2257003400	2.28	1.00	Tree Fruit
276	C990272	2770703300	194.95	150.00	Tree Fruit
276	C990272	2770800300	200.00	150.00	Tree Fruit
276	C990272	2770802200	20.00	20.00	Tree Fruit
276	C990272	5790140200	1.00	1.00	Tree Fruit
276	C990272	5790140800	1.00	1.00	Tree Fruit
276	C990272	5790140900	1.00	1.00	Tree Fruit
276	C990272	5790150200	1.00	1.00	Tree Fruit
276	C990272	5790150300	3.89	1.00	Tree Fruit
277	C182635	1212304500	8.00	7.00	Tree Fruit
278	C825506	1290701500	22.51	10.00	Tree Fruit
279	C990409	1291007400	37.06	25.00	Tree Fruit
279	C990409	1291620100	15.90	7.00	Tree Fruit
279	C990409	1292002100	5.18	3.00	Tree Fruit
279	C990409	1292002200	4.21	3.00	Tree Fruit
279	C990409	1292003000	4.76	3.00	Tree Fruit
279	C990409	1292003100	16.54	15.00	Tree Fruit
279	C990409	1293901100	37.13	26.00	Tree Fruit
279	C990409	1293901900	42.65	28.00	Tree Fruit
279	C990409	2761003800	21.60	17.00	Tree Fruit
279	C990409	2814861600	35.47	30.00	Tree Fruit
279	C990409	2815503500	1.00	0.00	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
279	C990409	2815503600	10.75	6.00	Tree Fruit
279	C990409	1290701400	16.90	8.00	Tree Fruit
280	C800526	1026806100	2.60	1.00	Tree Fruit
281	C182368	1851813000	5.00	4.00	Tree Fruit
282	C663438	2771010600	9.50	1.00	Tree Fruit
283	C182435	1293107300	2.00	2.00	Tree Fruit
284	C588904	1281220700	5.00	5.00	Tree Fruit
285	C182226	1055601200	5.00	2.00	Container Nursery
286	C436493	1300803800	4.31	0.00	Other
286	C436493	1311401000	5.14	0.00	Other
286	C436493	1311801500	43.50	0.00	Other
286	C436493	1330101400	17.92	17.92	Other
286	C436493	1334200500	8.57	8.57	Other
286	C436493	1311700500	20.00	20.00	Tree Fruit
286	C436493	1311701500	8.50	8.50	Tree Fruit
286	C436493	1311701700	15.00	15.00	Tree Fruit
286	C436493	1311702400	16.50	16.50	Tree Fruit
286	C436493	1320814200	83.00	83.00	Tree Fruit
286	C436493	1321100300	25.00	25.00	Tree Fruit
286	C436493	1321501500	31.00	31.00	Tree Fruit
286	C436493	1321504100	54.00	54.00	Tree Fruit
286	C436493	1321504200	3.14	3.14	Tree Fruit
286	C436493	1330101200	16.04	16.04	Tree Fruit
286	C436493	1330101300	25.31	25.31	Tree Fruit
286	C436493	1330101500	8.73	8.73	Tree Fruit
286	C436493	1330101600	17.79	17.79	Tree Fruit
286	C436493	1333014300	4.88	4.88	Tree Fruit
286	C436493	1334200400	19.77	19.77	Tree Fruit
286	C436493	1334200600	10.55	10.55	Tree Fruit
286	C436493	1334200700	9.51	9.51	Tree Fruit
286	C436493	1334200800	30.86	30.86	Tree Fruit
286	C436493	1334201500	28.54	28.54	Tree Fruit
286	C436493	1334201900	13.80	13.80	Tree Fruit
287	C182050	1212204700	2.50	2.50	Tree Fruit
287	C182050	1212204800	2.50	2.50	Tree Fruit
287	C182050	1212206300	5.50	5.50	Tree Fruit
287	C182050	1212206400	2.50	2.50	Tree Fruit
288	C402402	1620500700	3.37	3.37	Container Nursery
288	C402402	1620500899	27.71	27.71	Container Nursery
288	C402402	1620501000	12.33	12.33	Container Nursery
288	C402402	1620501100	0.12	0.12	Container Nursery
288	C402402	1620501200	0.76	0.76	Container Nursery
288	C402402	1620501300	23.64	23.64	Container Nursery
288	C402402	3060101700	10.04	5.00	Container Nursery
288	C402402	3060101800	10.00	6.00	Container Nursery
288	C402402	3060101900	17.45	15.00	Container Nursery
288	C402402	3060102200	15.81	15.00	Container Nursery
288	C402402	3062603400	0.51	0.51	Container Nursery

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288	C402402	3961003800	3.07	3.07	Container Nursery
288	C402402	1291117200	9.43	9.43	Container Nursery
288	C402402	1861110900	3.68	3.68	Field Grown Nursery or Floral
288	C402402	1861111100	3.04	3.04	Field Grown Nursery or Floral
288	C402402	1861111300	2.58	2.58	Field Grown Nursery or Floral
288	C402402	1861210800	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1861210900	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1861211000	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1861211100	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1861211200	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1861211300	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1861212700	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1861220100	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1861222000	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1861222100	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1861222200	1.00	0.00	Field Grown Nursery or Floral
288	C402402	1870500300	0.90	0.50	Field Grown Nursery or Floral
288	C402402	1870501000	1.00	1.00	Field Grown Nursery or Floral
288	C402402	2760710600	3.96	3.96	Field Grown Nursery or Floral
288	C402402	7601591200	100.00	100.00	Field Grown Nursery or Floral
288	C402402	7602441100	8.00	8.00	Field Grown Nursery or Floral
288	C402402	3960700700	45.01	45.01	Field Grown Nursery or Floral
288	C402402	1291117100	0.96	0.00	Other
288	C402402	1861111000	2.80	0.00	Other
288	C402402	1861111200	3.13	0.00	Other
288	C402402	1861111400	3.85	0.00	Other
288	C402402	1861111900	24.80	0.00	Other
288	C402402	1861112000	8.05	0.00	Other
288	C402402	1861112100	7.65	0.00	Other
288	C402402	1861111500	3.93	3.93	Tree Fruit
288	C402402	1861111600	4.80	1.80	Tree Fruit
288	C402402	1861111700	2.27	2.27	Tree Fruit
288	C402402	1861111800	3.74	3.74	Tree Fruit
288	C402402	1861112200	7.00	7.00	Tree Fruit
288	C402402	1861112300	3.20	3.20	Tree Fruit
288	C402402	1861112400	6.00	6.00	Tree Fruit
288	C402402	1861112500	4.33	4.33	Tree Fruit
288	C402402	1861112600	3.98	3.98	Tree Fruit
288	C402402	1861112700	5.36	5.36	Tree Fruit
288	C402402	1861113000	2.61	2.61	Tree Fruit
288	C402402	1861113100	89.22	50.00	Tree Fruit
288	C402402	1861226200	3.31	3.31	Tree Fruit
288	C402402	1861112800	5.23	5.23	Tree Fruit
288	C402402	1861112900	24.60	24.60	Tree Fruit
289	C407242	2250201400	5.50	3.90	Tree Fruit
289	C407242	2250201500	1.00	0.10	Tree Fruit
290	C402406	1591500800	5.00	2.50	Greenhouse Crops
290	C402406	1591704600	1.00	1.00	Greenhouse Crops

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
290	C402406	1591800300	9.00	4.00	Greenhouse Crops
290	C402406	1691500900	5.00	2.50	Greenhouse Crops
290	C402406	1691601900	8.00	3.00	Greenhouse Crops
290	C402406	1820741200	4.00	2.50	Greenhouse Crops
290	C402406	1820820100	5.00	3.00	Greenhouse Crops
291	C567839	1710322300	1.50	1.50	Greenhouse Crops
292	C567839	1591704000	3.00	3.00	Greenhouse Crops
292	C567839	1710115600	4.00	4.00	Greenhouse Crops
293	C443304	1282112600	9.33	9.13	Tree Fruit
293	C443304	1282112700	8.74	8.62	Tree Fruit
293	C443304	1284601900	10.00	6.50	Tree Fruit
293	C443304	1290604700	7.00	6.00	Tree Fruit
293	C443304	1290700900	13.34	12.00	Tree Fruit
293	C443304	1291111800	3.53	2.88	Tree Fruit
293	C443304	1291807800	3.81	3.60	Tree Fruit
293	C443304	1291807900	3.78	3.60	Tree Fruit
293	C443304	1291808000	3.02	2.80	Tree Fruit
293	C443304	1293401400	5.00	4.68	Tree Fruit
293	C443304	1293401500	5.09	4.36	Tree Fruit
293	C443304	1320814300	2.49	2.23	Tree Fruit
293	C443304	1320814400	2.31	1.81	Tree Fruit
293	C443304	1320814500	3.01	2.51	Tree Fruit
293	C443304	1320814600	7.37	6.45	Tree Fruit
293	C443304	1320814700	2.46	2.11	Tree Fruit
293	C443304	1320814800	6.40	6.00	Tree Fruit
293	C443304	1322513000	2.24	1.50	Tree Fruit
293	C443304	1322800100	15.17	11.60	Tree Fruit
293	C443304	1323512900	6.53	4.19	Tree Fruit
293	C443304	1330810500	20.00	18.00	Tree Fruit
293	C443304	1332900900	4.27	3.97	Tree Fruit
293	C443304	1332901000	4.17	2.67	Tree Fruit
293	C443304	1332901100	2.50	2.50	Tree Fruit
293	C443304	1332901200	3.85	3.85	Tree Fruit
293	C443304	1332901700	3.10	2.77	Tree Fruit
293	C443304	1333421600	13.04	8.51	Tree Fruit
293	C443304	1591124400	7.32	0.64	Tree Fruit
293	C443304	1851220600	4.86	4.63	Tree Fruit
293	C443304	1853520200	9.37	9.00	Tree Fruit
293	C443304	1853520300	10.14	9.75	Tree Fruit
293	C443304	1853520400	9.66	9.25	Tree Fruit
293	C443304	1853520500	4.63	4.10	Tree Fruit
293	C443304	1853812100	8.85	8.78	Tree Fruit
293	C443304	1853812200	4.36	4.33	Tree Fruit
293	C443304	1853812300	3.12	3.00	Tree Fruit
293	C443304	1853812400	5.04	5.00	Tree Fruit
293	C443304	1862106000	4.24	3.52	Tree Fruit
293	C443304	1862308200	1.60	1.27	Tree Fruit
293	C443304	1881305300	2.00	1.90	Tree Fruit



<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
293	C443304	1881305400	3.85	2.12	Tree Fruit
293	C443304	1881305500	2.16	2.00	Tree Fruit
293	C443304	1881505000	8.06	5.08	Tree Fruit
293	C443304	1882230600	1.51	1.38	Tree Fruit
293	C443304	1882230700	2.40	2.27	Tree Fruit
293	C443304	1882230800	2.40	1.14	Tree Fruit
293	C443304	1882230900	2.40	2.23	Tree Fruit
293	C443304	1882231100	2.82	2.69	Tree Fruit
293	C443304	1882231200	2.29	2.16	Tree Fruit
293	C443304	1890603100	6.44	4.86	Tree Fruit
293	C443304	9272600060	2.89	2.64	Tree Fruit
293	C443304	9383300093	10.71	3.50	Tree Fruit
294	C568545	1282010300	23.78	23.00	Tree Fruit
294	C568545	1282010400	36.19	35.00	Tree Fruit
296	C888016	1015720100	30.00	19.00	Tree Fruit
297	C182046	2760911700	18.47	17.00	Tree Fruit
298	C805059	1722104800	3.50	2.00	Tree Fruit
299	C182282	1333013800	5.00	2.00	Tree Fruit
300	C182578	1242034300	2.00	1.00	Tree Fruit
301	C182361	1234561231	2.20	1.10	Tree Fruit
302	C182291	1323206000	2.50	2.00	Tree Fruit
303	C645682	1881410800	7.40	4.30	Tree Fruit
304	C182691	1021807000	6.51	5.50	Tree Fruit
304	C182691	1021807100	4.59	1.00	Tree Fruit
304	C182691	1021807200	5.03	1.00	Tree Fruit
305	C182215	1020830800	40.00	36.00	Tree Fruit
307	C450453	1280910200	4.30	3.00	Tree Fruit
308	C182036	1083201300	3.35	2.60	Tree Fruit
309	C182355	1102300600	11.27	9.00	Tree Fruit
310	C872263	1220306100	40.00	40.00	Grapes, Berries, and Vine Fruit
310	C872263	1570601700	15.00	15.00	Row and Field Crops
310	C872263	1211501600	3.00	3.00	Tree Fruit
310	C872263	1220306900	15.00	15.00	Tree Fruit
312	C182280	1852900800	7.58	6.50	Tree Fruit
312	C182280	1852901500	8.49	5.00	Tree Fruit
312	C182280	1852910200	2.83	2.50	Tree Fruit
314	C827685	1281903100	5.00	1.00	Other
314	C827685	1281221600	15.00	10.00	Tree Fruit
314	C827685	1284300500	15.00	10.00	Tree Fruit
315	C892872	1875304200	12.80	10.00	Tree Fruit
316	C436420	1311500400	35.00	33.00	Tree Fruit
317	0396500	1850410100	40.00	20.00	Tree Fruit
318	C180822	1261802400	5.50	5.00	Tree Fruit
319	C888008	1283303800	18.00	10.50	Tree Fruit
320	C665102	2700100900	3.17	3.17	Tree Fruit
320	C665102	2790100900	40.00	40.00	Tree Fruit
320	C665102	2790300200	33.35	33.35	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
320	C665102	2790300600	37.76	37.00	Tree Fruit
320	C665102	2790300700	36.80	36.80	Tree Fruit
320	C665102	2790300800	36.58	36.58	Tree Fruit
320	C665102	2790301000	8.46	8.46	Tree Fruit
320	C665102	2790301100	8.11	8.11	Tree Fruit
320	C665102	2790301600	80.00	80.00	Tree Fruit
320	C665102	2790300900	2.85	2.85	Tree Fruit
321	C181256	1243402100	6.50	5.00	Tree Fruit
321	C181256	1860421700	5.00	3.00	Tree Fruit
322	C182554	1013605300	24.00	16.00	Tree Fruit
323	C657857	1020840500	10.36	9.00	Tree Fruit
324	C182040	1851812800	5.40	3.00	Tree Fruit
326	C182346	1013707100	11.43	0.25	Tree Fruit
328	C353353	1057712700	4.00	2.00	Tree Fruit
329	W251855	1073901500	3.05	2.50	Tree Fruit
330	C182577	1867200400	4.25	3.00	Tree Fruit
331	C182026	1221000800	9.00	7.00	Tree Fruit
332	C900443	1081920700	2.30	2.00	Tree Fruit
333	C182352	1280910400	4.40	2.00	Tree Fruit
334	C772714	1291110100	21.00	21.00	Container Nursery
334	C772714	1292001100	20.00	20.00	Container Nursery
334	C772714	1742400600	5.00	5.00	Container Nursery
334	C772714	1742401100	6.00	6.00	Container Nursery
334	C772714	1742404500	7.00	7.00	Container Nursery
334	C772714	1742404600	7.00	7.00	Container Nursery
334	C772714	1742404700	3.00	3.00	Container Nursery
334	C772714	1742404900	2.00	2.00	Container Nursery
334	C772714	1742405000	1.00	1.00	Container Nursery
334	C772714	1742405100	7.00	7.00	Container Nursery
334	C772714	1742405400	8.00	8.00	Container Nursery
334	C772714	1742407000	4.00	4.00	Container Nursery
334	C772714	1770912900	1.00	1.00	Container Nursery
334	C772714	1770913300	1.00	1.00	Container Nursery
334	C772714	1770913400	1.00	1.00	Container Nursery
334	C772714	1770923500	2.75	2.75	Container Nursery
334	C772714	1780807100	2.00	2.00	Container Nursery
334	C772714	1780807200	3.00	3.00	Container Nursery
334	C772714	1780807300	2.00	2.00	Container Nursery
334	C772714	1810210300	3.00	3.00	Container Nursery
334	C772714	1810210700	2.00	2.00	Container Nursery
334	C772714	1810415400	1.00	1.00	Container Nursery
334	C772714	1811606400	5.00	5.00	Container Nursery
334	C772714	1811805200	7.00	7.00	Container Nursery
334	C772714	1811806100	1.00	1.00	Container Nursery
334	C772714	1811807200	1.00	1.00	Container Nursery
334	C772714	1811807300	3.00	3.00	Container Nursery
334	C772714	1822001500	8.00	8.00	Container Nursery
334	C772714	1822001600	1.00	1.00	Container Nursery

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
334	C772714	1822003100	3.00	3.00	Container Nursery
334	C772714	1822003200	5.00	5.00	Container Nursery
334	C772714	1822003900	11.00	11.00	Container Nursery
334	C772714	1822004000	11.00	11.00	Container Nursery
334	C772714	1822004430	6.00	6.00	Container Nursery
334	C772714	1822004480	5.00	5.00	Container Nursery
334	C772714	1822300200	1.00	1.00	Container Nursery
334	C772714	1822300900	3.00	3.00	Container Nursery
334	C772714	1822301000	4.00	4.00	Container Nursery
334	C772714	1822301500	5.00	5.00	Container Nursery
334	C772714	1822301600	5.00	5.00	Container Nursery
334	C772714	1822400100	8.00	8.00	Container Nursery
334	C772714	1822402900	8.79	8.79	Container Nursery
334	C772714	1870413700	40.00	40.00	Container Nursery
334	C772714	1870415400	10.00	10.00	Container Nursery
334	C772714	1870415500	10.00	10.00	Container Nursery
334	C772714	1870415600	11.00	11.00	Container Nursery
335	5426169	2090606100	42.00	16.00	Field Grown Nursery or Floral
335	5426169	1300804800	18.60	4.50	Tree Fruit
335	5426169	1300804900	2.00	1.50	Tree Fruit
335	5426169	1311501400	10.00	5.00	Tree Fruit
335	5426169	1311501600	10.00	10.00	Tree Fruit
335	5426169	1311501700	10.00	10.00	Tree Fruit
335	5426169	1311501800	10.00	10.00	Tree Fruit
335	5426169	1311501900	10.00	5.00	Tree Fruit
335	5426169	1311502000	10.00	5.50	Tree Fruit
335	5426169	1311502100	19.80	18.00	Tree Fruit
335	5426169	1311600100	26.70	26.00	Tree Fruit
335	5426169	1311600500	11.60	11.00	Tree Fruit
335	5426169	1311601800	9.80	9.50	Tree Fruit
335	5426169	1311602200	10.00	9.50	Tree Fruit
335	5426169	1311602500	12.50	12.00	Tree Fruit
335	5426169	1311602700	25.00	25.00	Tree Fruit
335	5426169	1311602800	11.60	11.40	Tree Fruit
336	C180651	1072900600	2.61	1.77	Tree Fruit
336	C180651	1072900700	2.23	2.23	Tree Fruit
337	C622790	3291413000	33.92	1.00	Row and Field Crops
337	C622790	3291413100	18.79	2.00	Tree Fruit
338	A052371	1262406500	2.75	1.50	Tree Fruit
339	C182300	1030106800	10.00	10.00	Tree Fruit
339	C182300	1300107100	16.00	16.00	Tree Fruit
340	C182309	1881507700	3.25	2.00	Tree Fruit
341	C181229	1311322800	60.00	3.00	Field Grown Nursery or Floral
342	C182442	2770330200	22.00	5.50	Tree Fruit
342	C182442	2770330300	20.00	2.00	Tree Fruit
343	C182299	3831121700	1.00	1.00	Container Nursery
344	C182566	1073001200	4.50	1.50	Tree Fruit
345	C641834	1284901200	26.00	16.00	Tree Fruit

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345	C641834	1284901400	42.00	30.00	Tree Fruit
345	C641834	1290802300	20.00	18.00	Tree Fruit
346	0028699	1330603900	3.80	2.00	Tree Fruit
347	C787057	1241831800	4.62	3.00	Tree Fruit
348	C182266	1284302300	15.95	13.00	Tree Fruit
349	4147200	1280931300	12.00	11.00	Tree Fruit
349	4147200	1281110200	14.00	13.00	Tree Fruit
349	4147200	1281110300	3.20	3.00	Tree Fruit
349	4147200	1281120600	1.60	1.60	Tree Fruit
349	4147200	1284101000	10.00	9.50	Tree Fruit
349	4147200	1280931000	1.00	1.00	Tree Fruit
350	2558646	2561720500	18.00	2.00	Greenhouse Crops
350	2558646	2561720600	14.40	2.00	Greenhouse Crops
350	2558646	2563306200	15.00	5.00	Greenhouse Crops
350	2558646	2563306300	20.00	3.00	Greenhouse Crops
351	C462169	2546120100	4.00	2.00	Field Grown Nursery or Floral
351	C462169	2546121010	4.00	1.00	Greenhouse Crops
351	C462169	2546121200	20.00	14.00	Greenhouse Crops
351	C462169	2561720300	10.00	2.00	Greenhouse Crops
351	C462169	2561720700	10.00	2.00	Greenhouse Crops
351	C462169	2546120800	4.00	3.00	Row and Field Crops
351	C462169	2546140300	10.00	6.00	Row and Field Crops
352	C182235	1082521800	4.23	4.00	Tree Fruit
353	C182631	1071620300	3.50	1.00	Tree Fruit
354	0008132	1721403200	6.20	3.00	Tree Fruit
355	C182642	1057202200	4.00	2.50	Tree Fruit
356	C182288	2654410900	1.50	1.50	Tree Fruit
357	C558977	1866022000	5.00	2.00	Tree Fruit
358	C182242	2401008300	15.00	8.00	Tree Fruit
359	C717867	1020841400	26.08	25.00	Tree Fruit
359	C717867	1020841600	41.21	36.00	Tree Fruit
359	C717867	1021020700	31.58	25.00	Tree Fruit
359	C717867	1021020800	3.67	2.00	Tree Fruit
359	C717867	1021020900	32.50	25.00	Tree Fruit
359	C717867	1021021000	128.87	90.00	Tree Fruit
359	C717867	1021021100	6.62	5.00	Tree Fruit
359	C717867	1021600200	11.22	5.00	Tree Fruit
359	C717867	1021602400	21.72	10.00	Tree Fruit
359	C717867	1021602500	74.46	50.00	Tree Fruit
360	C381676	1281802800	1.25	0.25	Field Grown Nursery or Floral
360	C381676	1281803800	8.00	5.00	Tree Fruit
360	C381676	1281803700	8.00	5.00	Tree Fruit
361	C571698	6780701200	20.00	20.00	Tree Fruit
362	C571698	2710810200	32.00	32.00	Row and Field Crops
362	C571698	2721310800	100.00	100.00	Row and Field Crops
362	C571698	6780602700	6.00	6.00	Row and Field Crops
362	C571698	6780701300	10.00	10.00	Row and Field Crops
363	C182485	2640313200	3.30	2.00	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
364	C544991	1081612000	2.04	2.00	Tree Fruit
365	C182555	2801310400	5.00	0.50	Container Nursery
366	C733664	1014602100	11.30	9.50	Tree Fruit
367	W251876	2760803500	5.50	2.00	Tree Fruit
368	C762670	1073200700	30.00	25.00	Tree Fruit
369	6732911	1250630600	96.00	30.00	Tree Fruit
370	C571864	1232704900	4.00	0.00	Other
370	C571864	1232705000	4.00	0.00	Other
370	C571864	1234203500	2.00	1.50	Tree Fruit
370	C571864	1234203600	2.00	1.50	Tree Fruit
370	C571864	1234203700	5.00	2.00	Tree Fruit
370	C571864	1234203800	5.00	3.00	Tree Fruit
371	C905663	1012720800	81.47	6.00	Grapes, Berries, and Vine Fruit
372	8331300	2841101100	14.00	0.00	Other
372	8331300	2841101600	2.00	0.00	Other
372	8331300	2841103500	10.00	0.00	Other
372	8331300	2850800200	90.00	0.00	Other
372	8331300	2850910500	5.00	0.00	Other
372	8331300	2841101500	38.00	6.00	Tree Fruit
372	8331300	2841103700	21.00	15.00	Tree Fruit
372	8331300	2841103800	8.00	5.00	Tree Fruit
372	8331300	2841300900	39.00	15.00	Tree Fruit
372	8331300	2841301000	43.00	32.00	Tree Fruit
372	8331300	2841501500	26.00	26.00	Tree Fruit
372	8331300	2841501600	7.00	7.00	Tree Fruit
372	8331300	2850910600	35.00	35.00	Tree Fruit
373	C772683	2781806600	3.50	3.00	Tree Fruit
374	C182032	1271422600	4.75	4.00	Tree Fruit
375	C181593	1093106000	13.60	4.00	Tree Fruit
375	C181593	1102801900	3.70	3.00	Tree Fruit
376	C777849	2761010400	50.50	15.00	Tree Fruit
377	C182689	1291000300	5.00	5.00	Tree Fruit
377	C182689	1291000700	5.00	5.00	Tree Fruit
378	C119249	1221301900	158.30	60.00	Container Nursery
378	C119249	1221306400	120.00	70.00	Container Nursery
378	C119249	1261700500	20.90	12.00	Container Nursery
379	C182239	2642411100	3.00	3.00	Tree Fruit
380	4099400	2420300301	80.00	0.00	Other
380	4099400	2420301201	12.00	0.00	Other
380	4099400	2340403600	5.00	5.00	Row and Field Crops
380	4099400	2341410900	5.00	1.00	Row and Field Crops
380	4099400	2363331000	1.00	1.00	Row and Field Crops
380	4099400	2363333200	3.00	2.00	Row and Field Crops
380	4099400	2420301400	98.00	20.00	Row and Field Crops
380	4099400	2340404000	34.00	5.00	Tree Fruit
380	4099400	2341420100	4.00	2.00	Tree Fruit
380	4099400	2344400200	5.00	2.00	Tree Fruit
380	4099400	2410411300	20.00	5.00	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
380	4099400	2410411600	15.00	5.00	Tree Fruit
380	4099400	2410411700	15.00	2.00	Tree Fruit
380	4099400	2410411800	20.00	18.00	Tree Fruit
380	4099400	2420701100	15.00	10.00	Tree Fruit
380	4099400	2420701300	21.00	15.00	Tree Fruit
380	4099400	2421100100	27.00	15.00	Tree Fruit
381	0005239	2341420200	23.00	20.00	Tree Fruit
382	C182501	1024121100	2.44	1.59	Greenhouse Crops
383	C182501	1275410100	8.34	1.89	Greenhouse Crops
384	0523210	2890630100	80.00	10.00	Tree Fruit
384	0523210	2891201400	75.00	27.00	Tree Fruit
385	C774994	2770422800	9.70	6.00	Field Grown Nursery or Floral
386	H008531	1362100700	111.00	3.00	Other
386	H008531	2860210900	8.00	1.00	Other
387	C182702	1012107700	50.00	30.00	Container Nursery
387	C182702	1012108100	100.00	52.00	Container Nursery
387	C182702	1012710800	25.00	8.00	Container Nursery
387	C182702	1015620700	10.00	2.00	Tree Fruit
388	C181982	1050820800	1.00	1.00	Tree Fruit
388	C181982	1050820900	1.00	1.00	Tree Fruit
388	C181982	1050821000	1.00	1.00	Tree Fruit
388	C181982	1050821100	1.00	1.00	Tree Fruit
388	C181982	1050923100	3.00	2.30	Tree Fruit
389	C181877	1639500000	4.75	0.00	Field Grown Nursery or Floral
390	C182464	1211510300	28.00	22.00	Tree Fruit
391	W252949	6753312100	20.00	18.00	Tree Fruit
391	W252949	6753312200	0.00	0.00	Tree Fruit
391	W252949	6753410900	0.00	0.00	Tree Fruit
391	W252949	6753411000	0.00	0.00	Tree Fruit
391	W252949	6753411100	0.00	0.00	Tree Fruit
392	C622846	1291906600	1.00	0.00	Other
392	C622846	1281906000	22.50	18.00	Tree Fruit
393	C181602	1852307800	33.00	19.00	Tree Fruit
393	C181602	1852307900	9.00	7.00	Tree Fruit
394	C733943	1270722800	28.00	14.00	Tree Fruit
394	C733943	1270724800	12.00	4.00	Tree Fruit
394	C733943	1270724900	25.00	10.00	Tree Fruit
395	C419559	1293803400	10.00	8.00	Field Grown Nursery or Floral
396	C182295	1274000500	2.75	2.00	Tree Fruit
397	C182307	1720120100	5.28	5.00	Tree Fruit
398	C182289	1270722000	40.00	25.00	Tree Fruit
399	C567988	2172910200	1.00	1.00	Other
399	C567988	2172910300	1.59	1.00	Other
401	C182350	1701624600	2.00	2.00	Tree Fruit
401	C182350	1701624700	2.00	2.00	Tree Fruit
402	C182319	1721404500	9.70	9.79	Tree Fruit
402	C182319	1721406500	4.50	4.00	Tree Fruit
403	C182325	1272708300	2.97	2.97	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
404	C182551	2941603200	1.50	1.00	Row and Field Crops
406	C182499	2221212000	2.50	1.00	Tree Fruit
407	C182601	1274301400	3.67	3.00	Tree Fruit
408	C182499	2221212200	4.00	1.00	Tree Fruit
409	C182499	2221212100	3.50	0.25	Tree Fruit
410	C182218	1743001100	8.50	8.25	Tree Fruit
412	C182572	1274400400	2.90	2.90	Tree Fruit
413	C182329	1711300800	1.80	1.80	Tree Fruit
414	C867549	1271511200	10.00	10.00	Tree Fruit
415	C182230	1781803500	10.70	7.00	Tree Fruit
417	C104512	1271105500	10.50	10.00	Tree Fruit
418	C182219	1274300200	3.22	3.22	Tree Fruit
418	C182219	1274300300	3.69	3.69	Tree Fruit
419	C182224	1281804600	22.98	20.00	Tree Fruit
420	3387920	1070905100	7.80	5.50	Container Nursery
420	3387920	1070904500	6.26	0.50	Field Grown Nursery or Floral
420	3387920	1070904900	7.50	3.00	Field Grown Nursery or Floral
420	3387920	1070905200	17.83	0.50	Field Grown Nursery or Floral
420	3387920	1210440900	6.51	5.00	Field Grown Nursery or Floral
420	3387920	1210441000	9.75	8.00	Field Grown Nursery or Floral
420	3387920	1210441100	9.85	8.00	Field Grown Nursery or Floral
420	3387920	1070905000	5.96	2.00	Field Grown Nursery or Floral
420	3387920	1234000400	7.65	4.60	Field Grown Nursery or Floral
420	3387920	1234000500	9.78	3.50	Field Grown Nursery or Floral
420	3387920	1234000600	2.34	0.25	Grapes, Berries, and Vine Fruit
420	3387920	1070902700	2.20	1.25	Greenhouse Crops
420	3387920	1070902800	2.40	1.25	Greenhouse Crops
420	3387920	1070904700	7.28	3.00	Greenhouse Crops
420	3387920	1234003400	2.00	1.80	Other
420	3387920	1070905300	10.43	3.00	Tree Fruit
421	C182607	3771314700	1.50	1.00	Tree Fruit
422	C739908	1100900400	12.00	5.00	Other
422	C739908	1101200500	6.00	6.00	Tree Fruit
423	C181183	1850422100	5.00	3.00	Tree Fruit
424	C182290	1280931900	2.50	1.50	Tree Fruit
425	C181874	1890310100	21.70	10.00	Tree Fruit
426	C805077	1283602000	15.00	3.00	Tree Fruit
427	W251817	1722100300	4.60	1.00	Greenhouse Crops
428	9671920	1271511400	10.78	10.78	Tree Fruit
428	9671920	1271511500	6.81	6.81	Tree Fruit
428	9671920	1274205900	8.00	8.00	Tree Fruit
428	9671920	1274206000	4.00	4.00	Tree Fruit
428	9671920	1274207000	12.00	12.00	Tree Fruit
428	9671920	1274207100	16.00	16.00	Tree Fruit
428	9671920	1275120200	20.00	20.00	Tree Fruit
428	9671920	1720210700	5.00	5.00	Tree Fruit
428	9671920	1720213900	19.67	19.67	Tree Fruit
429	9824200	1283105400	2.50	2.50	Field Grown Nursery or Floral

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
429	9824200	1283105500	2.50	2.50	Field Grown Nursery or Floral
429	9824200	1283105600	10.50	10.50	Field Grown Nursery or Floral
429	9824200	1292122800	20.00	16.00	Field Grown Nursery or Floral
429	9824200	1271105600	10.92	10.92	Tree Fruit
429	9824200	1274301800	14.60	14.60	Tree Fruit
429	9824200	1271107600	19.00	19.00	Tree Fruit
429	9824200	1282906600	40.30	40.00	Tree Fruit
429	9824200	1721405800	11.00	11.00	Tree Fruit
430	5311385	1110301600	61.00	40.00	Tree Fruit
430	5311385	1110301800	59.00	3.00	Tree Fruit
430	5311385	1092000900	61.00	5.00	Tree Fruit
430	5311385	1110301400	72.00	30.00	Tree Fruit
431	C182438	2761500800	10.00	9.00	Tree Fruit
432	C783657	1275123400	9.49	9.49	Tree Fruit
433	C880192	2770421200	20.00	12.00	Tree Fruit
434	0031457	1062905300	2.10	1.50	Tree Fruit
434	0031457	1062905400	1.00	0.50	Tree Fruit
435	C919687	2860401300	32.00	2.00	Grapes, Berries, and Vine Fruit
436	C919687	2860401200	32.00	0.00	Grapes, Berries, and Vine Fruit
437	4375703	1281011200	2.25	1.00	Tree Fruit
438	C180643	1283402500	4.93	4.93	Tree Fruit
438	C180643	1283402600	7.05	7.05	Tree Fruit
438	C180643	1283402700	5.30	5.30	Tree Fruit
438	C180643	1283402800	2.95	2.95	Tree Fruit
439	C786357	1102901700	10.00	10.00	Field Grown Nursery or Floral
440	C786357	1022401000	3.00	3.00	Container Nursery
440	C786357	1022401300	2.00	2.00	Container Nursery
440	C786357	1093520800	13.00	13.00	Field Grown Nursery or Floral
440	C786357	1100210800	10.00	10.00	Field Grown Nursery or Floral
440	C786357	1100213400	8.00	8.00	Field Grown Nursery or Floral
440	C786357	1100213500	9.00	9.00	Field Grown Nursery or Floral
440	C786357	1103100100	27.00	27.00	Field Grown Nursery or Floral
440	C786357	1103100600	18.00	18.00	Field Grown Nursery or Floral
440	C786357	1103100700	11.00	11.00	Field Grown Nursery or Floral
441	C786357	1103000500	20.00	20.00	Field Grown Nursery or Floral
441	C786357	1103100500	10.00	10.00	Field Grown Nursery or Floral
442	C182051	1081007000	23.00	20.00	Tree Fruit
443	C572083	1030306400	5.00	1.80	Greenhouse Crops
444	C181648	2634022200	2.00	1.00	Container Nursery
444	C181648	2980812900	1.00	0.00	Container Nursery
445	C844753	1212801000	2.50	2.00	Tree Fruit
446	C844753	1212800900	2.50	0.00	Other
447	C506701	1280203400	2.50	0.50	Field Grown Nursery or Floral
447	C506701	1280203300	10.00	5.00	Tree Fruit
448	0008292	1881003000	39.00	8.00	Tree Fruit
449	0024042	1281703700	14.50	7.00	Tree Fruit
449	0024042	1281704000	2.50	1.00	Tree Fruit
450	C635448	1213111000	10.00	8.00	Field Grown Nursery or Floral



