

# WATER QUALITY CONTROL PLAN

## Los Angeles Region

Basin Plan

for the

Coastal Watersheds of

Los Angeles and Ventura Counties



California Regional Water Quality Control Board

Los Angeles Region (4)

**REACH BOUNDARIES**  
(marked by dotted lines)

**SANTA CLARA RIVER**

1. Between Highway 101 Bridge and Santa Clara River Estuary
2. Between Freeman Diversion "Dam" near Saticoy and Highway 101 Bridge
3. Between A Street, Fillmore and Freeman Diversion "Dam" near Saticoy
4. Between Blue Cut gaging station (approx. 1 mile west of LA/Ventura county line) and A Street, Fillmore
5. Between West Pier Highway 99 and Blue Cut gaging station
6. Between Bouquet Canyon Road Bridge and West Point Highway 99
7. Between Lang gaging station and Bouquet Canyon Road Bridge
8. Above Lang gaging station
9. SANTA PAULA CREEK above Santa Paula Water Works Diversion Dam
10. SESPE CREEK above gaging station, 500' downstream from Little Sespe Creek
11. PIRU CREEK above gaging station below Santa Felicia Dam

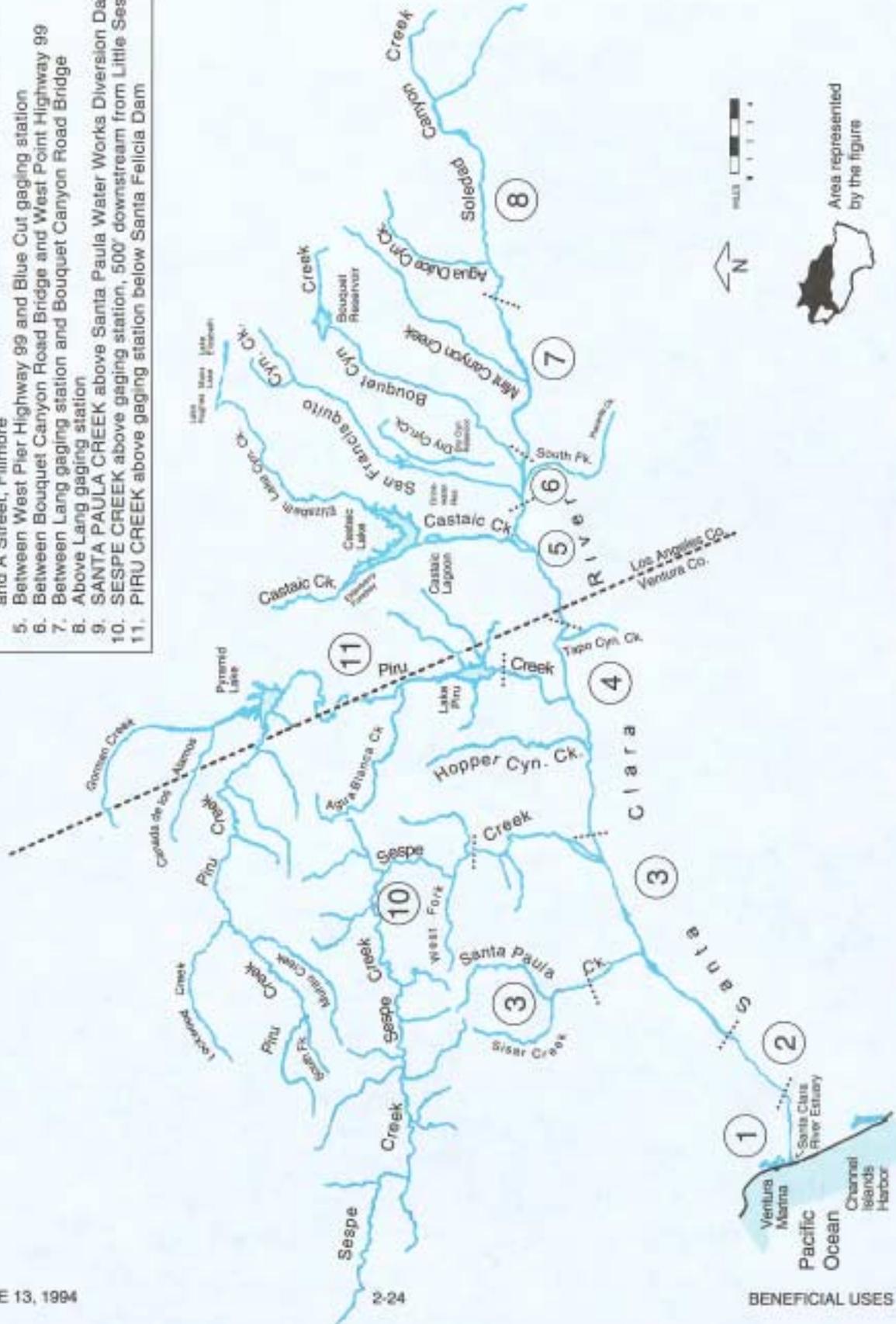


Figure 2-3. Major surface waters of the Santa Clara River watershed.

