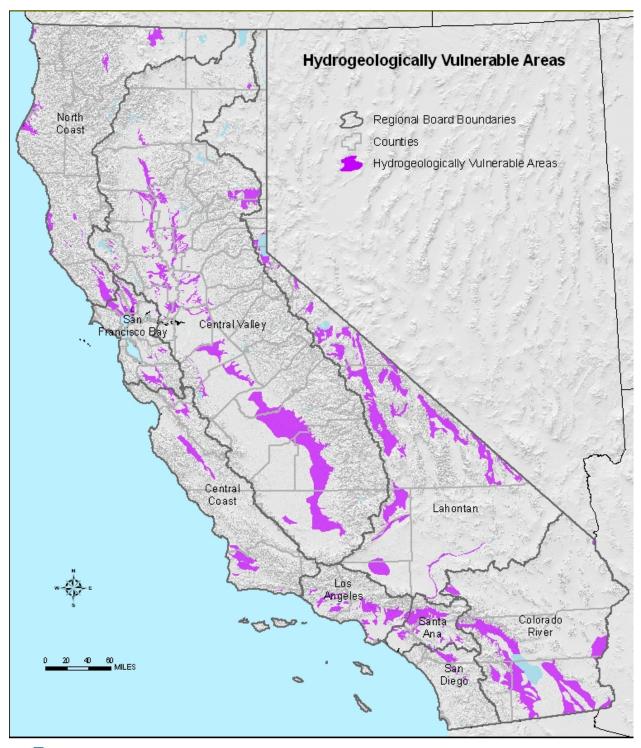
Hydrogeologically Vulnerable Areas Map

Background

In response to Executive Order D-5-99, State Water Board staff created a map where published hydrogeologic information indicates soil or rock conditions that may be more vulnerable (or susceptible) to groundwater contamination: "Hydrogeologically Vulnerable Areas." The map was created due to groundwater concerns over releases of MTBE, primarily from leaking underground storage tank sites. However, areas that are vulnerable to MTBE may also be vulnerable to other contaminants released at the surface. The map was created in 2000 using Department of Water Resources (DWR) and US Geological Survey publications. Data from these publications were used to identify areas where geologic conditions are more likely to allow recharge at rates substantially higher than in lower permeability or confined areas of the same groundwater basin. The identified areas are associated by a metadata table (in the following pages) which identifies (1) DWR basin name and number, (2) published source of information (i.e., title, date, author, and appropriate page, figure, table, or plate number), and (3) specific criteria upon which the vulnerability category is based. Groundwater resources underlying designated (i.e., published) recharge, rapid infiltration, or unconfined areas were considered categorically more vulnerable to potential contaminant releases than groundwater underlying areas of slower recharge, lower infiltration rates, or intervening low permeability deposits (i.e., confining layers).

Areas Outside Basins

Staff did not map areas in the fractured rocks that occur in mountain and foothill areas (e.g. Sierra Nevada), or in permeable volcanics which may provide primary recharge for those areas. By default, the groundwater resources in these areas are considered hydrogeologically vulnerable. Some small alluvial groundwater basins in regions of the Mojave and Colorado Deserts were not mapped due to their sparse population. These maps and metadata tables were distributed to DWR and the Department of Public Health for review and revision. This map should be used as a large scale tool and does not override more recent or detailed site-specific knowledge.





In response to Executive Order D-5-99, SWRCB staff has created a map displaying areas where published hydrogeologic information indicates conditions that may be more vulnerable to groundwater contamination.

Data Source: State Water Resources Control Board November 2000

Figure 1: Map of Hydrogeologically Vulnerable Areas In California

Table 1: Documentation Table for Statewide Maps Showing Hydrogeologically Vulnerable Areas

Table 1: Documentation Table for Statewide Maps Showing Hydrogeologically Vulnerable Areas

Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
North Coastal	1-1	Smith River Valley	Del Norte	USGS Water-Supply Paper 1254, p. 38, Pl. 5 ; DWR Bull. 66-59, p. 14	Yes	USGS Water-Supply Paper 1254, p. 38, paragraph 2, "Ground water permeable stream channels."; paragraph 4, "Terrace deposits recharge areas."
North Coastal	1-2	Klamath River Valley	Modoc, Siskiyou		No	Mappable, but volcanic recharge areas (fracture flow) not included. Sparse population.
North Coastal	1-3	Butte Valley	Siskiyou	DWR Bull. 66-59, p. 18; USGS Water-Supply Paper 1491, Pl. 1, Table 4, p. 18-19, 58	Yes	Recharge largely through direct percolation of precipitation or subsurface inflow from streams.
North Coastal	1-4	Shasta Valley	Siskiyou	DWR Bull. 83, p. 31; USGS Water-Supply Paper 1484, Pl. 1; DWR Bull. 66-59, p. 22	No	DWR Bull. 83, p. 31, Paragraph 5, "The main rechargeShasta River." Need to map alluvial valley.
North Coastal	1-5	Scott River Valley	Siskiyou	DWR Bull. 83, p. 31-32 ; DWR Bull. 66-59, p. 26	Yes	DWR Bull. 83, p. 31, paragraph 5, "The main recharge …Shasta River."
North Coastal	1-6	Hayfork Valley	Trinity		No	Low/Limited Use.
North Coastal	1-7	Hoopa Valley	Humboldt		No	Low/Limited Use.
North Coastal	1-8	Mad River Valley	Humboldt	DWR Bull. 142-1, p. 239-253 ; DWR Bull. 66-59, p. 30, Mad River Valley Map	Yes	Basin divided into six areas; recharge through alluvium in all areas.