<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
450	C635448	1221704900	2.75	1.00	Field Grown Nursery or Floral
451	C182612	1234601800	2.00	2.00	Tree Fruit
452	C182504	2411600400	10.70	9.40	Tree Fruit
452	C182504	2411610100	6.87	6.20	Tree Fruit
453	W251748	1026702000	1.40	0.75	Row and Field Crops
454	C182358	1322703000	104.00	50.00	Tree Fruit
455	C182222	2651014800	5.00	4.00	Tree Fruit
455	C182222	2651014900	5.00	4.00	Tree Fruit
456	ME97632	2411801600	10.00	4.50	Tree Fruit
457	C400133	1300400400	112.24	14.55	Tree Fruit
457	C400133	1300701000	165.10	80.29	Tree Fruit
457	C400133	1300803900	73.40	10.90	Tree Fruit
457	C400133	1300300100	634.10	242.26	Tree Fruit
458	C182313	1242101300	1.55	1.00	Tree Fruit
458	C182313	1242105200	3.83	3.00	Tree Fruit
458	C182313	1242105300	4.61	4.00	Tree Fruit
458	C182313	1242105400	1.42	1.00	Tree Fruit
458	C182313	1242105100	13.39	10.00	Tree Fruit
459	C091714	1592101100	3.00	2.00	Container Nursery
459	C091714	1712601300	3.18	2.75	Container Nursery
459	C091714	1822701500	9.54	5.00	Container Nursery
459	C091714	1822721500	4.42	3.00	Container Nursery
459	C091714	1722103400	18.00	14.00	Tree Fruit
460	C181234	5962510800	8.00	3.00	Field Grown Nursery or Floral
462	C888005	1881507900	6.00	4.50	Field Grown Nursery or Floral
462	C888005	1890317900	6.00	4.00	Field Grown Nursery or Floral
463	C182382	2410810100	25.00	23.00	Tree Fruit
464	C182388	2382402500	0.81	0.75	Tree Fruit
464	C182388	2382810100	9.09	9.00	Tree Fruit
465	C739897	2410800200	6.79	3.00	Tree Fruit
465	C739897	2410801600	0.87	0.25	Tree Fruit
465	C739897	2410804400	1.10	0.25	Tree Fruit
465	C739897	2410804500	55.23	47.00	Tree Fruit
465	C739897	2411500800	5.02	5.00	Tree Fruit
466	C182228	1082220100	33.00	33.00	Tree Fruit
467	C180836	1280701600	75.62	65.00	Tree Fruit
467	C180836	1281502800	28.00	18.00	Tree Fruit
467	C180836	1281502900	30.00	20.00	Tree Fruit
467	C180836	1281503000	55.00	43.00	Tree Fruit
467	C180836	1281503100	28.00	19.00	Tree Fruit
467	C180836	1282003700	23.85	20.00	Tree Fruit
467	C180836	1282003800	16.06	15.00	Tree Fruit
467	C180836	1282112100	18.03	16.00	Tree Fruit
467	C180836	1282112200	24.62	19.00	Tree Fruit
468	C783513	1083402000	9.92	9.40	Tree Fruit
468	C783513	1083402800	8.80	4.00	Tree Fruit
468	C783513	1083500700	10.50	4.00	Tree Fruit
468	C783513	1083501500	6.00	5.10	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
468	C783513	1083501600	4.60	1.50	Tree Fruit
468	C783513	1083501800	6.40	4.20	Tree Fruit
469	C182264	1851605900	22.50	19.00	Tree Fruit
470	C880024	1310702700	12.58	11.84	Field Grown Nursery or Floral
470	C880024	1310701500	6.10	5.36	Tree Fruit
470	C880024	1322000300	19.24	18.88	Tree Fruit
470	C880024	1322002100	1.67	1.32	Tree Fruit
470	C880024	1322204100	5.70	5.49	Tree Fruit
470	C880024	1322204200	4.11	3.89	Tree Fruit
470	C880024	1322204300	6.74	6.52	Tree Fruit
470	C880024	1330202100	1.33	1.26	Tree Fruit
470	C880024	1330202300	1.04	1.00	Tree Fruit
470	C880024	1330202400	1.02	1.00	Tree Fruit
470	C880024	1330205000	1.23	1.16	Tree Fruit
470	C880024	1330400600	6.55	5.73	Tree Fruit
470	C880024	1330401500	18.53	18.20	Tree Fruit
470	C880024	1330402500	1.98	1.17	Tree Fruit
470	C880024	1330504900	1.40	1.34	Tree Fruit
471	3604864	1280100800	35.00	4.00	Row and Field Crops
471	3604864	1280103500	35.00	14.00	Row and Field Crops
471	3604864	1280202800	40.00	20.00	Row and Field Crops
471	3604864	1280700300	40.00	3.00	Row and Field Crops
471	3604864	1284209100	20.00	10.00	Row and Field Crops
471	3604864	1284200100	80.00	75.00	Tree Fruit
471	3604864	1284200500	40.00	18.00	Tree Fruit
472	C180697	1231202900	1.00	1.00	Tree Fruit
472	C180697	1231203000	5.00	5.00	Tree Fruit
472	C180697	1231203100	5.00	5.00	Tree Fruit
472	C180697	1231203200	1.00	1.00	Tree Fruit
473	C182262	1274207400	4.00	4.00	Tree Fruit
474	5912327	1220200200	40.00	40.00	Field Grown Nursery or Floral
474	5912327	1220200400	16.00	16.00	Field Grown Nursery or Floral
474	5912327	1220200500	4.20	4.20	Field Grown Nursery or Floral
474	5912327	1220200600	10.00	10.00	Field Grown Nursery or Floral
474	5912327	1220202800	10.00	10.00	Field Grown Nursery or Floral
474	5912327	1220204900	10.00	10.00	Field Grown Nursery or Floral
474	5912327	1220308000	74.00	70.00	Field Grown Nursery or Floral
474	5912327	1220902100	15.00	15.00	Field Grown Nursery or Floral
474	5912327	1220904100	12.50	12.50	Field Grown Nursery or Floral
474	5912327	2110222100	53.80	53.80	Field Grown Nursery or Floral
474	5912327	2110231100	45.60	45.60	Field Grown Nursery or Floral
474	5912327	2110231200	12.07	10.87	Field Grown Nursery or Floral
474	5912327	1220905600	21.00	21.00	Field Grown Nursery or Floral
474	5912327	1220905500	1.00	0.00	Other
474	5912327	1211501300	65.00	65.00	Tree Fruit
475	W252009	2771205900	8.00	4.00	Tree Fruit
476	C772636	1274801200	5.00	4.00	Tree Fruit

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477	C648698	1275510700	4.00	3.00	Field Grown Nursery or Floral
477	C648698	1275510900	8.00	7.00	Field Grown Nursery or Floral
477	C648698	1275511000	6.50	6.00	Field Grown Nursery or Floral
478	C292059	1111304900	12.00	11.00	Tree Fruit
478	C292059	1332600200	7.00	7.00	Tree Fruit
478	C292059	1851134700	65.00	40.00	Tree Fruit
479	0576771	1891702800	13.62	5.00	Row and Field Crops
479	0576771	1891703100	20.14	12.00	Tree Fruit
479	0576771	1891703300	43.24	30.00	Tree Fruit
479	0576771	1891700800	24.20	8.00	Tree Fruit
480	C181865	1284800300	2.55	2.00	Tree Fruit
480	C181865	1284800600	10.06	6.00	Tree Fruit
481	C534994	1861006700	34.00	2.00	Tree Fruit
482	C182270	2651702300	3.26	0.92	Tree Fruit
483	C899517	2651500700	3.04	3.00	Tree Fruit
483	C899517	2651500800	3.37	2.75	Tree Fruit
483	C899517	2651500600	15.65	6.75	Tree Fruit
484	C905668	1072205000	6.00	3.00	Tree Fruit
485	C292283	1281603100	2.50	2.00	Field Grown Nursery or Floral
485	C292283	1252320700	10.50	6.00	Tree Fruit
486	C787051	1281704800	20.40	2.00	Tree Fruit
487	c182245	1270723800	10.00	10.00	Tree Fruit
487	c182245	1270724000	10.00	10.00	Tree Fruit
487	c182245	1270724100	5.00	5.00	Tree Fruit
487	c182245	1270724600	8.50	8.50	Tree Fruit
488	C786357	1093520500	5.00	5.00	Field Grown Nursery or Floral
488	C786357	1093521000	20.00	10.00	Field Grown Nursery or Floral
489	C787051	1281704700	8.25	5.00	Tree Fruit
490	C182413	2221431000	1.00	1.00	Container Nursery
492	C567961	2411800200	16.00	10.00	Tree Fruit
492	C567961	2411801700	2.00	2.00	Tree Fruit
493	C420023	1292120600	6.30	5.00	Tree Fruit
494	C937489	2410403200	4.89	3.89	Tree Fruit
495	C182665	3953110100	3.20	0.50	Container Nursery
496	C553297	1821408200	17.00	17.00	Tree Fruit
497	C784062	2601821500	1.00	0.50	Container Nursery
497	C784062	2601821600	1.00	0.50	Container Nursery
497	C784062	7601704600	5.00	3.00	Container Nursery
498	C725766	1263403100	2.50	1.00	Tree Fruit
499	9308700	1852601500	10.00	10.00	Tree Fruit
500	C990327	1080206300	5.20	4.00	Tree Fruit
500	C990327	1080206400	4.50	3.50	Tree Fruit
500	C990327	1080206500	8.50	7.00	Tree Fruit
500	C990327	1080206600	8.00	6.00	Tree Fruit
500	C990327	1242004100	2.20	2.00	Tree Fruit
500	C990327	1242033100	2.50	1.50	Tree Fruit
500	C990327	1242033200	2.30	2.00	Tree Fruit
500	C990327	1242033300	3.30	3.00	Tree Fruit

SDRILG ID	SDRILG Member Number	Parcel Number	Total Acres	Irrigated Acres	Primary Crop Type
500	C990327	1242033400	4.00	4.00	Tree Fruit
500	C990327	1242033500	42.00	38.00	Tree Fruit
500	C990327	1242033800	4.00	4.00	Tree Fruit
500	C990327	1242033900	4.50	4.00	Tree Fruit
500	C990327	1242034000	4.70	4.50	Tree Fruit
500	C990327	1080206700	33.00	18.00	Tree Fruit
500	C990327	1881012800	17.00	15.00	Tree Fruit
501	C182338	1013705800	6.30	2.00	Field Grown Nursery or Floral
502	C814537	1054922900	4.00	3.00	Tree Fruit
503	C462423	1781803400	12.00	12.00	Tree Fruit
504	C866920	1851606600	9.30	8.00	Tree Fruit
505	C772694	1211212100	3.50	2.20	Tree Fruit
506	C899505	1330502200	37.00	4.00	Tree Fruit
507	C753404	1850110400	2.40	1.80	Field Grown Nursery or Floral
508	C182305	1024704100	4.00	3.00	Tree Fruit
509	C182597	2721322200	120.00	100.00	Container Nursery
510	C223135	1720215700	2.00	1.00	Tree Fruit
510	C223135	1720215800	3.40	2.00	Tree Fruit
511	C181977	2470102000	3.00	3.00	Grapes, Berries, and Vine Fruit
512	C182633	1100401300	78.50	60.35	Tree Fruit
512	C182633	1101200100	6.01	4.55	Tree Fruit
512	C182633	1101200700	3.06	2.99	Tree Fruit
512	C182633	1101200900	6.00	5.90	Tree Fruit
512	C182633	1251001000	27.21	8.82	Tree Fruit
512	C182633	1311400900	142.83	37.86	Tree Fruit
512	C182633	1311700900	4.59	2.41	Tree Fruit
513	C182633	1101200800	5.99	4.13	Tree Fruit
513	C182633	1101202300	2.99	3.02	Tree Fruit
513	C182633	1250630900	62.47	15.70	Tree Fruit
513	C182633	1311100600	599.17	0.22	Tree Fruit
513	C182633	1311700800	49.94	37.86	Tree Fruit
513	C182633	1311701000	4.63	1.82	Tree Fruit
513	C182633	1311800600	650.23	1.04	Tree Fruit
513	C182633	1311801900	257.52	118.12	Tree Fruit
514	C182506	1851813100	6.00	3.00	Tree Fruit
515	C182404	1320204200	8.00	7.00	Tree Fruit
516	0008139	1027001700	3.50	3.50	Tree Fruit
516	0008139	1027001800	3.50	3.50	Tree Fruit
516	0008139	1073301200	2.00	2.00	Tree Fruit
516	0008139	1073301300	6.00	6.00	Tree Fruit
516	0008139	1080310900	4.00	4.00	Tree Fruit
516	0008139	1080311400	3.50	3.50	Tree Fruit
516	0008139	1083011500	3.50	3.50	Tree Fruit
516	0008139	1093200300	12.00	10.00	Tree Fruit
517	C182480	1851020400	40.00	3.00	Tree Fruit
518	C182480	1851605100	5.00	3.00	Tree Fruit
519	C484170	1320810800	23.00	21.00	Tree Fruit
519	C484170	1333012400	4.50	4.00	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
519	C484170	1333012500	3.50	2.00	Tree Fruit
519	C484170	1333012600	2.20	1.00	Tree Fruit
519	C484170	1333012900	3.00	2.00	Tree Fruit
519	C484170	1333013000	3.30	2.00	Tree Fruit
520	C637107	2401111000	16.50	9.00	Tree Fruit
521	C402768	1300401700	13.00	6.50	Tree Fruit
522	C665300	1272107400	2.00	1.80	Tree Fruit
522	C665300	1272107500	2.00	1.80	Tree Fruit
523	3364450	1052910600	3.90	1.50	Tree Fruit
523	3364450	1052910700	2.00	2.00	Tree Fruit
523	3364450	1052910800	2.00	2.00	Tree Fruit
524	C568595	1055203400	3.75	2.00	Tree Fruit
525	C182366	2391605000	2.00	1.00	Tree Fruit
526	C899506	1100900200	40.00	3.00	Tree Fruit
527	1141312	1300802700	5.00	3.00	Grapes, Berries, and Vine Fruit
527	1141312	1300802800	5.00	2.00	Grapes, Berries, and Vine Fruit
527	1141312	1310602200	9.00	9.00	Tree Fruit
527	1141312	1882714900	54.00	44.00	Tree Fruit
527	1141312	1883212300	8.00	6.00	Tree Fruit
527	1141312	1883212400	2.00	2.00	Tree Fruit
527	1141312	1883212500	3.00	2.00	Tree Fruit
527	1141312	1883220300	7.00	3.00	Tree Fruit
527	1141312	1883220400	10.00	6.00	Tree Fruit
527	1141312	1300805000	20.00	20.00	Tree Fruit
527	1141312	1880820100	14.00	12.00	Tree Fruit
527	1141312	1882715000	14.00	12.00	Tree Fruit
528	H019432	1293004100	19.00	11.00	Tree Fruit
528	H019432	1293004300	18.00	14.00	Tree Fruit
528	H019432	1293004500	19.00	12.00	Tree Fruit
529	5572634	1733502300	2.50	1.25	Greenhouse Crops
529	5572634	1261804500	8.50	7.50	Tree Fruit
530	C888040	2344202600	1.00	1.00	Tree Fruit
531	C781015	5961903200	10.00	4.00	Tree Fruit
531	C781015	5970903100	5.00	4.00	Tree Fruit
531	C781015	5970904900	21.00	19.00	Tree Fruit
531	C781015	5970904600	4.00	1.00	Tree Fruit
532	C784066	1274001200	3.80	2.50	Tree Fruit
533	C182590	1111901900	5.25	4.00	Tree Fruit
534	C990125	1851805000	3.50	3.50	Tree Fruit
535	ME96913	1081004600	6.00	6.00	Tree Fruit
536	C664814	1057611500	2.00	2.00	Tree Fruit
537	C665065	1020840800	8.00	6.00	Tree Fruit
538	C899476	1070300700	1.75	1.40	Tree Fruit
538	C899476	1072502800	2.00	0.70	Tree Fruit
538	C899476	1072502900	2.50	0.50	Tree Fruit
539	C182317	2770304700	13.00	10.00	Tree Fruit
540	C180684	1275221200	5.50	5.00	Field Grown Nursery or Floral
540	C180684	1275221400	4.70	4.00	Field Grown Nursery or Floral

SDRILG ID	SDRILG Member Number	Parcel Number	Total Acres	Irrigated Acres	Primary Crop Type
540	C180684	1275721300	6.80	5.00	Field Grown Nursery or Floral
540	C180684	1294202200	20.00	6.00	Field Grown Nursery or Floral
542	C805063	1021806300	13.00	9.00	Tree Fruit
542	C805063	1021808400	1.00	0.50	Tree Fruit
543	C846476	1291003000	15.70	12.50	Tree Fruit
543	C846476	1291006600	9.95	8.50	Tree Fruit
543	C846476	1291006700	5.99	3.00	Tree Fruit
543	C846476	1292910700	4.50	4.00	Tree Fruit
543	C846476	1330502900	4.50	4.50	Tree Fruit
543	C846476	1330503000	10.00	9.50	Tree Fruit
544	C182359	1830121900	2.25	1.00	Greenhouse Crops
544	C182359	1830122200	2.00	1.00	Greenhouse Crops
545	C182484	1320606000	6.00	3.50	Tree Fruit
546	C443473	1051122400	1.00	0.70	Tree Fruit
547	C180637	1280910700	13.00	13.00	Tree Fruit
548	C182375	2220305300	50.00	20.00	Tree Fruit
548	C182375	2220305400	60.00	30.00	Tree Fruit
549	C182547	2783510400	2.50	0.50	Grapes, Berries, and Vine Fruit
549	C182547	2783513700	2.30	1.50	Grapes, Berries, and Vine Fruit
550	0011708	1251330100	28.50	12.00	Tree Fruit
551	C550637	1811804300	1.00	0.50	Field Grown Nursery or Floral
551	C550637	1811808200	15.00	3.50	Field Grown Nursery or Floral
551	C550637	1811808300	2.00	1.00	Field Grown Nursery or Floral
552	W251788	2652602000	9.35	4.20	Tree Fruit
553	C805006	1282402400	9.52	8.50	Tree Fruit
554	0017628	1282401200	11.20	10.00	Tree Fruit
555	C182369	2221022200	2.30	1.00	Other
555	C182369	2221022600	2.58	2.00	Tree Fruit
555	C182369	2221022700	4.65	4.00	Tree Fruit
556	C291979	5180104400	7.90	1.00	Container Nursery
557	C420018	2651401500	1.50	1.50	Tree Fruit
558	C182341	2760231600	12.80	8.00	Tree Fruit
559	C888190	2650800900	3.39	1.75	Tree Fruit
560	C278483	1211902900	26.00	26.00	Tree Fruit
561	C278483	1211903000	52.00	47.00	Tree Fruit
561	C278483	1220302700	40.00	20.00	Tree Fruit
561	C278483	1220302800	80.00	52.00	Tree Fruit
561	C278483	1220308400	40.00	40.00	Tree Fruit
562	C278483	1211731000	2.30	2.30	Tree Fruit
562	C278483	1211731100	2.30	2.30	Tree Fruit
562	C278483	1211731200	2.30	2.30	Tree Fruit
562	C278483	1211731300	2.30	2.30	Tree Fruit
562	C278483	1211731400	2.30	2.30	Tree Fruit
562	C278483	1211731500	2.30	2.30	Tree Fruit
562	C278483	1211731600	2.30	2.30	Tree Fruit
562	C278483	1211731700	2.30	2.30	Tree Fruit
562	C278483	1211731800	2.30	2.30	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
562	C278483	1211731900	2.30	2.30	Tree Fruit
562	C278483	1211732000	2.30	2.30	Tree Fruit
562	C278483	1211732100	2.30	2.30	Tree Fruit
562	C278483	1211732200	2.30	2.30	Tree Fruit
562	C278483	1220308500	40.00	20.00	Tree Fruit
563	C182275	2651020900	8.75	8.75	Tree Fruit
564	C739427	1300103800	37.00	37.00	Tree Fruit
564	C739427	1300103900	18.00	15.00	Tree Fruit
564	C739427	1300104000	33.00	33.00	Tree Fruit
564	C739427	1300104100	12.00	10.00	Tree Fruit
564	C739427	1333803200	4.00	3.00	Tree Fruit
564	C739427	1900801800	70.00	20.00	Tree Fruit
564	C739427	1900802000	120.00	15.00	Tree Fruit
564	C739427	2401400200	40.00	37.00	Tree Fruit
565	C893019	1281600500	45.00	35.00	Field Grown Nursery or Floral
565	C893019	1252324600	5.50	5.50	Tree Fruit
565	C893019	1252324800	7.00	5.00	Tree Fruit
566	C664810	1014600200	7.14	3.75	Tree Fruit
567	C545811	1292702800	11.14	10.25	Tree Fruit
567	C545811	1292702900	7.41	5.75	Tree Fruit
568	C180664	2640313000	5.38	4.53	Tree Fruit
568	C180664	2640313100	4.93	4.03	Tree Fruit
569	C182348	1274902500	6.71	4.90	Tree Fruit
570	C182271	2663404000	2.96	2.00	Tree Fruit
571	C725811	1741122500	2.00	1.25	Container Nursery
571	C725811	1741120400	2.50	1.12	Container Nursery
571	C725811	1741120700	2.00	1.25	Container Nursery
573	0030633	2412930100	1.00	0	Other
573	0030633	2420205600	3.00	0	Other
573	0030633	2412930300	20.00	13	Tree Fruit
573	0030633	2420204800	17.00	4	Tree Fruit
574	ME89455	1274000400	3.06	2	Tree Fruit
575	C182685	1271510200	4.00	3	Tree Fruit
576	C805035	1722200500	19.66	9	Tree Fruit
576	C805035	1866010900	23.83	16	Tree Fruit
578	C182571	1280710500	26.44	21	Tree Fruit
578	C182571	1283301700	19.72	16	Tree Fruit
579	C182548	1853800100	7.00	6	Tree Fruit
580	C846042	1274400900	2.85	1.75	Tree Fruit
581	C750064	2802003300	7.00	5	Tree Fruit
582	C939869	1300500100	2.59	0.00	Container Nursery
582	C939869	1300501500	42.05	39.00	Container Nursery
582	C939869	1300501700	49.77	45.00	Container Nursery
582	C939869	1300504200	4.42	4.42	Container Nursery
582	C939869	1300504300	4.34	3.50	Container Nursery
582	C939869	1300504400	4.80	4.00	Container Nursery
582	C939869	1300504500	5.07	5.00	Container Nursery
582	C939869	1300601300	100.97	95.00	Container Nursery

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
582	C939869	1300601600	126.63	120.00	Container Nursery
582	C939869	1300800500	10.00	9.00	Container Nursery
582	C939869	1300803000	88.52	85.00	Container Nursery
582	C939869	1320902300	105.43	90.00	Container Nursery
582	C939869	1320902500	1.00	0.00	Container Nursery
582	C939869	1320902700	10.92	10.00	Container Nursery
582	C939869	1330205300	2.33	2.33	Container Nursery
582	C939869	1330205400	1.00	1	Container Nursery
582	C939869	1330205500	9.40	8.00	Container Nursery
582	C939869	1330401000	3.75	3.50	Container Nursery
582	C939869	1330401200	3.75	3.50	Container Nursery
582	C939869	1330401400	7.73	7.50	Container Nursery
582	C939869	1330401600	6.97	6.50	Container Nursery
582	C939869	1332600800	7.18	7.00	Container Nursery
582	C939869	1870416100	103.72	78	Container Nursery
582	C939869	1870420600	10.53	2.00	Container Nursery
582	C939869	8420710900	1.00	1	Container Nursery
582	C939869	8420711600	1.00	1	Container Nursery
582	C939869	8420810800	1.00	1	Container Nursery
582	C939869	8420810900	1.00	1	Container Nursery
582	C939869	8420812500	1.00	1	Container Nursery
583	C182667	1300102600	25.00	25	Field Grown Nursery or Floral
583	C182667	1300102800	49.00	35	Field Grown Nursery or Floral
583	C182667	1300103300	18.00	0	Field Grown Nursery or Floral
584	w254460	4815000800	0.50	0	Greenhouse Crops
585	C880187	1873705700	0.70	0.6	Tree Fruit
585	C880187	2241002700	9.80	9	Tree Fruit
585	C880187	2241003400	5.50	5	Tree Fruit
585	C880187	2241007700	2.30	2	Tree Fruit
585	C880187	2241007800	10.70	10	Tree Fruit
585	C880187	2241007900	4.50	2.5	Tree Fruit
585	C880187	2241008000	2.80	2.2	Tree Fruit
585	C880187	2274302000	22.50	17	Tree Fruit
585	C880187	2274302100	1.40	0.5	Tree Fruit
586	C182238	1851812700	3.50	2	Tree Fruit
587	C867300	1311000100	6.99	6	Tree Fruit
587	C867300	1311000200	10.20	9.2	Tree Fruit
588	C181179	1013605000	28.39	1	Other
588	C181179	1013605100	38.52	7.75	Tree Fruit
588	C181179	1013605200	35.23	1	Tree Fruit
588	C181179	1013613400	3.02	3.02	Tree Fruit
588	C181179	1013615700	3.72	3.72	Tree Fruit
588	C181179	1016615600	5.04	5.04	Tree Fruit
589	C664829	2920101500	10.00	10	Tree Fruit
590	C899507	1571007200	227.00	132.5	Row and Field Crops
595	C899507	1220904700	1.50	1.5	Row and Field Crops
596	C181846	2411400900	2.17	1.83	Tree Fruit
596	C181846	2411401000	1.50	0.4	Tree Fruit



<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
597	ME95253	1283801200	12.53	12.53	Tree Fruit
597	ME95253	1283801300	6.24	6.24	Tree Fruit
597	ME95253	1283902700	30.22	30.22	Tree Fruit
598	C182477	1881611500	3.00	1	Container Nursery
599	C665138	1782221400	20.00	6	Container Nursery
599	C665138	1821404500	7.00	4	Container Nursery
600	C182474	1290401000	21.00	17	Tree Fruit
601	C180837	1280701800	8.81	8.31	Tree Fruit
601	C180837	1280702500	105.95	80	Tree Fruit
601	C180837	1281610100	75.52	65	Tree Fruit
601	C180837	1281610200	35.70	35.69	Tree Fruit
601	C180837	1281610300	16.30	14	Tree Fruit
601	C180837	1281710100	13.87	0	Tree Fruit
601	C180837	1281710200	50.71	50	Tree Fruit
602	C059972	1281804000	16.00	16	Tree Fruit
602	C059972	1281804400	1.00	1	Tree Fruit
602	C059972	1282111600	17.82	17	Tree Fruit
602	C059972	2250406800	2.24	1.5	Tree Fruit
602	C059972	2250406900	1.00	0.5	Tree Fruit
602	C059972	2250409500	0.00	0	Tree Fruit
602	C059972	2250410200	0.84	0	Tree Fruit
602	C059972	2250410400	3.02	2	Tree Fruit
602	C059972	2250410600	1.00	0.5	Tree Fruit
602	C059972	2250410700	1.00	0.5	Tree Fruit
602	C059972	2250410900	60.50	40	Tree Fruit
602	C059972	2283131300	25.00	20	Tree Fruit
602	C059972	2320130100	32.64	28	Tree Fruit
602	C059972	2371505200	1.90	0.5	Tree Fruit
602	C059972	2371505300	1.03	1	Tree Fruit
602	C059972	7601708800	105.50	55	Tree Fruit
603	C739428	1900620300	30.57	0	Other
603	C739428	1900620400	10.37	0	Other
603	C739428	1901500800	1.10	0	Other
603	C739428	1901500900	33.83	0	Other
603	C739428	1900620500	41.53	9	Tree Fruit
604	C665363	1281020600	3.00	1	Tree Fruit
604	C665363	1281020605	4.00	3	Tree Fruit
604	C665363	1291620400	10.00	2	Tree Fruit
604	C665363	1291620500	10.00	2	Tree Fruit
606	C182229	1293201100	62.00	25	Tree Fruit
607	C442464	1294210700	62.01	0	Field Grown Nursery or Floral
607	C442464	1294201400	20.68	0	Other
607	C442464	1332203900	22.98	0	Other
607	C442464	1252323300	21.45	20	Tree Fruit
607	C442464	1281501500	41.53	40	Tree Fruit
607	C442464	1281501600	41.63	40	Tree Fruit
607	C442464	1281602200	90.37	70	Tree Fruit
607	C442464	1281602500	7.64	7	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
607	C442464	1281602600	51.56	50	Tree Fruit
607	C442464	1281603900	1.00	1	Tree Fruit
607	C442464	1281604000	26.30	25	Tree Fruit
607	C442464	1283900700	45.08	40	Tree Fruit
607	C442464	1294201500	20.60	0	Tree Fruit
607	C442464	1294210900	72.08	0	Tree Fruit
607	C442464	1294212000	15.46	0	Tree Fruit
607	C442464	1300801600	13.21	12	Tree Fruit
607	C442464	1300900600	4.29	4	Tree Fruit
607	C442464	1301000100	78.55	75	Tree Fruit
607	C442464	1310101300	4.95	4.95	Tree Fruit
607	C442464	1311000300	20.64	20	Tree Fruit
607	C442464	1311000400	1.00	1	Tree Fruit
607	C442464	1311001200	5.00	5	Tree Fruit
607	C442464	1311001400	6.22	6	Tree Fruit
607	C442464	1311001700	3.88	3	Tree Fruit
607	C442464	1311500200	20.00	20	Tree Fruit
607	C442464	1311501000	40.30	40	Tree Fruit
607	C442464	1311602000	10.73	10	Tree Fruit
607	C442464	1311602100	10.00	10	Tree Fruit
607	C442464	1311602900	2.13	2	Tree Fruit
607	C442464	1321503300	49.14	45	Tree Fruit
607	C442464	1321503400	44.77	42	Tree Fruit
607	C442464	1321503500	41.64	40	Tree Fruit
607	C442464	1321601500	41.20	40	Tree Fruit
607	C442464	1321601700	40.00	40	Tree Fruit
607	C442464	1321601900	40.08	40	Tree Fruit
607	C442464	1321602000	21.11	40	Tree Fruit
607	C442464	1321602100	4.63	4	Tree Fruit
607	C442464	1321602700	27.52	25	Tree Fruit
607	C442464	1321602800	24.10	22	Tree Fruit
607	C442464	1321602900	13.62	12	Tree Fruit
607	C442464	1321603200	39.90	38	Tree Fruit
607	C442464	1321900900	6.38	6	Tree Fruit
607	C442464	1321901900	5.44	5	Tree Fruit
607	C442464	1321902000	1.77	1	Tree Fruit
607	C442464	1322201600	1.91	1	Tree Fruit
607	C442464	1322201700	10.28	10	Tree Fruit
607	C442464	1322201900	25.00	25	Tree Fruit
607	C442464	1322203500	10.26	10	Tree Fruit
607	C442464	1322203600	10.87	10	Tree Fruit
607	C442464	1322203700	9.70	9	Tree Fruit
607	C442464	1322203900	10.11	10	Tree Fruit
607	C442464	1324400700	8.34	8	Tree Fruit
607	C442464	1324400900	5.20	5	Tree Fruit
607	C442464	1324401000	3.06	3	Tree Fruit
607	C442464	1324401300	4.86	4	Tree Fruit
607	C442464	1330205200	2.66	2	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
607	C442464	1330600600	21.58	20	Tree Fruit
607	C442464	1332012500	43.03	0	Tree Fruit
607	C442464	1332012600	43.03	0	Tree Fruit
607	C442464	2342604200	2.11	2	Tree Fruit
607	C442464	2342604300	2.05	2	Tree Fruit
607	C442464	2410402300	4.34	4	Tree Fruit
607	C442464	2410402500	4.13	4	Tree Fruit
607	C442464	2411210300	3.31	3	Tree Fruit
607	C442464	2411300900	3.82	3	Tree Fruit
607	C442464	2411301000	2.79	2	Tree Fruit
607	C442464	2411301100	1.32	1	Tree Fruit
607	C442464	2411302000	3.02	3	Tree Fruit
607	C442464	2411400100	5.32	5	Tree Fruit
607	C442464	2412402400	1.00	1	Tree Fruit
607	C442464	1332203800	19.89	0	Tree Fruit
607	C442464	1332204000	43.51	0	Tree Fruit
608	C764427	1275210800	10.00	6	Tree Fruit
608	C764427	1275210900	10.00	10	Tree Fruit
609	C781017	2401412600	183.00	0	Other
609	C781017	2401410300	63.00	6	Tree Fruit
610	C182448	1083001900	5.00	2	Tree Fruit
611	C182632	1275220800	30.00	26	Tree Fruit
612	ME72564	1224500800	3.00	3	Tree Fruit
613	C888187	1083601100	9.00	9	Tree Fruit
614	C182449	1284605800	4.00	4	Tree Fruit
615	C180768	1241720300	4.00	3.5	Tree Fruit
616	C406666	1330301000	1.00	1	Tree Fruit
616	C406666	1330301200	1.00	1	Tree Fruit
616	C406666	1331903900	2.00	2	Tree Fruit
616	C406666	1331904000	0.30	0.3	Tree Fruit
616	C406666	1332600600	6.00	5	Tree Fruit
616	C406666	1324401400	5.00	4	Tree Fruit
616	C406666	1330301300	2.00	1	Tree Fruit
617	C182370	1057600200	3.00	3	Tree Fruit
618	C487567	1310900800	6.50	5	Tree Fruit
619	C182315	1083206400	12.00	12	Tree Fruit
619	C182315	1083206500	12.00	12	Tree Fruit
619	C182315	1083206600	12.00	12	Tree Fruit
620	C182470	1100212400	45.00	29	Tree Fruit
621	C182372	1027711300	2.80	2.8	Tree Fruit
621	C182372	1027711400	2.00	2	Tree Fruit
622	C182727	1057600500	2.50	2	Tree Fruit
623	C182615	1072405300	2.65	2	Tree Fruit
624	C182353	1026806200	4.00	2	Tree Fruit
625	C777777	1211006000	6.50	2	Tree Fruit
627	C361611	2791311600	11.68	6.5	Tree Fruit
628	C546595	1251130100	19.90	8	Tree Fruit
629	C182297	1700510200	1.00	1	Container Nursery

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
630	C182397	1082711500	11.50	11.5	Tree Fruit
630	C182397	1282711600	9.80	9.8	Tree Fruit
631	C182513	1291006200	12.00	10	Tree Fruit
631	C182513	1291007800	9.30	6	Tree Fruit
632	C182367	1014205000	3.80	3	Tree Fruit
633	C777787	1512001900	0.50	0.5	Container Nursery
633	C777787	1512002000	1.50	1.5	Container Nursery
633	C777787	1512005300	2.00	2	Container Nursery
634	C717755	2411003100	34.00	24	Tree Fruit
635	C789181	1022804300	10.60	10	Tree Fruit
636	C419895	1320608200	2.00	2	Tree Fruit
636	C419895	1320608300	16.00	15	Tree Fruit
637	C182423	1021053300	4.60	3	Tree Fruit
638	C182395	1873500800	9.73	0	Other
638	C182395	1873500900	5.00	0	Other
638	C182395	1873501000	3.07	0	Other
638	C182395	1873501100	10.29	0	Other
638	C182395	1873501200	19.54	0	Other
638	C182395	1873501700	40.25	0	Other
638	C182395	1873510100	33.77	33	Tree Fruit
638	C182395	1873510200	2.36	1	Tree Fruit
638	C182395	1873510300	2.27	2.27	Tree Fruit
638	C182395	1873510400	1.99	1	Tree Fruit
638	C182395	1873510500	0.83	0.83	Tree Fruit
638	C182395	1873510600	7.15	7.15	Tree Fruit
638	C182395	1876232800	32.65	30	Tree Fruit
638	C182395	2241001100	9.21	8.5	Tree Fruit
638	C182395	2241003300	3.00	1	Tree Fruit
638	C182395	2241004000	8.38	8.38	Tree Fruit
638	C182395	2241004300	5.38	5.38	Tree Fruit
638	C182395	2241004500	3.01	1.5	Tree Fruit
638	C182395	2241004600	8.73	8	Tree Fruit
638	C182395	2241004700	4.13	4.13	Tree Fruit
638	C182395	2250102900	14.33	13	Tree Fruit
638	C182395	2250103010	2.11	2	Tree Fruit
638	C182395	2250103100	0.22	0.22	Tree Fruit
638	C182395	2250103200	3.56	3	Tree Fruit
638	C182395	2250103600	25.26	24	Tree Fruit
639	C571709	1101200200	4.00	4	Tree Fruit
639	C571709	1101200300	6.50	6.5	Tree Fruit
640	C182699	2241804600	0.25	0.25	Tree Fruit
640	C182699	2336220900	0.50	0.25	Tree Fruit
640	C182699	2336221000	1.00	0.5	Tree Fruit
640	C182699	2336231400	0.50	0.5	Tree Fruit
640	C182699	2341805400	0.75	0.5	Tree Fruit
641	C182467	1100601600	7.50	7	Tree Fruit
642	C665342	1850111800	2.10	2	Field Grown Nursery or Floral
642	C665342	1850112800	2.30	1.5	Field Grown Nursery or Floral