FIGURE 2-12

VENTURA CENTRAL  
GROUNDWATER BASINS

CALIFORNIA  
REGIONAL  
WATER QUALITY  
CONTROL BOARD  
LOS ANGELES REGION  
(4)

REGIONAL BOUNDARY

STREAMS

COUNTY LINE

SPREADING GROUNDS



Miles

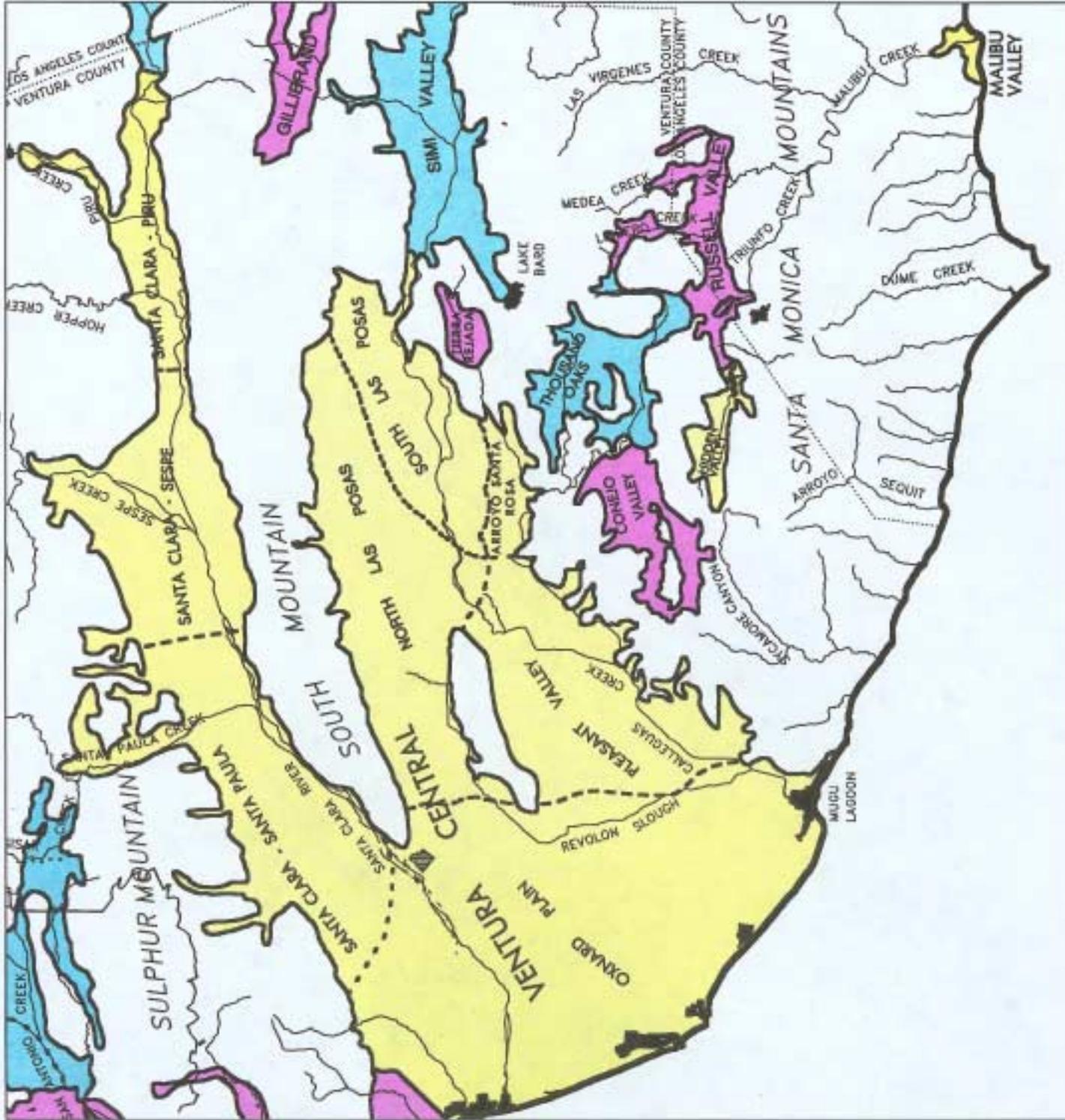


FIGURE 2-13

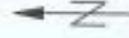
UPPER SANTA CLARA  
GROUNDWATER  
BASINS