North Coastal	1-9	Eureka Plain	Humboldt	DWR Bull. 142-1, p. 232-253 ; DWR Bull. 66-59, p. 30, Mad River Valley Map	Yes	Subdivided into two areas (Salmon Creek-Elk River Area and Jacoby Creek-Freshwater Creek Areas). Recharge by infiltration and percolation on the Hookton and Carlotta Formations. Basin delineation modified by DWR comments 11/19/99, #4.
North Coastal	1-10	Eel River Valley	Humboldt	DWR Bull. 136, p. 19-22, Pl. 4 ; DWR Bull. 66-59, p. 38, Eel River Valley Map	Yes	Recharge through permeable soil types Basin delineation modified by DWR comments 11/19/99, #4.
North Coastal	1-11	Round Valley	Mendocino	USGS Water-Supply Paper 1548, p. 85-86, Pl. 3; DWR Bull. 66-60, Pl. 4	No	Recharge through percolation of precipitation through stream channel and alluvial fans at valley margins to permeable deposits. Possible underflow from surrounding bedrock. Area too small for scale.
North Coastal	1-12	Laytonville Valley	Mendocino		Yes	Delineation based on DWR comments, 11/24/99.
North Coastal	1-13	Little Lake Valley	Mendocino	USGS Water-Supply Paper 1548, p. 105-106, Pl. 6	Yes	Recharge is principally through permeable stream channels and alluvial soils and fans.
North Coastal	1-14	Lower Klamath River Valley	Del Norte		No	Low/Limited Use.
North Coastal	1-15	Happy Camp Town Area	Siskiyou		No	Low/Limited Use.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
North Coastal	1-16	Seiad Valley	Siskiyou		No	Low/Limited Use.
North Coastal	1-17	Bray Town Area	Siskiyou		No	Low/Limited Use.
North Coastal	1-18	Red Rock Valley	Siskiyou		No	Low/Limited Use.
North Coastal	1-19	Anderson Valley	Mendocino		Yes	Delineation based on DWR comments, 11/24/99
North Coastal	1-20	Garcia River Valley	Mendocino		Yes	Delineation based on DWR comments, 11/24/99
North Coastal	1-21	Fort Bragg Terrace Area	Mendocino	DWR Bull. 142-1, p. 258-280	Yes	Located in the Mendocino Coast Hydrographic Unit. Recharge by infiltration of rainfall and surface runoff. INCLUDES PART OF BASINS 1-40 AND 1-45. Basin delineation modified by DWR comments of 11/24/99.
North Coastal	1-22	Fairchild Swamp Valley	Modoc		No	Low/Limited Use.
North Coastal	1-23	Modoc Plateau Recent Volcanic Areas	Modoc, Siskiyou		No	Mappable, but volcanic recharge areas (fracture flow) not included. Sparse population.
North Coastal	1-24	Modoc Plateau Pleistocene Volcanic Areas	Modoc, Siskiyou		No	Mappable, but volcanic recharge areas (fracture flow) not included. Sparse population.
North Coastal	1-25	Prairie Creek Area	Humboldt		No	Low/Limited Use.
North Coastal	1-26	Redwood Creek Valley	Humboldt		No	Low/Limited Use.
North Coastal	1-27	Big Lagoon Area	Humboldt		No	Low/Limited Use.
North Coastal	1-28	Mattole River Valley	Humboldt		No	Low/Limited Use.
North Coastal	1-29	Honeydew Town Area	Humboldt		No	Low/Limited Use.
North Coastal	1-30	Pepperwood Town Area	Humboldt		No	Low/Limited Use.
North Coastal	1-31	Weott Town Area	Humboldt		No	Low/Limited Use.
North Coastal	1-32	Garberville Town Area	Humboldt		No	Low/Limited Use.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
North Coastal	1-33	Larabee Valley	Humboldt		No	Low/Limited Use.
North Coastal	1-34	Dinsmore Town Area	Humboldt		No	Low/Limited Use.
North Coastal	1-35	Hyampom Valley	Trinity		No	Low/Limited Use.
North Coastal	1-36	Hettenshaw Valley	Trinity		No	Low/Limited Use.
North Coastal	1-37	Cottoneva Creek Valley	Mendocino		No	Low/Limited Use.
North Coastal	1-38	Lower Laytonville Valley	Mendocino		No	Low/Limited Use.
North Coastal	1-39	Branscomb Town Area	Mendocino		No	Low/Limited Use.
North Coastal	1-40	Ten Mile River Valley	Mendocino	DWR Bull. 142-1, p. 258-280	Yes	Located in the Mendocino Coast Hydrographic Unit. Recharge by infiltration of rainfall and surface runoff. PARTLY INCLUDED IN BASIN 1-21.
North Coastal	1-41	Little Valley	Mendocino	DWR Bull. 142-1, p. 258-280	No	Located in the Mendocino Coast Hydrographic Unit. Recharge by infiltration of rainfall and surface runoff. Area too small for scale.
North Coastal	1-42	Sherwood Valley	Mendocino		No	Low/Limited Use.
North Coastal	1-43	Williams Valley	Mendocino		No	Low/Limited Use.
North Coastal	1-44	Eden Valley	Mendocino		No	Low/Limited Use.
North Coastal	1-45	Big River Valley	Mendocino	DWR Bull. 142-1, p. 258-280	Yes	Located in the Mendocino Coast Hydrographic Unit. Recharge by infiltration of rainfall and surface runoff. PARTLY INCLUDED IN BASIN 1-21.