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
642	C665342	1850112900	3.60	3.1	Field Grown Nursery or Floral
643	C546597	2761401700	40.00	3	Grapes, Berries, and Vine Fruit
644	C182545	2870311200	9.03	1	Grapes, Berries, and Vine Fruit
645	C182726	1821801300	8.00	7	Tree Fruit
646	C519775	1271105800	18.91	18	Tree Fruit
647	C900426	2760302800	3.55	2.5	Tree Fruit
648	C182634	4850424100	2.50	1.5	Tree Fruit
649	2955900	1100600100	39.93	11	Tree Fruit
649	2955900	1100600200	39.70	15	Tree Fruit
649	2955900	1100600600	37.19	8.82	Tree Fruit
649	2955900	1100601700	6.18	6.18	Tree Fruit
649	2955900	1310500200	24.00	24	Tree Fruit
649	2955900	1310500300	24.00	24	Tree Fruit
649	2955900	1310500400	23.00	23	Tree Fruit
649	2955900	1310500500	1.00	0.5	Tree Fruit
649	2955900	1310802200	8.50	8	Tree Fruit
649	2955900	1310802300	7.50	7.5	Tree Fruit
649	2955900	1310802400	20.00	20	Tree Fruit
649	2955900	1310802500	32.00	32	Tree Fruit
650	4358325	5031322600	0.56	0.42	Container Nursery
650	4358325	5031323000	0.61	0.3	Container Nursery
650	4358325	5031323100	0.14	0.11	Container Nursery
650	4358325	5032421500	0.73	0.2	Container Nursery
650	4358325	5032421900	0.44	0.22	Container Nursery
650	4358325	5032422000	0.34	0.16	Container Nursery
650	4358325	5032422100	0.30	0.2	Container Nursery
650	4358325	5032513800	0.27	0.22	Container Nursery
650	4358325	5032514900	0.57	0.46	Container Nursery
651	C182563	1070802600	4.00	3	Tree Fruit
651	C182563	1070803200	1.10	1	Tree Fruit
652	C182532	1702103600	12.06	12	Tree Fruit
652	C182532	1861425500	20.00	15	Tree Fruit
653	C182556	1292922700	2.50	0.5	Tree Fruit
653	C182556	1292922800	2.50	1	Tree Fruit
654	C805057	1342400300	56.00	33	Tree Fruit
655	C777769	1012102200	4.84	3	Tree Fruit
655	C777769	1012102300	17.46	15	Tree Fruit
656	C762671	1574121400	18.92	16	Row and Field Crops
657	C568223	1333612000	2.50	1	Field Grown Nursery or Floral
659	C867563	2640421000	5.00	5	Container Nursery
660	C182364	1102800100	12.00	10	Tree Fruit
661	C657582	2401008400	17.00	13	Tree Fruit
662	C180743	1852604900	31.00	2	Field Grown Nursery or Floral
662	C180743	1852605000	57.00	10	Field Grown Nursery or Floral
663	C182429	1320811900	12.00	8	Tree Fruit
664	C182301	1333012000	5.00	3	Tree Fruit
665	C777773	1211902700	3.30	2.75	Tree Fruit
665	C777773	1211902800	2.50	1.5	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
665	C777773	1211902600	2.75	2.4	Tree Fruit
666	C182304	1281012600	3.00	3	Tree Fruit
666	C182304	1310602300	7.77	7.77	Tree Fruit
666	C182304	1310602400	7.69	7.69	Tree Fruit
666	C182304	1320812000	18.00	18	Tree Fruit
666	C182304	1322903000	41.00	27	Tree Fruit
666	C182304	1340900600	18.00	16	Tree Fruit
666	C182304	1340902900	25.00	20	Tree Fruit
667	C182456	2224400900	6.08	3.5	Tree Fruit
667	C182456	2224401600	7.35	4	Tree Fruit
668	C624018	1283302400	5.00	0	Tree Fruit
668	C624018	1283302500	5.00	1	Tree Fruit
669	C292447	1073003600	6.34	3.75	Field Grown Nursery or Floral
669	C292447	1073003700	5.02	3.6	Field Grown Nursery or Floral
669	C292447	1073003800	5.61	4.75	Field Grown Nursery or Floral
669	C292447	1073003900	5.05	4.5	Field Grown Nursery or Floral
669	C292447	1082910800	3.00	0.7	Field Grown Nursery or Floral
670	C207492	1901200600	115.00	35	Tree Fruit
671	C990253	1301001000	46.86	31.9	Tree Fruit
671	C990253	1301001100	24.41	16.6	Tree Fruit
671	C990253	1311600600	20.00	20	Tree Fruit
671	C990253	1311601200	40.00	33	Tree Fruit
671	C990253	1311601300	23.60	20	Tree Fruit
671	C990253	1320900200	32.58	12.5	Tree Fruit
672	1886827	1323511100	2.50	1.25	Field Grown Nursery or Floral
672	1886827	1851231200	2.00	1.25	Field Grown Nursery or Floral
672	1886827	1851231000	2.00	1.75	Greenhouse Crops
672	1886827	1881404500	3.80	2.5	Greenhouse Crops
673	C733665	1062801000	53.00	10.3	Tree Fruit
674	8609362	1281905200	23.00	12	Tree Fruit
675	C182592	2841103100	10.00	1	Grapes, Berries, and Vine Fruit
676	A030564	1281220300	1.25	1	Tree Fruit
677	C777785	1129091500	3.00	2.5	Tree Fruit
678	C182525	1282924100	2.70	1.5	Tree Fruit
679	C182579	1260805500	2.70	2	Tree Fruit
680	C181594	1294002300	5.00	4	Tree Fruit
681	C182712	5992002800	10.00	1	Grapes, Berries, and Vine Fruit
684	C888069	1211721500	14.00	13	Container Nursery
684	C888069	1220801300	3.50	3	Container Nursery
684	C888069	1220801700	4.00	3.5	Container Nursery
684	C888069	1220905800	10.00	9	Container Nursery
684	C888069	1070910100	4.30	3.9	Field Grown Nursery or Floral
684	C888069	1070910300	6.30	5.7	Field Grown Nursery or Floral
684	C888069	1070910400	6.30	5.7	Field Grown Nursery or Floral
685	C180839	2561211700	0.89	0.89	Greenhouse Crops
686	ME96206	1294000700	8.00	6	Tree Fruit
686	ME96206	1850724000	8.00	7	Tree Fruit
686	ME96206	1851123400	2.50	2	Tree Fruit

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687	7185700	1281012500	10.00	9	Tree Fruit
687	7185700	1866124500	7.98	7.98	Tree Fruit
687	7185700	1866124600	7.96	7.96	Tree Fruit
687	7185700	1866124700	7.66	7.66	Tree Fruit
687	7185700	1866124800	12.06	9.06	Tree Fruit
688	C786937	2771204600	9.00	7.5	Tree Fruit
688	C786937	2771204700	9.00	7.5	Tree Fruit
689	C783545	1274301000	3.60	1.5	Tree Fruit
691	C888126	1721301700	7.82	7.5	Field Grown Nursery or Floral
691	C888126	1721301800	2.20	1.5	Field Grown Nursery or Floral
691	C888126	1721302000	10.02	9	Field Grown Nursery or Floral
692	ME96921	1024901500	1.95	1.95	Tree Fruit
692	ME96921	1024901000	4.00	4	Tree Fruit
694	C944646	1881404600	3.00	1.5	Greenhouse Crops
694	C944646	1882901400	8.00	2	Greenhouse Crops
694	C944646	2800630400	15.00	7	Greenhouse Crops
695	C182598	2652311140	8.34	2.75	Tree Fruit
695	C182598	2652311300	41.18	32.94	Tree Fruit
695	C182598	2653801000	4.52	4.52	Tree Fruit
695	C182598	2653801100	6.51	6	Tree Fruit
695	C182598	2653801200	11.68	7.1	Tree Fruit
696	C182723	5430331400	1.00	1	Container Nursery
697	C407045	1275221100	5.50	2.5	Tree Fruit
698	C556035	1841810400	5.63	1.16	Greenhouse Crops
699	C506729	1290912400	24.50	5	Tree Fruit
700	C568738	2340404100	2.06	2	Tree Fruit
700	C568738	2410100300	1.19	0.5	Tree Fruit
700	C568738	2410102600	4.74	4	Tree Fruit
700	C568738	2410102900	41.19	38	Tree Fruit
700	C568738	2410103000	1.29	0.3	Tree Fruit
700	C568738	2410103100	3.83	1	Tree Fruit
700	C568738	2410103200	1.44	0.3	Tree Fruit
700	C568738	2410103300	3.68	2	Tree Fruit
700	C568738	2410210200	38.48	6.5	Tree Fruit
700	C568738	2410410400	19.96	15	Tree Fruit
700	C568738	2410102500	2.29	1.66	Tree Fruit
701	C180638	1781801900	20.00	20	Tree Fruit
701	C180638	1781803100	12.50	8	Tree Fruit
702	ME70681	2760805800	5.00	2.5	Grapes, Berries, and Vine Fruit
703	C657608	1210620500	3.91	3.5	Tree Fruit
704	C663573	2760220400	5.00	5	Tree Fruit
704	C663573	2760220500	5.00	4	Tree Fruit
704	C663573	2760220600	5.00	4	Tree Fruit
704	C663573	2760220700	5.00	4	Tree Fruit
705	C182394	1014601800	2.68	2	Tree Fruit
706	W252639	2660530600	4.25	1.5	Tree Fruit
707	C182213	1271110500	2.54	2.54	Tree Fruit
708	C182663	1014700300	2.30	2	Tree Fruit

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709	C182529	1292910600	7.80	5	Tree Fruit
710	C181870	2813211700	8.50	3.3	Grapes, Berries, and Vine Fruit
712	C792208	1261803000	5.00	4	Tree Fruit
712	C792208	1260503300	8.00	5	Tree Fruit
712	C792208	1260505100	7.00	3	Tree Fruit
715	W254405	2411800300	6.90	3	Tree Fruit
716	W251716	2544001200	1.80	1	Field Grown Nursery or Floral
717	C182043	1820710500	2.75	2.25	Container Nursery
718	C402802	1274800400	8.90	4	Tree Fruit
719	C182624	3270114000	43.00	3	Grapes, Berries, and Vine Fruit
720	C738098	2770501200	9.50	8.5	Tree Fruit
721	W251891	1080421000	6.00	2	Tree Fruit
722	C420034	1015001100	3.00	1	Tree Fruit
725	C378338	1014601600	2.90	2	Tree Fruit
725	C378338	1014601700	2.70	2.7	Tree Fruit
726	C182253	96400000	10.00	6	Tree Fruit
727	0020972	1870422900	10.00	6	Tree Fruit
728	0020972	1870420300	10.00	10	Field Grown Nursery or Floral
729	0020972	1870423000	10.00	10	Field Grown Nursery or Floral
730	C182292	1054922700	5.20	4.5	Tree Fruit
731	H055317	2840707300	8.90	1.3	Grapes, Berries, and Vine Fruit
732	C571667	1821323200	10.40	8	Grapes, Berries, and Vine Fruit
734	C182276	1024704000	5.00	3	Tree Fruit
734	C182276	1034703100	5.00	3	Tree Fruit
735	C823685	1026305700	10.00	6	Container Nursery
736	C182037	1850421900	5.00	1	Tree Fruit
736	C182037	1850422000	5.70	5	Tree Fruit
737	C641840	1320200700	10.77	0	Tree Fruit
737	C641840	1320201600	32.46	22	Tree Fruit
737	C641840	1320202500	10.50	9.5	Tree Fruit
737	C641840	1320202800	59.30	30	Tree Fruit
737	C641840	1320202900	37.73	30	Tree Fruit
737	C641840	1320203700	10.00	0	Tree Fruit
737	C641840	1320204900	97.74	75	Tree Fruit
737	C641840	1320205000	43.12	40	Tree Fruit
737	C641840	1320205100	62.55	32	Tree Fruit
737	C641840	1320810100	18.84	17	Tree Fruit
737	C641840	1320810200	35.10	20	Tree Fruit
737	C641840	1320813700	8.30	8	Tree Fruit
737	C641840	1320813800	8.30	8	Tree Fruit
737	C641840	1320813900	11.03	9.03	Tree Fruit
737	C641840	1321200700	51.50	0	Tree Fruit
737	C641840	1322503900	8.18	8	Tree Fruit
737	C641840	1322504100	16.07	15	Tree Fruit
738	C765130	3870810900	5.15	3.5	Other
738	C765130	3870840200	2.54	2	Other
738	C765130	3870840300	2.23	1.55	Other
739	C805054	1722104000	5.00	5	Tree Fruit



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740	C182274	1271414900	15.75	11	Tree Fruit
741	C442904	1330100500	76.19	18	Grapes, Berries, and Vine Fruit
741	C442904	1110300200	25.32	2.5	Tree Fruit
741	C442904	1330100700	3.38	3.38	Tree Fruit
741	C442904	1330100800	10.00	6.5	Tree Fruit
741	C442904	1330100900	41.31	41.31	Tree Fruit
741	C442904	1331100600	100.00	40	Tree Fruit
741	C442904	1330100600	30.00	7.62	Tree Fruit
742	C926954	2410200900	8.40	8	Tree Fruit
744	C182421	2621900500	2.87	1	Tree Fruit
745	C759416	9227925000	2.90	2.1	Tree Fruit
746	C647618	2420800400	260.00	210	Tree Fruit
747	C182552	2840422200	4.00	1	Grapes, Berries, and Vine Fruit
748	C181888	4100302300	38.00	10	Grapes, Berries, and Vine Fruit
749	C710654	4023003600	3.16	2	Tree Fruit
750	C150240	1866010500	15.00	12	Tree Fruit
751	C180852	1332901800	4.00	4	Tree Fruit
754	C182436	1251332100	5.00	4	Field Grown Nursery or Floral
754	C182436	1251332200	5.00	3	Field Grown Nursery or Floral
754	C182436	1251332300	10.00	7	Field Grown Nursery or Floral
755	C182544	1863220600	2.50	1.5	Tree Fruit
756	C663167	1820761900	3.14	1.24	Greenhouse Crops
757	C736908	2780801700	30.90	12	Tree Fruit
758	C182400	1054911600	3.00	3	Tree Fruit
759	C182029	1213113100	2.00	2	Tree Fruit
759	C182029	1213113200	2.00	1.5	Tree Fruit
759	C182029	1213113300	3.80	2.5	Tree Fruit
760	C182337	1025800700	20.00	18	Tree Fruit
760	C182337	1025800800	10.00	8	Tree Fruit
760	C182337	1025800900	10.00	9	Tree Fruit
761	C182455	1292122000	5.00	2	Tree Fruit
762	C327892	1862905100	4.00	3	Greenhouse Crops
763	C182606	1271420200	8.00	6.6	Tree Fruit
764	C361308	2481001700	84.00	1	Row and Field Crops
764	C361308	2481101000	81.00	1	Row and Field Crops
765	C182287	1221800900	10.00	8	Tree Fruit
765	C182287	1221802700	3.00	3	Tree Fruit
765	C182287	1221802800	3.00	3	Tree Fruit
766	C182439	1290714800	5.00	5	Tree Fruit
768	C182626	1284500100	40.00	0.5	Tree Fruit
769	C182414	1213123100	3.25	2	Tree Fruit
770	C378335	1271511100	10.00	9	Tree Fruit
771	C182240	1220904300	2.50	2	Tree Fruit
771	C182240	1220904400	2.50	2	Tree Fruit
772	C371638	1027710400	6.00	6	Tree Fruit
774	ME96206	1851607300	6.00	5.5	Tree Fruit
775	C292078	2402100600	3.80	1	Tree Fruit
777	C182437	1100710200	11.00	8	Tree Fruit

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777	C182437	1100710400	11.00	5	Tree Fruit
777	C182437	1103500300	15.00	12	Tree Fruit
778	C990712	1252201400	2.10	0.07	Tree Fruit
779	C927178	2250103800	7.63	6	Tree Fruit
780	ME95032	1212010500	4.20	2	Tree Fruit
781	C182419	1291006000	4.70	2	Tree Fruit
782	8609300	2341522800	3.14	2	Tree Fruit
783	C182445	2224501700	1.50	1	Tree Fruit
784	C182323	1252313000	8.00	5.5	Tree Fruit
785	C844776	1272211000	9.00	9	Field Grown Nursery or Floral
785	C844776	1275300300	5.00	4	Field Grown Nursery or Floral
785	C844776	1275300200	20.00	10	Tree Fruit
786	C180851	1027410900	7.17	3.5	Container Nursery
786	C180851	1027411100	4.50	0.5	Container Nursery
786	C180851	1027411200	4.40	0.48	Container Nursery
787	C407068	1721404900	9.60	9.6	Tree Fruit
787	C407068	1721405600	7.00	7	Tree Fruit
788	C568236	7601960204	21.00	17	Tree Fruit
788	C568236	7601960205	17.00	17	Tree Fruit
790	C737014	1221003000	2.70	2	Row and Field Crops
790	C737014	1220905000	7.50	7.5	Tree Fruit
790	C737014	1220905100	5.00	3	Tree Fruit
791	C182041	1092702000	21.26	18	Tree Fruit
792	C749971	1270601100	10.00	10	Container Nursery
792	C749971	1270601200	10.00	10	Container Nursery
792	C749971	1270607900	20.00	20	Container Nursery
792	C749971	1270605200	17.00	17	Field Grown Nursery or Floral
792	C749971	1272212600	13.00	10	Field Grown Nursery or Floral
792	C749971	1272212700	10.00	10	Field Grown Nursery or Floral
792	C749971	1272908800	15.00	15	Field Grown Nursery or Floral
793	C182246	1283302900	2.57	1	Container Nursery
794	C534341	1260505300	12.00	9	Tree Fruit
795	C893027	2563143500	1.00	1	Container Nursery
796	C990198	1851124900	10.00	10	Tree Fruit
796	C990198	4523680809	14.00	14	Tree Fruit
796	C990198	8994555989	19.00	19	Tree Fruit
797	C181122	1012710300	5.16	3	Tree Fruit
797	C181122	1012713000	7.94	4	Tree Fruit
798	C724522	1220403000	5.00	4.5	Tree Fruit
798	C724522	1272902500	16.00	13.78	Tree Fruit
799	C182003	2871001600	48.00	3	Grapes, Berries, and Vine Fruit
800	6035000	1054102700	2.20	1	Tree Fruit
801	C772687	1281906800	10.14	8	Tree Fruit
802	C182487	1281804500	1.00	1	Field Grown Nursery or Floral
802	C182487	1281901300	3.50	3	Tree Fruit
802	C182487	1282402800	2.50	1	Tree Fruit
802	C182487	1285101400	4.50	2	Tree Fruit
803	C181871	7601708000	35.00	35	Tree Fruit

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804	C717845	1820140004	14.73	12	Row and Field Crops
805	C564076	2640428500	2.00	2	Container Nursery
805	C564076	2602130200	2.00	2	Field Grown Nursery or Floral
805	C564076	2602130700	2.00	2	Field Grown Nursery or Floral
805	C564076	6791001200	18.50	16	Field Grown Nursery or Floral
805	C564076	2640428600	2.50	2.5	Field Grown Nursery or Floral
805	C564076	2164101100	1.00	1	Greenhouse Crops
805	C564076	1260801500	5.00	4	Tree Fruit
806	C181886	1057801300	2.17	2.17	Tree Fruit
806	C181886	1057801400	2.21	2.21	Tree Fruit
806	C181886	1057801500	4.05	3	Tree Fruit
807	C556030	1020714000	8.50	8	Tree Fruit
808	H061987	1274901600	5.50	3	Tree Fruit
809	C919668	1082221500	4.00	3	Tree Fruit
810	C182296	1073008600	3.20	2.25	Tree Fruit
810	C182296	1293104700	3.79	2	Tree Fruit
810	C182296	1293104800	4.04	2	Tree Fruit
810	C182296	1293104900	4.34	4	Tree Fruit
810	C182296	1293105000	4.96	4.5	Tree Fruit
811	C361609	1691301600	2.25	0.5	Greenhouse Crops
812	W251751	2543921400	1.00	0.7	Greenhouse Crops
812	W251751	2543921500	1.00	0.7	Greenhouse Crops
813	C462531	2110102400	110.00	60	Row and Field Crops
814	C182468	1027112800	4.15	3.5	Tree Fruit
815	C805045	1284900400	36.77	35	Tree Fruit
815	C805045	1285000900	21.67	20	Tree Fruit
817	C181112	2831010400	12.25	1.99	Field Grown Nursery or Floral
818	C783533	2543520500	0.50	0.25	Other
819	C783533	2542700700	1.25	0.75	Container Nursery
820	C480794	1850723300	2.50	1.5	Field Grown Nursery or Floral
820	C480794	1851605800	43.00	41	Tree Fruit
821	C182647	1891212200	10.59	2	Grapes, Berries, and Vine Fruit
822	C181140	1941804400	10.00	10	Field Grown Nursery or Floral
823	C182703	1221005500	9.00	3.5	Tree Fruit
824	C182214	ACE1630100	3.00	2	Tree Fruit
825	C182660	1881804600	2.50	1	Tree Fruit
826	C182672	5992302100	5.13	2	Grapes, Berries, and Vine Fruit
827	C783533	2543511900	1.00	0.86	Field Grown Nursery or Floral
827	C783533	2542700800	1.40	1.2	Field Grown Nursery or Floral
827	C783533	2562425800	0.25	0.2	Field Grown Nursery or Floral
827	C783533	2544001000	1.80	1.6	Greenhouse Crops
827	C783533	2562425200	1.00	0.85	Other
828	C182491	1261806000	4.50	3.5	Tree Fruit
829	C182381	1333020800	10.22	3	Tree Fruit
829	C182381	1333021000	2.86	1.5	Tree Fruit
829	C182381	1333021100	2.67	1.5	Tree Fruit
829	C182381	1333021200	2.55	1.5	Tree Fruit
830	C182651	2402500300	78.00	0	Other

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
830	C182651	2401104900	103.89	100	Tree Fruit
830	C182651	2401115100	75.83	75	Tree Fruit
830	C182651	2401115700	1.00	1	Tree Fruit
830	C182651	2401115800	9.64	9	Tree Fruit
830	C182651	2401116100	9.78	9	Tree Fruit
830	C182651	2402410600	34.17	34	Tree Fruit
830	C182651	2402410800	28.70	28	Tree Fruit
831	C789203	2583501200	0.50	0.1	Container Nursery
831	C789203	2583504100	0.50	0.4	Container Nursery
832	C182668	1212021200	4.00	2.5	Grapes, Berries, and Vine Fruit
833	C182638	1274400600	4.00	3	Tree Fruit
834	C556018	1782210700	14.00	12	Tree Fruit
835	ME10660	1782210300	12.95	12	Tree Fruit
836	C182599	2791302600	4.65	1.5	Grapes, Berries, and Vine Fruit
837	C182614	1073704300	2.70	1.5	Tree Fruit
838	C568018	1821802200	19.40	14.55	Container Nursery
838	C568018	1821802300	17.58	13.2	Container Nursery
838	C568018	1876301100	17.00	12.75	Field Grown Nursery or Floral
839	C381681	1014900400	1.50	0	Tree Fruit
839	C381681	1014901100	4.00	4	Tree Fruit
839	C381681	1014901200	10.00	6	Tree Fruit
840	C180973	1810221300	0.90	0.5	Field Grown Nursery or Floral
840	C180973	1810221400	1.02	0.5	Field Grown Nursery or Floral
840	C180973	1812010800	8.00	2	Field Grown Nursery or Floral
840	C180973	1025600400	13.50	6	Field Grown Nursery or Floral
840	C180973	1282904000	32.00	10	Field Grown Nursery or Floral
840	C180973	1810221200	6.28	3	Field Grown Nursery or Floral
840	C180973	1812110100	10.00	5	Field Grown Nursery or Floral
840	C180973	1861231200	12.00	8	Field Grown Nursery or Floral
840	C180973	1332304900	5.00	2.5	Greenhouse Crops
841	1720050	1700510300	7.00	7	Tree Fruit
842	C182247	1082920300	27.80	14	Tree Fruit
843	C952990	1293901800	17.00	6	Tree Fruit
844	C443151	navy000000	40.00	40	Row and Field Crops
844	C443151	navy000000	18.00	18	Row and Field Crops
844	C443151	navy000000	10.00	10	Row and Field Crops
844	C443151	7601078600	2.50	1.5	Tree Fruit
844	C443151	7601079200	3.00	1.5	Tree Fruit
844	C443151	7601078700	6.33	3	Tree Fruit
846	C180842	1027201500	10.18	10.18	Container Nursery
846	C180842	1027201600	16.46	10	Container Nursery
846	C180842	1027210100	5.75	4	Container Nursery
846	C180842	1027210200	2.22	2	Container Nursery
846	C180842	1027210300	1.04	1	Container Nursery
846	C180842	1027210400	1.21	1	Container Nursery
846	C180842	1027210500	5.48	4	Container Nursery
846	C180842	1027200900	119.48	100	Container Nursery
846	C180842	1027201400	3.72	3.72	Field Grown Nursery or Floral

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
847	C182623	1083204400	7.00	6	Tree Fruit
848	C871122	1252312300	2.50	1.5	Field Grown Nursery or Floral
848	C871122	1252312400	4.00	3.5	Tree Fruit
848	C871122	1252312200	3.50	2.5	Tree Fruit
849	C657672	1051900400	20.00	17	Tree Fruit
849	C657672	1051902700	10.00	8	Tree Fruit
849	C657672	1881605300	6.50	3.5	Tree Fruit
849	C657672	1881605400	17.00	16.5	Tree Fruit
850	C777753	2770414200	7.80	6	Tree Fruit
850	C777753	2770420700	15.26	12	Tree Fruit
851	C182495	1071511100	4.00	2.8	Tree Fruit
851	C182495	1281804700	17.20	16	Tree Fruit
851	C182495	1281804800	12.70	12	Tree Fruit
851	C182495	1281804900	4.10	3.8	Tree Fruit
851	C182495	1282121900	8.40	5	Tree Fruit
851	C182495	1282122000	9.20	5	Tree Fruit
851	C182495	1282122100	10.30	5	Tree Fruit
851	C182495	1282122200	16.60	9	Tree Fruit
851	C182495	1282710400	48.00	19	Tree Fruit
851	C182495	1282710500	58.00	23	Tree Fruit
851	C182495	1282711000	1.50	1	Tree Fruit
851	C182495	1282711100	1.30	1	Tree Fruit
851	C182495	1282711700	0.87	0.4	Tree Fruit
851	C182495	1282711800	5.00	3	Tree Fruit
851	C182495	1282713100	84.00	45	Tree Fruit
851	C182495	1282713200	0.61	0.3	Tree Fruit
851	C182495	1284600300	2.00	1	Tree Fruit
851	C182495	1285000500	18.00	17	Tree Fruit
851	C182495	1285000600	27.40	26	Tree Fruit
851	C182495	1293906600	5.00	4.2	Tree Fruit
851	C182495	1323200800	22.00	8	Tree Fruit
851	C182495	1850412700	2.00	1.7	Tree Fruit
851	C182495	2411202000	13.00	9	Tree Fruit
851	C182495	2411202100	13.00	9	Tree Fruit
851	C182495	2411202200	24.80	16	Tree Fruit
851	C182495	2411202300	12.40	8	Tree Fruit
851	C182495	2411202600	10.60	7	Tree Fruit
851	C182495	2411202700	12.50	8	Tree Fruit
851	C182495	2411202800	7.80	5	Tree Fruit
851	C182495	2411202900	9.00	6	Tree Fruit
852	C182441	1281220600	6.70	6.7	Tree Fruit
853	C846483	1851011500	9.83	0	Other
853	C846483	1851010200	39.90	30	Tree Fruit
853	C846483	1851010300	13.80	10	Tree Fruit
853	C846483	1851010400	18.06	15	Tree Fruit
853	C846483	1851010500	8.20	8	Tree Fruit
853	C846483	1851011200	12.04	12	Tree Fruit
854	C695947	1280710300	20.74	16.5	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
854	C695947	1280711600	20.94	20.94	Tree Fruit
854	C695947	1281220200	11.00	10	Tree Fruit
854	C695947	1281701400	30.00	26	Tree Fruit
854	C695947	1281701500	30.00	29	Tree Fruit
854	C695947	1283303700	40.00	33	Tree Fruit
855	C182503	1891700900	0.98	0.25	Container Nursery
856	C182713	6560600800	279.00	10	Grapes, Berries, and Vine Fruit
857	C181876	1013613500	6.00	4	Tree Fruit
857	C181876	1013613600	10.00	10	Tree Fruit
857	C181876	1013614800	10.00	6	Tree Fruit
858	0002489	1283800600	25.00	20	Tree Fruit
858	0002489	1283800700	9.00	7	Tree Fruit
859	C182237	1271110300	5.00	2	Tree Fruit
860	2821370	1870415300	9.50	4	Tree Fruit
861	C182676	1292122600	5.00	1.5	Tree Fruit
862	w254450	4815000900	0.55	0.5	Other
863	C328049	1333511500	2.50	2	Container Nursery
863	C328049	1880901100	4.00	3.5	Container Nursery
863	C328049	1883321800	2.50	2	Container Nursery
863	C328049	1890401800	6.00	5	Container Nursery
864	C182640	1057600100	2.50	1	Tree Fruit
865	C402701	1015510700	15.99	10	Tree Fruit
866	C745615	1081007500	41.00	41	Tree Fruit
866	C745615	1083201400	19.12	41	Tree Fruit
866	C745615	1083202600	7.63	41	Tree Fruit
866	C745615	1083205300	18.90	41	Tree Fruit
867	C182673	1073600300	4.00	0.5	Greenhouse Crops
869	C534022	1270713300	21.00	11	Tree Fruit
869	C534022	1272711500	4.70	4	Tree Fruit
870	C182492	1291624700	4.03	4.03	Tree Fruit
870	C182492	1291624800	4.00	2	Tree Fruit
870	C182492	1291624900	5.00	5	Tree Fruit
870	C182492	1291625000	5.86	2.75	Tree Fruit
870	C182492	1291625100	8.50	0	Tree Fruit
871	C772964	1591703200	8.00	5	Greenhouse Crops
871	C772964	1591801900	5.00	3.5	Greenhouse Crops
872	C182233	2660920700	2.10	0.4	Tree Fruit
873	C118369	1092331200	14.90	5	Tree Fruit
874	C182646	5180105200	1.00	1	Grapes, Berries, and Vine Fruit
875	C182304	1281703100	3.00	13	Tree Fruit
876	C182536	1054810400	3.78	2.78	Tree Fruit
877	C181187	1283304000	5.22	3.5	Tree Fruit
877	C181187	1283403300	5.11	4.5	Tree Fruit
877	C181187	1283403400	5.17	4	Tree Fruit
878	C846007	1322802200	3.31	3	Tree Fruit
879	C846007	1322801500	31.97	8	Tree Fruit
880	C905704	1890210900	45.00	20	Tree Fruit
880	C905704	1891300200	40.00	20	Tree Fruit

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882	C182679	1057600300	2.50	1.25	Tree Fruit
883	C772741	2502710500	8.00	1	Grapes, Berries, and Vine Fruit
883	C772741	2502708800	9.00	3	Tree Fruit
883	C772741	2502710900	8.00	2	Tree Fruit
884	C749899	1030103600	10.00	6.5	Tree Fruit
884	C749899	1030106400	5.00	4	Tree Fruit
884	C749899	1030106500	5.00	4.5	Tree Fruit
885	C182654	2500105800	7.33	1	Tree Fruit
886	C749971	1221802000	4.90	4.9	Tree Fruit
887	8609300	1333010900	20.00	15	Tree Fruit
888	C657877	2543510500	3.00	0.75	Field Grown Nursery or Floral
888	C657877	2543510300	1.50	0.25	Field Grown Nursery or Floral
889	C990389	1092600900	8.00	1	Field Grown Nursery or Floral
890	W254587	1330600300	8.00	6	Tree Fruit
891	C990389	1092601100	90.00	8	Field Grown Nursery or Floral
891	C990389	1092601300	7.00	1.5	Field Grown Nursery or Floral
891	C990389	1092601400	86.00	38	Field Grown Nursery or Floral
891	C990389	1093520100	106.00	28	Field Grown Nursery or Floral
892	C436532	1271512000	4.75	4	Tree Fruit
894	C180641	1292703400	2.50	2.5	Tree Fruit
894	C180641	1292703500	2.50	1.5	Tree Fruit
894	C180641	1292706900	8.00	3	Tree Fruit
894	C180641	1292707000	8.00	1.5	Tree Fruit
895	C182737	2760221300	2.78	1	Grapes, Berries, and Vine Fruit
896	C182312	2241904000	3.50	2.5	Tree Fruit
898	1527125	1052205700	1.58	1.5	Tree Fruit
898	1527125	1052205800	1.17	1	Tree Fruit
898	1527125	1052205900	1.22	1	Tree Fruit
898	1527125	1052206000	1.28	1	Tree Fruit
898	1527125	1052206100	1.83	1	Tree Fruit
898	1527125	1052206200	1.01	1	Tree Fruit
898	1527125	1052206300	1.14	1	Tree Fruit
898	1527125	1052206400	1.27	1	Tree Fruit
898	1527125	1052206500	1.00	1	Tree Fruit
898	1527125	1052206600	2.02	1.41	Tree Fruit
898	1527125	1052206700	2.02	2	Tree Fruit
898	1527125	1052206800	1.15	1.06	Tree Fruit
898	1527125	1052207000	2.18	20.3	Tree Fruit
899	C546595	1252325200	32.80	32.8	Tree Fruit
899	C546595	1270611400	2.50	2	Tree Fruit
899	C546595	1270724300	3.11	2.5	Tree Fruit
899	C546595	1270724400	3.11	2.5	Tree Fruit
899	C546595	1270724500	3.11	2.5	Tree Fruit
900	C182655	1290801200	21.20	20	Tree Fruit
900	C182655	1851606500	9.20	9	Tree Fruit
901	C182677	1322800600	11.72	9	Tree Fruit
902	C741193	3623900000	5.00	4	Tree Fruit
903	C546424	1691400600	3.34	1	Greenhouse Crops

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
903	C546424	1691401200	6.32	1	Greenhouse Crops
904	C182428	1270607800	3.00	2	Tree Fruit
905	C180686	3960411900	4.00	3.5	Container Nursery
905	C180686	3960412200	3.00	2.5	Container Nursery
906	6035000	1027112900	2.00	1.5	Tree Fruit
907	3306500	1333701100	5.40	2	Tree Fruit
908	4374663	1290801300	10.00	9	Tree Fruit
908	4374663	1301802100	10.50	9	Tree Fruit
908	4374663	1333123800	2.19	2.19	Tree Fruit
908	4374663	1333123900	2.35	2.35	Tree Fruit
908	4374663	1333124000	4.30	3.85	Tree Fruit
908	4374663	1333124100	3.88	3.5	Tree Fruit
908	4374663	1880822400	10.75	9.5	Tree Fruit
908	4374663	1880824600	10.65	10	Tree Fruit
908	4374663	1881300400	19.00	15	Tree Fruit
909	C328003	1025202900	20.10	6	Tree Fruit
909	C328003	1025210100	5.00	3	Tree Fruit
909	C328003	1026104900	6.96	3	Tree Fruit
910	C182451	1851602400	1.50	1	Tree Fruit
910	C182451	1851606700	10.00	10	Tree Fruit
910	C182451	1851607500	5.00	4.5	Tree Fruit
911	C820391	1061300400	16.47	16	Tree Fruit
911	C820391	1212301000	4.09	4	Tree Fruit
911	C820391	1220307100	7.01	6	Tree Fruit
911	C820391	1220307200	7.05	6	Tree Fruit
912	9824200	1722106300	4.00	3.8	Tree Fruit
913	C182704	1111205200	1.00	0	Other
913	C182704	1111201300	5.00	5	Tree Fruit
913	C182704	1111205100	10.00	10	Tree Fruit
913	C182704	1321902100	7.64	7.64	Tree Fruit
913	C182704	1321902200	7.50	7.5	Tree Fruit
913	C182704	1330503200	23.00	21	Tree Fruit
913	C182704	1333612500	2.50	1	Tree Fruit
913	C182704	1333612600	7.50	7	Tree Fruit
914	C292602	1082230600	4.70	4.7	Tree Fruit
914	C292602	1082230700	13.00	13	Tree Fruit
915	C645645	2371001700	11.00	9	Tree Fruit
916	C777812	1743003100	3.00	1	Greenhouse Crops
917	C182662	1820607300	5.00	4	Container Nursery
917	C182662	1820607400	5.00	4	Container Nursery
917	C182662	1822800100	21.00	12	Container Nursery
917	C182662	1780808700	4.00	1.5	Tree Fruit
918	C182519	1282120700	11.00	7	Tree Fruit
919	C777710	7601284700	49.00	7.4	Field Grown Nursery or Floral
919	C777710	5020400500	116.00	0	Other
920	C739429	1083202300	19.27	18.5	Tree Fruit
920	C739429	1251001700	64.81	64.81	Tree Fruit
920	C739429	1251001900	30.83	30.83	Tree Fruit