CALIFORNIA  
REGIONAL  
WATER QUALITY  
CONTROL BOARD  
LOS ANGELES REGION  
(4)

— REGIONAL BOUNDARY

— STREAMS

\* SAUGUS AQUIFER,  
SANTA CLARA-BOUQUET,  
SAN FRANCISQUITO,  
SANTA CLARA-MINT AND  
THE PLACERITA CANYON  
BELONG TO THE  
EASTERN SANTA CLARA  
GROUNDWATER BASINS



Miles

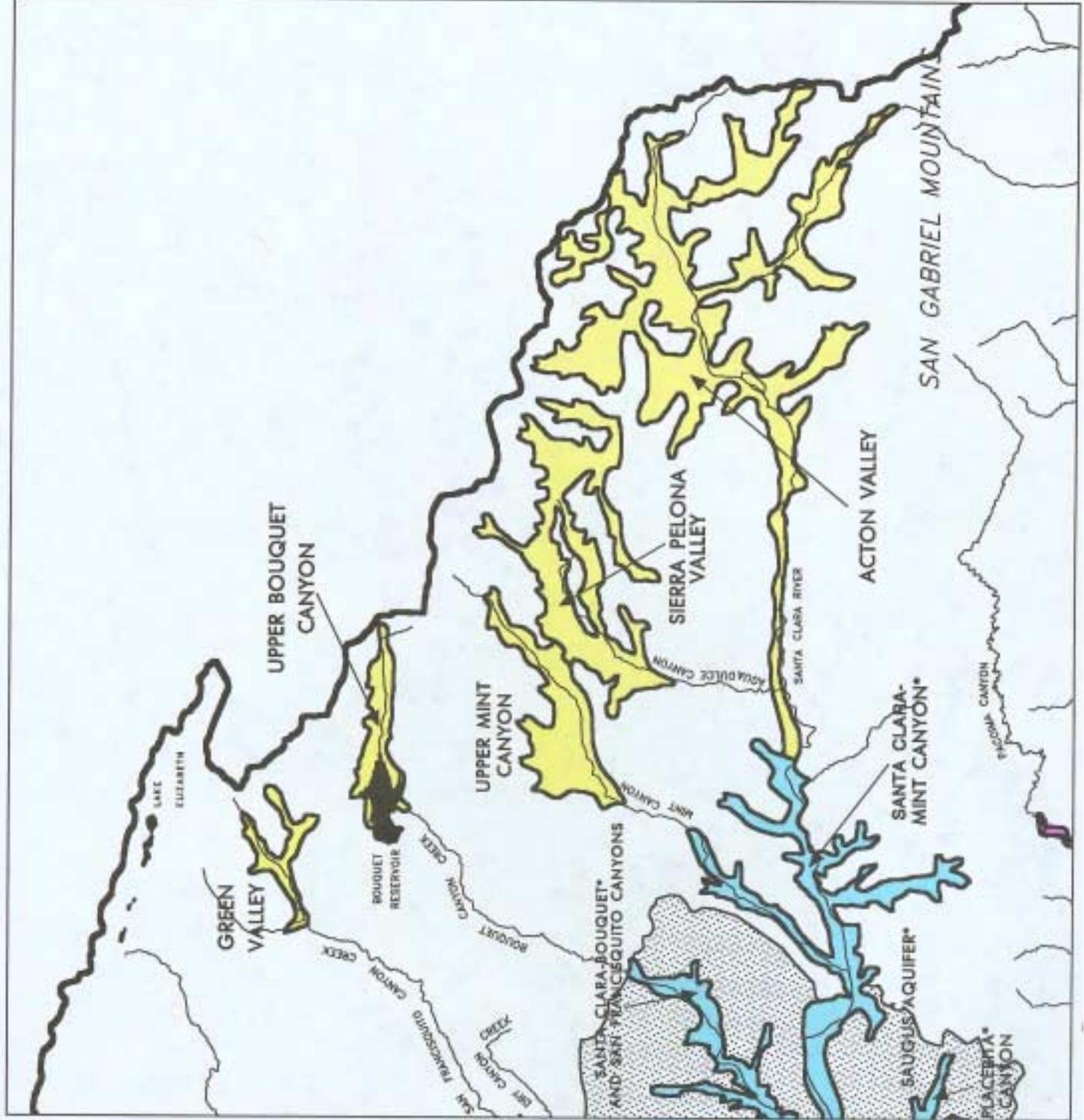


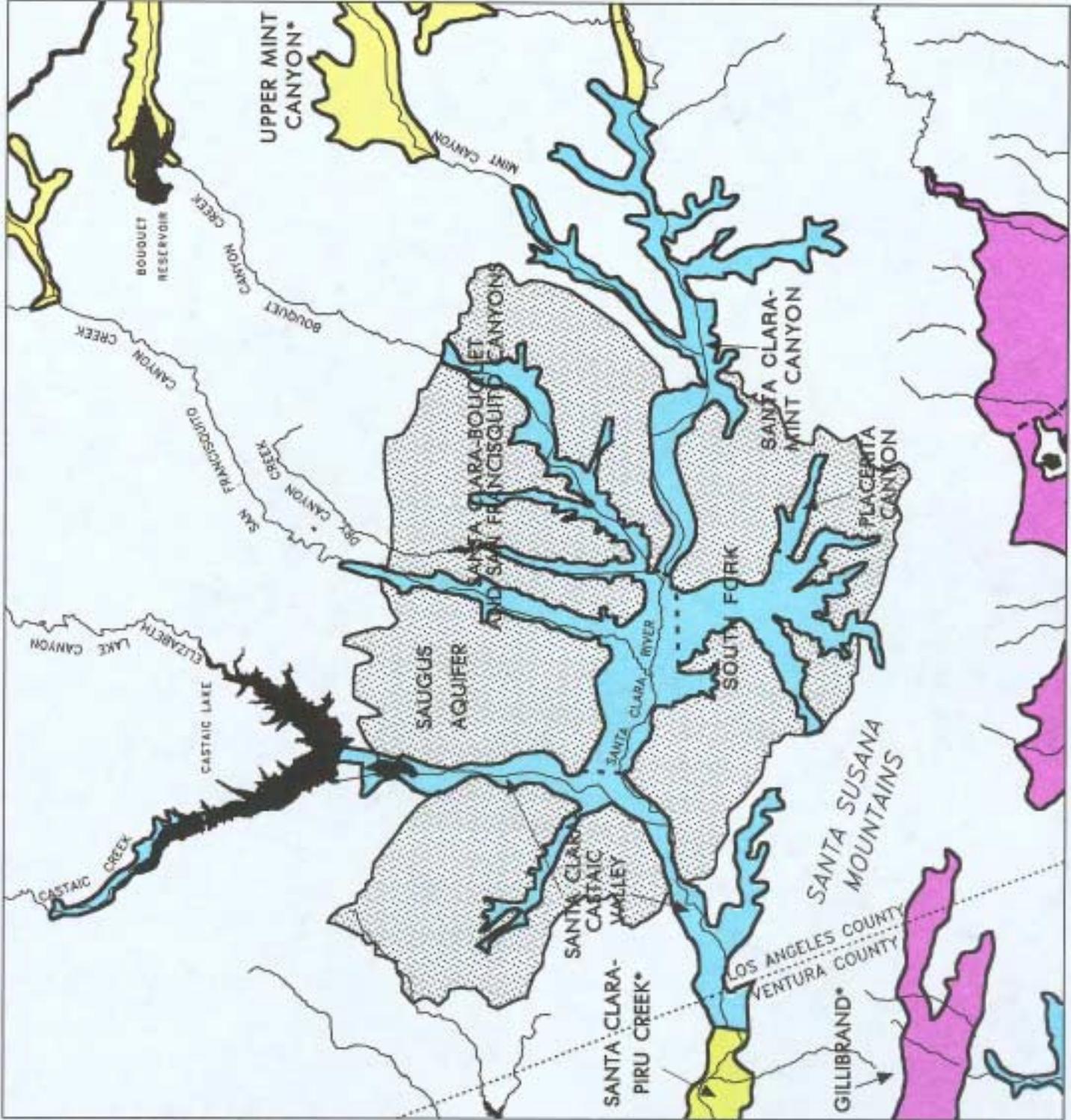
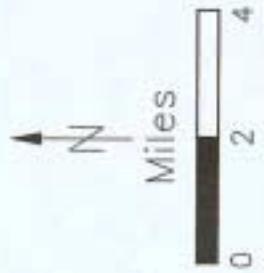
FIGURE 2-14

**EASTERN SANTA CLARA  
GROUNDWATER BASINS**

CALIFORNIA  
REGIONAL  
WATER QUALITY  
CONTROL BOARD  
LOS ANGELES REGION  
(4)

- REGIONAL BOUNDARY
- STREAMS
- ..... COUNTY LINE

\* UPPER MINT CANYON IS PART OF THE UPPER SANTA CLARA BASINS.  
SANTA CLARA-PIRU IS PART OF THE VENTURA CENTRAL BASINS, GILLIBRAND IS PART OF VENTURA CENTRAL BASINS.