North Coastal	1-46	Navarro River Valley	Mendocino	DWR Bull. 142-1, p. 258-280	No	Located in the Mendocino Coast Hydrographic Unit. Recharge by infiltration of rainfall and surface runoff. Area too small for scale.
North Coastal	1-47	Gualala River Valley	Mendocino		No	Area too small for scale.
North Coastal	1-48	Gravelly Valley	Lake		No	Low/Limited Use.
North Coastal	1-49	Anapolis Ohlson Ranch Formation Highlands	Sonoma		No	Low/Limited Use.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
San Francisco Bay	2-1	Petaluma Valley	Marin, Sonoma	DWR Bull. 118-4, v. 3, Fig. 7; USGS Water Supply Paper 1427	Yes	Delineation based on DWR comments, 11/24/99.
San Francisco Bay	2- 2.01	Napa Valley	Napa, Solano	USGS Water-Supply Paper 1495	Yes	Delineation based on DWR comments, 11/24/99
San Francisco Bay	2- 2.02	Sonoma Valley	Sonoma	DWR Bull. 118-4, v. 4, Fig. 7 ; USGS Water-Supply Paper 1495	Yes	Delineation based on DWR comments, 11/24/99
San Francisco Bay	2-3	Suisun- Fairfield Valley	Solano		No	No DWR or USGS references found.
San Francisco Bay	2-4	Pittsburg Plain	Contra Costa		No	No DWR or USGS references found.
San Francisco Bay	2-5	Clayton Valley	Contra Costa		No	No DWR or USGS references found.
San Francisco Bay	2-6	Ygnacio Valley	Contra Costa		No	No DWR or USGS references found.
San Francisco Bay	2-7	San Ramon Valley	Contra Costa		No	No DWR or USGS references found.
San Francisco Bay	2-8	Castro Valley	Alameda		No	No DWR or USGS references found.
San Francisco Bay	2-9	Santa Clara Basin	Alameda, Contra Costa, Santa Clara, San Mateo	DWR Bull. 118-1, App A, p. 85, Pl. 11	Yes	Confined/unconfined areas and primary recharge zones.
San Francisco Bay	2- 9.01	East Bay Area	Alameda, Contra Costa	DWR Bull. 118-1, App A, Pl. 14; DWR Bull. 118-1, v. I-II; ACFCD 205(J) Report, Maslonkowski, 1984	Yes	Recharge area for Niles Cone defined based on presence of Newark aquitard.
San Francisco Bay	2- 9.02	South Bay Area	Santa Clara	SEEHRL Report No. 87-8/10, v. 10, p. 9, Fig. 1 (San Mateo Basin); DWR Bull. 118-1 v. III; Kleinfelder, 1988	No	Confined areas referenced but not delineated.
San Francisco Bay	2-10	Livermore Valley	Alameda, Contra Costa	DWR Bull. 118-2, p. 37, Pl. 9A-9B	Yes	High infiltration areas defined based on aquitard thickness and soils.
San Francisco Bay	2-11	Sunol Valley	Alameda	DWR Bull. 118-2, p. 61, Pl. 9A-9B	Yes	High infiltration areas defined.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
San Francisco Bay	2-12	McDowell Valley	Mendocino		No	Low/Limited Use.
San Francisco Bay	2-13	Knights Valley	Sonoma		No	Low/Limited Use.
San Francisco Bay	2-14	Potter Valley	Mendocino	USGS Water-Supply Paper 1548, p. 75-76, Pl. 2	No	Recharge from precipitation in drainage basin, especially at valley margins. Also, infiltration from irrigation canals, laterals and fields with excess water. Area too small for scale.
San Francisco Bay	2-15	Ukiah Valley	Mendocino	USGS Water-Supply Paper 1548, p. 68, Pl. 2 ; DWR Bull. 66-59, p. 42	Yes	Direct infiltration of rainfall and seepage loss from streams. Some recharge from streams and percolation of irrigation water.
San Francisco Bay	2-16	Sanel Valley	Mendocino	USGS Water-Supply Paper 1548, p. 58, Pl. 2 ; DWR Bull. 66-59, p. 47	Yes	Recharge from infiltration from streams and percolation of rainfall. PARTLY INCLUDED WITH BASIN 2-15.
San Francisco Bay	2- 17.01	Alexander Area	Sonoma	DWR Bull. 118-4, v. 5, p. 48; DWR Bull. 142-1; DWR Unnumbered Report (Thronson, 1963); USGS Water-Supply Paper 1548	Yes	Entire valley has potential for high infiltration. Delineation based on DWR comments, 11/24/99.
San Francisco Bay	2- 17.02	Cloverdale Area	Sonoma		Yes	Entire valley has potential for high infiltration. Delineation based on DWR comments, 11/24/99.
San Francisco Bay	2- 18.01	Santa Rosa Plain	Sonoma	DWR Bull. 118-4 v. 2, Fig. 7; USGS Water-Supply Paper 1427	Yes	High infiltration areas defined based on Soil Conservation Service. Delineation based on DWR comments, 11/24/99.
San Francisco Bay	2- 18.02	Healdsburg Area	Sonoma	DWR Bull. 118-4, v. 5, p. 48	Yes	Entire valley has potential for high infiltration. Delineation based on DWR comments, 11/24/99.
San Francisco Bay	2- 18.03	Rincon Valley	Sonoma		No	Low/Limited Use.
San Francisco Bay	2-19	Kenwood Valley	Sonoma		No	No DWR references found.
San Francisco Bay	2-20	Lower Russian River Valley	Sonoma		No	No DWR references found.