<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
920	C739429	1272004200	9.93	7.25	Tree Fruit
920	C739429	1272712300	11.69	8	Tree Fruit
920	C739429	1292707100	2.81	2.81	Tree Fruit
920	C739429	1292707200	2.35	2.35	Tree Fruit
920	C739429	1292707300	2.22	2.22	Tree Fruit
920	C739429	1881200900	28.33	28.33	Tree Fruit
920	C739429	1881201000	39.85	29.67	Tree Fruit
920	C739429	1881201200	10.87	10.87	Tree Fruit
920	C739429	1881702300	8.31	8.31	Tree Fruit
920	C739429	1881702400	7.03	7.03	Tree Fruit
922	C663634	1281220400	8.00	8	Tree Fruit
922	C663634	1284103000	20.00	18	Tree Fruit
922	C663634	1284103100	10.00	9	Tree Fruit
922	C663634	1285210600	16.00	12.75	Tree Fruit
923	C990362	1271420100	8.00	6	Container Nursery
923	C990362	1103200600	30.00	20	Tree Fruit
923	C990362	1260303800	2.58	2	Tree Fruit
923	C990362	1260303900	2.76	2	Tree Fruit
923	C990362	1260304000	4.58	4.5	Tree Fruit
923	C990362	1262102400	8.90	5	Tree Fruit
923	C990362	1271421800	12.60	8	Tree Fruit
923	C990362	1271421900	12.49	8	Tree Fruit
923	C990362	1271422000	8.87	5	Tree Fruit
923	C990362	1271422100	6.79	5	Tree Fruit
923	C990362	1272002100	7.64	5	Tree Fruit
923	C990362	1272002200	7.88	5	Tree Fruit
923	C990362	1272222600	14.96	10	Tree Fruit
923	C990362	1292110200	25.92	20	Tree Fruit
924	9824200	1291006100	9.00	8	Tree Fruit
925	C544991	1081611900	3.11	1	Tree Fruit
926	C846847	1260800500	8.02	6.81	Tree Fruit
926	C846847	1260800600	15.58	13.24	Tree Fruit
926	C846847	1260806300	14.28	12.13	Tree Fruit
926	C846847	1270714000	7.22	3.61	Tree Fruit
926	C846847	1272900500	38.90	36.23	Tree Fruit
926	C846847	1272903400	3.44	2.06	Tree Fruit
926	C846847	1272903500	2.50	1.25	Tree Fruit
926	C846847	1272903600	2.96	1.77	Tree Fruit
926	C846847	1272907300	9.81	9.5	Tree Fruit
926	C846847	1272907400	9.81	9.5	Tree Fruit
926	C846847	1272907500	19.62	18.45	Tree Fruit
926	C846847	1272907600	4.78	4.06	Tree Fruit
926	C846847	1272907900	8.99	8.09	Tree Fruit
926	C846847	1272908300	2.34	1.17	Tree Fruit
926	C846847	1272908400	3.19	3.19	Tree Fruit
926	C846847	1272908500	2.18	2.18	Tree Fruit
926	C846847	1272908600	2.11	2.11	Tree Fruit
926	C846847	1272908700	2.74	2.74	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
926	C846847	1273400900	9.96	7.9	Tree Fruit
926	C846847	1273500600	13.00	10.4	Tree Fruit
926	C846847	1291110400	2.98	2.83	Tree Fruit
926	C846847	1291114000	27.09	25.73	Tree Fruit
926	C846847	1293003100	4.06	3.65	Tree Fruit
926	C846847	1293003200	2.98	2.68	Tree Fruit
926	C846847	1293003300	2.64	2.37	Tree Fruit
926	C846847	1293003400	11.51	10.93	Tree Fruit
926	C846847	1272712800	54.30	46.15	Tree Fruit
926	C846847	1290105700	25.94	20.75	Tree Fruit
926	C846847	1290106100	43.12	38.8	Tree Fruit
926	C846847	1293003500	20.01	16.4	Tree Fruit
927	C531874	1211512800	3.00	3	Row and Field Crops
927	C531874	1211513200	10.00	7	Row and Field Crops
928	C182522	2760810900	8.50	2	Tree Fruit
929	C181620	1021501000	5.00	5	Tree Fruit
929	C181620	1021501300	19.42	10	Tree Fruit
930	C846477	1221800300	7.00	6.5	Tree Fruit
930	C846477	1221801100	4.00	3	Tree Fruit
930	C846477	1222801500	3.80	3	Tree Fruit
930	C846477	1222801700	2.60	2	Tree Fruit
930	C846477	1222801800	2.50	1	Tree Fruit
930	C846477	1222802000	2.50	2.2	Tree Fruit
930	C846477	1222802500	2.50	1.8	Tree Fruit
931	C733674	1282000800	40.00	8	Tree Fruit
931	C733674	1282003400	8.33	8.33	Tree Fruit
931	C733674	1282003500	8.71	7.5	Tree Fruit
931	C733674	1282010600	46.53	41	Tree Fruit
931	C733674	1283503000	36.51	31	Tree Fruit
931	C733674	1282010100	12.51	12	Tree Fruit
931	C733674	1282001000	80.00	26	Tree Fruit
931	C733674	1282003600	129.99	120	Tree Fruit
931	C733674	1282003300	12.57	9.67	Tree Fruit
932	C932756	1270601600	6.00	6	Container Nursery
932	C932756	1270713800	50.00	50	Container Nursery
932	C932756	1272901200	8.00	8	Container Nursery
932	C932756	1701615100	9.00	7	Container Nursery
932	C932756	1701615200	2.60	2.6	Container Nursery
932	C932756	2190410400	3.00	2	Container Nursery
932	C932756	2190423100	5.00	5	Container Nursery
932	C932756	2210214300	7.00	5	Container Nursery
932	C932756	2210215200	25.00	15	Container Nursery
933	C737018	1023610500	8.00	2	Field Grown Nursery or Floral
933	C737018	1093104500	9.00	2	Field Grown Nursery or Floral
935	C544906	2760911900	10.00	8	Tree Fruit
935	C544906	2760912600	8.36	6	Tree Fruit
936	C645663	1083902900	45.00	45	Tree Fruit
936	C645663	1111901109	7.50	7.5	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
936	C645663	1251000600	80.00	80	Tree Fruit
936	C645663	1251000800	33.67	33.67	Tree Fruit
936	C645663	1251000900	4.81	4.81	Tree Fruit
936	C645663	1252320200	19.33	19.33	Tree Fruit
936	C645663	1252322000	38.69	38.69	Tree Fruit
936	C645663	1252323400	16.97	16.97	Tree Fruit
936	C645663	1275123300	8.00	8	Tree Fruit
936	C645663	1280700600	68.37	68.37	Tree Fruit
936	C645663	1281502000	15.00	15	Tree Fruit
936	C645663	1281510500	12.00	12	Tree Fruit
936	C645663	1281603300	16.00	16	Tree Fruit
936	C645663	1282110200	10.00	10	Tree Fruit
936	C645663	1282110300	8.00	8	Tree Fruit
936	C645663	1282110500	8.00	8	Tree Fruit
936	C645663	1282112300	8.00	8	Tree Fruit
936	C645663	1282122600	5.00	5	Tree Fruit
936	C645663	1282713400	6.36	6	Tree Fruit
936	C645663	1282714500	4.31	4.31	Tree Fruit
936	C645663	1282714600	2.01	2	Tree Fruit
936	C645663	1294210800	51.68	50	Tree Fruit
936	C645663	1311500500	32.20	32.2	Tree Fruit
936	C645663	1311500600	40.00	40	Tree Fruit
936	C645663	1311500700	7.00	7	Tree Fruit
936	C645663	1311500800	10.00	10	Tree Fruit
936	C645663	1311501100	37.10	25	Tree Fruit
936	C645663	1311502300	10.00	10	Tree Fruit
936	C645663	1311502400	10.00	10	Tree Fruit
936	C645663	1311502500	10.00	10	Tree Fruit
936	C645663	1311600700	20.00	20	Tree Fruit
936	C645663	1311600800	20.00	20	Tree Fruit
936	C645663	1311602300	20.00	20	Tree Fruit
936	C645663	1311602600	11.95	11.95	Tree Fruit
936	C645663	1321500330	49.14	49	Tree Fruit
936	C645663	1321503100	46.00	46	Tree Fruit
936	C645663	1321503200	48.76	48.76	Tree Fruit
936	C645663	1321603000	40.61	40	Tree Fruit
936	C645663	1323201500	10.00	10	Tree Fruit
936	C645663	1330204200	12.00	11	Tree Fruit
936	C645663	1330204400	12.00	11	Tree Fruit
936	C645663	1661402700	25.34	25.34	Tree Fruit
936	C645663	2410402400	0.50	0.5	Tree Fruit
938	C182580	1281610700	14.80	14.8	Tree Fruit
938	C182580	1281610800	2.41	2.41	Tree Fruit
938	C182580	1281610900	16.13	16.13	Tree Fruit
938	C182580	1281611000	0.40	0.4	Tree Fruit
938	C182580	1281611100	14.78	14.78	Tree Fruit
938	C182580	1281611200	1.93	1.93	Tree Fruit
938	C182580	1281611300	1.63	1.63	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
938	C182580	1281611400	7.37	0	Tree Fruit
938	C182580	1281611500	0.89	0.89	Tree Fruit
938	C182580	1281801100	19.97	19.97	Tree Fruit
938	C182580	1281803100	4.81	0	Tree Fruit
938	C182580	1281803900	3.44	0	Tree Fruit
938	C182580	1281805000	15.99	15.99	Tree Fruit
938	C182580	1900800800	2.44	1	Tree Fruit
938	C182580	1900801100	43.14	38	Tree Fruit
938	C182580	1900802700	34.65	21	Tree Fruit
939	W251899	6461001700	10.00	3	Row and Field Crops
939	W251899	6461001800	10.00	9	Row and Field Crops
939	W251899	6461002000	19.50	15	Row and Field Crops
940	C182531	2770415600	19.50	13	Tree Fruit
941	C182559	6511201800	10.00	7	Row and Field Crops
941	C182559	6540111100	12.00	4	Row and Field Crops
941	C182559	6540112700	8.00	4	Row and Field Crops
942	C182675	1292912400	1.00	1	Tree Fruit
943	C756938	3981401500	118.89	90	Tree Fruit
943	C756938	3981700700	25.63	10	Tree Fruit
943	C756938	4010400500	430.04	370	Tree Fruit
944	C182340	1294002500	5.00	4.5	Tree Fruit
945	C292051	1057711000	3.50	3.5	Tree Fruit
946	C571677	1851606900	16.00	5	Tree Fruit
947	C204649	1281704100	3.00	3	Tree Fruit
948	C180825	1285000800	66.00	45	Tree Fruit
949	C292501	1280710600	14.43	14.43	Tree Fruit
949	C292501	1280710700	20.57	20.57	Tree Fruit
949	C292501	1280710800	5.09	5.09	Tree Fruit
949	C292501	1281111300	8.03	8.03	Tree Fruit
950	C719651	1111901100	5.00	5	Tree Fruit
950	C719651	1310201700	4.00	4	Tree Fruit
950	C719651	1310400200	5.00	5	Tree Fruit
950	C719651	9011001100	3.50	3.5	Tree Fruit
951	C645627	1074002300	10.00	8	Tree Fruit
952	5199950	1290410700	7.00	5	Tree Fruit
953	C182613	1282121100	82.15	49	Tree Fruit
954	C661850	1264800300	4.00	3	Tree Fruit
955	C943903	1026006600	5.75	5	Tree Fruit
956	W251455	1073802400	13.70	12	Tree Fruit
956	W251455	1073802500	7.00	6	Tree Fruit
957	C880124	1021011700	31.00	31	Field Grown Nursery or Floral
957	C880124	1021011800	20.00	5	Field Grown Nursery or Floral
957	C880124	1021011900	20.00	1	Field Grown Nursery or Floral
957	C880124	1057800100	4.50	1	Field Grown Nursery or Floral
958	C545884	1850105200	10.00	9	Tree Fruit
959	C182573	1220403800	2.50	1.75	Tree Fruit
960	W252827	2670511100	1.00	1	Grapes, Berries, and Vine Fruit
961	C733974	1320607100	2.00	1.5	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
962	C181170	2401423900	25.31	3.5	Tree Fruit
963	C182461	1102204300	12.20	6	Tree Fruit
964	C823399	1251504400	30.00	5	Field Grown Nursery or Floral
965	C182769	1301701800	186.00	144	Tree Fruit
966	W255419	1851604300	7.00	3.5	Tree Fruit
967	C745630	1252323800	5.00	5	Tree Fruit
967	C745630	1252323900	25.00	17	Tree Fruit
967	C745630	6791400500	19.33	19	Tree Fruit
968	W255276	9293200024	5.00	4	Grapes, Berries, and Vine Fruit
969	C657687	0000004A01	190.00	190	Field Grown Nursery or Floral
970	C182745	1063122200	1.24	0.62	Tree Fruit
970	C182745	1063122300	1.24	0.62	Tree Fruit
971	c182793	1321504500	4.65	2.5	Tree Fruit
972	A064282	9313000101	10.00	8.5	Tree Fruit
973	C631319	9291600047	6.30	4	Grapes, Berries, and Vine Fruit
974	C182591	2410403100	3.20	2	Tree Fruit
975	c182766	2783612300	2.50	1	Grapes, Berries, and Vine Fruit
976	C637114	1070201100	1.10	0.5	Tree Fruit
976	C637114	1070206600	10.30	8.5	Tree Fruit
977	C182827	2171400400	1.50	1	Tree Fruit
978	W250504	2761211000	8.00	3	Grapes, Berries, and Vine Fruit
979	W254569	1333012700	1.10	0.5	Tree Fruit
979	W254569	1333012800	3.84	1.5	Tree Fruit
980	c182831	1042722100	1.20	1	Tree Fruit
980	c182831	1042722200	1.20	1	Tree Fruit
981	C645456	1290604300	17.50	15	Tree Fruit
981	C645456	1290608000	47.50	13	Tree Fruit
982	C182611	2811831300	4.80	2	Tree Fruit
983	C717806	1261701300	40.00	5	Greenhouse Crops
983	C717806	1220307500	24.22	24.22	Row and Field Crops
983	C717806	1220307600	4.73	4.73	Row and Field Crops
983	C717806	1221004700	52.54	46	Row and Field Crops
983	C717806	1221300300	49.17	32	Row and Field Crops
983	C717806	1221300400	1.07	1.07	Row and Field Crops
983	C717806	1221301000	25.87	25.87	Row and Field Crops
983	C717806	1221301200	16.81	16.81	Row and Field Crops
983	C717806	1221302200	39.02	39.02	Row and Field Crops
983	C717806	1221302300	181.47	181.47	Row and Field Crops
983	C717806	1221302400	17.54	17.54	Row and Field Crops
983	C717806	1221302700	20.10	20.1	Row and Field Crops
983	C717806	1221303100	92.39	55.13	Row and Field Crops
983	C717806	1223100500	38.33	38.33	Row and Field Crops
983	C717806	1241503200	637.87	49	Row and Field Crops
983	C717806	1251314800	328.63	30	Row and Field Crops
983	C717806	1251314900	35.65	9.5	Row and Field Crops
983	C717806	1261707900	53.17	26	Row and Field Crops
983	C717806	1263201200	76.24	29	Row and Field Crops
983	C717806	1272305900	117.50	10	Row and Field Crops

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
983	C717806	1272710200	36.41	36.41	Row and Field Crops
983	C717806	1571506000	23.51	13	Row and Field Crops
983	C717806	7601851200	9.20	9.2	Row and Field Crops
983	C717806	7601851500	77.58	69.8	Row and Field Crops
983	C717806	7602112100	52.54	50	Row and Field Crops
983	C717806	7602112200	320.00	216	Row and Field Crops
984	C733670	1851606000	29.00	24	Tree Fruit
985	C182786	1290802500	20.00	10	Tree Fruit
986	C182225	2224500500	6.00	6	Tree Fruit
987	C182744	1021052900	8.00	5	Tree Fruit
988	c182749	1861405800	3.00	2	Tree Fruit
989	A032354	1291113900	5.60	2.5	Tree Fruit
990	c755068	1213222100	4.87	1	Greenhouse Crops
991	C180814	1866014600	3.04	2	Tree Fruit
992	W255345	9313000112	9.74	6	Tree Fruit
993	C725856	1062721400	1.24	1.07	Container Nursery
993	C725856	1062721500	1.06	0.92	Container Nursery
993	C725856	1062721600	1.06	0.92	Container Nursery
993	C725856	1062721700	1.05	0.91	Container Nursery
993	C725856	1062721800	1.00	0.87	Container Nursery
993	C725856	1062721900	1.11	0.96	Container Nursery
993	C725856	1062722000	1.22	1.06	Container Nursery
993	C725856	1062722100	1.40	1.21	Container Nursery
993	C725856	1062722200	1.12	0.97	Container Nursery
993	C725856	1062722300	1.11	0.96	Container Nursery
993	C725856	1062722400	1.21	1.05	Container Nursery
993	C725856	1062722500	1.13	0.98	Container Nursery
993	C725856	1062800300	6.49	3.5	Container Nursery
994	JB0000	1882407200	5.20	2	Tree Fruit
995	C773086	2591302900	2.50	1	Greenhouse Crops
996	C182776	2771005200	12.40	11	Tree Fruit
997	W254576	1015100600	4.00	2	Tree Fruit
998	W255262	1862106100	5.00	4	Tree Fruit
999	H042042	1850109500	5.76	2.5	Tree Fruit
1001	C182682	1861405000	5.00	1	Tree Fruit
1002	c182771	1264801400	2.78	1.75	Tree Fruit
1003	C568453	1014601500	5.01	3	Tree Fruit
1004	C646194	1820740900	4.40	2.5	Greenhouse Crops
1004	C646194	1820741100	9.60	6	Greenhouse Crops
1005	C182816	1026801600	6.60	4.5	Tree Fruit
1006	C181850	1294101000	4.00	1	Row and Field Crops
1007	C182409	2221010300	19.62	8	Tree Fruit
1007	C182409	2221010500	18.74	8	Tree Fruit
1007	C182409	2320130400	16.45	10	Tree Fruit
1007	C182409	2325000500	10.86	6	Tree Fruit
1007	C182409	2325000900	23.00	12	Tree Fruit
1007	C182409	2325001100	0.91	0	Tree Fruit
1008	C223149	2771103100	8.26	2	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1009	C182322	2401105000	26.51	26	Tree Fruit
1009	C182322	2401105100	22.85	22	Tree Fruit
1009	C182322	2401115300	12.80	12.5	Tree Fruit
1010	C182693	2770421700	8.00	3	Tree Fruit
1011	W254487	1051807100	9.70	5	Field Grown Nursery or Floral
1012	W255346	9313000079	10.00	6	Tree Fruit
1013	W255145	1333022000	13.90	5	Tree Fruit
1014	C182627	2830315900	2.00	1	Grapes, Berries, and Vine Fruit
1014	C182627	2830316000	2.00	1	Tree Fruit
1014	C182627	2830315200	2.00	2	Tree Fruit
1015	ME89524	1690902500	4.00	2	Field Grown Nursery or Floral
1016	C182823	2224401000	1.50	1	Tree Fruit
1017	C182426	1012905600	5.00	5	Tree Fruit
1017	C182426	1012905700	4.66	4	Tree Fruit
1017	C182426	9330600247	20.00	18	Tree Fruit
1018	0552621	1292912100	37.05	37.05	Tree Fruit
1020	C182824	1292910300	8.00	7	Tree Fruit
1021	C181202	1875403500	30.00	26	Tree Fruit
1022	C733944	1131400300	196.70	40	Row and Field Crops
1023	C182830	1280911000	3.30	3	Tree Fruit
1024	C182805	1292703300	11.13	5.3	Tree Fruit
1025	C182804	1853512100	2.50	1	Tree Fruit
1026	C181827	8217201400	4.88	2.1	Grapes, Berries, and Vine Fruit
1027	C182652	2703501200	1.00	1	Tree Fruit
1027	C182652	2703501400	1.25	1	Tree Fruit
1029	C182837	1866020400	5.82	3	Tree Fruit
1030	0020962	1291007500	58.00	45	Tree Fruit
1030	0020962	1291007600	45.00	20	Tree Fruit
1030	0020962	1291007700	20.00	5	Tree Fruit
1031	C182767	1281120300	2.59	2	Tree Fruit
1032	C182767	1284300300	10.70	8	Tree Fruit
1033	C182767	1281120400	28.48	23	Tree Fruit
1034	C182767	1284300400	16.07	10	Tree Fruit
1035	C182767	1284302400	15.50	10	Tree Fruit
1036	C182767	1285001800	32.29	24	Tree Fruit
1037	C182639	2761003700	6.00	6	Tree Fruit
1037	C182639	2761003500	6.00	6	Tree Fruit
1038	C182836	1743002700	10.00	9	Tree Fruit
1039	C182308	1274102000	5.33	5	Tree Fruit
1040	C665685	1561106700	1.00	1	Container Nursery
1040	C665685	2561711900	1.00	1	Container Nursery
1041	0399700	1290402900	14.08	8	Tree Fruit
1041	0399700	1290410900	22.17	10	Tree Fruit
1042	C182724	1870421400	7.00	4	Tree Fruit
1043	C182574	2642401800	4.30	1.5	Tree Fruit
1044	C181978	1284603200	4.86	4	Tree Fruit
1045	C180755	1024202100	5.00	4	Container Nursery
1048	C182256	1241830200	7.80	3.5	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1049	C182521	2771012000	8.69	4.5	Tree Fruit
1050	C182796	1890320500	5.50	1	Tree Fruit
1051	C182748	1881501000	19.11	8	Tree Fruit
1052	C181193	1851507600	2.96	1	Tree Fruit
1053	C777784	2370705100	2.00	2	Tree Fruit
1054	C364847	1272906000	3.59	2	Tree Fruit
1055	C182434	2830410400	1.00	1	Container Nursery
1057	C182517	1293107100	5.60	3	Tree Fruit
1058	C182608	1274903600	4.00	3	Tree Fruit
1059	C180938	1263311600	2.00	2	Tree Fruit
1059	C180938	1263311700	4.00	4	Tree Fruit
1059	C180938	1702301300	1.89	1	Tree Fruit
1059	C180938	1702303600	3.00	3	Tree Fruit
1059	C180938	1702303900	2.00	2	Tree Fruit
1060	C182825	2241905500	3.23	2.23	Tree Fruit
1062	w253963	2870310700	8.00	8	Grapes, Berries, and Vine Fruit
1063	C182584	1292706400	2.50	1.5	Tree Fruit
1064	C182514	1851810900	4.40	3.5	Field Grown Nursery or Floral
1064	C182514	1851810500	4.10	3.5	Tree Fruit
1066	C182766-02	1294301700	2.00	1	Tree Fruit
1067	C182488	1274301100	3.84	1.5	Tree Fruit
1068	C182385	1110801200	5.78	5	Tree Fruit
1068	C182385	1110801300	12.60	12	Tree Fruit
1069	C182680	2224501600	2.00	1	Tree Fruit
1070	6616975	1892712200	15.00	7.5	Tree Fruit
1071	C182278	2651701100	9.00	4	Tree Fruit
1071	C182278	2652600500	4.00	2.5	Tree Fruit
1072	W255156	1290411000	14.00	14	Tree Fruit
1073	N250759	1292707500	6.00	5	Row and Field Crops
1073	N250759	1292707600	4.00	2	Row and Field Crops
1074	C545318	1027601800	9.00	8	Tree Fruit
1074	C545318	1027801700	3.00	1	Tree Fruit
1074	C545318	1272509300	6.00	5	Tree Fruit
1074	C545318	1272509400	6.00	6	Tree Fruit
1075	C182478	1020830600	12.00	9	Tree Fruit
1076	w255403	1221700800	8.00	6.5	Tree Fruit
1077	C182410	1284301900	5.00	3.5	Tree Fruit
1079	C190403	1251504200	38.40	14	Other
1079	C190403	1251614500	1921.40	41	Other
1079	C190403	1251502900	383.80	16.8	Tree Fruit
1079	C190403	1251503000	459.80	52.5	Tree Fruit
1079	C190403	1251615500	223.70	9.6	Tree Fruit
1079	C190403	1251616500	123.20	4.9	Tree Fruit
1079	C190403	1251616600	21.80	6	Tree Fruit
1079	C190403	1251621500	249.90	31.8	Tree Fruit
1079	C190403	1251624700	148.00	18.1	Tree Fruit
1079	C190403	1251718200	203.00	19	Tree Fruit
1079	C190403	1251719000	292.40	67	Tree Fruit



<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1079	C190403	1251730600	24.30	1.8	Tree Fruit
1079	C190403	1251730700	191.60	85	Tree Fruit
1080	C883201	1211502000	50.00	50	Tree Fruit
1080	C883201	1220308100	10.00	4	Tree Fruit
1080	C883201	1220308200	10.00	4	Tree Fruit
1080	C883201	1220308300	10.00	4	Tree Fruit
1086	C888030	1281703400	10.00	5	Tree Fruit
1086	C888030	1281703500	15.00	13	Tree Fruit
1087	6563200	1243512100	4.00	3	Tree Fruit
1087	6563200	1243518300	6.00	6	Tree Fruit
1087	6563200	1243518400	6.00	5	Tree Fruit
1087	6563200	1243518500	4.00	4	Tree Fruit
1088	C792224	1021803500	19.56	7	Tree Fruit
1089	C182670	1073402700	1.37	0	Tree Fruit
1089	C182670	1073402800	3.50	3.17	Tree Fruit
1090	C180653	2380630600	2.50	1	Tree Fruit
1090	C180653	2380630700	1.00	1	Tree Fruit
1090	C180653	2380630800	1.50	1	Tree Fruit
1090	C180653	2380630900	1.00	1	Tree Fruit
1090	C180653	2380631000	1.50	1	Tree Fruit
1091	C182227	1271505100	20.00	15	Tree Fruit
1093	C677635	1282404200	19.00	5	Tree Fruit
1094	C182331	1070803900	3.78	2.5	Tree Fruit
1094	C182331	1073307700	4.00	2.5	Tree Fruit
1094	C182331	1073307800	4.00	4	Tree Fruit
1095	C182822	2760304600	9.88	5.5	Tree Fruit
1096	C182049	1015511100	4.65	3.25	Tree Fruit
1097	C327931	2760804600	15.00	3	Tree Fruit
1098	C880150	1021808687	45.00	35	Tree Fruit
1099	C880150	2780703536	35.00	20	Tree Fruit
1100	C53402	1290803100	12.00	12	Tree Fruit
1100	C53402	1290803200	20.00	20	Tree Fruit
1100	C53402	1290804800	10.50	10.5	Tree Fruit
1100	C53402	1900310300	24.80	0	Tree Fruit
1100	C53402	1900310400	40.00	0	Tree Fruit
1101	W255156	1290601300	14.00	14	Tree Fruit
1102	c118370	2461400700	34.50	0.5	Grapes, Berries, and Vine Fruit
1103	C180653	1212901100	4.40	4.4	Tree Fruit
1103	C180653	1212901200	3.00	3	Tree Fruit
1103	C180653	2072300100	2.00	2	Tree Fruit
1104	C182562	2671480700	2.50	2	Tree Fruit
1104	C182562	2671480800	2.50	1	Tree Fruit
1105	W251857	2650610900	4.00	1	Tree Fruit
1106	C182324	1073003100	10.30	7	Tree Fruit
1107	C725895	1710910100	5.00	1.5	Greenhouse Crops
1107	C725895	1812703400	2.50	1	Greenhouse Crops
1108	C182457	1072902600	2.50	2.5	Tree Fruit
1109	1720050	1722101700	6.70	6	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1110	3746247	1301002100	1.00	1	Tree Fruit
1110	3746247	1301002200	1.00	1	Tree Fruit
1110	3746247	1301002300	1.00	1	Tree Fruit
1110	3746247	1301002400	1.00	1	Tree Fruit
1112	C182407	1012802500	39.05	38	Tree Fruit
1112	C182407	1012802700	10.32	9.09	Tree Fruit
1112	C182407	1012802800	10.16	10.14	Tree Fruit
1112	C182407	1012802900	10.05	10.02	Tree Fruit
1112	C182407	1012803011	10.02	9.76	Tree Fruit
1112	C182407	1280204200	9.38	9.02	Tree Fruit
1112	C182407	1280204300	10.85	10	Tree Fruit
1112	C182407	1280204400	8.02	8	Tree Fruit
1112	C182407	1280204500	7.45	7.25	Tree Fruit
1112	C182407	1280204600	4.40	4.11	Tree Fruit
1112	C182407	1280204700	9.06	8.89	Tree Fruit
1112	C182407	1282710100	39.70	38.02	Tree Fruit
1112	C182407	1282711300	6.97	6.5	Tree Fruit
1112	C182407	1282711400	11.57	11.5	Tree Fruit
1113	C783660	1290701100	31.15	27.8	Tree Fruit
1113	C783660	1290701700	21.49	10.53	Tree Fruit
1114	C182738	1292911100	2.82	2.5	Tree Fruit
1115	C968836	2771113900	8.00	1.8	Grapes, Berries, and Vine Fruit
1116	C119276	1290605900	14.50	7	Tree Fruit
1116	C119276	1290607800	9.50	7	Tree Fruit
1117	W251772	2653316200	1.30	0.6	Tree Fruit
1118	W255365	1021806900	10.00	9	Tree Fruit
1119	C182412	1082520900	3.38	3.38	Tree Fruit
1119	C182412	1082521000	2.41	2.41	Tree Fruit
1120	W254591	2371602600	2.00	1.5	Tree Fruit
1121	C182746	2770905000	10.00	10	Tree Fruit
1121	C182746	2770905600	10.00	2	Tree Fruit
1122	C182806	1221701100	2.40	1.5	Tree Fruit
1123	C867240	6531110800	20.00	12	Other
1124	W255026	2801102000	1.20	0.75	Tree Fruit
1125	C182634	1850424100	2.50	1.5	Tree Fruit
1126	C182605	2830614200	10.00	2	Field Grown Nursery or Floral
1127	C657845	1251331700	2.50	2	Tree Fruit
1128	C182217	1220307300	12.00	12	Tree Fruit
1128	C182217	1220307400	13.00	13	Tree Fruit
1129	C182377	2381511000	2.90	2	Tree Fruit
1129	C182377	2381511100	1.80	1.8	Tree Fruit
1130	C753575	1882401200	10.00	5	Container Nursery
1130	C753575	1882402400	2.00	1	Container Nursery
1131	6515558	1281120500	5.00	1.5	Tree Fruit
1131	6515558	1281130160	19.90	8	Tree Fruit
1132	c182809	1282122500	8.00	2.5	Tree Fruit
1133	W255060	1211902000	8.50	6.5	Tree Fruit
1134	C888060	1025801400	8.00	8	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1135	C182810	1333013300	9.00	4	Tree Fruit
1136	C571696	1282900900	20.00	13	Tree Fruit
1137	C182302	1020710900	3.00	3	Tree Fruit
1138	C182422	1332500200	4.26	0.5	Tree Fruit
1138	C182422	1332500300	15.60	5.5	Tree Fruit
1138	C182422	1332500400	7.80	7	Tree Fruit
1141	C182628	1211720600	2.50	2	Tree Fruit
1142	C182267	1293107000	3.60	2.5	Tree Fruit
1143	C749104	1781301500	5.00	1	Container Nursery
1144	C462465	1251331600	2.50	2	Tree Fruit
1145	C182661	1293105200	2.30	1	Tree Fruit
1146	C182283	1072406900	4.00	4	Tree Fruit
1146	C182283	2224401200	4.50	4.5	Tree Fruit
1147	C182263	2671202300	28.00	1	Tree Fruit
1148	C725848	1333013700	5.30	2	Tree Fruit
1149	C182336	1281210500	17.00	17	Tree Fruit
1150	A002915	1050203500	5.30	2.5	Tree Fruit
1151	C181574	1333901000	1.00	1	Container Nursery
1152	C733719	1020830900	39.00	39	Tree Fruit
1153	C182773	1865801300	1.50	1.5	Tree Fruit
1154	C180631	1322001900	6.00	6	Field Grown Nursery or Floral
1154	C180631	1322002000	6.00	6	Field Grown Nursery or Floral
1154	C180631	1322302400	6.00	6	Field Grown Nursery or Floral
1154	C180631	1401101900	40.00	40	Field Grown Nursery or Floral
1154	C180631	1401102000	40.00	40	Field Grown Nursery or Floral
1154	C180631	1401102400	40.00	40	Field Grown Nursery or Floral
1154	C180631	1402900400	86.00	0	Field Grown Nursery or Floral
1154	C180631	1402900500	90.00	90	Field Grown Nursery or Floral
1154	C180631	1402900800	86.00	86	Field Grown Nursery or Floral
1155	C771082	1281012200	3.00	3	Tree Fruit
1155	C771082	1281012300	3.00	3	Tree Fruit
1156	C927183	1260303600	5.82	3	Tree Fruit
1157	C182335	1333120600	2.95	1.25	Tree Fruit
1158	w253680	1264800700	5.61	4.5	Tree Fruit
1159	C181232	1821802900	8.50	7.5	Tree Fruit
1160	5791610	1072403600	2.00	0.5	Tree Fruit
1161	C738107	7601707100	70.00	35	Grapes, Berries, and Vine Fruit
1162	C182686	1882260200	7.25	3	Tree Fruit
1163	C182787	1020811000	20.00	20	Tree Fruit
1163	C182787	1320203800	8.00	8	Tree Fruit
1163	C182787	1320203900	8.00	8	Tree Fruit
1163	C182787	1320204000	9.91	9.91	Tree Fruit
1163	C182787	1320204100	8.00	8	Tree Fruit
1163	C182787	9353500204	2.85	2.85	Tree Fruit
1163	C182787	9353500215	2.85	2.85	Tree Fruit
1163	C182787	9353500226	2.85	2.85	Tree Fruit
1163	C182787	9353500237	2.85	2.85	Tree Fruit
1163	C182787	9353500248	2.85	2.85	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1163	C182787	9353500259	2.85	2.85	Tree Fruit
1163	C182787	9353500260	2.90	2.9	Tree Fruit
1164	C182447	1220302900	120.00	98	Grapes, Berries, and Vine Fruit
1165	C182447	1220304300	80.00	40	Grapes, Berries, and Vine Fruit
1166	c846822	1220805800	5.00	3	Grapes, Berries, and Vine Fruit
1166	c846822	1220307700	5.00	4	Tree Fruit
1167	C182666	2771011900	9.00	3	Tree Fruit
1168	C567671	1027310100	6.00	3	Tree Fruit
1169	C545325	1210321200	2.20	0.8	Tree Fruit
1170	C182403	2481800800	10.00	4	Tree Fruit
1170	C182403	2502720700	9.50	9	Tree Fruit
1170	C182403	2481800900	18.30	10	Tree Fruit
1178	5912327	1220201400	10.00	10	Field Grown Nursery or Floral
1178	5912327	1220201500	5.00	5	Field Grown Nursery or Floral
1178	5912327	1220201600	14.46	14.46	Field Grown Nursery or Floral
1179	5912327	1220305500	20.00	20	Field Grown Nursery or Floral
1179	5912327	1222801400	5.87	5.87	Field Grown Nursery or Floral
1180	5912327	1220305300	15.65	10	Field Grown Nursery or Floral
1181	5912327	1220904600	2.50	2	Field Grown Nursery or Floral
1182	5912327	2111310200	2.94	2.94	Field Grown Nursery or Floral
1182	5912327	2111310300	2.50	2.5	Field Grown Nursery or Floral
1182	5912327	2111310400	2.42	2.42	Field Grown Nursery or Floral
1182	5912327	2111310500	5.46	5.46	Field Grown Nursery or Floral
1182	5912327	2111310700	2.84	2.84	Field Grown Nursery or Floral
1182	5912327	2111311000	3.01	3.01	Field Grown Nursery or Floral
1184	C182794	4324911400	0.50	0.3	Tree Fruit
1187	C182756	1850906800	4.80	0	Tree Fruit
1187	C182756	1850907400	4.00	1	Tree Fruit
1187	C182756	1850907500	4.00	0	Tree Fruit
1187	C182756	1850908000	59.00	1	Tree Fruit
1188	C181120	1781700200	24.00	14	Greenhouse Crops
1189	C182739	2802100300	4.00	1	Grapes, Berries, and Vine Fruit
1191	C182618	1292121000	2.50	2	Tree Fruit
1191	C182618	1292121100	2.50	1.5	Tree Fruit
1193	C781057	1272712600	4.89	3	Tree Fruit
1194	C899520	1210210300	2.03	2.03	Container Nursery
1194	C899520	1210212200	2.00	2	Container Nursery
1194	C899520	7601960215	44.47	26.9	Container Nursery
1194	C899520	7601960216	65.57	48.2	Container Nursery
1194	C899520	7601962600	4.90	4.9	Container Nursery
1195	C119177	1282121300	97.00	50	Grapes, Berries, and Vine Fruit
1195	C119177	1282121200	3.00	0	Other
1195	C119177	1301600500	296.00	200	Tree Fruit
1196	C954133	6341005900	5.00	3	Container Nursery
1196	C954133	6341007800	6.50	4	Container Nursery
1196	C954133	6341006000	3.50	1	Row and Field Crops
1196	C954133	6341006200	10.00	0	Row and Field Crops
1196	C954133	6360206800	4.00	2	Row and Field Crops