**Table 3-8. Water Quality Objectives for Selected Constituents in Inland Surface Waters<sup>a</sup>.**

Reaches are in upstream to downstream order.

WATERSHED/STREAM REACH <sup>b</sup>	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron <sup>c</sup> (mg/L)	Nitrogen <sup>d</sup> (mg/L)	SAR <sup>e</sup> (mg/L)
Miscellaneous Ventura Coastal Streams	<i>no waterbody specific objectives<sup>f</sup></i>					
<b>Ventura River Watershed:</b>						
Above Camino Cielo Road	700	300	50	1.0	5	5
Between Camino Cielo Road and Casitas Vista Road	800	300	60	1.0	5	5
Between Casitas Vista Road and confluence with Weldon Canyon	1000	300	60	1.0	5	5
Between confluence with Weldon Canyon and Main Street	1500	500	300	1.5	10	5
Between Main St. and Ventura River Estuary	<i>no waterbody specific objectives<sup>f</sup></i>					
<b>Santa Clara River Watershed:</b>						
Above Lang gaging station	500	100	50	0.5	5	5
Between Lang gaging station and Bouquet Canyon Road Bridge	800	150	100	1.0	5	5
Between Bouquet Canyon Road Bridge and West Pier Highway 99	1000	300	100	1.5	10	5
Between West Pier Highway 99 and Blue Cut gaging station	1000	400	100	1.5	5	10
Between Blue Cut gaging station and A Street, Fillmore	1300	600	100	1.5	5	5
Between A Street, Fillmore and Freeman Diversion "Dam" near Saticoy	1300	650	80	1.5	5	5
Between Freeman Diversion "Dam" near Saticoy and Highway 101 Bridge	1200	600	150	1.5	-	-
Between Highway 101 Bridge and Santa Clara River Estuary	<i>no waterbody specific objectives<sup>f</sup></i>					
Santa Paula Creek above Santa Paula Water Works Diversion Dam	600	250	45	1.0	5	5
Sespe Creek above gaging station, 500' downstream from Little Sespe Creek	800	320	60	1.5	5	5
Piru Creek above gaging station below Santa Felicia Dam	800	400	60	1.0	5	5
<b>Calleguas Creek Watershed:</b>						
Above Potrero Road	850	250	150	1.0	10	f
Below Potrero Road	<i>no waterbody specific objectives<sup>f</sup></i>					

**Table 3-8. Water Quality Objectives for Selected Constituents in Inland Surface Waters<sup>a</sup> (cont.)**

Reaches are in upstream to downstream order.

WATERSHED/STREAM REACH <sup>b</sup>	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron <sup>c</sup> (mg/L)	Nitrogen <sup>d</sup> (mg/L)	SAR <sup>e</sup> (mg/L)
Miscellaneous Los Angeles County Coastal Streams	<i>no waterbody specific objectives<sup>f</sup></i>					
Malibu Creek Watershed	2000	500	500	2.0	10	-
Ballona Creek Watershed	<i>no waterbody specific objectives<sup>f</sup></i>					
Dominguez Channel Watershed	<i>no waterbody specific objectives<sup>f</sup></i>					
<b>Los Angeles River Watershed:</b>						
Above Figueroa Street	950	300	150	g	8	g
Between Figueroa Street and Los Angeles River Estuary (Willow Street). Includes Rio Hondo below Santa Ana Freeway	1500	350	150	g	8	g
Rio Hondo above Santa Ana Freeway <sup>h</sup>	750	300	150	g	8	g
Santa Anita Creek above Santa Anita spreading grounds	250	30	10	g	f	g
Eaton Canyon Creek above Eaton Dam	250	30	10	g	f	g
Arroyo Seco above spreading grounds	300	40	15	g	f	g
Big Tujunga Creek above Hansen Dam	350	50	20	g	f	g
Pacoima Wash above Pacoima spreading grounds	250	30	10	g	f	g
<b>San Gabriel River Watershed:</b>						
Above Morris Dam	250	30	10	0.6	2	2
Between Morris Dam and Ramona Blvd.	450	100	100	0.5	8	g
Between Ramona Blvd. and Firestone Blvd.	750	300	150	1.0	8	g
Between Firestone Blvd. and San Gabriel River Estuary (downstream from Willow Street) including Coyote Creek	<i>no waterbody specific objectives<sup>f</sup></i>					
All other minor San Gabriel Mountain streams tributary to San Gabriel Valley <sup>i</sup>	300	40	15	g	f	g
<b>Island Watercourses:</b>						
Anacapa Island	<i>no waterbody specific objectives<sup>f</sup></i>					
San Nicolas Island	<i>no waterbody specific objectives<sup>f</sup></i>					
Santa Barbara island	<i>no waterbody specific objectives<sup>f</sup></i>					
Santa Catalina Island	<i>no waterbody specific objectives<sup>f</sup></i>					
San Clemente Island	<i>no waterbody specific objectives<sup>f</sup></i>					