San Francisco Bay	2-21	Bodega Bay Area	Sonoma		No	No DWR references found.
San Francisco Bay	2-22	Half Moon Bay Terrace	San Mateo		No	No DWR references found.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
San Francisco Bay	2-23	Napa- Sonoma Volcanic Highlands	Sonoma		No	No DWR references found.
San Francisco Bay	2-24	San Gregorio Valley	San Mateo		No	No DWR references found.
San Francisco Bay	2-25	Sebastopol Merced Formation Highlands	Marin, Sonoma		No	No DWR references found.
San Francisco Bay	2-26	Pescadero Valley	San Mateo		No	No DWR references found.
San Francisco Bay	2-27	Sand Point Area	Marin		No	No DWR references found.
San Francisco Bay	2-28	Ross Valley	Marin		No	No DWR references found.
San Francisco Bay	2-29	San Rafael Valley	Marin		No	No DWR references found.
San Francisco Bay	2-30	Novato Valley	Marin		No	No DWR references found.
San Francisco Bay	2-31	Arroyo Del Hambre Valley	Contra Costa		No	No DWR references found.
San Francisco Bay	2-32	Visitation Valley	Sam Francisco, San Mateo		No	No DWR references found.
San Francisco Bay	2-33	Islais Valley	San Francisco		No	No DWR references found.
San Francisco Bay	2-34	San Francisco Sand Dune Area	San Francisco		No	No DWR references found.
San Francisco Bay	2-35	Merced Valley	Sam Francisco, San Mateo		No	No DWR references found.
San Francisco Bay	2-36	San Pedro Valley	San Mateo		No	No DWR references found.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
Central Coastal	3-1	Soquel Valley	Santa Cruz	USGS Open-File Report 79-1065	No	High infiltration areas defined. Areas too small for map scale.
Central Coastal	3-2	Pajaro Valley	Monterey, Santa Cruz	Richardson, et al, (1961) "San Felipe Division, Geology and Ground-Water Resources Appendix, Part IV", USBR Unnumbered Report, Pl. 2, 3; USGS Open-File Report, Muir, June 1972, p. 14, Fig. 11; USGS Water-Res. Inv. 87-4281	No	High infiltration areas defined. USBR Unnumbered Report, Pl. 3 defines confined/unconfined zones. Areas too small for map scale.
Central Coastal	3-3	Gilroy- Hollister Valley	San Benito, Santa Clara	Richardson, et al, (1961) "San Felipe Division, Geology and Ground-Water Resources Appendix, Part IV", USBR Unnumbered Report, Pl. 2, 3; DWR Bull. 118-1, v. 4 (Gilroy area); USGS Open-File Report, Fig. 5 (Hollister/San Juan area)	Yes	Confined/unconfined zones defined.
Central Coastal	3-4	Salinas Valley	Monterey	DWR Bull. 19, Pl. 1 ; USGS Water-Res. Inv. 83-4049	Yes	Confined/unconfined areas defined.
Central Coastal	3- 4.06	Paso Robles Basin	Monterey, San Luis Obispo	DWR District Report (1979) "Groundwater in the Paso Robles Basin"; DWR Unnumbered Report (Gershon, March 1971) "Preliminary Evaluation of the Water Supply of Arroyo Grande & Paso Robles Areas"; DWR Bull. 18	No	Generally confined, recharge areas not defined in reference.
Central Coastal	3- 4.08	Seaside Area	Monterey	USGS Water-Res. Inv. 82-10, p. 10, Fig. 9	No	High infiltration areas defined. Areas too small for map scale.
Central Coastal	3- 4.09	Langley Area	Monterey		No	Low/Limited Use.
Central Coastal	3- 4.10	Corral de Tierra Area	Monterey		No	Low/Limited Use.
Central Coastal	3-5	Cholame Valley	Monterey, San Luis Obispo		No	No references found.
Central Coastal	3-6	Lockwood Valley	Monterey		No	No references found.
Central Coastal	3-7	Carmel Valley	Monterey	USGS Water-Res. Inv. 83-4280, p. 12, Fig. 2; DWR Unnumbered Report (Meffley, July 1974), p. 1	No	Highly permeable basin, apparent confinement in West. Areas too small for map scale.
Central Coastal	3-8	Los Osos Valley	San Luis Obispo	DWR District Report (October 1973), p. 23, Fig. 2; DWR District Report (July 1989); DWR Bull. 63-6	No	Largely confined, recharge in tributary canyons, areas not mapped in references.
Central Coastal	3-9	San Luis Obispo Valley	San Luis Obispo		No	No references found.
Central Coastal	3-10	Pismo Creek Valley	San Luis Obispo	DWR Bull. 18, Pl. 2; DWR Bull. 63-3, p.15, Pl.3	No	Largely confined, recharge areas not defined in reference.
Central Coastal	3-11	Arroyo Grande Valley- Nipoma Mesa Area	San Luis Obispo	DWR Bull. 18, Pl. 2; DWR Unnumbered Report (Gershon, March 1971) "Preliminary Evaluation of the Water Supply of Arroyo Grande & Paso Robles Areas"; DWR District Report (June 1979); DWR Bull. 74-9	Yes	Largely confined, recharge areas adjacent to uplands, not delineated in reference. PARTLY INCLUDED WITH BASIN 3-12.

Table 1: Documentation Table for Statewide Maps Showing Hydrogeologically Vulnerable Areas

Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
Central Coastal	3-12	Santa Maria River Valley	San Luis Obispo, Santa Barbara	USGS Water-Res. Inv. 85-4129, p.1, Fig. 2; DWR Bull. 63-3	Yes	Confined/unconfined well delineated.