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1197	C657613	1250304100	2.00	1	Tree Fruit
1198	c739917	1012711400	5.08	0	Other
1198	c739917	1012711500	5.11	0	Other
1198	c739917	1012712800	45.00	0	Other
1198	c739917	1027311000	17.81	0	Other
1198	c739917	1284603900	2.52	0	Other
1198	c739917	1310200500	1.70	0	Other
1198	c739917	1103500200	5.15	4	Tree Fruit
1198	c739917	1281400100	40.00	10	Tree Fruit
1198	c739917	1281400200	80.00	45	Tree Fruit
1198	c739917	1282001900	10.16	5	Tree Fruit
1198	c739917	1282002300	190.91	100	Tree Fruit
1198	c739917	1282002400	29.09	10	Tree Fruit
1198	c739917	1282003900	162.28	110	Tree Fruit
1198	c739917	1282111100	4.73	2	Tree Fruit
1198	c739917	1282111200	37.58	19	Tree Fruit
1198	c739917	1282111400	14.20	8	Tree Fruit
1198	c739917	1283800300	82.18	30	Tree Fruit
1198	c739917	1283801000	10.00	6	Tree Fruit
1198	c739917	1283900400	23.28	15	Tree Fruit
1198	c739917	1283900600	45.36	27	Tree Fruit
1198	c739917	1283901600	18.28	15	Tree Fruit
1198	c739917	1283901700	5.00	3	Tree Fruit
1198	c739917	1290802800	73.11	18.5	Tree Fruit
1198	c739917	1290804100	12.22	4.5	Tree Fruit
1198	c739917	1290804500	12.93	1.5	Tree Fruit
1198	c739917	1290804600	8.53	1.5	Tree Fruit
1198	c739917	1290804700	10.11	6	Tree Fruit
1198	c739917	1332600100	8.95	7	Tree Fruit
1198	c739917	1342400100	10.47	6	Tree Fruit
1198	c739917	1342400200	43.41	31	Tree Fruit
1199	C182669	1701623900	3.85	3.85	Tree Fruit
1200	C781007	1273302000	2.50	2	Tree Fruit
1201	C182259	2650503200	3.60	1	Tree Fruit
1202	C181642	1057800300	2.00	1.75	Tree Fruit
1203	C182447	1211501700	40.00	20	Grapes, Berries, and Vine Fruit
1203	C182447	1211501800	40.00	20	Grapes, Berries, and Vine Fruit
1203	C182447	1211501900	40.00	20	Grapes, Berries, and Vine Fruit
1203	C182447	1220307000	40.00	20	Grapes, Berries, and Vine Fruit
1204	C182447	1220402500	80.00	40	Grapes, Berries, and Vine Fruit
1205	c930844	1212531600	1.40	1	Container Nursery
1205	c930844	1212531800	1.20	1	Container Nursery
1206	C622217	1701701000	42.50	22.5	Tree Fruit
1206	C622217	1701702700	42.50	22.5	Tree Fruit
1206	C622217	1701703400	42.50	22.5	Tree Fruit
1206	C622217	1701703500	42.50	22.5	Tree Fruit
1206	C622217	1701710100	42.50	22.5	Tree Fruit
1206	C622217	1710800800	42.50	22.5	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1207	5440383	2402302800	2.02	2	Tree Fruit
1207	5440383	2402302900	2.53	2	Tree Fruit
1207	5440383	2402303000	8.37	2	Tree Fruit
1207	5440383	2402303100	7.54	0	Tree Fruit
1208	c182792	1013611900	20.71	20.71	Tree Fruit
1208	c182792	1013612300	2.98	2.98	Tree Fruit
1208	c182792	1013611800	11.82	11.82	Tree Fruit
1208	c182792	1013612700	2.53	2.53	Tree Fruit
1209	C182795	2760912700	9.00	8	Tree Fruit
1209	C182795	2761500300	10.00	10	Tree Fruit
1209	C182795	2761500400	10.00	10	Tree Fruit
1210	C567912	1014801400	10.00	0	Other
1210	C567912	1014302900	21.00	13	Tree Fruit
1210	C567912	1014303000	19.00	9	Tree Fruit
1210	C567912	1015000100	19.00	13	Tree Fruit
1211	W254974	1211005700	5.50	3	Field Grown Nursery or Floral
1212	W252023	1141204700	20.00	4	Grapes, Berries, and Vine Fruit
1213	C182794	1084400700	5.37	4	Tree Fruit
1213	C182794	4304911400	0.50	0.3	Tree Fruit
1214	C182017	1282905400	4.90	3	Tree Fruit
1214	C182017	1282905500	5.00	3	Tree Fruit
1214	C182017	1282905600	5.00	3	Tree Fruit
1214	C182017	1282905700	5.20	3	Tree Fruit
1214	C182017	1282905800	8.72	1.25	Tree Fruit
1214	C182017	1282905900	5.47	1.25	Tree Fruit
1214	C182017	1282906000	3.23	1.25	Tree Fruit
1214	C182017	1282906100	3.18	1.25	Tree Fruit
1214	C182017	1284400200	10.63	5	Tree Fruit
1214	C182017	1284400300	16.00	10	Tree Fruit
1214	C182017	1290106800	23.37	18	Tree Fruit
1214	C182017	1290106900	12.40	10	Tree Fruit
1214	C182017	1290107000	4.48	2	Tree Fruit
1214	C182017	1290107100	4.91	3	Tree Fruit
1214	C182017	1290107200	22.14	20	Tree Fruit
1214	C182017	1822802700	5.00	5	Tree Fruit
1215	C568109	1020831300	40.00	38	Tree Fruit
1215	C568109	1020831400	40.00	38	Tree Fruit
1215	C568109	1020831600	40.00	36	Tree Fruit
1215	C568109	1020831700	40.00	36	Tree Fruit
1215	C568109	1020831800	40.00	38	Tree Fruit
1215	C568109	1023004300	4.00	3	Tree Fruit
1215	C568109	1023004400	4.00	3	Tree Fruit
1215	C568109	1111301100	6.00	5	Tree Fruit
1215	C568109	1111301300	4.00	2	Tree Fruit
1215	C568109	1111301400	6.00	6	Tree Fruit
1215	C568109	1111305400	10.00	4	Tree Fruit
1215	C568109	1111305500	16.00	5	Tree Fruit
1215	C568109	1111305600	8.00	7	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1215	C568109	1111700300	4.00	1	Tree Fruit
1215	C568109	1284604500	42.00	38	Tree Fruit
1215	C568109	1290105800	24.00	15	Tree Fruit
1215	C568109	1293001600	20.00	10	Tree Fruit
1215	C568109	1293004600	20.00	15	Tree Fruit
1215	C568109	1293004800	20.00	10	Tree Fruit
1215	C568109	1293005000	20.00	20	Tree Fruit
1215	C568109	1294200200	83.00	24	Tree Fruit
1215	C568109	1311001000	8.00	6	Tree Fruit
1215	C568109	1311001500	30.00	20	Tree Fruit
1215	C568109	1311100300	20.00	20	Tree Fruit
1215	C568109	1333014200	22.00	18	Tree Fruit
1215	C568109	1334201000	20.00	20	Tree Fruit
1215	C568109	1334201700	16.00	16	Tree Fruit
1215	C568109	1334201800	14.00	14	Tree Fruit
1215	C568109	1781000600	40.00	2	Tree Fruit
1215	C568109	1851120200	7.00	6	Tree Fruit
1215	C568109	2410100700	12.00	9	Tree Fruit
1215	C568109	2410101600	9.00	7	Tree Fruit
1215	C568109	2411600100	40.00	30	Tree Fruit
1216	C574447	1012401200	11.20	0	Tree Fruit
1216	C574447	1012711800	33.90	9	Tree Fruit
1216	C574447	1012712900	73.10	30	Tree Fruit
1216	C574447	1015711900	4.00	2	Tree Fruit
1216	C574447	1015712000	4.00	2	Tree Fruit
1216	C574447	1015712100	14.30	5	Tree Fruit
1217	C182807	1781902000	8.30	6	Tree Fruit
1218	C182617	1015630100	11.00	4	Tree Fruit
1219	C182293	1273204500	1.10	1.1	Grapes, Berries, and Vine Fruit
1220	C182320	2641305100	5.00	4	Field Grown Nursery or Floral
1221	C182803	1293201700	44.00	30	Tree Fruit
1222	C182811	1111700500	1.90	1	Tree Fruit
1223	c182774	1851122400	10.50	7	Tree Fruit
1223	c182774	1851124000	2.50	1	Tree Fruit
1224	C181579	2502720300	10.00	6	Tree Fruit
1225	w255363	1850720100	5.90	0.5	Tree Fruit
1226	c182813	2770420500	16.00	2	Tree Fruit
1227	C181245	2410201000	23.50	23.5	Tree Fruit
1228	C182768	1860212200	2.50	1	Tree Fruit
1229	C182387	1821904800	3.74	2	Greenhouse Crops
1230	C578817	2840201400	1.52	0.75	Tree Fruit
1231	C739884	1870502900	1.00	0.37	Container Nursery
1231	C739884	1870503000	0.60	0.37	Container Nursery
1232	C553237	1021050200	10.00	5	Tree Fruit
1233	C777711	1871407500	9.00	5	Container Nursery
1234	182790	1091201200	35.00	1	Tree Fruit
1235	C182486	1853901700	3.00	1	Tree Fruit
1236	C182775	1821907400	12.00	4.5	Grapes, Berries, and Vine Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1237	C182498	1866012500	2.53	1.75	Tree Fruit
1238	C291910	1263401900	3.00	0.5	Tree Fruit
1239	C182741	1022805700	6.50	5.5	Tree Fruit
1240	c182833	1333013100	5.00	1	Tree Fruit
1241	C777720	1293003900	76.00	76	Tree Fruit
1241	C777720	1720800800	130.00	101	Tree Fruit
1241	C777720	1852503000	50.00	50	Tree Fruit
1241	C777720	1881003500	120.00	120	Tree Fruit
1242	C182621	2861300400	9.30	1.5	Grapes, Berries, and Vine Fruit
1243	C182763	1221704400	2.73	2	Tree Fruit
1244	C739453	1026002000	4.83	3.5	Tree Fruit
1244	C739453	1057302000	6.10	5	Tree Fruit
1244	C739453	1057712600	1.70	0.2	Tree Fruit
1244	C739453	7601962300	5.00	5	Tree Fruit
1245	C572093	2770402800	10.00	2	Tree Fruit
1246	6015746	1562200200	3.00	3	Container Nursery
1246	6015746	1563510300	3.00	3	Container Nursery
1246	6015746	1563510700	2.00	2	Container Nursery
1246	6015746	1563510800	0.50	0.5	Container Nursery
1247	C182835	1111801900	2.05	1	Tree Fruit
1248	C846708	1082520600	4.40	1.5	Tree Fruit
1249	C182500	1021050300	4.35	2.75	Tree Fruit
1250	1321294	1822700900	46.68	46.68	Tree Fruit
1250	1321294	1822701200	54.74	54.74	Tree Fruit
1250	1321294	1822701300	16.58	16.58	Tree Fruit
1250	1321294	1822701400	13.06	13.06	Tree Fruit
1251	C182418	2840705700	10.00	10	Tree Fruit
1253	C182657	1881612100	3.98	2.75	Tree Fruit
1254	C683888	9311800123	19.39	9.5	Tree Fruit
1255	C182762	1323205900	2.66	1	Tree Fruit
1256	C182783	1221704300	3.20	2	Tree Fruit
1257	C182546	1720212300	8.90	7.5	Tree Fruit
1257	C182546	1720212700	9.50	8	Tree Fruit
1258	C182473	1333013600	1.50	1.5	Tree Fruit
1259	C181174	1024405500	4.12	3.5	Tree Fruit
1260	W253935	6531200100	25.00	2	Tree Fruit
1261	C905651	1720212400	5.26	4	Tree Fruit
1261	C905651	1720215400	14.19	11	Tree Fruit
1261	C905651	1720215500	8.28	7	Tree Fruit
1261	C905651	1720215600	8.39	7	Tree Fruit
1262	6732853	1081205200	11.00	2	Tree Fruit
1262	6732853	1081205300	13.00	5	Tree Fruit
1262	6732853	1081205400	43.00	35	Tree Fruit
1262	6732853	1081211500	27.00	20	Tree Fruit
1262	6732853	1081220300	22.00	17	Tree Fruit
1262	6732853	1081220800	30.00	10	Tree Fruit
1262	6732853	1081220900	31.00	25	Tree Fruit



<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1262	6732853	1081221100	110.00	15	Tree Fruit
1262	6732853	1081221300	57.00	25	Tree Fruit
1262	6732853	1081221400	12.00	10	Tree Fruit
1262	6732853	1081221700	1.00	1	Tree Fruit
1262	6732853	1081221900	78.00	55	Tree Fruit
1262	6732853	1250610400	39.00	10	Tree Fruit
1262	6732853	1250610700	8.00	2	Tree Fruit
1262	6732853	1250610900	97.00	12	Tree Fruit
1262	6732853	1250620600	1.00	0	Tree Fruit
1262	6732853	1250620800	131.00	35	Tree Fruit
1262	6732853	1280103600	58.00	5	Tree Fruit
1262	6732853	1280103700	39.00	0	Tree Fruit
1263	C182318	1280711200	40.00	40	Tree Fruit
1263	C182318	1281700400	26.00	26	Tree Fruit
1263	C182318	1281702400	10.00	10	Tree Fruit
1263	C182318	1281702800	10.00	10	Tree Fruit
1263	C182318	1281702900	10.00	10	Tree Fruit
1263	C182318	1281703600	40.00	40	Tree Fruit
1263	C182318	1281704900	10.00	10	Tree Fruit
1263	C182318	1285000200	10.00	10	Tree Fruit
1263	C182318	1285001700	60.00	60	Tree Fruit
1264	ME52347	1270610500	8.00	8	Tree Fruit
1265	C182039	3723060000	1.50	1.5	Tree Fruit
1266	C182643	1057711900	4.00	2	Tree Fruit
1267	C846855	1273202200	6.50	2	Tree Fruit
1268	C556098	1292111900	3.00	2	Field Grown Nursery or Floral
1268	C556098	1292112100	10.00	5	Field Grown Nursery or Floral
1269	C181975	1324705700	3.75	3.75	Tree Fruit
1269	C181975	1324705800	3.25	2.25	Tree Fruit
1270	C758250	1852603500	17.00	10	Tree Fruit
1271	C820552	1333013400	5.02	5.02	Tree Fruit
1271	C820552	1333013500	5.54	5.54	Tree Fruit
1272	C182589	1102003000	8.00	7	Tree Fruit
1273	H053721	1281510200	60.00	40	Tree Fruit
1274	C641801	1290308100	31.00	24	Tree Fruit
1274	C641801	1292703700	5.00	3.5	Tree Fruit
1275	C908270	1260200800	10.00	8	Tree Fruit
1276	C182772	2620323700	0.70	0.2	Container Nursery
1277	C402581	1081911900	2.00	1	Field Grown Nursery or Floral
1279	C182750	1061710500	2.50	2.5	Tree Fruit
1280	C182025	1851130400	20.00	2	Container Nursery
1281	W255104	1221703000	4.50	4	Tree Fruit
1281	W255104	1221703900	2.50	2	Tree Fruit
1282	C564070	1026305800	1.63	1	Field Grown Nursery or Floral
1283	C990276	1025602400	15.39	12.25	Field Grown Nursery or Floral
1283	C990276	1083002100	2.79	1	Field Grown Nursery or Floral
1283	C990276	1083002200	6.29	4.75	Field Grown Nursery or Floral
1283	C990276	1083002300	8.05	5.5	Field Grown Nursery or Floral

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1283	C990276	1083002400	35.58	21.25	Field Grown Nursery or Floral
1283	C990276	1083206900	4.00	2	Field Grown Nursery or Floral
1283	C990276	1083400500	50.21	38	Field Grown Nursery or Floral
1283	C990276	1083401700	10.36	7.25	Field Grown Nursery or Floral
1283	C990276	1083402100	14.14	12	Field Grown Nursery or Floral
1283	C990276	1083402200	18.72	14	Field Grown Nursery or Floral
1283	C990276	1083402300	11.44	9.75	Field Grown Nursery or Floral
1283	C990276	1083402400	11.02	8.25	Field Grown Nursery or Floral
1283	C990276	1084201800	10.72	5.25	Field Grown Nursery or Floral
1283	C990276	1083204100	21.43	14	Field Grown Nursery or Floral
1283	C990276	1083205200	22.21	17.75	Field Grown Nursery or Floral
1283	C990276	1083205900	8.43	5	Field Grown Nursery or Floral
1283	C990276	1083206000	8.17	6.5	Field Grown Nursery or Floral
1283	C990276	1083206100	8.06	4.75	Field Grown Nursery or Floral
1283	C990276	1083206200	5.23	1	Field Grown Nursery or Floral
1283	C990276	1083206300	3.20	2.75	Field Grown Nursery or Floral
1283	C990276	1083502500	19.24	16.5	Field Grown Nursery or Floral
1283	C990276	1083902800	62.00	50	Field Grown Nursery or Floral
1283	C990276	1083001800	5.95	4.25	Tree Fruit
1283	C990276	1083203400	8.75	7.5	Tree Fruit
1283	C990276	1083401500	53.79	45.75	Tree Fruit
1283	C990276	1083402500	9.71	8.25	Tree Fruit
1283	C990276	1083402600	20.00	17	Tree Fruit
1283	C990276	1083402700	10.91	9.25	Tree Fruit
1283	C990276	1083206700	10.00	5	Tree Fruit
1283	C990276	1083206800	20.00	14	Tree Fruit
1283	C990276	1250801800	14.00	10	Tree Fruit
1284	C182659	1322800500	13.70	10	Tree Fruit
1285	C207447	1042710400	19.80	6.5	Tree Fruit
1285	C207447	1042722500	5.00	4	Tree Fruit
1285	C207447	1080110300	9.90	7.5	Tree Fruit
1285	C207447	1080203200	36.00	15	Tree Fruit
1286	C182764	1865801900	4.11	3.8	Tree Fruit
1286	C182764	1865802100	5.25	5.25	Tree Fruit
1286	C182764	1865802200	17.00	14.5	Tree Fruit
1286	C182764	1865802300	9.00	7.5	Tree Fruit
1286	C182764	1865802400	2.44	2	Tree Fruit
1287	W251657	1221004200	3.00	3	Tree Fruit
1288	C181625	1234501500	1.00	1	Tree Fruit
1289	C182255	1272904500	3.00	3	Tree Fruit
1290	C182471	2861812000	4.00	4	Tree Fruit
1291	C182789	1221703300	2.90	1.5	Tree Fruit
1292	c182791	1875304400	115.20	60	Tree Fruit
1292	c182791	1875304500	61.91	5	Tree Fruit
1292	c182791	1875500100	10.00	10	Tree Fruit
1293	0030029	2770930300	13.50	13	Tree Fruit
1293	0030029	2770930400	27.50	18	Tree Fruit
1293	0030029	2770933900	8.50	8	Tree Fruit

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1293	0030029	2770934300	4.15	4	Tree Fruit
1293	0030029	2780704000	46.00	45	Tree Fruit
1293	0030029	2791510500	20.00	19	Tree Fruit
1293	0030029	2791510600	20.00	19	Tree Fruit
1294	C182834	1333422900	2.00	1	Tree Fruit
1295	C182012	1283800900	42.00	25	Tree Fruit
1296	C182645	1273901800	2.60	1	Tree Fruit
1297	C182399	1013605400	6.00	3	Tree Fruit
1297	C182399	1013605500	4.00	3	Tree Fruit
1298	C207289	1100211000	80.00	14	Tree Fruit
1298	C207289	1100900100	183.00	34	Tree Fruit
1299	C182234	2651102600	2.85	2.5	Tree Fruit
1300	c182832	1792503100	1.17	1.17	Container Nursery
1301	C182797	1320813600	4.30	2	Tree Fruit
1302	C180725	2410404600	4.00	2	Tree Fruit
1303	w254895	1221700400	4.20	3	Tree Fruit
1304	C534225	1890810300	20.00	17	Field Grown Nursery or Floral
1304	C534225	1890814300	10.00	4	Field Grown Nursery or Floral
1304	C534225	1890814400	10.00	9	Field Grown Nursery or Floral
1305	C181649	1333125700	2.20	2	Tree Fruit
1306	C182755	1220802000	10.00	10	Row and Field Crops
1306	C182755	1713500700	5.00	5	Row and Field Crops
1307	C182802	1221701300	4.20	3	Tree Fruit
1308	c663141	1103610500	9.75	2	Tree Fruit
1308	c663141	1103611800	46.28	25	Tree Fruit
1309	C182386	4793502700	0.50	0.3	Greenhouse Crops
1310	C181973	1221301400	1.00	0	Other
1311	C205080	2410411000	20.00	1	Row and Field Crops
1311	C205080	2410410900	20.00	5	Tree Fruit
1313	C888183	1701705400	7.20	7	Field Grown Nursery or Floral
1314	C888183	1540406800	2.80	2.8	Container Nursery
1315	C182641	1057600900	2.50	1.5	Tree Fruit
1316	C182782	2652708300	0.50	0.5	Container Nursery
1322	C182784	1882716000	2.20	1.5	Tree Fruit
1323	A069031	1874605500	2.63	1.5	Tree Fruit
1324	C920976	2870702200	8.00	6	Tree Fruit
1325	A008072	2563300700	4.50	4.5	Container Nursery
1326	C118331	1221800100	3.50	3	Tree Fruit
1326	C118331	1221801300	5.50	5.5	Tree Fruit
1331	c820549	1851607900	10.00	8	Tree Fruit
1332	C648091	1220900300	5.00	5	Field Grown Nursery or Floral
1332	C648091	1220900500	5.00	5	Field Grown Nursery or Floral
1332	C648091	1220901800	10.00	10	Field Grown Nursery or Floral
1333	C665382	2160530700	3.20	1.4	Greenhouse Crops
1335	ME96288	1027502600	4.75	4.75	Tree Fruit
1336	C783640-37	1070700400	20.70	16.4	Tree Fruit
1336	C783640-37	1070701200	36.80	29	Tree Fruit
1336	C783640-37	1070701800	13.20	10.4	Tree Fruit

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1336	C783640-37	1073201500	6.90	5.5	Tree Fruit
1336	C783640-37	1073201600	23.70	18.7	Tree Fruit
1336	C783640-37	1073202000	3.00	2	Tree Fruit
1340	C888069	6491110100	5.66	5.1	Container Nursery
1340	C888069	6491110200	0.51	0.5	Container Nursery
1340	C888069	6491110300	0.35	0.3	Container Nursery
1340	C888069	6491110600	1.37	1.3	Container Nursery
1340	C888069	6492810100	2.62	2.4	Container Nursery
1340	C888069	6491110400	0.01	0	Other
1341	C665426	1015710300	42.00	20	Field Grown Nursery or Floral
1341	C665426	1021304200	73.00	25	Tree Fruit
1342	C190941	1275211000	44.00	35	Tree Fruit
1343	C182044	9342000093	10.00	3	Tree Fruit
1344	C182678	1271105700	5.40	4	Tree Fruit
1345	w255356	1292112300	7.33	1.15	Field Grown Nursery or Floral
1346	C181974	1280921700	8.00	5	Tree Fruit
1346	C181974	1280921800	5.00	4	Tree Fruit
1346	C181974	1281110100	10.00	5	Tree Fruit
1347	c182829	1220900200	3.50	3.5	Field Grown Nursery or Floral
1347	c182829	2221311100	44.50	30	Field Grown Nursery or Floral
1347	c182829	1220900400	4.64	4	Tree Fruit
1348	C182311	1282001400	30.00	27	Tree Fruit
1349	C713377	1291008400	2.00	2	Tree Fruit
1352	5481450	1082912500	15.50	2	Tree Fruit
1352	5481450	1082912600	5.28	3	Tree Fruit
1352	5481450	1082920400	52.16	35	Tree Fruit
1352	5481450	1083500500	6.60	2.5	Tree Fruit
1352	5481450	1083701100	0.85	0	Tree Fruit
1352	5481450	1083704500	36.00	25	Tree Fruit
1352	5481450	1083704800	22.90	0.5	Tree Fruit
1352	5481450	1083705200	3.40	0.5	Tree Fruit
1352	5481450	1083705300	2.20	1.5	Tree Fruit
1352	5481450	1083710100	11.40	0.5	Tree Fruit
1352	5481450	1083710700	22.78	7	Tree Fruit
1353	C182594	1213122000	1.50	1.5	Tree Fruit
1354	c182814	1057600600	2.50	2	Tree Fruit
1356	C182443	2400104000	2.00	2	Field Grown Nursery or Floral
1356	C182443	1320203100	5.00	5	Tree Fruit
1356	C182443	1320203300	5.00	5	Tree Fruit
1356	C182443	1875404000	20.00	20	Tree Fruit
1357	C180666	1275002400	8.89	7	Tree Fruit
1358	C353624	1282010200	21.36	10	Tree Fruit
1359	C182460	2642501200	3.32	3	Tree Fruit
1360	C182690	1880821600	30.00	10	Container Nursery
1361	C545716	1072900800	3.00	2	Tree Fruit
1362	C182630	1273902300	2.50	2.5	Tree Fruit
1363	C760146	1581505800	45.00	20	Tree Fruit
1363	C760146	1881514700	20.00	1	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1364	ME10643	1270610400	4.50	4	Field Grown Nursery or Floral
1364	ME10643	1270611300	20.00	12	Field Grown Nursery or Floral
1365	C181258	1275210400	41.50	28	Field Grown Nursery or Floral
1365	C181258	1292120200	7.50	7	Field Grown Nursery or Floral
1365	C181258	1292123200	8.50	8	Field Grown Nursery or Floral
1365	C181258	2192412900	8.00	5	Field Grown Nursery or Floral
1365	C181258	2190301200	2.00	0	Other
1369	ME10668	1292921900	10.00	3	Row and Field Crops
1369	ME10668	1293500100	20.00	18	Row and Field Crops
1370	C777817	1280931600	2.68	2	Tree Fruit
1370	C777817	1280931700	2.83	2.4	Tree Fruit
1370	C777817	1280932300	11.58	10	Tree Fruit
1371	C628004	1713100900	14.44	10	Tree Fruit
1371	C628004	1740300100	17.32	12	Tree Fruit
1373	C182330	1290410300	16.00	0	Tree Fruit
1373	C182330	1290410400	2.87	2	Tree Fruit
1373	C182330	1881500900	19.60	3	Tree Fruit
1376	C716031	1860621200	4.00	3	Tree Fruit
1376	C716031	1860621300	6.00	3	Tree Fruit
1376	C716031	1860622500	30.00	20	Tree Fruit
1376	C716031	1860622600	30.00	28	Tree Fruit
1376	C716031	1860622700	30.00	18	Tree Fruit
1377	C182333	1721406000	32.00	8	Tree Fruit
1378	C180674	1250707800	6.00	3	Field Grown Nursery or Floral
1378	C180674	1250707900	26.50	18	Field Grown Nursery or Floral
1379	C182812	1013706100	40.00	10	Tree Fruit
1380	C242165	1220806900	2.50	2.5	Container Nursery
1380	C242165	1220807000	12.82	9	Field Grown Nursery or Floral
1381	0028689	1092703500	11.85	11.85	Tree Fruit
1381	0028689	1093200500	2.54	1.5	Tree Fruit
1381	0028689	1093200600	2.23	2	Tree Fruit
1381	0028689	1093400100	84.18	65.6	Tree Fruit
1382	c568779	1111800400	4.77	3.77	Tree Fruit
1384	C657712	2173814000	12.00	9	Other
1385	C657712	1820821100	4.25	3.5	Other
1386	C182452	1282110100	28.59	28.59	Tree Fruit
1386	C182452	1282110600	14.21	14.21	Tree Fruit
1386	C182452	1282120100	51.47	51.47	Tree Fruit
1386	C182452	1282120200	8.78	8.78	Tree Fruit
1387	C182808	1282120800	8.11	8.11	Tree Fruit
1388	C182252	1274401500	8.00	7	Tree Fruit
1390	C893047	1281703800	10.00	10	Tree Fruit
1391	A021121	1283402000	17.00	12	Tree Fruit
1392	C899484	1071511900	6.90	6	Tree Fruit
1393	C182582	1022804400	15.00	14	Tree Fruit
1395	C423019	1081007100	27.00	22	Tree Fruit
1395	C423019	1210223200	12.50	6	Tree Fruit
1396	C182752	1222801300	9.10	9	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1397	C182006	1290304200	12.00	5	Field Grown Nursery or Floral
1399	C182539	1053012200	9.00	7	Tree Fruit
1399	C182539	1053013100	2.00	1.5	Tree Fruit
1400	C772933	1082510100	5.00	5	Tree Fruit
1400	C772933	1082521100	5.00	5	Tree Fruit
1401	C534965	2502720600	10.00	0	Tree Fruit
1401	C534965	2502720500	10.00	2	Tree Fruit
1401	C534965	2502720800	10.00	1	Tree Fruit
1402	C900468	1290803800	1.00	0	Other
1402	C900468	1290805000	40.00	20	Tree Fruit
1402	C900468	1291807300	4.49	4.49	Tree Fruit
1402	C900468	1291807400	3.15	3.15	Tree Fruit
1403	C279241	3930102900	37.45	30	Tree Fruit
1403	C279241	3930103900	13.52	13.52	Tree Fruit
1403	C279241	3930104500	3.78	3.78	Tree Fruit
1406	C846049	1026102500	5.00	0	Tree Fruit
1406	C846049	1026102600	5.00	2	Tree Fruit
1406	C846049	1026104800	5.00	3.5	Tree Fruit
1406	C846049	1243515100	2.50	2.5	Tree Fruit
1406	C846049	1243515200	2.50	2.5	Tree Fruit
1406	C846049	1243517400	7.00	7	Tree Fruit
1406	C846049	1243517500	2.50	2.5	Tree Fruit
1407	C753559	2410401800	6.00	3	Tree Fruit
1408	C624050	1021010200	10.93	7	Field Grown Nursery or Floral
1408	C624050	1021010300	8.11	5	Field Grown Nursery or Floral
1408	C624050	1021010500	8.80	5	Field Grown Nursery or Floral
1409	C867708	2420700800	2.81	1	Grapes, Berries, and Vine Fruit
1409	C867708	2420701500	46.30	40.4	Tree Fruit
1409	C867708	2430200300	44.94	22	Tree Fruit
1409	C867708	2420700700	41.00	7.5	Tree Fruit
1410	0382200	2650620900	3.00	1.2	Tree Fruit
1410	0382200	2651100200	4.50	2.2	Tree Fruit
1410	0382200	2670202100	2.50	1.25	Tree Fruit
1410	0382200	2670202400	4.00	1.5	Tree Fruit
1411	C182524	1821407600	12.12	3.4	Other
1412	C825610	1300104200	8.00	8	Tree Fruit
1412	C825610	1300104500	8.00	8	Tree Fruit
1412	C825610	1310103100	8.00	8	Tree Fruit
1412	C825610	1310104300	13.00	13	Tree Fruit
1412	C825610	1310104400	8.00	8	Tree Fruit
1415	C545820	1290802600	22.00	14	Tree Fruit
1415	C545820	1290802700	18.00	13	Tree Fruit
1417	C182383	1850627100	46.22	5	Greenhouse Crops
1418	C182493	1274500400	5.00	2.5	Tree Fruit
1420	C182730	1013615500	6.50	3.2	Tree Fruit
1422	C181215	1140910600	10.00	4	Grapes, Berries, and Vine Fruit
1423	C888004	2911310600	5.00	2.5	Tree Fruit
1423	C888004	2911310700	5.00	2	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1424	C182273	1080206100	8.00	3	Tree Fruit
1425	C735738	2602121800	10.00	8.5	Container Nursery
1425	C735738	2602222000	4.83	4.2	Container Nursery
1426	C204333	6522200200	264.00	20	Other
1427	C181823	1055603700	5.24	1.25	Tree Fruit
1428	C749186	1292921700	3.69	3	Tree Fruit
1429	C182417	1270903600	3.00	3	Tree Fruit
1430	C120578	2682300800	6.00	4	Tree Fruit
1431	W252949	6753311900	5.00	4	Tree Fruit
1431	W252949	6753312000	5.00	4	Tree Fruit
1432	C867685	1782000100	32.00	25	Tree Fruit
1432	C867685	1782002300	8.00	3	Tree Fruit
1433	C182561	1881512900	3.19	2.5	Field Grown Nursery or Floral
1434	C182561	1291904800	7.62	5.5	Tree Fruit
1436	0382200	2642912800	1.50	0.75	Other
1436	0382200	1883312900	3.00	1.5	Tree Fruit
1436	0382200	2260920500	2.00	1.1	Tree Fruit
1436	0382200	2621900700	3.00	2.25	Tree Fruit
1436	0382200	2640903600	2.50	1.25	Tree Fruit
1436	0382200	2641513300	2.00	0.75	Tree Fruit
1436	0382200	2642233100	2.50	1.5	Tree Fruit
1436	0382200	2642403500	1.50	0.75	Tree Fruit
1436	0382200	2642412100	4.00	2	Tree Fruit
1436	0382200	2642412300	3.00	2	Tree Fruit
1436	0382200	2642501100	2.50	2	Tree Fruit
1436	0382200	2643911000	1.50	0.75	Tree Fruit
1436	0382200	2644510900	2.50	1.5	Tree Fruit
1436	0382200	2650502800	2.50	1	Tree Fruit
1436	0382200	2650630600	2.00	1.42	Tree Fruit
1436	0382200	2650632000	2.00	1	Tree Fruit
1436	0382200	2650802600	3.00	2	Tree Fruit
1436	0382200	2651103100	2.00	1.5	Tree Fruit
1436	0382200	2651400700	1.50	1.5	Tree Fruit
1436	0382200	2651402000	2.00	1	Tree Fruit
1436	0382200	2651402200	2.50	0.75	Tree Fruit
1436	0382200	2651602700	4.00	0.4	Tree Fruit
1436	0382200	2651701200	10.00	6.5	Tree Fruit
1436	0382200	2652014300	2.00	1.5	Tree Fruit
1436	0382200	2652014500	2.50	1.5	Tree Fruit
1436	0382200	2652202200	2.00	1.5	Tree Fruit
1436	0382200	2652202600	3.50	1.75	Tree Fruit
1436	0382200	2653316300	1.50	0.8	Tree Fruit
1436	0382200	2653316600	1.00	0.3	Tree Fruit
1436	0382200	2653316800	1.50	0.75	Tree Fruit
1436	0382200	2653702100	1.00	0.5	Tree Fruit
1436	0382200	2654120600	3.00	1.75	Tree Fruit
1436	0382200	2654210100	2.00	1.25	Tree Fruit
1436	0382200	2654511200	2.00	0.75	Tree Fruit

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1436	0382200	2654802400	2.00	1.25	Tree Fruit
1436	0382200	2660203000	3.00	2	Tree Fruit
1436	0382200	2660204300	8.00	6.5	Tree Fruit
1436	0382200	2660302300	2.50	1.5	Tree Fruit
1436	0382200	2660402400	1.50	0.75	Tree Fruit
1436	0382200	2660412000	2.00	1.2	Tree Fruit
1436	0382200	2660530800	4.00	3	Tree Fruit
1436	0382200	2660714300	2.00	1	Tree Fruit
1436	0382200	2660714500	1.50	0.5	Tree Fruit
1436	0382200	2660911700	4.50	3.3	Tree Fruit
1436	0382200	2660919300	2.50	1.75	Tree Fruit
1436	0382200	2660921800	2.00	0.54	Tree Fruit
1436	0382200	2661101300	2.00	1	Tree Fruit
1436	0382200	2661202600	1.50	0.75	Tree Fruit
1436	0382200	2661402000	2.50	1	Tree Fruit
1436	0382200	2661510200	3.00	1.5	Tree Fruit
1436	0382200	2661910400	2.50	1.5	Tree Fruit
1436	0382200	2662000300	3.00	1.5	Tree Fruit
1436	0382200	2662002500	1.50	0.75	Tree Fruit
1436	0382200	2662002700	1.50	0.75	Tree Fruit
1436	0382200	2662203200	2.00	0.5	Tree Fruit
1436	0382200	2663104900	4.00	1	Tree Fruit
1436	0382200	2663205000	3.50	0.5	Tree Fruit
1436	0382200	2663600300	2.50	1.5	Tree Fruit
1436	0382200	2663600700	2.00	1.25	Tree Fruit
1436	0382200	2663602900	1.50	0.35	Tree Fruit
1436	0382200	2670100100	3.00	1.5	Tree Fruit
1436	0382200	2670101600	2.00	1.25	Tree Fruit
1436	0382200	2670200700	3.00	1	Tree Fruit
1436	0382200	2670200800	3.00	2	Tree Fruit
1436	0382200	2670302400	3.00	2	Tree Fruit
1436	0382200	2670302700	3.00	2	Tree Fruit
1436	0382200	2670701700	3.00	1.5	Tree Fruit
1436	0382200	2670801500	3.50	2.3	Tree Fruit
1436	0382200	2670900300	4.50	3.5	Tree Fruit
1436	0382200	2671002500	4.00	4	Tree Fruit
1436	0382200	2671201400	2.50	1.5	Tree Fruit
1436	0382200	2671203100	2.00	1.2	Tree Fruit
1436	0382200	2671203400	3.00	2	Tree Fruit
1436	0382200	2671203500	2.50	1.5	Tree Fruit
1436	0382200	2671630400	1.25	0.5	Tree Fruit
1436	0382200	2671710800	3.00	1.6	Tree Fruit
1436	0382200	2680100700	2.00	0.75	Tree Fruit
1436	0382200	2680902500	3.50	2.75	Tree Fruit
1436	0382200	2682500200	3.00	2.25	Tree Fruit
1436	0382200	2690200900	1.00	0.4	Tree Fruit
1436	0382200	2691935800	4.00	2	Tree Fruit
1436	0382200	2981901100	3.00	2	Tree Fruit