**Table 3-8. Water Quality Objectives for Selected Constituents in Inland Surface Waters<sup>a</sup> (cont.)**

Reaches are in upstream to downstream order.

WATERSHED/STREAM REACH <sup>b</sup>	TDS (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	Boron <sup>c</sup> (mg/L)	Nitrogen <sup>d</sup> (mg/L)	SAR <sup>e</sup> (mg/L)
<b>Other Watercourses:</b>						
San Antonio Creek <sup>j</sup>	225	25	6	--	--	--
Chino Creek <sup>j</sup>	--	--	--	--	--	--

- a. As part of the State's continuing planning process, data will continue to be collected to support the development of numerical water quality objectives for waterbodies and constituents where sufficient information is presently unavailable. Any new recommendations for water quality objectives will be brought before the Regional Board in the future.
- b. All references to watersheds, streams and reaches include all tributaries. Water quality objectives are applied to all waters tributary to those specifically listed in the table. See Figures 2-1 to 2-10 for locations.
- c. Where naturally occurring boron results in concentrations higher than the stated objective, a site-specific objective may be determined on a case-by-case basis.
- d. Nitrate-nitrogen plus nitrite-nitrogen (NO<sub>3</sub>-N + NO<sub>2</sub>-N). The lack of adequate nitrogen data for all streams precluded the establishment of numerical objectives for all streams.
- e. Sodium adsorption ratio (SAR) predicts the degree to which irrigation water tends to enter into cation-exchange reactions in soil.

$$SAR = Na+ / ((Ca^{++} + Mg^{++}) / 2)^{1/2}$$

- f. Site-specific objectives have not been determined for these reaches at this time. These areas are often impaired (by high levels of minerals) and there is not sufficient historic data to designate objectives based on natural background conditions. The following table illustrates the mineral or nutrient quality necessary to protect different categories of beneficial uses and will be used as a guideline for establishing effluent limits in these cases. Protection of the most sensitive beneficial use(s) would be the determining criteria for the selection of effluent limits.

Recommended objective (mg/L)	Beneficial Use Categories				
	MUN (Drinking Water Standards) <sup>1</sup>	PROC	AGR	AQ LIFE*(Frshwtr) <sup>4</sup>	GWR
TDS	500 (USEPA secondary MCL)	50-1500 <sup>2,7,9</sup>	450-2000 <sup>2,3,6</sup>		Limits based on appropriate groundwater basin objectives and/or beneficial uses
Chloride	250 (USEPA secondary MCL)	20-1000 <sup>2,9</sup>	100-355 <sup>2,3,8</sup>	230 (4 day ave. continuous conc) <sup>4</sup>	
Sulfate	400-500 (USEPA proposed MCL)	20-300 <sup>2,9</sup>	350-600 <sup>2,8</sup>		
Boron			0.5-4.0 <sup>2,6,8</sup>		
Nitrogen	10 (USEPA MCL)				

References: 1) USEPA CFR § 141 et seq., 2) McKee and Wolf, 1963, 3) Ayers and Westcot, 1985, 4) USEPA, 1988, 5) Water Pollution Control Federation, 1989, 6) USEPA, 1973, 7) USEPA 1980, 8) Ayers, 1977.

\* Aquatic life includes a variety of Beneficial Uses including WARM, COLD, SPWN, MIGR and RARE.

- g. Agricultural supply is not a beneficial use of the surface water in the specified reach.
- h. Rio Hondo spreading grounds are located above the Santa Ana Freeway
- i. The stated objectives apply to all other surface streams originating within the San Gabriel Mountains and extend from their headwaters to the canyon mouth.
- j. These watercourses are primarily located in the Santa Ana Region. The water quality objectives for these streams have been established by Santa Ana Region. Dashed lines indicate that numerical objectives have not been established, however, narrative objectives shall apply. Refer to the Santa Ana Region Basin Plan for more details.