Central Coastal	3-13	Cuyama Valley Basin	Kern, San Luis Obispo, Santa Barbara, Ventura		No	No references found.
Central Coastal	3-14	San Antonio Creek Valley (Vandenberg)	Santa Barbara	USGS Water-Res. Inv. 84-4340, p. 10, Fig. 1; USGS Open-File Report, Koehler, 1970; USGS Water-Supply Paper 1664; USGS Water-Res. Inv. 80-750	Yes	Largely unconfined.
Central Coastal	3-15	Santa Ynez River Valley (Lompoc)	Santa Barbara	USGS Water-Res. Inv. 91-4172, Fig. 12; USGS Water-Supply Papers 1467, 1664 and 1107; USGS Water-Res. Inv. 84-4131 and 97-4056; USGS Open- File Report 76-183	Yes	Confined area defined.
Central Coastal	3-16	Goleta Basin	Santa Barbara	USGS Water-Supply Paper 1108, p. 84, Pl. 5 and 9	Yes	Confined, recharge areas defined.
Central Coastal	3-17	Santa Barbara Basin	Santa Barbara	USGS Water-Supply Paper 2197, p. 5, Table 1; USGS Water-Supply Papers 1108 and 1859-A; USGS Water-Res. Inv. 89-4017	No	Largely confined, unconfined area not defined in reference.
Central Coastal	3-18	Carpinteria Basin	Santa Barbara	USGS Water-Supply Paper 1108, Pl. 4, p. 53	Yes	Confined, recharge areas defined.
Central Coastal	3-19	Carrizo Plain	San Luis Obispo		No	No references found.
Central Coastal	3-20	Ano Nuevo Area	San Mateo		No	No references found.
Central Coastal	3-21	Santa Cruz Purisima Formation Highlands	Santa Cruz	USGS Water-Res. Inv. Open-File Report 79-1065 (North Central Highlands)	No	High infiltration areas defined. Areas too small for map scale.
Central Coastal	3-22	Santa Ana Valley	San Benito		No	No references found.
Central Coastal	3-23	Upper Santa Ana Valley	San Benito		No	No references found.
Central Coastal	3-24	Quien Sabe Valley	San Benito		No	No references found.
Central Coastal	3-25	Tres Pinos Creek Valley	San Benito		No	No references found.
Central Coastal	3-26	West Santa Cruz Terrace	Santa Cruz	USGS Water-Res. Inv. Open-File Report 79-1065	No	High infiltration areas defined. Areas too small for map scale.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
Central Coastal	3-27	Scotts Valley	Santa Cruz	USGS Water-Res. Inv. 81-6, Fig. 4	No	Unconfined aquifer, recharge through Santa Margarita Sandstone. Areas too small for map scale.
Central Coastal	3-28	San Benito River Valley	San Benito		No	Low/Limited Use.
Central Coastal	3-29	Dry Lake Valley	San Benito		No	Low/Limited Use.
Central Coastal	3-30	Bitter Water Valley	San Benito		No	Low/Limited Use.
Central Coastal	3-31	Hernandez Valley	San Benito		No	Low/Limited Use.
Central Coastal	3-32	Peach Tree Valley	San Benito		No	Low/Limited Use.
Central Coastal	3-33	San Carpoforo Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-34	Arroyo de la Cruz Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-35	San Simeon Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-36	Santa Rosa Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-37	Villa Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-38	Cayucos Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-39	Old Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-40	Toro Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-41	Morro Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-42	Chorro Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-43	Rinconada Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-44	Pozo Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-45	Huasna Valley	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-46	Rafael Valley	San Luis Obispo		No	Low/Limited Use.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
Central Coastal	3-47	Bis Spring Area	San Luis Obispo		No	Low/Limited Use.
Central Coastal	3-48	Careaga Sand Highlands	Santa Barbara		No	Low/Limited Use.
Central Coastal	3-49	Montecito Valley	Santa Barbara		No	Low/Limited Use.
South Coastal	4-1	Upper Ojai Valley	Ventura	DWR Bull. 12, p. B-53, Pl. 11	No	Areas too small for map scale.
South Coastal	4-2	Ojai Valley	Ventura	DWR Bull. 12, p. B-53, Pl. 11	Yes	Generally unconfined.
South Coastal	4-3	Ventura River Valley	Ventura	DWR Bull. 12, p. B-55, B-58 and B-59, Pl. 11 ; DWR Bull. 63-1	No	Eastern portion unconfined, west confined.
South Coastal	4-4	Santa Clara River Valley (incl. Oxnard Plain)	Ventura	DWR Bull. 12, Table 11, Pl. 11; DWR Bull. 63-1, p. 104-8	Yes	Forebay well defined.
South Coastal	4- 4.07	Santa Clara River Valley Eastern Basin	Los Angeles		No	Low/Limited Use.
South Coastal	4-5	Acton Valley	Los Angeles		No	No references found.
South Coastal	4-6	Pleasant Valley	Ventura	DWR Bull. 12, p. B-93, Table 11	No	Confined basin.
South Coastal	4-7	Arroyo Santa Rosa Valley	Ventura	DWR Bull. 12, p. B-118, Pl. 11	No	Deep aquifers confined.
South Coastal	4-8	Los Posas Valley	Ventura	DWR Bull. 12, p. B-105, Pl. B-1C	Yes	High Infiltration area well defined.
South Coastal	4-9	Simi Valley	Ventura	DWR Bull. 12, p. B-99, Pl. 11, 12-C; DWR Bull. 74-9	Yes	Eastern portion unconfined, west confined.