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1436	0382200	8778112100	2.00	1	Tree Fruit
1437	0382200	2654120300	4.00	3	Tree Fruit
1438	C905680	1281210200	2.00	2	Tree Fruit
1438	C905680	1281210300	10.00	10	Tree Fruit
1439	C182459	1221001200	19.60	2	Container Nursery
1440	C880189	1021604900	8.50	4.5	Tree Fruit
1440	C880189	1080206200	25.00	0	Tree Fruit
1441	C805040	2760232100	12.00	4	Tree Fruit
1442	C181254	1284400500	9.80	1	Grapes, Berries, and Vine Fruit
1442	C181254	1284402200	5.90	3	Grapes, Berries, and Vine Fruit
1442	C181254	1284402300	3.00	1	Grapes, Berries, and Vine Fruit
1443	C825597	2830320200	6.00	6	Grapes, Berries, and Vine Fruit
1444	C665439	1822600600	6.50	5	Greenhouse Crops
1444	C665439	1822600800	14.00	0	Greenhouse Crops
1444	C665439	1822700500	1.00	0	Greenhouse Crops
1445	0382200	2651602900	6.00	4	Tree Fruit
1445	0382200	2651603000	6.00	3	Tree Fruit
1445	0382200	2651701400	3.00	1	Tree Fruit
1445	0382200	2651701500	12.00	10	Tree Fruit
1445	0382200	2651701600	6.00	5	Tree Fruit
1445	0382200	2651701700	6.00	3	Tree Fruit
1445	0382200	2654511100	3.00	1	Tree Fruit
1445	0382200	2660102100	6.50	4.5	Tree Fruit
1445	0382200	2662000500	3.00	1.5	Tree Fruit
1445	0382200	2663710400	3.00	2	Tree Fruit
1446	C182509	2760802000	12.19	5	Tree Fruit
1447	C181854	1110300600	40.00	40	Tree Fruit
1447	C181854	1110301100	30.00	30	Tree Fruit
1447	C181854	1110301200	10.00	0	Tree Fruit
1447	C181854	1110301700	40.00	40	Tree Fruit
1448	C182379	1057611400	2.50	2	Tree Fruit
1449	C182508	1330501900	10.87	10.87	Tree Fruit
1449	C182508	1330502100	17.33	17	Tree Fruit
1450	ME97845	2172802600	1.60	0.5	Container Nursery
1451	C182753	1211411900	2.00	1.2	Tree Fruit
1452	C967892	1261809700	3.50	2.5	Tree Fruit
1453	C182356	1071902000	6.40	0.5	Tree Fruit
1453	C182356	1071903000	3.50	0.5	Tree Fruit
1454	W252884	2650632300	2.00	1	Tree Fruit
1455	C990644	1812600200	1.80	1	Greenhouse Crops
1456	C635803	1860421600	6.00	4	Tree Fruit
1457	W251785	2780801600	40.00	0	Other
1458	C180760	1821408300	4.70	3	Tree Fruit
1459	C182357	1021051700	5.00	4	Tree Fruit
1459	C182357	1021051800	5.00	4	Tree Fruit
1459	C182357	1021051900	4.00	3	Tree Fruit
1460	C182481	1950403600	30.00	2	Field Grown Nursery or Floral

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1463	C182735	0000000001	3.00	3	Tree Fruit
1464	W255374	1292707400	2.50	2	Tree Fruit
1465	C182828	2391506400	1.00	1	Tree Fruit
1466	C778138	1141204800	20.00	3	Grapes, Berries, and Vine Fruit
1467	C180802	1021809000	6.00	2	Tree Fruit
1467	C180802	1024501400	1.00	0	Tree Fruit
1467	C180802	1026900700	80.00	23	Tree Fruit
1468	C182610	1210620700	4.00	1	Container Nursery
1472	C753609	2471802700	11.50	11.5	Tree Fruit
1472	C753609	2471802800	1.00	1	Tree Fruit
1472	C753609	2471802900	5.00	5	Tree Fruit
1473	C180678	1291007300	8.60	7	Tree Fruit
1475	c182817	1071205400	1.00	0.3	Other
1476	C777845	2150700400	5.00	2	Container Nursery
1477	C512979	1102200200	24.00	8	Tree Fruit
1477	C512979	1102200500	3.53	3	Tree Fruit
1477	C512979	1102200600	3.00	3	Tree Fruit
1477	C512979	1102200700	3.25	3	Tree Fruit
1477	C512979	1102200800	3.22	3	Tree Fruit
1477	C512979	1102200900	20.92	10	Tree Fruit
1477	C512979	1102201300	89.00	10	Tree Fruit
1477	C512979	1102202500	20.00	10	Tree Fruit
1479	C181866	2760230400	6.00	3	Tree Fruit
1480	C182432	1111901600	4.21	4	Tree Fruit
1481	7965569	1072900400	2.50	2.25	Tree Fruit
1481	7965569	1072900500	3.00	2.25	Tree Fruit
1482	C825503	2363335000	0.20	0.05	Row and Field Crops
1482	C825503	2341410300	9.00	4.5	Tree Fruit
1482	C825503	2363334400	0.45	0.22	Tree Fruit
1482	C825503	2363334500	4.61	2.3	Tree Fruit
1483	C182431	1252324400	4.00	4	Tree Fruit
1484	C119272	1015100800	1.00	1	Tree Fruit
1490	C542115	1291633400	4.00	2	Field Grown Nursery or Floral
1490	C542115	1882715300	3.00	1	Other
1492	C182583	2860603500	20.00	2.5	Tree Fruit
1493	C182583	2861113300	8.58	1	Other
1496	C182648	1863111200	3.00	3	Tree Fruit
1497	C182398	1057723400	4.50	4.2	Tree Fruit
1498	c899530	1272103300	7.00	3	Tree Fruit
1499	C182321	1021807500	3.90	2	Tree Fruit
1500	W250179	2783520700	4.00	2	Grapes, Berries, and Vine Fruit
1501	C182476	2401906500	14.00	14	Tree Fruit
1502	C791579	1252200200	8.19	8.19	Tree Fruit
1502	C791579	1252200300	5.26	5.26	Tree Fruit
1502	C791579	1252200400	13.63	13.63	Tree Fruit
1504	8862000	1841024700	4.99	0.25	Field Grown Nursery or Floral
1505	c789157	1861404800	5.00	1	Greenhouse Crops
1505	c789157	1861405700	5.00	1	Greenhouse Crops

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1508	w254696	2461311800	17.50	1	Grapes, Berries, and Vine Fruit
1509	C182424	1234005200	0.50	0.5	Container Nursery
1510	C402951	1822404400	5.10	1	Container Nursery
1510	C402951	1822405400	5.10	1	Container Nursery
1511	C442464	1252322400	16.97	16.97	Tree Fruit
1512	C777800	1720921200	1.00	0	Other
1512	C777800	1720920200	14.00	3	Tree Fruit
1513	C750042	1301502800	3.65	0	Other
1513	C750042	1301701300	25.91	25	Other
1513	C750042	1301800900	0.72	0.72	Tree Fruit
1513	C750042	1301802200	19.60	19	Tree Fruit
1513	C750042	1301802300	3.96	3.96	Tree Fruit
1513	C750042	1321502000	17.60	17.6	Tree Fruit
1513	C750042	1321502100	11.92	11.92	Tree Fruit
1513	C750042	1321502200	30.86	30.86	Tree Fruit
1513	C750042	1321504300	109.23	108.5	Tree Fruit
1513	C750042	1322800800	8.58	0	Tree Fruit
1514	C119271	1284800100	7.50	2.7	Tree Fruit
1515	C406507	1292110100	14.00	10	Row and Field Crops
1515	C406507	1293000900	60.00	50	Row and Field Crops
1515	C406507	1293001000	20.00	15	Row and Field Crops
1517	C899528	1073402300	16.00	16	Tree Fruit
1517	C899528	1073402400	17.00	17	Tree Fruit
1518	0032727	1011301100	60.38	26.68	Tree Fruit
1518	0032727	1011501000	159.88	1.24	Tree Fruit
1518	0032727	1011501100	160.24	99	Tree Fruit
1518	0032727	1011501200	159.88	88.03	Tree Fruit
1518	0032727	1012107100	123.13	11.92	Tree Fruit
1518	0032727	1012402800	0.88	0	Tree Fruit
1518	0032727	1012402900	38.00	0	Tree Fruit
1518	0032727	1012403000	2.58	0	Tree Fruit
1518	0032727	1012404100	167.80	151.87	Tree Fruit
1518	0032727	1012404200	39.48	39.48	Tree Fruit
1518	0032727	1012404300	70.50	35.84	Tree Fruit
1518	0032727	1012404400	38.90	13.2	Tree Fruit
1518	0032727	1012404500	39.17	35.23	Tree Fruit
1519	C182351	2224502100	5.00	4	Tree Fruit
1519	C182351	2224502300	6.70	5.5	Tree Fruit
1519	C182351	2224502500	7.10	6	Tree Fruit
1520	C182316	1320204400	8.01	0	Tree Fruit
1520	C182316	1320204500	12.84	11	Tree Fruit
1520	C182316	1320204600	11.11	10	Tree Fruit
1520	C182316	1320204700	8.02	7.5	Tree Fruit
1521	W250512	1100712000	70.00	15	Field Grown Nursery or Floral
1522	C686424	1025301400	12.00	4.5	Container Nursery
1522	C686424	1051809100	20.00	18	Container Nursery
1522	C686424	1070300600	18.00	14	Container Nursery
1522	C686424	1070301200	1.00	1	Container Nursery

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1522	C686424	1072502600	15.00	13	Container Nursery
1523	c182757	1290307900	18.00	12	Tree Fruit
1524	C182535	1275221700	8.60	8	Tree Fruit
1525	C182826	1210806900	4.60	4	Tree Fruit
1526	C888027	1292112200	20.00	19	Tree Fruit
1527	C850099	1323523600	3.00	2	Tree Fruit
1528	8862000	1812605600	0.63	0.15	Container Nursery
1528	8862000	1812605700	0.71	0.15	Container Nursery
1528	8862000	1812605800	2.18	0.1	Container Nursery
1528	8862000	1812606100	2.10	0.1	Field Grown Nursery or Floral
1528	8862000	1812600300	1.60	0.15	Greenhouse Crops
1528	8862000	1812606200	2.31	0.1	Greenhouse Crops
1529	C181622	1080311800	3.75	3.75	Tree Fruit
1530	W252800	1271511700	5.25	4	Tree Fruit
1531	C777844	2770422000	10.00	9	Tree Fruit
1532	C182465	1251330600	12.00	10	Tree Fruit
1533	C919673	1027114000	5.00	5	Tree Fruit
1536	C118092	1102901500	9.00	4.5	Tree Fruit
1537	C118092	1102901200	8.50	5	Field Grown Nursery or Floral
1537	C118092	1102901600	8.00	6	Tree Fruit
1537	C118092	1102901800	14.00	6	Tree Fruit
1538	C182751	1743001300	10.00	5	Tree Fruit
1539	C182405	1026201800	11.70	3.5	Tree Fruit
1541	C182576	1283901500	12.00	4	Field Grown Nursery or Floral
1541	C182576	1291903000	6.00	5	Field Grown Nursery or Floral
1541	C182576	1293800300	5.00	4	Field Grown Nursery or Floral
1543	C725812	1013604800	101.00	30	Field Grown Nursery or Floral
1546	C182362	1280930600	5.87	5.87	Tree Fruit
1546	C182362	1280930700	6.30	6.3	Tree Fruit
1546	C182362	1281210700	2.50	2.5	Tree Fruit
1546	C182362	1281210800	7.11	7.11	Tree Fruit
1546	C182362	1281210900	2.50	2.5	Tree Fruit
1546	C182362	1281211000	4.99	4.99	Tree Fruit
1548	C796917	2760301500	38.00	30	Tree Fruit
1548	C796917	2760800800	30.00	25	Tree Fruit
1548	C796917	2761501600	39.00	30	Tree Fruit
1548	C796917	2761501700	14.00	11	Tree Fruit
1548	C796917	2761501800	10.00	9	Tree Fruit
1548	C796917	2761501900	10.00	9	Tree Fruit
1548	C796917	2761502000	11.00	10	Tree Fruit
1548	C796917	2761502100	18.00	11	Tree Fruit
1549	W254959	1061104400	2.00	1.5	Tree Fruit
1552	C777817	1280930100	11.57	10	Tree Fruit
1553	C181106	2543521100	3.40	2.25	Greenhouse Crops
1554	C182479	5630701700	1.65	1	Field Grown Nursery or Floral
1555	C182479	5640400500	2.00	1.25	Field Grown Nursery or Floral
1555	C182479	5640400800	1.50	1	Field Grown Nursery or Floral
1555	C182479	5640610900	0.50	0.25	Field Grown Nursery or Floral

SDRILG ID	SDRILG Member Number	Parcel Number	Total Acres	Irrigated Acres	Primary Crop Type
1556	4764971	2770300500	5.20	2	Tree Fruit
1556	4764971	2771501700	39.78	35	Tree Fruit
1557	C181111	1220307900	2.53	2	Field Grown Nursery or Floral
1558	5912327	1220205500	14.96	12	Field Grown Nursery or Floral
1559	C182530	1274806300	1.25	1.25	Tree Fruit
1559	C182530	1274806400	1.00	1	Tree Fruit
1559	C182530	1274806600	18.23	18.23	Tree Fruit
1559	C182530	1274807000	86.15	86.15	Tree Fruit
1559	C182530	1274807100	6.85	6.85	Tree Fruit
1559	C182530	1274900800	2.50	2.5	Tree Fruit
1559	C182530	1274904300	4.25	4.25	Tree Fruit
1559	C182530	1274904800	5.69	5.69	Tree Fruit
1559	C182530	1274904900	4.20	4.2	Tree Fruit
1559	C182530	1274905100	4.34	4.34	Tree Fruit
1560	C182479	640610900	0.50	0.25	Field Grown Nursery or Floral
1562	C182777	1212704200	2.00	0.5	Tree Fruit
1563	C182339	1290111500	20.00	20	Field Grown Nursery or Floral
1563	C182339	1711501200	4.54	4	Field Grown Nursery or Floral
1564	C182033	2441204100	50.00	3	Tree Fruit
1564	C182033	2441204500	40.00	7	Tree Fruit
1566	C182327	1220300800	20.00	17	Field Grown Nursery or Floral
1566	C182327	1291111100	20.00	18	Field Grown Nursery or Floral
1566	C182327	1591701000	45.00	4	Field Grown Nursery or Floral
1566	C182327	1820740400	20.00	20	Field Grown Nursery or Floral
1566	C182327	1862461200	20.00	20	Field Grown Nursery or Floral
1567	C783695	1274104100	2.50	1.5	Tree Fruit
1571	C182303	1074202400	2.54	1	Grapes, Berries, and Vine Fruit
1571	C182303	1074202500	8.37	4	Grapes, Berries, and Vine Fruit
1571	C182303	1074205000	4.29	3	Grapes, Berries, and Vine Fruit
1571	C182303	1071202400	14.50	6	Tree Fruit
1573	0382200	2661100400	4.00	2.5	Tree Fruit
1573	0382200	2661201100	6.50	4	Tree Fruit
1574	C182735	2652401200	3.00	3	Tree Fruit
1575	C182596	1100212700	10.00	10	Tree Fruit
1575	C182596	1100214600	5.00	5	Tree Fruit
1575	C182596	1270104300	6.00	6	Tree Fruit
1576	C825504	7601709800	40.00	40	Field Grown Nursery or Floral
1576	C825504	7601701600	25.00	25	Field Grown Nursery or Floral
1578	C210996	1111003900	8.23	7	Tree Fruit
1578	C210996	1111100800	0.99	0.99	Tree Fruit
1578	C210996	1281704500	10.00	10	Tree Fruit
1578	C210996	1300800800	3.00	2	Tree Fruit
1583	C745630	1021603900	10.00	10	Tree Fruit
1583	C745630	1021604200	1.50	1.5	Tree Fruit
1583	C745630	1024401100	7.00	7	Tree Fruit
1583	C745630	1024403200	4.00	4	Tree Fruit
1583	C745630	1024405600	1.00	1	Tree Fruit
1583	C745630	1025210200	6.00	6	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1583	C745630	1025210300	10.00	10	Tree Fruit
1583	C745630	1053632100	4.00	4	Tree Fruit
1583	C745630	1071710600	7.00	7	Tree Fruit
1583	C745630	1082520100	8.00	8	Tree Fruit
1583	C745630	1212020400	5.00	5	Tree Fruit
1583	C745630	1275300600	5.00	5	Tree Fruit
1583	C745630	1293101700	15.00	15	Tree Fruit
1583	C745630	1294101700	10.00	10	Tree Fruit
1584	C571707	1314300200	5.00	4	Tree Fruit
1587	C182595	1275111400	10.00	10	Tree Fruit
1587	C182595	1275111600	15.00	15	Tree Fruit
1588	8331300	2841101100	14.00	0	Other
1588	8331300	2841101600	2.00	0	Other
1588	8331300	2841103500	10.00	0	Other
1588	8331300	2850800200	90.00	0	Other
1588	8331300	2850910500	5.00	0	Other
1588	8331300	2841101500	38.00	6	Tree Fruit
1588	8331300	2841103700	21.00	15	Tree Fruit
1588	8331300	2841103800	8.00	5	Tree Fruit
1588	8331300	2841300900	39.00	15	Tree Fruit
1588	8331300	2841301000	43.00	32	Tree Fruit
1588	8331300	2841501500	26.00	26	Tree Fruit
1588	8331300	2841501600	7.00	7	Tree Fruit
1588	8331300	2850910600	35.00	35	Tree Fruit
1596	0382200	401001362	4.00	1	Tree Fruit
1596	0382200	2670100400	3.00	1	Tree Fruit
1596	0382200	2671411800	4.50	1	Tree Fruit
1708	C550667	1590803000	10.00	5	Field Grown Nursery or Floral
1708	C550667	1820200100	20.00	15	Field Grown Nursery or Floral
1708	C550667	2051120800	1.00	1	Field Grown Nursery or Floral
1708	C550667	2090404400	10.00	3	Field Grown Nursery or Floral
1708	C550667	2090606100	40.00	10	Field Grown Nursery or Floral
1709	C182633	1100901000	120.00	27.48	Container Nursery
1710	C180802	1021809100	15.00	12	Tree Fruit
1711	C182352	1873222200	2.00	1	Tree Fruit
1712	C182328	1882900200	16.00	16	Tree Fruit
1713	C182838	2411300700	3.10	2	Tree Fruit
1714	C567884	1852307400	5.00	5	Field Grown Nursery or Floral
1715	W254966	2870701400	6.05	2	Tree Fruit
1716	C180659	1027711100	5.30	5	Tree Fruit
1717	0030021	1022805400	15.00	7.5	Tree Fruit
1718	C182801	1027310200	4.26	1	Container Nursery
1718	C182801	1020520400	22.04	8	Tree Fruit
1718	C182801	1013120300	80.00	50	Tree Fruit
1719	C893012	1221701200	3.60	3.6	Tree Fruit
1720	W254447	6501900200	42.00	8.5	Tree Fruit
1721	W255839	1026004000	2.74	1.8	Tree Fruit

<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1722	C182779	1013500800	50.00	24	Tree Fruit
1723	C182633	1100901000	120.00	27.48	Field Grown Nursery or Floral
1724	C182841	2224500900	1.81	1	Tree Fruit
1725	C182845	1892712000	5.12	4	Tree Fruit
1725	C182845	1892712100	5.90	5	Tree Fruit
1725	C182845	1892712700	6.29	4	Tree Fruit
1726	C182798	1212000500	5.25	2	Tree Fruit
1727	C436493	1311702300	12.27	12.27	Tree Fruit
1727	C436493	1311800800	2.56	2.56	Tree Fruit
1727	C436493	1334201600	12.80	12.8	Tree Fruit
1728	C182902	2371611300	2.00	1.5	Tree Fruit
1729	C182964	2224401400	6.62	6.62	Tree Fruit
1730	C888066	1280710400	22.50	20.5	Tree Fruit
1730	C888066	1280711500	23.00	21	Tree Fruit
1731	C182923	1054923500	3.88	1.5	Tree Fruit
1732	W257096	1332020600	15.00	1	Field Grown Nursery or Floral
1732	W257096	1281502100	13.96	13	Tree Fruit
1733	C182925	1281020300	17.00	10	Tree Fruit
1733	C182925	1281020400	13.00	10	Tree Fruit
1734	C556005	1851122700	21.00	19	Tree Fruit
1735	C182942	1026400300	21.68	5	Tree Fruit
1735	C182942	9180300056	40.00	5	Tree Fruit
1736	C182561	1291904800	7.62	7.62	Field Grown Nursery or Floral
1737	8609300	1333010900	20.00	18	Tree Fruit
1738	W257159	1742407300	4.00	4	Container Nursery
1738	W257159	1822404700	2.00	2	Container Nursery
1738	W257159	1822404800	1.00	1	Container Nursery
1738	W257159	1822405500	1.50	1.5	Container Nursery
1738	W257159	2171622000	1.00	1	Container Nursery
1738	W257159	2171622100	1.00	1	Container Nursery
1738	W257159	2172010100	1.50	1.5	Container Nursery
1739	C657672	1290921000	5.00	4.5	Tree Fruit
1740	C406666	1330301100	9.00	9	Tree Fruit
1741	C804679	1056802000	5.00	0.44	Container Nursery
1742	C182944	1015510900	3.50	3.5	Tree Fruit
1742	C182944	1015511000	3.00	3	Tree Fruit
1743	C749942	1241902000	10.00	5	Field Grown Nursery or Floral
1743	C749942	1241902100	10.00	5	Field Grown Nursery or Floral
1743	C749942	1241901900	12.00	1	Tree Fruit
1743	C749942	1241901800	180.00	125	Tree Fruit
1744	C182966	1281022700	7.00	6	Tree Fruit
1745	C182945	1283301600	7.00	7	Tree Fruit
1745	C182945	1283301800	7.00	7	Tree Fruit
1745	C182945	1285210500	8.00	8	Tree Fruit
1746	C182866	1292910900	6.70	5	Tree Fruit
1747	C182943	1290402600	26.00	24	Tree Fruit
1748	C182849	1873220400	2.97	1	Tree Fruit
1749	C182905	2250200500	6.68	3	Tree Fruit

SDRILG ID	SDRILG Member Number	Parcel Number	Total Acres	Irrigated Acres	Primary Crop Type
1750	W257259	1292403000	23.65	12	Tree Fruit
1751	C182903	1023004400	4.00	1	Tree Fruit
1751	C182903	1024004300	2.00	1.5	Tree Fruit
1752	C182962	2760811400	8.82	1.1	Tree Fruit
1752	C182962	2760811500	10.58	1.8	Tree Fruit
1753	C182904	1280920200	6.00	6	Tree Fruit
1754	C725699	1103510700	21.00	19	Tree Fruit
1754	C725699	1103612100	2.00	1	Tree Fruit
1755	C182965	1320814000	32.82	25	Other
1755	C182965	1320814100	5.14	2	Other
1756	C182906	2410400300	3.20	2.5	Tree Fruit
1757	C733669	1851601900	5.00	2.5	Tree Fruit
1757	C733669	1851606000	29.00	25	Tree Fruit
1758	C182867	1882300100	35.13	35.13	Tree Fruit
1758	C182867	1882300600	8.14	8.14	Tree Fruit
1759	W257349	7601709800	20.00	10	Other
1760	C846486	2241433300	5.00	3	Tree Fruit
1000	C182253	96400000	10.00	7	Tree Fruit
1109	1720050	1722101700	6.70	6	Container Nursery
1139	C182434	2830410400	1.00	1	Container Nursery
1182	5912327	2111310200	1.14	1.14	Field Grown Nursery or Floral
1182	5912327	2111310500	3.47	3.47	Field Grown Nursery or Floral
1182	5912327	2111310700	1.85	1.85	Field Grown Nursery or Floral
1214	C182017	1284401700	4.60	1.5	Tree Fruit
1214	C182017	1284401800	2.80	1.5	Tree Fruit
1214	C182017	1284401900	2.17	1.5	Tree Fruit
1214	C182017	1284402000	3.01	1.5	Tree Fruit
1214	C182017	1284402100	4.32	1.5	Tree Fruit
1252	C182259	2650503200	3.00	1	Tree Fruit
1389	C719651	1111901100	7.58	7	Tree Fruit
1398	C182257	2380630600	2.40	1	Tree Fruit
1398	C182257	2380630700	1.20	1.1	Tree Fruit
1398	C182257	2380630800	1.50	1.2	Tree Fruit
1398	C182257	2380630900	1.50	1.2	Tree Fruit
1398	C182257	2380631000	2.40	1	Tree Fruit
1403	C279241	3930103900	26.81	20	Tree Fruit
1405	C645663	1282714600	2.01	0	Other
1405	C645663	1083902900	52.00	50	Tree Fruit
1405	C645663	1281502000	13.90	13	Tree Fruit
1405	C645663	1281510500	12.65	12	Tree Fruit
1405	C645663	1281603300	16.60	16	Tree Fruit
1405	C645663	1282110200	19.08	19	Tree Fruit
1405	C645663	1282110300	8.50	8	Tree Fruit
1405	C645663	1282110500	8.16	8	Tree Fruit
1405	C645663	1282122600	8.00	5	Tree Fruit
1405	C645663	1282714500	4.31	4	Tree Fruit
1405	C645663	1323201500	10.12	10	Tree Fruit
1431	W252949	6753312100	0.10	0.1	Tree Fruit



<b>SDRILG ID</b>	<b>SDRILG Member Number</b>	<b>Parcel Number</b>	<b>Total Acres</b>	<b>Irrigated Acres</b>	<b>Primary Crop Type</b>
1431	W252949	6753312200	0.40	0.4	Tree Fruit
1431	W252949	6753410900	3.00	1.5	Tree Fruit
1431	W252949	6753411000	5.00	4	Tree Fruit
1431	W252949	6753411100	0.40	0.4	Tree Fruit
1449	C182508	1311602900	2.13	2	Tree Fruit
1462	C182584	1292706400	2.50	1.5	Tree Fruit
1505	c789157	1881404500	4.00	1	Greenhouse Crops
1507	C104510	1025602400	2.00	2	Container Nursery
1511	C442464	1252323300	21.45	21	Tree Fruit
1511	C442464	1330205200	2.66	1.5	Tree Fruit
1511	C442464	1330600600	21.00	21	Tree Fruit
1551	C119272	1015100800	1.00	1	Tree Fruit
1552	C777817	1280931600	2.63	2	Tree Fruit
1552	C777817	1280931700	2.85	2	Tree Fruit
1565	C18257	2721322200	120.00	100	Container Nursery
1572	C182327	1822600600	20.00	20	Field Grown Nursery or Floral
1583	C745630	1294101700	3.00	3	Tree Fruit
217	C182361	1311502600	22.04	22.04	Tree Fruit
217	C182361	1311502700	15.00	3.00	Tree Fruit
292	C567839	1710322300	1.50	1.50	Greenhouse Crops
684	C888069	1220902100	1.00	1	Container Nursery
684	C888069	1220904100	12.00	11	Container Nursery
684	C888069	1220905600	1.00	1	Container Nursery
693	ME96206	1294000700	8.00	6	Field Grown Nursery or Floral
693	ME96206	1851123400	2.50	2	Tree Fruit
693	ME96206	1850724000	8.00	7	Tree Fruit
724	C181234	5962510800	8.00	3	Field Grown Nursery or Floral
773	ME96206	1851123400	2.50	5	Tree Fruit
774	ME96206	1294000700	8.00	6	Field Grown Nursery or Floral
774	ME96206	1851123400	2.50	2	Tree Fruit
774	ME96206	1850724000	8.00	7	Tree Fruit
868	C182282	1333013800	5.00	2	Tree Fruit
893	C182301	1333012000	5.00	3	Tree Fruit
897	C182615	1072405300	2.65	1	Tree Fruit
925	C544991	1081612000	2.04	1	Tree Fruit
931	C733674	1281905200	22.81	14.75	Tree Fruit
947	C204649	1281703100	10.00	10	Tree Fruit
	C182780	1081004500	10.00	8	Field Grown Nursery or Floral

## **APPENDIX B**

### **FIELD MONITORING AND SAMPLING STANDARD OPERATING PROCEDURES**

MPSL-DFG Field Sampling Team	SOP Procedure Number:	1.0
Standard Operating Procedures (SOPs) for Conducting Field Measurements and Field Collections of Water and Bed Sediment Samples in SWAMP	Date:	15 October 2007
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## **Marine Pollution Studies Laboratory – Department of Fish and Game (MPSL-DFG) Standard Operating Procedures (SOPs) for Conducting Field Measurements and Field Collections of Water and Bed Sediment Samples in the Surface Water Ambient Monitoring Program (SWAMP)**

The SOPs below are for reference and information purposes only, the documents are not required by the Surface Water Ambient Monitoring Program (SWAMP). Please see the SWAMP Quality Assurance Management Plan ( <http://www.swrcb.ca.gov/swamp/qamp.html> ) for more information regarding SWAMP QA/QC requirements.

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## Field Measurements

### Field Data Sheets

Field data sheets are used to record field observations, probe measurements, and water and sediment chemistry sampling. Field data sheets are provided through the Marine Pollution Studies Laboratory website at:

<http://mpsl.mlml.calstate.edu/swdwnlds.htm>

Click on the *Field Data Sheets* for the most recent versions. There are guidelines provided below to standardize what is recorded on all data sheets and that should be helpful in completing each form. The Beaufort Scale (see at the end of this document) is also used for specifications and equivalent wind speeds for water conditions. The entries discussed below and on the field data sheets are recorded at each sampling site.

### Notes to Standardize SWAMP Field Data Sheets (For in the field use)

Upon arrival at a sampling site, record visual observations on the appearance of the water and other information related to water quality and water use.

Key Reminders to identify samples:

1. **Sample Time** is the SAME for all samples (Water, Sediment, & Probe) taken at the sampling event. Use time of FIRST sample as it is important for the chain of custody (COC).
2. **Left Bank/Right Bank**  
*Left bank* is defined as the bank to the left of the observer when facing downstream, and the *right bank* is to the right of the observer when facing downstream

**FIELD OBSERVATIONS:** (each one of these observations has a *Comment* field in the database so use comment space on data sheet to add information about an observation if necessary)

1. **DOMINANT SUBSTRATE:** if possible; describe DOMINANT substrate type; use UNK if you cannot see the dominant substrate type
2. **WADEABILITY:** in general, is the water body being sampled wadeable to the average person AT the POINT of SAMPLE
3. **BEAUFORT SCALE:** use scale 0-12; refer to scales listed at the end of this document.
4. **WIND DIRECTION:** records the direction from which the wind is blowing
5. **PICTURES:** Digital photos are taken to help document the actual sampling site. The convention is to take photos facing DOWNSTREAM, overlooking the site. Right bank and left bank are thus defined in this downstream-facing direction. Document any discrepancies from this convention. Only one photo is necessary, if both, left and right

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bank, fit into one frame. Record all photos in the field data sheet space to record picture numbers given by camera; be sure to rename accordingly back in the office. All photos should be renamed and saved with the StationCode\_yyyy\_mm\_dd\_uniquecode (e.g. 123ABC123\_2007\_07\_01\_BBDS).

6. **SITE ODOR:** Note if hydrogen sulfide odor, musty odor, sewage odor, etc. is in the sampling reach
7. **SKY CODE:** Note recent meteorological events that may have impacted water quality
8. **OTHER PRESENCE:** VASCULAR refers to terrestrial plants or submerged aquatic vegetation (SAV) and NONVASCULAR refers to plankton, periphyton etc.
9. **PRECIPITATION:** Note if any precipitation is occurring during sampling
10. **PRECIPITATION LAST 24 HOURS:** Note how much precipitation has occurred within the last 24-h of sampling
11. **WATER ODOR:** Note if the sample water being collected has odor
12. **WATER CLARITY:** this describes the clarity of the water while standing creek side; clear represents water that is clear to the bottom, cloudy may not be clear to bottom but greater than 4" can be seen through the water column.
13. **WATER COLOR:** This is the color of the water from standing creek side
14. **OBSERVED FLOW:** Visual estimates in cubic ft/s.

#### **SAMPLE DETAILS:**

1. **EVENT TYPE:** Note the event type based which type of media is being collected
2. **SAMPLE TYPE:** GRAB samples are when bottles are filled from a single depth; INTEGRATED sample are taken from MULTIPLE depths and combined.
  - a. GRAB: use 0.1 for subsurface samples; if too shallow to submerge bottle; depth =0
  - b. INTEGRATED: -88 in depth sampled, record depths combined in sample comments
3. **SAMPLING CREW:** J. Smith, S. Ride (first person listed is crew leader)
4. **STARTING BANK:** Which side of the stream was accessed first. Bearings are always recorded looking downstream
5. **OCCUPATION METHOD:** What media was used to access the site
6. **TARGET LAT/LONG:** Refers to the existing station location that the sampling crew is trying to achieve; can be filled out prior to sampling
7. **ACTUAL LAT/ LONG:** is the location of the current sample event.
8. **SAMPLE LOCATION:** describes from where IN water body sample was taken: Can be combined; ex: bank/thalweg or midchannel /thalweg
9. **HYDROMODIFICATION:** Describe existing hydromodifications such as a grade control, drainage pipes, bridge, culvert
10. **HYDROMOD LOC:** if there was an IMMEDIATE (with in range potentially effecting sample) hydromodification; was sample taken upstream or downstream of modification; if there is no hydromodification, NA is appropriate
11. **STREAM DEPTH, WIDTH & DISTANCE FROM BANK:** describe in meters at point of sample. Distance from bank should be recorded from the starting bank

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## Field Data Logbook

A Field Data Logbook or a Field Folder is taken into the field on each sampling trip. The use of bound or loose-leaf notebooks is left up to the entity conducting the monitoring. A good safety precaution against the loss of a bound field data logbook is to photocopy the current pages upon returning from the field. These pages are kept on file at the specific sample collection entity's office. If a loose-leaf notebook is used, take care to remove original field data log sheets from the notebook and file in the office. Copies of the field data log sheets may be left in the notebook for future reference.

**Field Data Logbooks (bound or loose leaf sheets) are maintained on file indefinitely in each regional office or contract laboratory office.** They are never discarded, since the logbook may be the only written record of field measurements. Field Data Logbooks are reviewed periodically during SWAMP QA site visits. At this point, these field notes are not inclusive of the information that would be collected for biological assessment work, and several other data measurement types.

## Flow

Sampling crews should be notified on reconnaissance forms if it is known that there is an operational United States Geological Survey (USGS) gage is located at or nearby a sampling site. If there is a USGS gage nearby, a gage height in feet is recorded and later converted to an instantaneous flow value and recorded in the logbook. The gage height is always to be reported to the USGS for conversion to flow. If a USGS gage is not available, a flow measurement should be taken, if requested. See Instantaneous Flow Measurement information starting on page 13 in this document. In addition, it is recommended that a flow severity value is recorded at each stream or river station that is not tidally influenced. See the Flow Severity section starting on page 13 of this document. Centroid velocity measurements may also be taken as a minimum acceptable rough characterization of the stream flow as requested, although this measurement is not to be recorded as a flow, since it is only a velocity measurement.

## Record of Samples Collected for Purposes of Chemical Analysis

The general types of chemical samples to be collected are listed for each site, since this may vary from site-to-site (e.g., metals-in-water, pesticides-in-sediments, routine water quality). Analyses authorization forms are recommended since different authorized laboratories perform different chemical analyses. The method of preservation for each chemical sample is recorded, as appropriate.

## Record of Data Submission

The *Logbook* field must indicate in some manner whether data recorded in the logbook has been transcribed onto data forms and submitted to the SWAMP data management staff.

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## Other Observations

**Water Appearance** Note general appearance (e.g., color, unusual amount of suspended matter, debris or foam)

## Sediment Appearance

Color, Odor and sediment composition should be noted.

## Weather

Note recent meteorological events that may have impacted water quality; (e.g., heavy rains, cold front, very dry, very wet)

## Biological Activity

Note excessive macrophyte, phytoplankton or periphyton growth. The observation of water color and excessive algal growth is very important in explaining high chlorophyll a values. Other observations such as presence of fish, birds and spawning fish are noted.

## Watershed or Instream Activities

Note instream or drainage basin activities or events that are impacting water quality (e.g., bridge construction, shoreline mowing, livestock watering upstream).

## Record of Pertinent Observations Related to Water Quality and Stream Uses

If the water quality conditions are exceptionally poor, note that standards are not met in the observations, (e.g., dissolved oxygen is below minimum criteria). Note uses (e.g., swimming, wading, boating, fishing, irrigation pumps, navigation). Eventually, for setting water quality standards, the level of use will be based on comments related to the level of fishing and swimming activities observed at a station.

## Specific Sample Information

Note specific comments about the sample itself that may be useful in interpreting the results of the analysis (e.g., number of sediment grabs, or type and number of fish in a tissue sample). If the sample was collected for a complaint or fish kill, make a note of this in the observation section.

## Missing Parameters

If a scheduled parameter or group of parameters is not collected, make some note of this in the comments.

## Field Data Measurements

While collecting water samples (see Field Collection Procedures for Water Samples section), record appropriate field measurements. When field measurements are made with a multiparameter instrument, it is preferable to place the sonde in the body of water to be sampled and allow it to equilibrate in the dissolved oxygen (D.O.) mode while water samples are collected. Field measurements are made at the centroid of flow, if the stream visually appears to be completely mixed from shore to shore. *Centroid* is defined as the midpoint of that portion of the stream width which contains 50% of the total flow. For routine field measurements, the date, time and depth are reported as a grab. Measure Quality Objectives (MQO's) for field measurements are listed in appendix C of the SWAMP QAMP.

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## Recommended Depths for Conducting Field Data Measurements

**Water Depth Less than 5 ft (<1.5 m)** If the water depth is less than 5 ft (1.5 m), grab samples for water are taken at approximately 0.1 m (4 in.), and multi-probe measurements are taken at approximately 0.2 m (8 in.). This is because all sensors have to be submerged, so 0.1 m would not be deep enough. But taking a grab sample at 0.2 m is not always feasible, as it is difficult to submerge bottles to that depth, and in many cases the bottle will hit the stream bottom.

**Water Depth Greater than 5 ft (>1.5 m)** If the water depth at the sampling point exceeds 5 ft (1.5 m) in depth, a vertical profile of dissolved oxygen, temperature, pH and specific conductance are made using the multiparameter probe equipment. The depth of the sonde at the time of measurement is most accurately determined from the depth sensor on the multiparameter sonde rather than depth labels on the cable.