**Table 3-10. Water Quality Objectives for Selected Constituents in Regional Ground Waters<sup>a</sup>.**

DWR Basin No. <sup>b</sup>	BASIN	OBJECTIVES (mg/L)			
		TDS	Sulfate	Chloride	Boron
	Pitas Point Area <sup>c</sup>	None specified			
4-1	Ojai Valley				
	Upper Ojai Valley				
	West of Sulfur Mountain Road	1,000	300	200	1.0
	Central area	700	50	100	1.0
	Sisar area	700	250	100	0.5
4-2	Lower Ojai Valley				0.5
	West of San Antonio--Senior Canyon Creeks	1,000	300	200	0.5
	East of San Antonio--Senior Canyon Creeks	700	200	50	
4-3	Ventura River Valley				
	Upper Ventura	800	300	100	0.5
	San Antonio Creek area	1,000	300	100	1.0
	Lower Ventura	1,500	500	300	1.5
4-4	Ventura Central <sup>d</sup>				
	Santa Clara--Piru Creek area				
	Upper area (above Lake Piru)	1,100	400	200	2.0
	Lower area east of Piru Creek	2,500	1,200	200	1.5
	Lower area west of Piru Creek	1,200	600	100	1.5
	Santa Clara--Sespe Creek area				
	Topa Topa (upper Sespe) area	900	350	30	2.0
	Fillmore area				
	Pole Creek Fan area	2,000	800	100	1.0
	South side of Santa Clara River	1,500	800	100	1.1
	Remaining Fillmore area	1,000	400	50	0.7
	Santa Clara--Santa Paula area				
	East of Peck Road	1,200	600	100	1.0
	West of Peck Road	2,000	800	110	1.0
	Oxnard Plain				
	Oxnard Forebay	1,200	600	150	1.0
	Confined aquifers	1,200	600	150	1.0
Unconfined and perched aquifers	3,000	1,000	500	--	
4-6	Pleasant Valley				
	Confined aquifers	700	300	150	1.0
	Unconfined and perched aquifers	--	--	--	--
4-7	Arroyo Santa Rosa	900	300	150	1.0
4-8	Las Posas Valley				
	South Las Posas area				
	NW of Grimes Cyn Rd & LA Ave & Somis Rd	700	300	100	0.5
	E of Grimes Cyn Rd and Hitch Blvd	2,500	1,200	400	3.0
	S of LA Ave between Somis Rd & Hitch Blvd	1,500	700	250	1.0
	Grimes Canyon Rd & Broadway area	250	30	30	0.2
North Las Posas area	500	250	150	1.0	
4-5	Upper Santa Clara				
	Acton Valley	550	150	100	1.0
	Sierra Pelona Valley (Agua Dulce)	600	100	100	0.5
	Upper Mint Canyon	700	150	100	0.5
	Upper Bouquet Canyon	400	50	30	0.5
	Green Valley	400	50	25	--
Lake Elizabeth--Lake Hughes area	500	100	50	0.5	

**Table 3-10. Water Quality Objectives for Selected Constituents in Regional Ground Waters<sup>a</sup> (cont.)**

DWR Basin No. <sup>b</sup>	BASIN	OBJECTIVES (mg/L)			
		TDS	Sulfate	Chloride	Boron
4-4.07	Eastern Santa Clara				
	Santa Clara--Mint Canyon	800	150	150	1.0
	South Fork	700	200	100	0.5
	Placerita Canyon	700	150	100	0.5
	Santa Clara--Bouquet & San Francisquito Canyons	700	250	100	1.0
	Castaic Valley	1,000	350	150	1.0
	Saugus Aquifer	--	--	--	--
4-9	Simi Valley				
	Simi Valley Basin				
	Confined aquifers	1,200	600	150	1.0
	Unconfined aquifers	--	--	--	--
	Gillibrand Basin	900	350	50	1.0
4-10	Conejo Valley	800	250	150	1.0
4-11	Los Angeles Coastal Plain				
	Central Basin	700	250	150	1.0
	West Coast Basin	800	250	250	1.5
	Hollywood Basin	750	100	100	1.0
	Santa Monica Basin	1,000	250	200	0.5
4-12	San Fernando Valley				
	Sylmar Basin	600	150	100	0.5
	Verdugo Basin	600	150	100	0.5
	San Fernando Basin				
	West of Highway 405	800	300	100	1.5
	East of Highway 405 (overall)	700	300	100	1.5
	Sunland-Tugunga area *	400	50	50	0.5
	Foothill area *	400	100	50	1.0
	Area encompassing RT-Tujunga-Erwin-N. Hollywood-Whithall-LA/Verdugo-Crystal Springs-Headworks-Glendale/Burbank Well Fields	600	250	100	1.5
	Narrows area (below confluence of Verdugo Wash with the LA River)	900	300	150	1.5
	Eagle Rock Basin	800	150	100	0.5
4-13	San Gabriel Valley				
	Raymond Basin				
	Monk Hill sub-basin	450	100	100	0.5
	Santa Anita area	450	100	100	0.5
	Pasadena area	450	100	100	0.5
	Main San Gabriel Basin				
	Western area †	450	100	100	0.5
Eastern area †	600	100	100	0.5	
	Puente Basin	1,000	300	150	1.0
4-14 8-2 <sup>g</sup>	Upper Santa Ana Valley				
	Live Oak area	450	150	100	0.5
	Claremont Heights area	450	100	50	--
	Pomona area	300	100	50	0.5
	Chino area	450	20	15	--
	Spadra area	550	200	120	1.0
4-15	Tierra Rejada	700	250	100	0.5
4-16	Hidden Valley	1,000	250	250	1.0
4-17	Lockwood Valley	1,000	300	20	2.0
4-18	Hungry Valley and Peace Valley	500	150	50	1.0