South Coastal	4-10	Conejo Valley	Ventura	DWR Bull. 12, p. B-111, Pl. 11, Table B-3	Yes	Unconfined volcanic basin. COMBINED WITH BASINS 4-19 AND 4-21.
South Coastal	4-11	Coastal Plain - Los Angeles Co.	Los Angeles	DWR Bull. 104, App A, Pl. 8A-8B; USGS Water-Supply Paper 1461, Pl. 3	Yes	Potentially rapid infiltration was delineated where the upper confining layer known as the Bellflower aquiclude is absent. An area known as Ballona Gap was also designated as potentially rapid infiltration zone, based on a geologic cross-section C-C'.
South Coastal	4-12	San Fernando Valley Basin	Los Angeles	State Water Rights Board, "Report of RefereeCity of Los Angeles vs. City of San Fernando" No. 650079, (Finlayson, et al, July 1962)	Yes	Eastern part of valley with medium to high infiltration rate delineated. Areas in western part of valley delineated based on surface soil properties and geologic cross-sections A/A'-D/D', M/M'.

Table 1: Documentation Table for Statewide Maps Showing Hydrogeologically Vulnerable Areas

Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
South Coastal	4-13	San Gabriel Basin	Los Angeles	DWR Bull. 104-2, Pl. 9A, 9B, 14; Dept. of Public Work, "Report of RefereeCity of Pasadena vs. City of Alhambra" No. Pasadena C-1323, (Conklin, et al, 1943), p. 37-78, 126-137, Pl. 5 (well logs), Pl. 6 (areal geology)	Yes	Infiltration rates >1 in/hr mapped as rapid infiltration zones per DWR Bull. 104-2. Potentially rapid infiltration zones in Raymond sub-basin were delineated by younger alluvium associated with drainage channels and recharge fields
South Coastal	4-14	Upper Santa Ana Valley	Los Angeles		Yes	PARTLY INCLUDED WITH BASIN 8-2
South Coastal	4-15	Tierra Rejada	Ventura	DWR Bull. 12, p. B-114, Pl. 11, Table B-3	No	Unconfined volcanic basin. Area too small for scale.
South Coastal	4-16	Hidden Valley	Ventura		No	Low/Limited Use.
South Coastal	4-17	Lockwood Valley	Ventura		No	Low/Limited Use.
South Coastal	4-18	Hungry Valley	Los Angeles, Ventura		No	Low/Limited Use.
South Coastal	4-19	Thousand Oaks Area	Ventura	DWR Bull. 12, p. B-111, Pl. 11, Table B-3	Yes	PARTLY INCLUDED WITH BASIN 4-10.
South Coastal	4-20	Russell Valley	Los Angeles, Ventura	DWR Bull. 12, p. B-111, Pl. 11, Table B-3	No	Low/Limited Use. Only Ventura County portion delineated. Primarily unconfined volcanics with some thin alluvium along streams.
South Coastal	4-21	Conejo-Tierra Rejada Volcanic Areas	Los Angeles, Ventura	DWR Bull. 12, p. B-111, Pl. 11, Table B-3	Yes	PARTLY INCLUDED WITH BASIN 4-10.
South Coastal	4-22	Malibu Valley	Los Angeles		No	Low/Limited Use.
Sacramento Basin	5-1	Goose Lake Valley	Modoc	DWR Bull. 98, v. 1, p. 79-80, 83; v. 2, Pl. 4; DWR Bull. 66-60, Part I	No	Upland recharge areas consist of permeable lava flows. Infiltration through the lava then percolation valleyward. Mappable, but volcanic recharge areas not included.
Sacramento Basin	5-2	Alturas Basin	Modoc	DWR Bull. 98, v. 1, p. 98-99, 102-103; v. 2, Pl. 8; DWR Bull. 66-60, Part I	No	Upland recharge areas consist of permeable lava flows. Infiltration through the lava then percolation valleyward. Mappable, but volcanic recharge areas not included.
Sacramento Basin	5- 2.01	South Fork Pit River and Alturas Area	Modoc	DWR Bull. 98, v. 1, p. 102, 104-105; v. 2, Pl. 8; DWR Bull. 66-60, Part I	No	Upland recharge areas consist of permeable lava flows. Infiltration through the lava then percolation valleyward. Mappable, but volcanic recharge areas not included.
Sacramento Basin	5- 2.02	Warm Springs Valley	Modoc	DWR Bull. 98, v. 1, p. 102, 105-106; v. 2, Pl. 8; DWR Bull. 66-60, Part I	No	Upland recharge areas consist of permeable lava flows. Infiltration through the lava then percolation valleyward. Mappable, but volcanic recharge areas not included.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
Sacramento Basin	5-3	Jess Valley	Modoc	DWR Bull. 98, v. 2, Pl. 7, 8, 9	Yes	Basin described as volcanic but actually alluvium.
Sacramento Basin	5-4	Big Valley	Lassen, Modoc	DWR Bull. 98, v. 1, p. 116-121; v. 2 , Pl. 10, 11	No	Upland recharge areas consist of permeable lava flows. Infiltration through the lava then percolation valleyward. Mappable, but volcanic recharge areas not included.
Sacramento Basin	5-5	Fall River Valley	Lassen, Shasta	DWR Bull. 98, v. 1, p. 133, 138-140; v. 2 , Pl. 14, 15	No	Upland recharge areas consist of permeable lava flows. Infiltration through the lava then percolation valleyward. Mappable, but volcanic recharge areas not included.