**Vertical Depth Profiles and Depth-Integrated Sample Collection** If depth integration sampling is being conducted, or if vertical profile measurements are requested, multi-probe measurements are made starting at a depth of 0.2 m, and are then conducted at 1.0, 2.0, 3.0, 4.0, and 5.0 m depths after that until 5.0 m depth is reached. Beginning at 5.0 m, measurements are made every 5.0 m through depth profile.

Field data for multiparameter vertical depth profiles are recorded in final form on the SWAMP Field Data Sheets and submitted to the SWAMP data management staff. Go to <http://mpsl.mlml.calstate.edu/swdwnlds.htm> for detailed information on data reporting.

### Water Temperature (°C)

Water temperature data are recorded for each SWAMP visit in final form in a Field Data Logbook and submitted to the SWAMP data management staff. See <http://mpsl.mlml.calstate.edu/swdwnlds.htm> for detailed information on data reporting.

### Temperature Sampling Procedures

Temperature is measured in-stream at the depth(s) specified above. Measuring temperature directly from the stream by immersing a multiprobe instrument or thermometer is preferred.

### Hand Held Centigrade Thermometer

If an electronic meter is not available, the temperature is measured with a hand-held, centigrade thermometer (Rawson, 1982).

- < In wadeable streams, stand so that a shadow is cast upon the site for temperature measurement.



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- < Hold the thermometer by its top and immerse it in the water. Position the thermometer so that the scale can be read.
- < Allow the thermometer to stabilize for at least one minute, then without removing the thermometer from the water, read the temperature to the nearest 0.1° C and record.
- < Do not read temperature with the thermometer out of the water. Temperature readings made with modern digital instruments are accurate to within  $\pm 0.1^\circ \text{C}$ .

### **Temperature Measurement from a Bucket**

When temperature cannot be measured in-stream, it can be measured in a bucket-Nalgene or plastic. Care must be taken to insure a measurement representative of in-stream conditions.

The following conditions must be met when measuring temperature from a bucket:

- < The bucket must be large enough to allow full immersion of the probe or thermometer.
- < The bucket must be brought to the same temperature as the water before it is filled.
- < The probe must be placed in the bucket immediately, before the temperature changes.
- < The bucket must be shaded from direct sunlight and strong breezes prior to and during temperature measurement.
- < The probe is allowed to equilibrate for at least one minute before temperature is recorded.
- < After these measurements are made, this water is discarded and another sample is drawn for water samples which are sent to the laboratory.

### **pH (standard units)**

pH data is recorded for each SWAMP visit in final form on the Field Data Sheets and submitted to the SWAMP data management staff. See <http://mpsi.mlml.calstate.edu/swdwnlds.htm> for detailed information on data reporting.

### **pH Sampling Equipment**

The pH meter should be calibrated according to the recommended procedures for calibration and maintenance of SWAMP field equipment. Calibration directions are listed in the manufactures field equipment operations manual. The pH function is pre and post calibrated every 24 h of use for multiparameter instruments.

### **pH Sampling Procedures**

#### **In-stream Method**

Preferably, pH is measured directly in-stream at the depth(s) specified earlier in this document. Allow the pH probe to equilibrate for at least one minute before pH is recorded to the nearest 0.1 pH unit.

#### **pH Measurement from a Bucket**

When pH cannot be measured in-stream, it can be measured in a bucket-Nalgene or plastic. The following precautions are outlined above; "Temperature Measurement from a Bucket".

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### **Potential Problems**

- < If the pH meter value does not stabilize in several minutes, out gassing of carbon dioxide or hydrogen sulfide, or the settling of charged clay particles may be occurring (Rawson, 1982).
- < If out gassing is suspected as the cause of meter drift, collect a fresh sample, immerse the pH probe and read pH at one minute.
- < If suspended clay particles are the suspected cause of meter drift, allow the sample to settle for 10 min, then read the pH in the upper layer of sample without agitating the sample.
- < With care, pH measurements can be accurately measured to the nearest 0.1 pH unit.

### **Dissolved Oxygen (mg/L)**

Dissolved oxygen (D.O.) data is recorded for each SWAMP visit in final form on a Field Data Sheet and submitted to the SWAMP data management staff.

See <http://mpsl.mlml.calstate.edu/swdwnlds.htm> for detailed information on data reporting.

### **Dissolved Oxygen Sampling Equipment**

The dissolved oxygen meter should be calibrated according to the recommended procedures for calibration and maintenance of SWAMP field equipment. Calibration directions are listed in the manufactures field equipment operations manual.

### **Multiprobe Instrument**

Pre and post calibrate the D.O. sensor every 24 h and for elevations greater than 500 ft on the multiprobe instrument. Preferably, D.O. is measured directly in-stream at the depth(s) specified in the Field Measurements section above. The D.O. probe must equilibrate for at least 90 s before D.O. is recorded to the nearest 0.1 % saturation or mg/L. Care must be taken at profile stations to insure that the reading is stable for each depth. Since dissolved oxygen takes the longest to stabilize, record this parameter after temperature, conductivity and pH. If the D.O. probe has an operable, automatic stirrer attached, the D.O. probe does not have to be manually stirred. However, if the probe is not equipped with an automatic stirrer, manual stirring must be provided by raising and lowering the probe at a rate of 1 ft/s (0.3m/s) without agitating the water surface. If the stream velocity at the sampling point exceeds 1 ft/s, the probe membrane can be pointed upstream into the flow and manual stirring can be avoided (Rawson, 1982).

### **D.O. Measurement from a Bucket**

When D.O. cannot be measured in-stream, it can be measured in a bucket-Nalgene or plastic, following precautions outlined in the Temperature Measurement from a Bucket listed above. During equilibration and reading, water should be moved past the membrane surface at a velocity of 1 ft/s (0.3 m/sec), either by automatic stirrer or manual stirring. If stirred manually in a bucket, the water surface is not agitated (Rawson, 1982).

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## 24-Hour Average D.O. (if requested in special study)

### Unattended 24-Hour D.O. Data Collection

#### Why Collect 24-Hour Data

Dissolved oxygen sampling for standards compliance is targeted to water bodies where low instantaneous D.O. levels indicate partial or nonsupport of designated aquatic life uses. Intensive monitoring is conducted with automated equipment that is preset to record and store field measurements hourly over one 24-h period. Four or more dissolved oxygen measurements may also be made manually at 4-6-h intervals over one 24-h period, as long as one is made near sunrise (0500-0900 h) to approximate the daily minimum. However, data collected with automated equipment is preferred.

#### When to Take Measurements

All 24-h D.O. monitoring events must be spaced over an index period representing warm-weather seasons of the year (approx March 15-October 15), with between one-half to two-thirds of the measurements occurring during the critical period (July 1-September 30). The *critical period* of the year is when minimum stream flows, maximum temperatures, and minimum dissolved oxygen concentrations typically occur in area streams. **A flow measurement must be taken at the time of deployment.** In a perennial stream, a 24-h data for standards compliance can not be used if the flow is less than the 7Q2. In perennial streams, the D.O. criterion to do not apply for flows under the 7Q2. A period of about one month must separate each 24-h sampling event. Additional samples may be collected outside the index period to further characterize a water body, but that information is generally not used for assessing standards compliance.

#### Frequency of Measurements

The measurement interval should be no more than once per 15 min and no less than once per hour.

#### Where to Take Measurements

For purposes of determining standards compliance with the 24-h average criteria, samples collected near the surface will be considered representative of the mixed surface layer. In deep streams, reservoirs, and tidally influenced water bodies, automated equipment is positioned between 1 foot (from the surface) to one-half the depth of the mixed surface layer. At least 10 24-h monitoring events (using the 24-h criteria and/or absolute minimum criteria) at each site within a 5-year period are recommended to provide adequate data for assessment.

#### When to Collect Other Routine Samples, if doing 24-hour D.O. measurements

Other routine field measurements and water samples should be collect at either the time of deployment, at the reference check, or when the multiprobe recording 24-h data is retrieved. When ever possible, flow must be measured at the 24-h site.

#### Priority for Scheduling 24-Hour Sampling Events

- < 303d listed waterbodies
- < Waterbodies with Concerns for DO problems (too few samples available for full use assessment).

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- < Occurrence of low D.O. concentrations observed during the day
- < Waterbodies with trends indicating declining D.O. concentrations
- < Waterbodies which would contribute to an Ecoregion data set

### **Data Reporting for 24-hour D.O. measurements**

Dissolved oxygen values recorded over the 24-h period are summed and divided by the number of measurements to determine the average concentration, which is compared to the 24-h criterion. The lowest D.O. value from each 24-h set is compared to the minimum criterion. There will be occasions when a complete 24-h data set won't be possible. For example, if there are 18 measurements instead of 24, a time weighted diurnal average needs to be calculated. This can be easily done using GW Basic.

Support of assigned aquatic life use is based on 24-h D.O. average and minimum criteria for each monitoring event. Report the 24-h average D.O. value, number of measurements over a 24-h period, and the minimum, and maximum values. Report data as a time composite sample with a beginning and ending date and time, covering the 24-h period measured.

### **Specific Conductance ( $\mu\text{S}/\text{cm}$ )**

Specific conductance should be recorded for each SWAMP visit in final form on a Field Data Sheet and submitted to the SWAMP data management staff.

See <http://mpsl.mlml.calstate.edu/swdownlds.htm> for detailed information on data reporting.

### **Specific Conductance Sampling Equipment**

The conductivity meter should be calibrated according to the recommended procedures for calibration and maintenance of SWAMP field equipment. Calibration directions are listed in the manufactures field equipment operations manual.

### **Specific Conductance Sampling Procedure**

Preferably, conductivity is measured directly in-stream at the depth(s) specified earlier in this document. Allow the conductivity probe to equilibrate for at least one minute before specific conductance is recorded to three significant figures (if the value exceeds 100). The primary physical problem in using a specific conductance meter is entrapment of air in the conductivity probe chambers. The presence of air in the probe is indicated by unstable specific conductance values fluctuating up to  $\pm 100 \mu\text{S}/\text{cm}$ . The entrainment of air can be minimized by slowly, carefully placing the probe into the water; and when the probe is completely submerged, quickly move it through the water to release any air bubbles.

If specific conductance cannot be measured in-stream, it should be measured in the container it can be measured in a bucket-Nalgene or plastic. The following precautions are outlined above; "Temperature Measurement from a Bucket".

### **Salinity (parts per thousand--ppt, or ‰)**

The value for salinity is computed from chloride concentration or specific conductance. The calculation assumes a nearly constant ratio for major ions in an estuary when seawater is diluted

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by river water. This assumption does not hold for cases where salinity is less than about three parts per thousand. Salinity determinations at such low values are only approximate. In estuarine waters, salinity is a relevant and meaningful parameter. Often the salinity may be low, approaching that of freshwater. Nevertheless, this is useful information. Determine if a station is estuarine from historical records (i.e., experiences cases where salinity is >2.0 ppt) and always report salinity at this station, regardless of the salinity during periods of high flow.

Salinity is measured directly in-stream at the depth(s) specified earlier in this document. Salinity data should be recorded for each SWAMP visit in final form on a Field Data Sheet and submitted to the SWAMP data management staff. See <http://mpsi.mlml.calstate.edu/swdownlds.htm> for detailed information on data reporting.

Values between 2.0 ppt and 1.0 ppt should be reported as <2.0 ppt rather than the actual value and values <1.0 ppt should be reported as <1.0 ppt. The field instruments compute salinity from specific conductance and temperature, and display the value in parts per thousand. Report salinity values above 2.0 ppt to the nearest 0.1 ppt.

## **Secchi Disc Transparency (meters)--if requested in special study**

Secchi disk transparency should be recorded for each SWAMP visit in final form on a Field Data Sheet and submitted to the SWAMP data management staff. See <http://mpsi.mlml.calstate.edu/swdownlds.htm> for detailed information on data reporting.

### **Secchi Disk Sampling Equipment**

- < Secchi disk, 20 cm in diameter
- < Measuring tape

### **Secchi Disk Transparency Sampling Procedures**

Preferably, Secchi disk transparency is measured directly in-stream wherever conditions allow. The Secchi disk should be clean, weighted and suspended with chain, wire, or Dacron line (the line used to suspend the Secchi disk should not be nylon or cotton; stretching may cause erroneous readings). Another option is to attach the Secchi disk to a metal rod calibrated in metric units.

### **Average Turbidity**

The Secchi disk should be lowered vertically in a location shielded from direct sunlight. Glare from the water's surface will affect the accuracy of the measurement. Don't wear sunglasses.

Slowly lower the disk until it disappears from view. The person viewing the disk should maintain an eye level of less than two meters above the water's surface. Note the depth at which the disk disappears from view.

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Slowly raise the disk until it becomes visible. Note the depth at which the disk reappears.

Compute the mathematical average of the two depths noted and record the average value to two significant figures in the field logbook. The recorded average value is the Secchi disk transparency.

### **High Turbidity (Muddy Water)**

In streams with very high turbidity, high velocity, and/or poor access, it may be necessary to measure Secchi disk transparency in a bucket. Fill the bucket from the centroid of flow being careful not to disturb the substrate.

Follow steps above for measuring the Secchi disk depth within 30 s after raising the filled bucket from the water's surface. Or, re-suspend the solids by stirring, then quickly make the measurement.

Record Secchi disk transparency to two significant figures.

### **Low Turbidity (Clear Water)**

Some bodies of water will be so clear and shallow that it will not be possible to lower the Secchi disk until it disappears from view.

Measure and record the depth at the deepest point accessible. Report Secchi disk transparency as greater than the deepest depth measured.

*Example (Low Turbidity):* South Fork Rocky Creek is a small ( $<1 \text{ ft}^3/\text{s}$ ) clear stream. The stream in the vicinity of the sampling site was less than 1 m deep and the bottom was clearly visible everywhere. However, a pool was located in the stream next to a bridge. The maximum depth of the pool was 2.6 m at which depth the Secchi disk was still visible. Therefore, Secchi disk transparency for South Fork Rocky Creek was recorded as  $> 2.6 \text{ m}$ .

### **Importance of Secchi Disk Data**

Eutrophication, the natural aging process in reservoirs and lakes is accelerated by human activities which add nutrients to lakes, reservoirs, and the surrounding watersheds. Section 314 of the Clean Water Act (CWA) of 1987 requires all states to classify lakes and reservoirs according to trophic state. Although chlorophyll a is the most direct measure of algal biomass, other indices and programs utilize Secchi disk depth as the primary factor.

### **Turbidity Measurement with Turbidity Meter**

Nephelometric Turbidity can be determined by measuring the amount of scatter when light is passed through a sample using a turbidity meter. The LaMotte 2020 Turbidity meter is a suitable instrument for example.

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Meters should be calibrated using a standard close to the expected sample value.

For instructions on how to operate the instruments refer to the manufacturer's manual. Turbidity measurements can be executed together with water sampling. The turbidity sample has to be representative for the sampled water mass. Make sure that no gas bubbles are trapped in the vial for the reading and that the outside of the vial is wiped completely clean (i.e., meaning free of moisture, lint and fingerprints). Take several measurements to assure an accurate reading. Do not record values that vary greatly. If variations are small, record an average. If settling particles are present, record a reading before and one after settling. The meter might have to be recalibrated with a different standard, if the sample water readings are outside of the calibration standard limits.

## Days Since Last Significant Precipitation

*Significant precipitation is defined as any amount that visibly influences water quality.* Water quality in small to medium streams and in the headwaters of many reservoirs is influenced by runoff during and immediately after rainfall events. This influence is site specific and poorly studied. As part of a new initiative to understand and regulate the adverse effects of runoff, SWAMP would like to associate recent rains or melted snow with ambient water quality, using a parameter defined as "days since last significant precipitation". Record the number of days, rounded to the nearest whole number, since a rain has occurred that, in the best professional judgment of monitoring personnel, may have influenced water quality. If it is raining when the sample is collected, or has rained within the last 24-h, report a value of <1. If it has been a long time since a significant rain, record this as greater than that particular value, for example >7 days. If confidence about the recent history of precipitation is low, draw a line through the space on the data form.

## Flow Severity -- recommended new parameter

Flow severity should be noted for each SWAMP visit to non-tidally influenced flowing streams and submitted in the comments on the SWAMP Field Data Sheet. It should be recorded even if flow is visible but not measurable on that sampling visit. There are no numerical flow guidelines associated with flow severity. This is an observational measurement that is highly dependent on the knowledge of monitoring personnel. It is a simple but useful piece of information when assessing water quality data. For example, a bacteria value of 10,000 with a flow severity of 1 would represent something entirely different than the same value with a flow severity of 5. The six flow severity values are; 1=No Flow, 2= Low Flow, 3 = Normal Flow, 4 = Flood, 5 = High Flow, and 6 = Dry. The following are detailed descriptions of severity values:

- 1**      **No Flow** When a flow severity of one (1 = no flow) is recorded for a sampling visit, then a flow value of zero  $\text{ft}^3/\text{s}$  should also be recorded for that sampling visit. **A flow severity of one (1) (no flow) describes situations where the stream has water visible in isolated pools.** There should be no obvious shallow subsurface flow in sand or gravel beds between isolated pools. Low flow does not only apply

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to streams with pools. It also applies to long reaches of bayous and streams that have no detectable flow but may have water from bank to bank.

- 2 **Low Flow** When stream flow is considered low a flow severity value of two (2) is recorded for the visit and the corresponding flow measurement is also recorded for that visit. In streams too shallow for a flow measurement but with detected water movement, record a value of < 0.10 cfs. Note: Use a stick or other light object to verified the direction of water movement (i.e., movement is downstream and not the affect of wind.) What is low for one stream could be high for another.
- 3 **Normal Flow** When stream flow is considered normal, a flow severity value of three (3) is recorded for the visit and the corresponding flow measurement is also be recorded for that visit. Normal is highly dependent on the stream. Like low flow, what is normal for one could be high or low for another stream.
- 4 and 5 **Flood and High Flow** Flow severity values for high and flood flows have long been established by EPA and are not sequential. Flood flow is reported as a flow severity of four (4) and high flows are reported as a flow severity of five (5). High flows would be characterized by flows that leave the normal stream channel but stay within the stream banks. Flood flows are those which leave the confines of the normal stream channel and move out on to the flood plain.
- 6 **Dry** When the stream is dry a flow severity value of six (6 = dry) is recorded for the sampling visit. In this case the flow is not reported. This will indicate that the stream is completely dry with no visible pools.

Flow information for over 200 USGS sites is available on the Internet. The address is <http://water.usgs.gov/index.html>. This is useful information in determining flow conditions prior to sampling. This information may be included in general observations.

### Flow Measurement Method (Reporting)

The method (or instrument) used to measure flow is noted by reporting a method number. The method numbers are:

1- Flow Gage Station (USGS/IBWC)	3- Electric (ex. Marsh-McBirney)
2- Mechanical (ex. Pigmy meter)	4- Weir/Flume
5- Other (orange peel, etc.)	



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### **Flow (ft<sup>3</sup>/s)**

If requested, flow data should be recorded for each monitoring visit to non-tidal, flowing streams. Flow data should be recorded in final form on a Field Data Sheet and submitted to the SWAMP data management staff. See <http://mpsl.mlml.calstate.edu/swdwnlds.htm> for detailed information on data reporting. The following are two exceptions to the flow reporting requirement:

#### **No Flow/ Pools**

If there is no flow at a stream site and accessible, isolated pools remain in the stream bed, collect and report the required field data and laboratory samples from the pools and report instantaneous flow. Under these conditions, flow (ft<sup>3</sup>/s) should be reported as zero. The reported flow severity value should be one. Pools may represent natural low-flow conditions in some streams and the chemistry of these pools will reveal natural background conditions.

#### **Dry**

If the stream bed holds no water, the sampling visit is finished. Report that the stream was "dry" in the observations and record a value of six (meaning "dry") for flow severity. No value is reported for flow since there is no water.

### **Flow Measurement**

If a flow measurement is required at a site, measure and record flow after recording visual observations. The intent of measuring flow first is to delay collection of chemical and biological water samples with limited holding times. Care must be taken not to collect water samples in the area disturbed during flow measurement. There are several acceptable flow measurement methods that can be used.

#### ***U.S. Geological Survey (USGS) Gaging Station***

Some SWAMP Stations are sampled at sites where the USGS maintains flow gaging equipment. On any type of sampling visit to a site that has a USGS flow gage, observe and record the gage height to the nearest hundredth of a foot in the field logbook. Upon return to the office, contact the USGS office responsible for maintaining the gage. USGS personnel can provide the flow value in cubic feet per second (ft<sup>3</sup>/s) that corresponds to the gage height. Although SWAMP personnel may have a rating curve available to them, shifts associated with changes in the stream bed may occur over time. Always call the USGS to determine the shift. At some sites the shift changes frequently. At others, the relation between stream flow and gage height is almost unchanging. If a gage is no longer maintained by USGS, cross out the recorded gage height and be prepared to measure flow by another method on the return visit to that site.

Several factors may influence the accuracy of the USGS rating curves that are used to convert gage height to flow. If there is any doubt about the accuracy of a USGS gage height reading or flow rating curve, sampling personnel should measure the flow if possible.

Gage height may be indicated at a USGS gage by one of three methods:

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**Staff Gage** Staff gages are enameled steel plates (with the appearance of large measuring tapes) bolted to some stable structure. For example, staff gages may be bolted to concrete bridge abutments, pillars, or docks. The staff gage face is white with black lettering and gradations. The gradations shown are feet, tenths of a foot, and 0.02 of a foot. The point at which the water level crosses the staff gage should be recorded to the nearest hundredth of a foot.

**Wire Weight Gage** Wire weight gages are locked, metal boxes with approximate dimensions of 15 in. long x 12 in. tall x 12 in. deep. Wire weight gages are usually affixed to bridge rails near mid-stream. They must be unlocked with a USGS key. The wire weight gages house a weight attached by wire cable to a graduated reel (gradations are tenths and hundredths of feet) with a counter at one end.

When the reel is released the weight can be gradually lowered until the bottom of the weight contacts the water surface. At the point of contact, the weight causes the water surface to ripple slightly. Maintaining the weight in that position, record the counter value to the nearest whole number and the point indicated by the stylus on the graduated reel to the nearest hundredth of a foot. Determine if the gage is the movable type that can be moved to multiple locations on the bridge. This type is common on braided streams. A correction value is stamped on the bridge near each point that the gage can be attached. Record the corrected value as the gage height in feet.

**Bubble Gage** Bubble gages are locked in metal sheds that are approximately 4 ft wide x 4 ft deep x 6.5 ft tall. The gage houses are most frequently located on the shore near a bridge but sometimes are attached to bridge pillars near mid-stream or established on the stream bank far from any bridge. The gage house must be unlocked with a USGS key. Bubble gages in gage houses usually indicate the gage height in two or three locations. A counter attached to the manometer system indicates gage height in feet. Some gage houses have stilling wells that can be entered. Often there is a staff gage on the inside wall.

Most bubble gages are also equipped with digital recorders. Digital recorders consist of two white, coded discs, approximately 4 in. in diameter with a punch tape overlapping a portion of each disc. The discs are marked with 100 gradations. As the front of the digital recorder is viewed, the stylus at the disc on the left indicates height in feet. The stylus at the disc on the right indicates gage height in hundredths of feet. The gage height from both discs should be added and the number recorded in the field logbook as gage height to the nearest hundredth of a foot.

Many USGS metal sheds also contain a surface level recorder. This device can be opened to determine how stable stream flow has been prior to the sampling event. Record observations concerning the flow hydrograph.

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## **Instantaneous Flow Measurement**

Water quality monitoring visits to sites where there are no nearby USGS flow gauges will require water quality monitoring personnel to measure flow, when requested by Regional Water Quality Control Boards (Regional Boards).

### ***Flow Measurement Equipment***

#### **Flow meter**

One of the following or an equivalent:

- < Marsh-McBirney Electronic meter
- < Montedoro-Whitney Electronic meter
- < Price Pigmy meter (with timer and beeper)
- < Price meter, Type AA (with Columbus weight)

#### **Additional Equipment**

- < Top-setting wading rod (preferably measured in tenths of feet)(see Figure 1).
- < Tape measure (with gradations every tenth of a foot).

### ***Flow Measurement Procedure (USGS, 1969)***

Select a stream reach with the following characteristics:

- < Straight reach with laminar flow (threads of velocity parallel to each other) and bank to bank. These conditions are typically found immediately upstream of riffle areas or places where the stream channel is constricted.
- < The site should have an even streambed free of large rocks, weeds, and protruding obstructions that create turbulence. The site should not have dead water areas near the banks, and a minimum amount of turbulence or back eddies.

### ***Flat Streambed Profile (cross section)***

Stretch the measuring tape across the stream at right angles to the direction of flow. When using an electronic flow meter, the tape does not have to be exactly perpendicular to the bank (direction of flow). When using a propeller or pigmy type meter, however, corrections for deviation from perpendicular must be made.

If necessary and possible, modify the measuring cross section to provide acceptable conditions by building dikes to cut off dead water and shallow flows, remove rocks, weeds, and debris in the reach of stream one or two meters upstream from the measurement cross section. After modifying a streambed, allow the flow to stabilize before starting the flow measurement.

Record the following information on the flow measurement form (see example Flow Measurement Forms at end of this document):

- < Station Location and Station ID
- < Date
- < Time measurement is initiated and ended
- < Name of person(s) measuring flow
- < Note if measurements are in feet or meters
- < Total stream width and width of each measurement section
- < For each cross section, record the mid-point, section depth and flow velocity

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### ***Measuring the Stream Width***

Measure and record the stream width between the points where the tape is stretched (waters edge to waters edge).

### ***Determining the Number of Flow Cross Sections***

Determine the spacing and location of flow measurement sections. Some judgment is required depending on the shape of the stream bed. Measurements must be representative of the velocity within the cross-section. If the stream banks are straight and the depth is nearly constant and the bottom is free of large obstructions, fewer measurements are needed, because the flow is homogeneous over a large section. Flow measurement sections do not have to be equal width. However, they should be unless an obstacle or other obstruction prevents an accurate velocity measurement at that point. ***No flow measurement section should have greater than 10% of the total flow.***

If the *stream width is less than 5 ft*, use flow sections with a width of 0.5 ft (See example 1 on page 23 of this document). If the *stream width is greater than 5 ft*, the minimum number of flow measurements is 10. The preferred number of flow measurement cross sections is 20-30 (See Example 2 on page 24 on this document). The total stream width is 26 ft with 20 measurements, section widths will be 1.3 ft ( $26/20 = 1.3$ ).

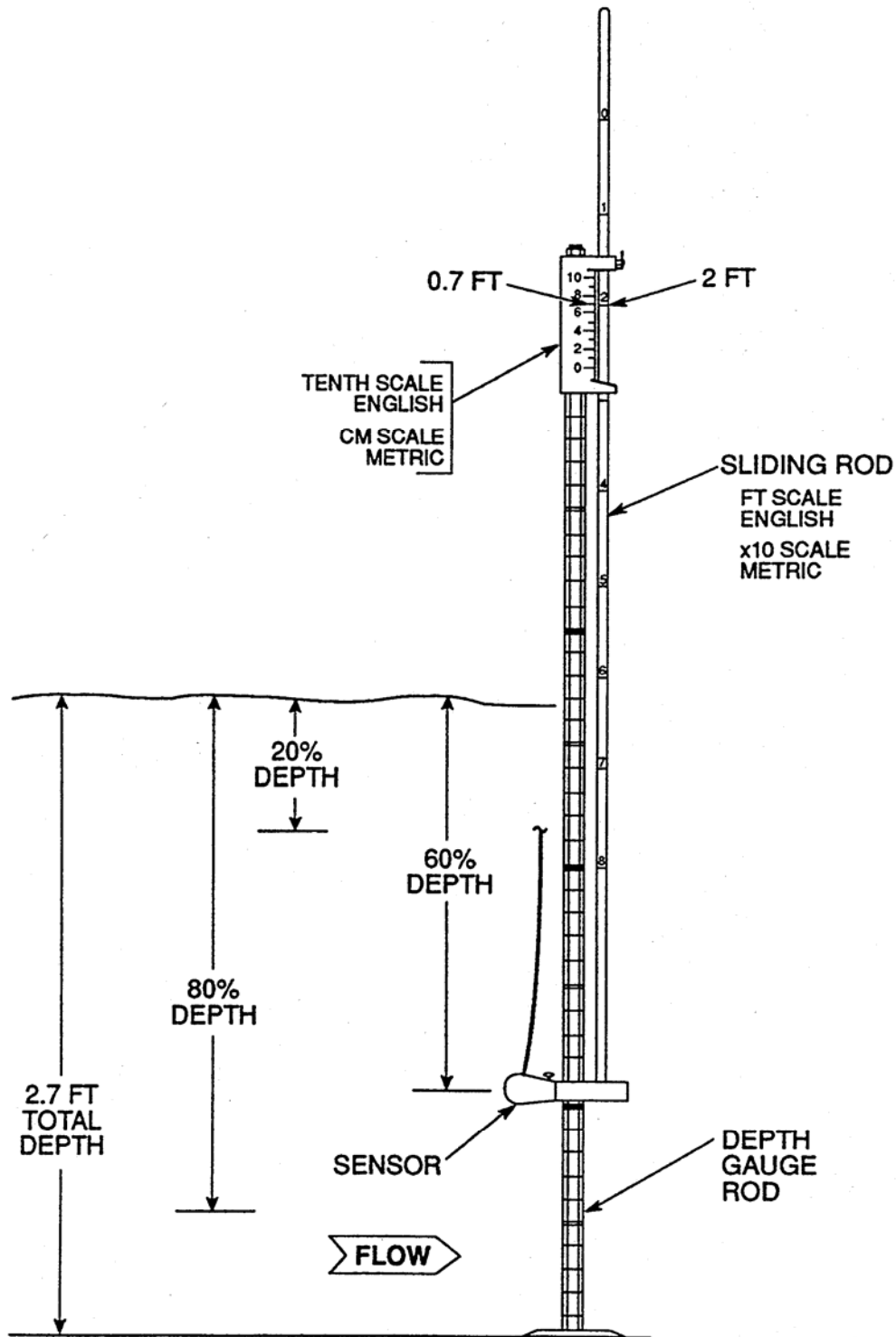
### ***Determining the Mid-Point of the Cross Section***

To find the mid-point of a cross section, divide the cross section width in half. Using Example 2 (see forms at end of document);

- < The total stream width is 26 ft with 20 cross sections and each cross section width is equal to 1.3 ft.
- < Divide 1.3 ft in half and the mid-point of the first section is 0.65 ft. In this example the tape at waters edge is set at zero (0) ft.
- < By adding 0.65 to zero the mid-point of the first section is 0.65 ft.
- < Each subsequent mid-point is found by adding the section width (1.3 ft) to the previous mid-point. For example; MIDPOINT #1 is  $0.65 + 0.0 = 0.65$ ; MIDPOINT #2 is  $0.65 + 1.3 = 1.95$  ft; MIDPOINT #3 is  $1.95 + 1.3 = 3.25$  ft and ....MIDPOINT # 20 is  $24.05 + 1.3$ .
- < Place the top setting wading rod at 0.65 ft for the first measurement.
- < Using a top setting wading rod, measure the depth at the mid-point of the first flow measurement section and record to the nearest 0.01 ft.

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Figure 1. Top-Setting Wading Rod  
(Marsh-McBirney)



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### ***Adjusting the Sensor Depth at a Cross Section***

Adjust the position of the sensor to the correct depth at each mid-point. The purpose of the top setting wading rod is to allow the user to easily set the sensor at 20%, 60%, and 80% of the total depth. The total depth can be measured with the *depth gage rod*. Each single mark represents 0.10 foot, each double mark represents 0.50 foot, and each triple mark represents 1.00 foot (see Figure 2).

#### **For Depths < 2.5 Ft**

If the depth is less than 2.5 ft, only one measurement is required at each measurement section. To set the sensor at 60% of the depth, line up the foot scale on the *sliding rod* with the *tenth scale*, located on top of the depth gage rod. If, for example, the total depth is 2.7 ft (as shown on Figure 2), then line up the 2 on the foot scale with the 7 on the tenth scale (Marsh-McBirney 1990).

#### **For Depths > 2.5 Ft**

If the depth is greater than 2.5 ft, two measurements should be taken at 20% and 80% of the total depth. To set the sensor at 20% of the depth, multiply the total depth by two. For example, if the total depth is 2.7 ft, the rod would be set at 5.4 ft (2.7 x 2). Line up the 5 on the sliding rod with the 4 on the tenth scale.

#### **For Depths > 2.5 Ft (cont)**

To set the sensor at 80% of the depth, divide the total depth by two. For example, the total depth is 2.7 ft the rod would be set at 1.35 ft (2.7/2). Line up the 1 on the sliding rod with the 0.35 on the tenth scale. The average of the two velocity measurements is used in the flow calculation. See page 2-36 for an example of a flow form recording measurements for depths greater than 2.5 ft.

NOTE: The point where the rod is set for 20 and 80% of the depth will not equal values derived by calculating 20 and 80% of the total depth.

### ***Measuring Velocity (this has typically been measured at 6/10 of the total depth, for velocity-only measurements)***

- < Position the meter at the correct depth and place at the mid-point of the flow measurement section. Measure and record the velocity and depth. The wading rod is kept vertical and the flow sensor kept perpendicular to the tape rather than perpendicular to the flow while measuring velocity with an electronic flow meter. When using a propeller or pigmy-type meter, however, the instrument should be perpendicular to the flow.
- < Permit the meter to adjust to the current for a few seconds. Measure the velocity for a minimum of 20 s with the Marsh-McBirney and Montedoro-Whitney meters. Measure velocity for a minimum of 40 s (preferably 2 min with the Price and pigmy meters).
- < When measuring the flow by wading, stand in the position that least affects the velocity of the water passing the current meter. The person wading stands a minimum of 1.5 ft downstream and off to the side of the flow sensor.

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- < A flow sensor, equipped with cable and weight may be used to measure flows where the water is too deep to wade. Follow the procedure involving meters attached to wading rods.
- < Report flow values less than 10 ft<sup>2</sup>/s to two significant figures. Report flow values greater than 10 ft<sup>3</sup>/s to the nearest whole number, but no more than three significant figures.
- < In cases where the flow is low and falling over an obstruction, it may be possible to measure the flow by timing how long it takes to fill a bucket of known volume.

Avoid measuring flow in areas with back eddies. The first choice would be to select a site with no back eddy development. However, this can not be avoided in certain situations. Measure the negative flows in the areas with back eddies. These negative values will be included in the final flow calculation.

### ***Calculating Flow***

To calculate flow, multiply the width x depth (ft<sup>2</sup>) to derive the area of the flow measurement section. The area of the section is then multiplied by the velocity (ft/s) to calculate the flow in cubic feet per second (cfs or ft<sup>3</sup>/sec) for that flow measurement section. When flow is calculated for all of the measurement sections, they are added together for the total stream flow (see Figure 2).

Q=Total Flow (or discharge), W=Width, D=Depth, V=Velocity.

$$Q = (W_1 * D_1 * V_1) + (W_2 * D_2 * V_2) + \dots + (W_n * D_n * V_n)$$

### ***What to Do with Negative Values***

Do not treat cross sections with negative flow values as zero. Negative values obtained from areas with back eddies should be subtracted during the summation of the flow for a site.

### ***Flow Estimate (ft<sup>3</sup>/s)***

Flow estimate data may be recorded for a non-tidally influenced stream when it is not possible to measure flows by one of the methods described above. Flow estimates are subjective measures based on field personnel's experience and ability to estimate distances, depths, and velocities. If flow can not be measured at a routine non-tidal station, a new site should be selected where flow can be measured.

### **Flow Estimate Procedure**

- < Observe the stream and choose a reach of the stream where it is possible to estimate the stream cross section and velocity.
- < Estimate stream width (ft) at that reach and record.
- < Estimate average stream depth (ft) at that reach and record. Estimate stream velocity (ft/s) at that reach and record. A good way to do this is to time the travel of a piece of floating debris. If doing this method from a bridge, measure the width of the bridge. Have one person drop a floating object (something that can be distinguished from other

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floating material) at the upstream side of the bridge and say start. The person on the downstream side of the bridge will stop the clock when the floating object reaches the downstream side of the bridge. Divide the bridge width by the number of seconds to calculate the velocity. The velocity can be measured at multiple locations along the bridge. These velocities are averaged. If this is done alone, watch for road traffic.

- < Multiply stream width (ft) times average stream depth (ft) to determine the cross sectional area (in ft<sup>2</sup>) which when multiplied by the stream velocity (in ft/s) and a correction constant, gives an estimated flow (ft<sup>3</sup>/s).