**Table 3-10. Water Quality Objectives for Selected Constituents in Regional Ground Waters<sup>a</sup> (cont.)**

DWR Basin No. <sup>b</sup>	BASIN	OBJECTIVES (mg/L)			
		TDS	Sulfate	Chloride	Boron
4-19	Thousand Oaks area	1,400	700	150	1.0
4-20	Russell Valley	1,500	500	250	1.0
	Russell Valley	2,000	500	500	2.0
	Triunfo Canyon area	2,000	500	500	2.0
	Lindero Canyon area	2,000	500	500	2.0
	Las Virgenes Canyon area	2,000	500	500	2.0
4-21	Conejo-Tierra Rejada Volcanic area <sup>h</sup>	--	--	--	--
4-22	Santa Monica Mountains--southern slopes <sup>i</sup>	1,000	250	250	1.0
	Camarillo area	1,000	250	250	1.0
	Point Dume area	2,000	500	500	2.0
	Malibu Valley	2,000	500	500	2.0
	Topanga Canyon area	2,000	500	500	2.0
	San Pedro Channel Islands <sup>j</sup>	--	--	--	--
	Anacapa Island	1,100	150	350	--
	San Nicolas Island	1,000	100	250	1.0
	Santa Catalina Island	--	--	--	--
	San Clemente Island	--	--	--	--
	Santa Barbara Island	--	--	--	--

- a. Objectives for ground waters outside of the major basins listed on this table and outlined in Figure 1-9 have not been specifically listed. However, ground waters outside of the major basins are, in many cases, significant sources of water. Furthermore, ground waters outside of the major basins are either potential or existing sources of water for downgradient basins and, as such, objectives in the downgradient basins shall apply to these areas.
- b. Basins are numbered according to Bulletin 118-80 (Department of Water Resources, 1980).
- c. Ground waters in the Pitas Point area (between the lower Ventura River and Rincon Point) are not considered to comprise a major basin, and accordingly have not been designated a basin number by the California Department of Water Resources (DWR) or outlined on Figure 1-9.
- d. The Santa Clara River Valley (4-4), Pleasant Valley (4-6), Arroyo Santa Rosa Valley (4-7) and Las Posas Valley (4-8) Ground Water Basins have been combined and designated as the Ventura Central Basin (DWR, 1980).
- e. The category for the Foothill Wells area in previous Basin Plan incorrectly groups ground water in the Foothill area with ground water in the Sunland-Tujunga area. Accordingly, the new categories, Foothill area and Sunland-Tujunga area, replace the old Foothill Wells area.
- f. All of the ground water in the Main San Gabriel Basin is covered by the objectives listed under Main San Gabriel Basin – Eastern area and Western area. Walnut Creek, Big Dalton Wash, and Little Dalton Wash separate the Eastern area from the Western area (see dashed line on Figure 2-17). Any ground water upgradient of these areas is subject to downgradient beneficial uses and objectives, as explained in Footnote a.
- g. The border between Regions 4 and 8 crosses the Upper Santa Ana Valley Ground Water Basin.
- h. Ground water in the Conejo-Tierra Rejada Volcanic Area occurs primarily in fractured volcanic rocks in the western Santa Monica Mountains and Conejo Mountain areas. These areas have not been delineated on Figure 1-9.
- i. With the exception of ground water in Malibu Valley (DWR Basin No. 4-22), ground waters along the southern slopes of the Santa Monica Mountains are not considered to comprise a major basin and accordingly have not been designated a basin number by the California Department of Water Resources (DWR) or outlined on Figure 1-9.
- j. DWR has not designated basins for ground waters on the San Pedro Channel Islands.