Sacramento Basin	5-6	Redding Basin	Shasta, Tehama	DWR Bull. 22; App E-P, p. 32, 348-351, 354, Pl. N-1, Sheet 2 of 2	Yes	The highest permeability exists in the southeast portion of the of the basin where Tuscan volcanic gravels occur in large amounts. Generally, alluvium is so thin that it is of little significance in regard to movement of storage of ground water.
Sacramento Basin	5-7	Lake Almanor Valley	Plumas		No	Mappable, but volcanic recharge areas (fracture flow) not included.
Sacramento Basin	5-8	Mountain Meadows Valley	Lassen		No	Low/Limited Use.
Sacramento Basin	5-9	Indian Valley	Plumas		No	Low/Limited Use.
Sacramento Basin	5-10	American Valley	Plumas		No	Low/Limited Use.
Sacramento Basin	5-11	Mohawk Valley	Plumas	DWR Bull. 98, v. 1, p. 155-157; v. 2 , Pl. 17, 18	Yes	Upland deposits are at best "moderately" permeable. Morainal deposits along southwest border have high water content and are locally permeable. Shallow unconfined area in valley.
Sacramento Basin	5-12	Sierra Valley	Plumas, Sierra	DWR Bull. 98, v. 1, p. 155-157; v. 2 , Pl. 17, 19	Yes	Upland recharge areas exist in the upper portion of alluvial fans. Minor infiltration through the lava also flows valleyward. Shallow unconfined area in valley.
Sacramento Basin	5-13	Upper Lake Valley	Lake		No	Mappable, but volcanic recharge areas (fracture flow) not included.
Sacramento Basin	5-14	Scott Valley	Lake		No	Mappable, but volcanic recharge areas (fracture flow) not included.
Sacramento Basin	5-15	Kelseyville Valley (Big Valley)	Lake		No	Low/Limited Use.
Sacramento Basin	5-16	High Valley	Lake	USGS Water-Supply Paper 1297, Pl. 1, p. 70	Yes	Recharge from infiltration of precipitation on the drainage area.
Sacramento Basin	5-17	Burns Valley	Lake	USGS Water-Supply Paper 1297, Pl. 1, p. 61	Yes	Recharge from infiltration of precipitation on the drainage area.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
Sacramento Basin	5-18	Coyote Valley	Lake	USGS Water-Supply Paper 1297, Pl. 1, p. 43	Yes	Recharge in part from infiltration of precipitation on the drainage area and also from outflow of Collayomi and Long Valleys.
Sacramento Basin	5-19	Collayomi Valley	Lake	USGS Water-Supply Paper 1297, Pl. 1, p. 36	Yes	Recharge from infiltration of precipitation on the drainage area.
Sacramento Basin	5-20	Berryessa Valley	Napa	DWR Bull. 99, p. 89-95	No	Recharge from infiltration of precipitation on the drainage area and seepage from adjoining hillsides. Areas too small for scale.
Sacramento Basin / San Joaquin Basin	5-21	Sacramento Valley	County # 4, 6, 11, 31, 34, 48, 51, 52, 57, 58 / County # 34, 48, 57	DWR Bull. 118-6, Fig. 5 ; USGS Prof. Paper 1401-A,B,C,D; DWR Bull. 133	Yes	"Areas having few barriers to vertical flow" per DWR Bull. 118-6, Fig. 5, were delineated as having highest potential infiltration/recharge. Basin delineation modified by DWR comments 11/19/99, #1, #2, and #3, and DWR comments 11/24/99.
San Joaquin Basin	5-22	San Joaquin Valley	County # 1, 7, 10, 15, 16, 20, 24, 34, 39, 50, 54	USGS Prof. Paper 1401-A, 1401-C, Pl. 5, and 1401-D; USGS Open-File Report "Ground-Water Geolgoy and Hydrology of the Kern River Alluvial Fan Area, Ca"; DWR Bull. 89, p. 33-37	Yes	Areas delineated as highest "susceptibility" based on absence of so-called Corcoran Clay which impedes vertical flow from shallow groundwater to deeper, higher quality drinking water production zones across much of the San Joaquin Valley.
San Joaquin Basin	5-23	Panoche Valley	San Benito		No	Low/Limited Use.
San Joaquin Basin	5-24	Squaw Valley	Fresno		No	Low/Limited Use.
San Joaquin Basin	5-25	Kern River Valley	Kern		No	Low/Limited Use.
San Joaquin Basin	5-26	Walker Basin Creek Valley	Kern		No	Low/Limited Use.
San Joaquin Basin	5-27	Cummings Valley	Kern		No	Low/Limited Use.
San Joaquin Basin	5-28	Tehachapi Valley West	Kern		No	Low/Limited Use.
San Joaquin Basin	5-29	Castaic Lake Valley	Kern		No	Low/Limited Use.
Sacramento Basin	5-30	Lower Lake Valley	Lake	USGS Water-Supply Paper 1297, Pl. 1, p. 56	Yes	Recharge from infiltration of precipitation on the Cache Formation outcrop area.
Sacramento Basin	5-31	Long Valley	Lake	USGS Water-Supply Paper 1297, Pl. 1, p. 73	Yes	Recharge from percolation of precipitation and streams.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
Sacramento Basin	5-32	Modoc Plateau Recent Volcanic Areas	Lassen, Modoc, Shasta, Siskiyou		No	Mappable, but volcanic recharge areas (fracture flow) not included.
Sacramento Basin	5-33	Modoc Plateau Pleistocene Volcanic Areas	Siskiyou		No	Mappable, but volcanic recharge areas (fracture flow) not included.