**Example:** A stream sampler conducted a sampling visit to a stream while the flow meter was being repaired. The sampler looked at the creek downstream from the bridge and saw a good place to estimate flow. The stream width was around 15 ft. It appeared the average depth on this reach was about 0.75 ft. The sampler timed a piece of floating debris as it moved a distance of 10 ft in 25 s downstream over the reach. An estimated flow with a smooth bottom was calculated using the following formula.

$$\text{Width} \times \text{Depth} \times \text{Velocity} \times A \text{ (correction factor)} = \text{estimated flow}$$

$$15 \text{ ft (width)} \times 0.75 \text{ ft (depth)} \times 2.5 \text{ ft/s (velocity)} \times A = 25 \text{ ft}^3/\text{s (cfs)}$$

A is a correction constant: 0.8 for rough bottom and 0.9 for smooth bottom

*Estimated flow should be reported to one or two significant figures.*

Experienced field personnel are able to estimate flow to within 20% of actual flow for total flows less than 50 ft<sup>3</sup>/s. The best way to develop this skill is to practice estimating flow before making measurements at all monitoring visits to non-tidally influenced flowing streams and then compare estimated flows with those obtained from USGS gages or from instantaneous flow measurements



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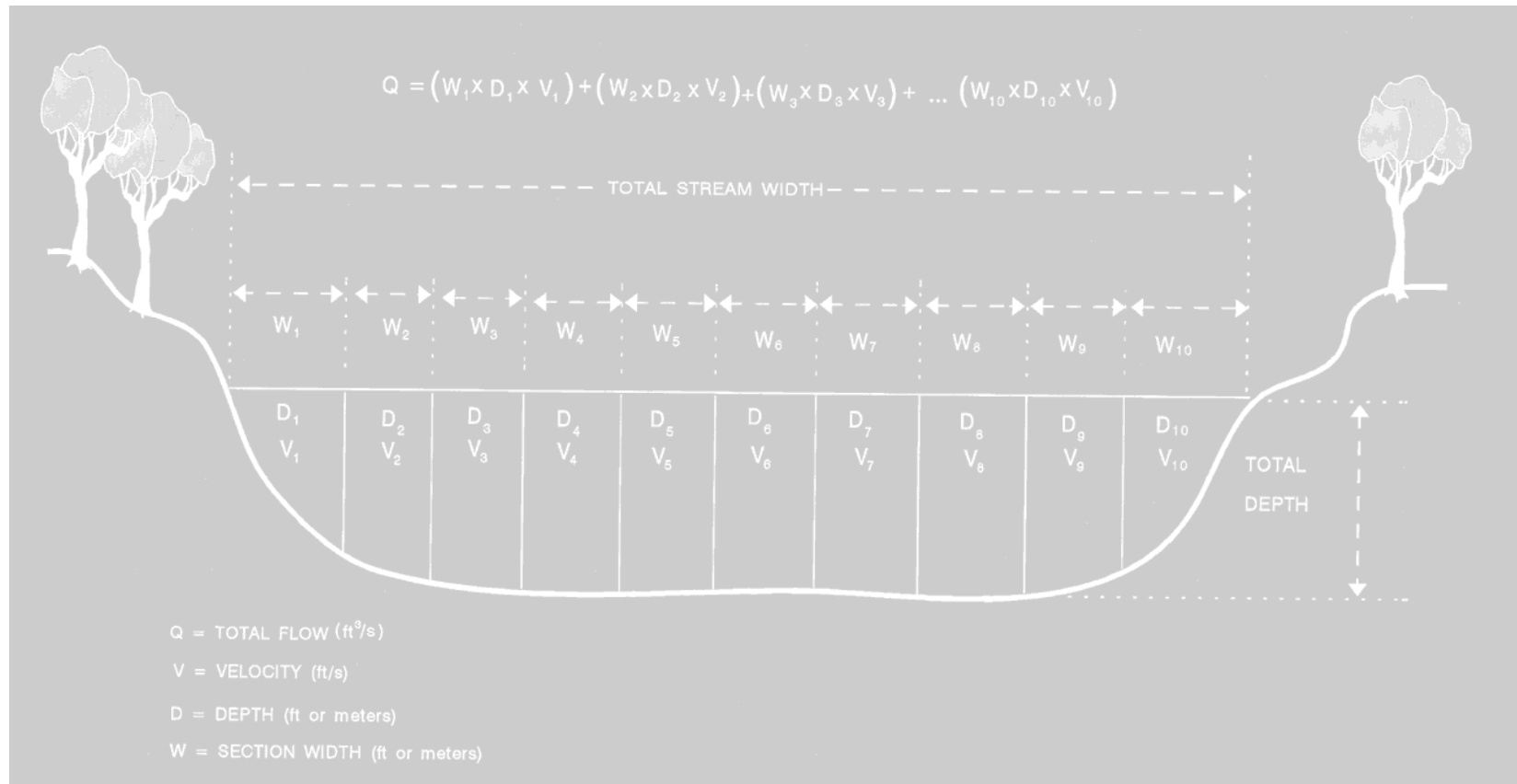


Figure 2. Stream Flow (Discharge) Measurement

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**Example 1.**  
**Stream Flow (Discharge) Measurement**  
**Small Stream < 5 Ft Wide and #2.5 Ft Deep**

Stream: OAK CREEK Date: 5/29/91  
Station Description: at US Hwy 90A  
Time Begin: 1545 Time End: 1630 Meter Type: Marsh-McBirney  
Observers: BK/MK Stream Width\*: 5 ft Section Width: 0.5 ft  
Observations: \_\_\_\_\_

Section Midpoint (ft)	Section Depth (ft)	Observational Depth** Ft	Velocity		Area W x D (ft <sup>2</sup> )	Discharge (Q) V x A (ft <sup>3</sup> /s)
			At Point (ft/s)	Average (ft/s)		
0.25	0.55			0.05		0.01375
0.75	0.80			0.11		0.044
1.25	0.85			0.27		0.42635
1.75	0.90			0.49		0.2205
2.25	1.10			0.58		0.275
2.75	1.50			0.72		0.540
3.25	1.20			0.76		0.456
3.75	0.90			0.76		0.342
4.25	0.75			0.44		0.165
4.75	0.30			0.00		0.00
$m^3/s \times 35.3 = ft^3/s$						
<b>Total Discharge (3Q) (ft<sup>3</sup>/s)</b>						<b>2.4826</b>

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### Example 2.

#### Stream Discharge Measurement Example (Larger Stream > 5 Ft and #2.5 Ft Deep)

Stream: RED RIVER Date: 5/28/91

Station Description: Post Oak Creek 40 m Below Sherman WWTP Outfall

Time Begin: 1542 Time End: 1601 Meter Type: Marsh-McBirney

Observers: CM, EW, DO Stream Width\*: 26 ft Section Width: 1.3 ft

Observations:

Section Midpoint (ft)	Section Depth (ft)	Observational Depth** (ft)	Velocity		Area W x D (ft <sup>2</sup> )	Discharge (Q) V x A (ft <sup>3</sup> /s)
			At Point (ft/s)	Average (ft/s)		
0.65	0.55			2.03	0.715	1.451
1.95	0.40			2.04	0.520	1.061
3.25	0.42			2.02	0.546	1.103
4.55	0.38			1.77	0.494	0.874
5.25	0.40			1.75	0.520	0.910
7.15	0.42			1.93	0.546	1.054
8.45	0.40			1.99	0.52	1.035
9.75	0.37			1.92	0.481	0.924
11.05	0.37			1.56	0.481	0.750
12.35	0.43			1.32	0.559	0.738
13.65	0.40			1.36	0.520	0.707
14.95	0.42			1.33	0.546	0.726
16.25	0.40			1.35	0.520	0.702
17.55	0.45			1.64	0.585	0.959
18.85	0.48			1.70	0.624	1.061
20.15	0.48			2.00	0.624	1.248
21.45	0.50			1.95	0.650	1.268
22.75	0.40			2.18	0.520	1.134
24.05	0.48			1.71	0.624	1.067
25.35	0.50			0.60	0.650	0.390
<b>Total Discharge (3Q) (ft<sup>3</sup>/s)</b>						<b>19.162</b>

m<sup>3</sup>/s x 35.3 = ft<sup>3</sup>/s

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### Example 3.

#### Stream Flow (Discharge) Measurement (Larger Stream > 5 Ft and >2.5 Ft Deep)

Stream: ARROYO COLORADO Date: 6/16/98

Station Description: Downstream of Harlingen WWTP

Time Begin: 1400 Time End: 1445 Meter Type: Marsh-McBirney

Observers: JD, CK Stream Width\*: 47.5 ft Section Width: 2.375 ft

Observations: \*Note that the starting point is at 4.7 ft on the measuring tape and not zero.

Section Midpoint (ft)	Section Depth (ft)	Observational Depth** (ft)	Velocity		Area W x D (ft <sup>2</sup> )	Discharge (Q) V x A (ft <sup>3</sup> /s)
			At Point (ft/sec)	Average (ft/sec)		
4.70	0.73			0.65	1.73	1.127
7.08	1.10			1.08	2.61	2.822
9.45	1.85			0.90	4.39	3.954
11.83	2.20			1.05	5.23	5.486
14.20	2.20			1.44	5.23	7.531
16.58	2.45			1.09	5.82	6.342
18.95	2.55	0.20	1.75	1.76	6.06	10.659
		0.80	1.76			
21.33	2.60	0.20	1.79	1.56	6.18	9.633
		0.80	1.32			
23.70	2.70	0.20	1.63	1.45	6.41	9.298
		0.80	1.26			
26.10	3.05	0.20	1.68	1.42	7.24	10.286
		0.80	1.15			
28.48	3.10	0.20	1.23	0.96	7.36	7.068
		0.80	0.69			
30.85	2.90	0.20	1.22	1.06	6.89	7.301
		0.80	0.89			
33.23	2.84	0.20	0.60	0.49	6.75	3.305
		0.80	0.37			
35.60	2.65	0.20	0.80	0.51	6.29	3.210
		0.80	0.21			
37.98	2.65	0.20	0.85	0.91	6.29	5.727
		0.80	0.96			
40.35	2.20			0.28	5.23	1.464
42.73	2.30			0.16	5.46	0.874
45.10	2.05			0.51	4.87	2.483
47.48	1.10			0.49	2.61	1.280
49.86	0.65			0.62	1.54	0.957

m<sup>3</sup>/s x 35.3 = ft<sup>3</sup>/s

**Total Discharge (3Q) (ft<sup>3</sup>/s)**

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### Summary of Significant Figures for Reporting Field Parameters

Parameter	Field Data Reporting Requirements
<b>Water Temperature</b> (°C)	Report temperature to the nearest tenth of a degree. Round insignificant figures 0 through 4 down and 5 thru 9 up.
<b>pH</b> (s.u.)	Report pH to the nearest tenth of a pH standard unit.
<b>D.O. mg/L</b>	Report dissolved oxygen to the nearest tenth of a mg/L.
<b>D.O.</b> (% saturation)	Report % saturation to the nearest tenth of a percent
<b>Specific Conductance</b> (micro siemens/cm)	Report specific conductance to only three significant figures if the value exceeds 100. Do not report ORP which is displayed by some multiprobes.
<b>Salinity</b> (ppt)	Report salinity values above 2.0 ppt to the nearest tenth of a part per thousand. In estuarine waters report the actual values displayed by the multiprobe above 2.0 ppt and values less than 2.0 as <2.0 or <1.0 only. Determine if a station is estuarine (i.e., experiences cases where salinity is >2.0 ppt) and always report salinity at this station, regardless of the salinity during periods of high flow.
<b>Secchi Disk</b> (meters)	Report Secchi depth transparency in meters to two significant figures.
<b>Days Since Last Significant Precipitation</b> (days)	Report whole numbers. If it is raining when the sample is collected or has rained within the last 24 h, report a value of <1. If it has been over a week since a rainfall event, report a value of > 7.
<b>Flow</b> (ft <sup>3</sup> /s)	Report instantaneous flow values less than 10 ft <sup>3</sup> /s to two significant figures. Report flow values greater than 10 ft <sup>3</sup> /s to the nearest whole number, but no more than three significant figures. When there is no flow (pools), report as 0.0. When there is no water, don't report a value, but report as "dry" in the observations.
<b>Flow Severity</b> (1-no flow, 2-low, 3-normal, 4-flood, 5-high, 6-dry)	When there is no flow (pools), report the severity as 1, and the instantaneous flow as 0.0 ft <sup>3</sup> /s. If the stream is dry, record only flow severity, as a value of 6.

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## BEAUFORT SCALE: Specifications and equivalent speeds for use at sea

FORCE	EQUIVALEN SPEED 10 m above ground		DESCRIPTION	SPECIFICATIONS FOR USE AT SEA
	Miles/hour	knots		
0	0-1	0-1	Calm	Sea like a mirror
1	1-3	1-3	Light air	Ripples with the appearance of scales are formed, but without foam crests.
2	4-7	4-6	Light Breeze	Small wavelets, still short, but more pronounced. Crests have a glassy appearance and do not break.
3	8-12	7-10	Gentle Breeze	Large wavelets. Crests begin to break. Foam of glassy appearance. Perhaps scattered white horses.
4	13-18	11-16	Moderate Breeze	Small waves, becoming larger; fairly frequent white horses.
5	19-24	17-21	Fresh Breeze	Moderate waves, taking a more pronounced long form; many white horses are formed. Chance of some spray.
6	25-31	22-27	Strong Breeze	Large waves begin to form; the white foam crests are more extensive everywhere. Probably some spray.
7	32-38	28-33	Near Gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.
8	39-46	34-40	Gale	Moderately high waves of greater length; edges of crests begin to break into spindrift. The foam is blown in well-marked streaks along the direction of the wind.
9	47-54	41-47	Severe Gale	High waves. Dense streaks of foam along the direction of the wind. Crests of waves begin to topple, tumble, and roll over. Spray may affect visibility.
10	55-63	48-55	Storm	Very high waves with long over-hanging crests. The resulting foam, in great patches, is blown in dense white streaks along the direction of the wind. On the whole the surface of the sea takes on a white appearance. The 'tumbling' of the sea becomes heavy and shock-like. Visibility affected.

Last edited on 09 January, 1999 Dave Wheeler [weatherman@zetnet.co.uk](mailto:weatherman@zetnet.co.uk)

Web Space kindly provided by [Zetnet Services Ltd](#), Lerwick, Shetland.

[http://www.zetnet.co.uk/sigs/weather/Met\\_Codes/beaufort.htm](http://www.zetnet.co.uk/sigs/weather/Met_Codes/beaufort.htm)

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## **Field Collection Procedures for Water Samples**

### **Scope and Application**

This protocol describes the techniques used to collect water samples in the field in a way that neither contaminates, loses, or changes the chemical form of the analytes of interest. The samples are collected in the field into previously cleaned and tested (if necessary) sample bottles of a material appropriate to the analysis to be conducted. Pre-cleaned sampling equipment is used for each site, whenever possible and/or when necessary. Appropriate sampling technique and measuring equipment may vary depending on the location, sample type, sampling objective, and weather. Trade names used in connection with equipment or supplies do not constitute an endorsement of the product.

### **Summary of Method**

Appropriate sample containers and field measurement gear as well as sampling gear are transported to the site where samples are collected according to each sample's protocol. Water velocity, turbidity, temperature, pH, conductivity, dissolved oxygen as well as other field data are measured and recorded using the appropriate equipment. These field data measurement protocols are provided in the SWAMP Field Measurement SOP. Samples are put on ice and appropriately shipped to the processing laboratories. This procedure has been modified from the Texas Natural Resources Conservation Commission's Procedure Manual for Surface Water Quality Monitoring, with major input from the United State's Geological Survey's (USGS's) National Water Quality Assessment (NAWQA) Protocol for Collection of Stream Water Samples, for which due credit is herewith given.

### **WATER SAMPLE COLLECTION**

Water chemistry and bacteriological samples, as requested, are collected at the same location. *Water samples are best collected before any other work is done at the site.* If other work (e.g., sediment sample collection, flow measurement or biological/habitat sample collection or assessment) is done after or downstream of the collection of water samples, it might be difficult to collect representative samples for water chemistry and bacteriology from the disturbed stream. Care must be taken, though, to not disturb sediment collection sites when taking water samples.

The following general information applies to all types of water samples, unless noted otherwise:

**Sample Collection  
Depth**

**Sub-Surface Grab Sample** Samples are collected at 0.1 m below the water surface. Containers should be opened and re-capped under water in most cases.

**Depth-integrated Sample** If a depth-integrated sample is



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taken, the sample is pumped from discrete intervals within the entire water column.

**Surface Grab Sample** Samples are collected at the surface when water depth is <0.1 m. Since there is a difference in water chemistry on the surface, compared to subsurface, surface water should be noted on the field data sheet as 0 m.

**Where to Collect Samples**

Water samples are collected from a location in the stream where the stream visually appears to be completely mixed. Ideally this would be at the centroid of the flow (*Centroid* is defined as the midpoint of that portion of the stream width, which contains 50% of the total flow), but depth and flow do not always allow centroid collection. For stream samples, the sampling spot must be accessible for sampling physicochemical parameters, either by bridge, boat or wading. Sampling from the shoreline of any water body (meaning standing on shore and sampling from there) is the least acceptable method, but in some cases is necessary.

In reservoirs, lakes, rivers, and coastal bays, samples are collected from boats at designated locations provided by Regional Water Quality Control Boards (Regional Boards).

**Sampling Order if Multiple Media are Requested to be Collected**

The order of events at every site has to be carefully planned. For example, if sediment is to be collected, the substrate can not be disturbed by stepping over or on it; water samples can not be taken where disturbed sediment would lead to a higher content of suspended matter in the sample. *For the most part, water samples are best collected before any other work is done at the site.* This information pertains to walk-in sampling.

**Sample Container Labels**

Label each container with the station ID, sample code, matrix type, analysis type, project ID, and date and time of collection (in most cases, containers will be pre-labeled). After sampling, secure the label by taping around the bottle with clear packaging tape.

**Procedural Notes**

For inorganic and organic water samples, bottles do not have to be rinsed if they are I-Chem 200 series or higher or ESS PC grade or higher. This means that the sample bottles are analyzed for contamination, and a certification of analysis is included with the bottles. Other sample containers are usually rinsed at least three times if the bottles do not meet these

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requirements. See filling instruction for each type of analyses if there is uncertainty. If applicable to the sample and analysis type, the sample container should be opened and re-capped under water.

**Sample Short-term Storage and Preservation**

Properly store and preserve samples as soon as possible. Usually this is done immediately after returning from the collection by placing the containers on bagged, crushed or cube ice in an ice chest. Sufficient ice will be needed to lower the sample temperature to at least 4 °C within 45 min after time of collection. Sample temperature will be maintained at 4 °C until delivered to the laboratory. Care is taken at all times during sample collection, handling and transport to prevent exposure of the sample to direct sunlight. Samples are preserved in the laboratory, if necessary, according to protocol for specific analysis (acidification in most cases).

**Field Safety Issues**

Proper gloves must be worn to prevent contamination of the sample and to protect the sampler from environmental hazards (disposable polyethylene, nitrile, or non-talc latex gloves are recommended, **however, metals and mercury sample containers can only be sampled and handled using polyethylene gloves as the outer layer**). Wear at least one layer of gloves, but two layers help protect against leaks. One layer of shoulder high gloves worn as a first (inside) layer is recommended to have the best protection for the sampler. Safety precautions are needed when collecting samples, especially samples that are suspected to contain hazardous substances, bacteria, or viruses.

**Sample Handling and Shipping**

Due to increased shipping restrictions, samples being sent via a freight carrier require additional packing. Although care is taken in sealing the ice chest, leaks can and do occur. Samples and ice should be bagged placed inside a large trash bag inside the ice chest for shipping. Ice should be double bagged to prevent melted ice water from leaking into the sample. The large trash bag can be sealed by simply twisting the bag closed (while removing excess air) and taping the tail down. Prior to shipping the drain plug of the ice chests have to be taped shut. Leaking ice chests can cause samples to be returned or arrive at the lab beyond the holding time.

Although glass containers are acceptable for sample collection, bubble wrap must be used when shipping glass.

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**Chain of Custody (COC) Forms**

Every shipment must contain a complete Chain of Custody (COC) Form that lists all samples collected and the analyses to be performed on these samples.

Make sure a COC is included for every laboratory, every time you send a shipment of samples. Electronic COCs can also be emailed to the various laboratories but must be sent before the samples arrive at their destinations.

Include region and trip information as well as any special instructions to the laboratory on the COC.

The original COC sheet (not the copies) is included with the shipment (insert into ziplock bag) One copy goes to the sampling coordinator, and the sampling crew keeps one copy.

Samples collected should have the salinity (in ppt), depth of collection, and date/time collected for each station on every COC.

Write a comment on this form, if you want to warn the laboratory personnel about possibly hazardous samples that contain high bacteria, chlorine or organic levels.

**Field QC Samples for Water Analyses**

Field duplicates are currently submitted at an annual rate of 5%. Field travel blanks are required for volatile organic compounds at a rate of one per cooler shipped. Field blanks are required for trace metals (including mercury and methyl mercury), DOC, and volatile organic compounds in water at a rate of 5%. See Appendix C of the SWAMP QAMP for detailed Field QC requirements.

**Field Site Data Sheets**

Each visited field site requires a field observation completed SWAMP Field Data Sheet, even if no samples are collected (i.e. at a site which is found to be dry). If water and/or sediment samples are collected, all elements of the SWAMP Field Data Sheet must be completely filled out.

**General Pre-Sampling Procedures**

**Instruments.** All instruments must be in proper working condition. Make sure all calibrations are current. Multi-probe sondes should be pre-calibrated every morning prior to sampling and post-calibrated within 24 h of the original calibration. Conductivity should also be calibrated between stations if there is a significant change in salinity. Dissolved oxygen sensors should be re-calibrated if there is a 500 ft

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change in elevation.

**Calibration Standards.** Pack all needed calibration standards.

**Sample Storage Preparations.** A sufficient amount of cube ice, blue ice and dry ice as well as enough coolers of the appropriate type/size must be brought into the field, or sources for purchasing these supplies identified in advance.

**Sample Container Preparation.** After arriving at the sample station, pack all needed sample containers for carriage to the actual collection site, and label them with a pre-printed label containing Station ID, Sample Code, Matrix info, Analysis Type info, Project ID and blank fields for date and time (if not already pre-labeled).

**Safety Gear.** Pack all necessary safety gear like waders, protective gloves and safety vests.

**Walk to the site.** For longer hikes to reach a sample collection site, large hiking backpacks are recommended for transport of gear, instruments and containers. Tote bins can be used, if the sampling site can be accessed reasonably close to the vehicle.

**GPS.** At the sampling site, compare/record reconnaissance GPS reading with current site reading and note differences. GPS coordinates should be in Decimal Degrees (e.g. 38.12345 -117.12345).

## COLLECTION OF WATER SAMPLES FOR ANALYSIS OF CONVENTIONAL CONSTITUENTS

In most streams, sub-surface (0.1 m below surface) water is representative of the water mass. A water sample for analysis of conventional constituents is collected by the grab method in most cases, immersing the container beneath the water surface to a depth of 0.1 m. Sites accessed by bridge can be sampled with a sample container-suspending device. Extreme care must be taken to avoid contaminating the sample with debris from the rope and bridge. Care must also be taken to rinse the device between stations. If the centroid of the stream cannot be sampled by wading, sampling devices can be attached to an extendable sampling pole.

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In some cases, depth-integrated sampling is required, as requested by Regional Boards. This is useful when lakes or rivers are stratified and a sample is wanted that represents the entire water column. Depth-integrated sample collection is explained later in this document.

<b>Conventional Water Constituents, Routinely Requested in SWAMP</b>	Chloride, sulfate, nitrite, nitrate (or nitrate+nitrate), ortho-phosphate, fluoride, total phosphorus, ammonia, TKN, alkalinity, chlorophyll a.
<b>Conventional Water Constituents, Occasionally Requested in SWAMP</b>	Total Suspended Solids (TSS) or Suspended Sediment Concentration (SSC), Total Dissolved Solids (TDS--especially if total metals requested), Total Organic Carbon (TOC), Dissolved Organic Carbon (DOC), hardness (if trace metals analysis is requested).
<b>Conventional Water Constituents Sample Volume</b>	Due to the potential for vastly different arrays of requested analyses for conventional constituents, please refer to table at the end of this document, as well as the Sample Handling Requirements Tables in Appendix C of the QAMP, for information on the proper volume to collect for the various types of analyses.
<b>Conventional Water Constituents Sample Container Type</b>	Due to the potential for vastly different arrays of requested analyses for conventional constituents, please refer to table at the end of this document, as well as the Sample Handling Requirements Tables in Appendix C of the QAMP, for information on the proper type of sample containers.
<b>Chlorophyll a Syringe Sample Method</b>	<b>Chlorophyll a syringe method:</b> Chlorophyll a is sampled by forcing water with a 60-mL syringe through a filter holder containing a 25-mm glass microfiber filter. The 60-mL syringe and an in-line filter holder are rinsed three times with the ambient water before filtration. The syringe is then filled with 60 mL of ambient water. The filter holder is then removed and a 25-mm glass microfiber filter is placed inside. The filter holder is then screwed onto the syringe and the ambient water is then flushed through the filter. The filter holder is removed every time more water needs to be drawn into the syringe. The process is then repeated until the desired amount of Chlorophyll a is present (usually 60 to 360 mL depending on the water clarity). When filtering is complete the filter holder is opened and the filter is removed with tweezers without

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touching the Chlorophyll a. The filter is then folded in half, then again, in half with the Chlorophyll a inside the folds. The folded filter is then wrapped in aluminum foil and placed in an envelope labeled with the site information and the volume filtered. The envelope is then immediately placed on dry ice until transferred to the lab.

**APPENDIX C**  
**FIELD DATA SHEETS**

## FIELD EQUIPMENT CHECKLIST

SITE: \_\_\_\_\_

CLIENT CONTACT/PHONE NUMBER: \_\_\_\_\_

REGULATOR/PHONE NUMBER: \_\_\_\_\_

### Personal Equipment and Supplies

- \_\_\_ First aid kit
- \_\_\_ Rain Gear and waders
- \_\_\_ Flashlight
- \_\_\_ Cell phone and chargers
- \_\_\_ Map
- \_\_\_ Work Gloves
- \_\_\_ other: \_\_\_\_\_

### Field Measurement Equipment and Supplies

- \_\_\_ Field Log Sheets/Field Folders
- \_\_\_ Field monitoring equipment
- \_\_\_ Multiprobe Sensor Instrument and calibration equipment/solutions
- \_\_\_ Flow meter and wading rods
- \_\_\_ Measuring tape/measuring stick
- \_\_\_ other: \_\_\_\_\_




### **Sampling Equipment and Supplies**

- \_\_\_ Proper number of sample container, including extras. Also bubble wrap and zip locks for containers.
- \_\_\_ Proper labels, including extras
- \_\_\_ COC Forms
- \_\_\_ Nitrile gloves and Tyveks
- \_\_\_ Coolers and ice or artificial ice
- \_\_\_ Decontamination equipment
- \_\_\_ Extra deionized water
- \_\_\_ Dipping pole and clean secondary containers
- \_\_\_ Sheet flow sampling device
- \_\_\_ Peristaltic pump, plus extra batteries
- \_\_\_ Clean sample tubing
- \_\_\_ other: \_\_\_\_\_

### **Other Office/Field Equipment and Supplies**

- \_\_\_ Copies of MRPP, QAPP and SOPs
- \_\_\_ Calculator
- \_\_\_ Camera, phone, and watch
- \_\_\_ Extra pens
- \_\_\_ Trash bags
- \_\_\_ other: \_\_\_\_\_

SWAMP Field Data Sheet (Water Chemistry & Discrete Probe) - EventType=WQ										Entered in d-base (initial/date)		Pg of Pgs	
*StationID: _____			*Date (mm/dd/yyyy): / /			*Group:			*Agency:				
*Funding: _____			ArrivalTime:		DepartureTime:		*SampleTime (1st sample):			*Protocol:			
*ProjectCode:			*Personnel:			*Purpose (circle applicable): WaterChem WaterTox Habitat FieldMeas			*PurposeFailure:				
*Location: Bank Thalweg Midchannel OpenWater			*GPS/DGPS	Lat (dd.ddddd)		Long (ddd.ddddd)		OCCUPATION METHOD: Walk-in Bridge R/V _____ Other					
GPS Device:			*Target:		-		STARTING BANK (facing downstream): LB / RB / NA						
Datum: NAD83		Accuracy ( ft / m ):		*Actual:		-		Point of Sample (if Integrated, then -88 in dbase)					
<b>Habitat Observations (CollectionMethod = Habitat_generic)</b>				WADEABILITY: Y / N / Unk	BEAUFORT SCALE (see attachment):		DISTANCE FROM BANK (m):		STREAM WIDTH (m):				
SITE ODOR: None,Sulfides,Sewage,Petroleum,Smoke,Other_____				WIND DIRECTION (from):				HYDROMODIFICATION: None, Bridge, Pipes, ConcreteChannel, GradeControl, Culvert, AerialZipline, Other		LOCATION (to sample): US / DS / WI / NA			
SKY CODE: Clear, Partly Cloudy, Overcast, Fog, Smoky, Hazy				OTHER PRESENCE: Vascular,Nonvascular,OilySheen,Foam,Trash,Other_____		PHOTOS (RB & LB assigned when facing downstream; RENAME to StationCode_yyyy_mm_dd_uniquecode):		1: (RB / LB / BB / US / DS / ##)					
DOMINANT SUBSTRATE: Bedrock, Concrete, Cobble, Gravel, Sand, Mud, Unk, Other_____				WATERCLARITY: Clear (see bottom), Cloudy (>4" vis), Murky (<4" vis)		PRECIPITATION: None, Fog, Drizzle, Rain, Snow		2: (RB / LB / BB / US / DS / ##)					
WATERODOR: None, Sulfides, Sewage, Petroleum, Mixed, Other_____				PRECIPITATION (last 24 hrs): Unknown, <1", >1", None		3: (RB / LB / BB / US / DS / ##)							
WATERCOLOR: Colorless, Green, Yellow, Brown				EVIDENCE OF FIRES: No, <1 year, <5 years		OVERLAND RUNOFF (Last 24 hrs): none, light, moderate / heavy, unknown							
OBSERVED FLOW: NA, Dry Waterbody Bed, No Obs Flow, Isolated Pool, Trickle (<0.1cfs), 0.1-1cfs, 1-5cfs, 5-20cfs, 20-50cfs, 50-200cfs, >200cfs													
Field Measurements (SampleType = FieldMeasure; Method = Field)													
	Depth Collec (m)	Velocity (fps)	Air Temp (°C)	Water Temp (°C)	pH	O <sub>2</sub> (mg/L)	O <sub>2</sub> (%)	Specific Conductivity (uS/cm)	Salinity (ppt)	Turbidity (ntu)			
SUBSURF/MID/ BOTTOM/REP													
SUBSURF/MID/ BOTTOM/REP													
SUBSURF/MID/ BOTTOM/REP													
Instrument:													
Calib. Date:													
Samples Taken (# of containers filled) - Method=Water_Grab						Field Dup YES / NO: (SampleType = Grab / Integrated; LABEL_ID = FieldQA; create collection record upon data entry)							
SAMPLE TYPE: Grab / Integrated			COLLECTION DEVICE: Indiv bottle (by hand, by pole, by bucket); Teflon tubing; Kemmer; Pole & Beaker; Other										
	Depth Collec (m)	Inorganics	Bacteria	Chl a	TSS / SSC	TOC / DOC	Total Hg	Dissolved Mercury	Total Metals	Dissolved Metals	Organics	Toxicity	VOAs
Sub/Surface													
Sub/Surface													
COMMENTS:													





# Notes to Standardize SWAMP Field Data Sheets (For in the field use)

## Key Reminders to identify samples:

1. **Sample Time** is the SAME for all samples (Water, Sediment, & Probe) taken at the sampling event. Use time of FIRST sample; important for COC.
2. **Group**; many different ways to do a group, one suggestion is to create groups which assign trips to assess frequency of field QA

## Collection Details

1. **Personnel**: S. Mundell, G Ichikawa (first person listed is crew leader)
2. **Location**: Use "openwater" in bay/estuary/harbor only if no distinguishable channel exists
3. **GRAB vs INTEGRATED**: GRAB samples are when bottles are filled from a single depth; INTEGRATED sample are taken from MULTIPLE depths and combined.
  - a. GRAB: use 0.1 for subsurface samples; if too shallow to submerge bottle; depth =0
  - b. INTEGRATED: -88 in depth sampled, record depths combined in sample comments
4. **TARGET LAT/LONG**: Refers to the existing station location that the sampling crew is trying to achieve; can be filled out prior to sampling
5. **ACTUAL LAT/ LONG**: is the location of the current sample event.
6. **HYDROMODIFICATION**: Describe existing hydromodifications such as a grade control, drainage pipes, bridge, culvert
7. **HYDROMOD LOC**: if there is an IMMEDIATE (with in range potentially effecting sample) hydromodification; Is the hydromodification upstream/downstream/within area of sample; if there is no hydromodification, NA is appropriate
8. **STREAM WIDTH and DEPTH**: describe in meters at point of sample.

**FIELD OBSERVATIONS**: (each one of these observations has a comment field in the database so use comment space on data sheet to add information about an observation if necessary)

1. **PICTURES**: use space to record picture numbers given by camera; be sure to rename accordingly back in the office. (StationCode\_yyyy\_mm\_dd\_uniquecode)
2. **WADEABILITY**: in general, is waterbody being sampled wadeable to the average person AT the POINT of SAMPLE
3. **DOMINANT SUBSTRATE**: if possible; describe DOMINANT substrate type; use UNK if you cannot see the dominant substrate type
4. **BEAUFORT SCALE**: use scale 0-12; refer to scales listed below.
5. **WIND DIRECTION**: records the direction from which the wind is blowing
6. **OTHER PRESENCE**: VASCULAR refers to terrestrial plants or submerged aquatic vegetation (SAV) and NONVASCULAR refers to plankton, periphyton etc. These definitions apply to vegetation IN the water at the immediate sampling area.
7. **OBSERVED FLOW**: Visual estimates in cubic feet/ second.
8. **WATER COLOR**: This is the color of the water from standing creek side
9. **WATER CLARITY**: this describes the clarity of the water while standing creek side; clear represents water that is clear to the bottom, cloudy may not be clear to bottom but greater than 4" can be seen through the water column.
10. **PRECIPITATION LAST24hrs**: refers to field crews best categorization of rainfall in the last 24 hrs; may or may not effect Overland Runoff Last 24 hrs
11. **OVERLAND RUNOFF LAST 24 hrs**: Light Precip = fog, drizzle, and/or light rain with no overland runoff; Mod to Heavy Precip = rain such that site probably or definitely received at least some overland runoff
12. **SedimentComp**: generally described sediments used for chemistry sample

Note: these reminders do not give all details needed to maintain equivalent SWAMP sampling protocols, they are strictly for "infield" use to help insure comparability of field observations.

## BEAUFORT SCALE: Specifications and equivalent speeds for use at sea

FORCE	EQUIVALENT SPEED 10 m above ground		DESCRIPTION	SPECIFICATIONS FOR USE AT SEA
	miles/hour	knots		
0	0-1	0-1	Calm	Sea like a mirror.
1	1-3	1-3	Light air	Ripples with the appearance of scales are formed, but without foam crests.
2	4-7	4-6	Light breeze	Small wavelets, still short, but more pronounced. Crests have a glassy appearance and do not break.
3	8-12	7-10	Gentle breeze	Large wavelets. Crests begin to break. Foam of glassy appearance. Perhaps scattered white horses.
4	13-18	11-16	Moderate breeze	Small waves, becoming larger; fairly frequent white horses.
5	19-24	17-21	Fresh breeze	Moderate waves, taking a more pronounced long form; many white horses are formed. Chance of some spray.
6	25-31	22-27	Strong breeze	Large waves begin to form; the white foam crests are more extensive everywhere. Probably some spray.
7	32-38	28-33	Near gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.
8	39-46	34-40	Gale	Moderately high waves of greater length; edges of crests begin to break into spindrift. The foam is blown in well-marked streaks along the direction of the wind.
9	47-54	41-47	Severe gale	High waves. Dense streaks of foam along the direction of the wind. Crests of waves begin to topple, tumble and roll over. Spray may affect visibility.
10	55-63	48-55	Storm	Very high waves with long over-hanging crests. The resulting foam, in great patches, is blown in dense white streaks along the direction of the wind. On the whole the surface of the sea takes on a white appearance. The 'tumbling' of the sea becomes heavy and shock-like. Visibility affected.

Source:

Last edited on 09 January, 1999 Dave Wheeler weatherman@zetnet.co.uk

Web Space kindly provided by Zetnet Services Ltd, Lerwick, Shetland.

## BEAUFORT SCALE: Specifications and equivalent speeds for use on land

FORCE	EQUIVALENT SPEED		DESCRIPTION	SPECIFICATIONS FOR USE ON LAND
	10 m above ground			
	miles/hour	knots		
0	0-1	0-1	Calm	Calm; smoke rises vertically
1	1-3	1-3	Light air	Direction of wind shown by smoke drift, but not by wind vanes
2	4-7	4-6	Light Breeze	Wind felt on face; leaves rustle; ordinary vanes moved by wind
3	8-12	7-10	Gentle Breeze	Leaves and small twigs in constant motion; wind extends light flag
4	13-18	11-16	Moderate Breeze	Raises dust and loose paper; small branches are moved.
5	19-24	17-12	Fresh Breeze	Small trees in leaf begin to sway crested wavelets form on inland waters
6	25-31	22-27	Strong Breeze	Large branches in motion; whistling heard in telegraph wires umbrellas used with difficulty
7	32-38	28-33	Neargale	Whole trees in motion; inconvenience felt when walking against the wind
8	39-46	34-40	Gale	Breaks Twigs and generally impedes progress

Source:

Last edited on 09 January, 1999 Dave Wheeler [weatherman@zetnet.co.uk](mailto:weatherman@zetnet.co.uk)

Web Space kindly provided by Zetnet Services Ltd, Lerwick, Shetland.

## **APPENDIX D**

### **CHAIN OF CUSTODY DOCUMENTATION**