Sacramento Basin	5-34	Mount Shasta Area	Siskiyou		No	Mappable, but volcanic recharge areas (fracture flow) not included.
Sacramento Basin	5-35	McCloud Area	Siskiyou		No	Mappable, but volcanic recharge areas (fracture flow) not included.
Sacramento Basin	5-36	Round Valley	Modoc	DWR Bull. 98, v. 1, p. 116-121; v. 2, Pl. 11	No	Upland recharge areas consist of permeable lava flows. Infiltration through the lava then percolation valleyward. Mappable, but volcanic recharge areas not included.
Sacramento Basin	5-37	Toad Well Area	Siskiyou		No	Low/Limited Use.
Sacramento Basin	5-38	Pondosa Town Area	Shasta, Siskiyou		No	Low/Limited Use.
Sacramento Basin	5-39	Fandango Valley	Modoc		No	Low/Limited Use.
Sacramento Basin	5-40	Hot Spring Valley	Lassen, Modoc, Shasta		No	Low/Limited Use.
Sacramento Basin	5-41	Egg Lake Valley	Modoc		No	Low/Limited Use.
Sacramento Basin	5-42	Bucher Swamp Valley	Modoc		No	Low/Limited Use.
Sacramento Basin	5-43	Rocky Prairie Valley	Modoc		No	Low/Limited Use.
Sacramento Basin	5-44	Long Valley	Lassen, Modoc		No	Low/Limited Use.
Sacramento Basin	5-45	Cayton Valley	Shasta		No	Low/Limited Use.
Sacramento Basin	5-46	Lake Britton Area	Shasta		No	Low/Limited Use.
Sacramento Basin	5-47	Goose Valley	Shasta		No	Low/Limited Use.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
Sacramento Basin	5-48	Burney Creek Valley	Shasta		No	Low/Limited Use.
Sacramento Basin	5-49	Dry Burney Creek Valley	Shasta		No	Low/Limited Use.
Sacramento Basin	5-50	North Fork Battle Creek Valley	Shasta		No	Low/Limited Use.
Sacramento Basin	5-51	Butte Creek Valley	Lassen		No	Low/Limited Use.
Sacramento Basin	5-52	Gray Valley	Lassen		No	Low/Limited Use.
Sacramento Basin	5-53	Dixie Valley	Lassen		No	Low/Limited Use.
Sacramento Basin	5-54	Ash Valley	Lassen		No	Low/Limited Use.
Sacramento Basin	5-55	Sacramento Valley Eastside Tuscan Formation Highlands	Butte, Plumas, Tehama		No	Mappable, but volcanic recharge areas (fracture flow) not included.
Sacramento Basin	5-56	Yellow Creek Valley	Plumas		No	Low/Limited Use.
Sacramento Basin	5-57	Last Chance Creek Valley	Plumas		No	Low/Limited Use.
Sacramento Basin	5-58	Clover Valley	Plumas		No	Low/Limited Use.
Sacramento Basin	5-59	Grizzly Valley	Plumas		No	Low/Limited Use.
Sacramento Basin	5-60	Humbug Valley	Plumas	DWR Bull. 98, v. 1, p. 155-157, v. 2, Pl. 17, 18	Yes	Upland recharge areas consist of permeable lava flows. Infiltration through the lava then percolation valleyward.
Sacramento Basin	5-61	Chrome Town Area	Glenn		No	Low/Limited Use.
Sacramento Basin	5-62	Elk Creek Area	Glenn		No	Low/Limited Use.
Sacramento Basin	5-63	Stonyford Town Area	Colusa, Glenn		No	Low/Limited Use.
Sacramento Basin	5-64	Bear Valley	Colusa		No	Low/Limited Use.
Sacramento Basin	5-65	Little Indian Valley	Lake		No	Low/Limited Use.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
Sacramento Basin	5-66	Clear Lake Cache Formation Highlands	Lake		No	Mappable, but volcanic recharge areas (fracture flow) not included.
Sacramento Basin	5-67	Clear Lake Pleistocene Volcanics	Lake		No	Mappable, but volcanic recharge areas (fracture flow) not included.
Sacramento Basin	5-68	Pope Valley	Lake		No	Low/Limited Use.
San Joaquin Basin	5-69	Yosemite Valley	Mariposa		No	Low/Limited Use.
San Joaquin Basin	5-70	Los Banos Creek Valley	Merced		No	Low/Limited Use.
San Joaquin Basin	5-71	Vallecitos Creek Valley	San Benito		No	Low/Limited Use.
San Joaquin Basin	5-72	Cedar Grove Area	Fresno		No	Low/Limited Use.
San Joaquin Basin	5-73	Three Rivers Area	Tulare		No	Low/Limited Use.
San Joaquin Basin	5-74	Springville Area	Tulare		No	Low/Limited Use.
San Joaquin Basin	5-75	Templeton Mountain Area	Tulare		No	Low/Limited Use.
San Joaquin Basin	5-76	Manache Meadows Area	Tulare		No	Low/Limited Use.
San Joaquin Basin	5-77	Sacator Canyon Valley	Tulare		No	Low/Limited Use.
San Joaquin Basin	5-78	Rockhouse Meadow Valley	Tulare		No	Low/Limited Use.
San Joaquin Basin	5-79	Inns Valley	Kern, Tulare		No	Low/Limited Use.
San Joaquin Basin	5-80	Brite Valley	Kern		No	Low/Limited Use.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
San Joaquin Basin	5-81	Bear Valley	Kern		No	Low/Limited Use.
San Joaquin Basin	5-82	Cuddy Canyon Valley	Kern		No	Low/Limited Use.
San Joaquin Basin	5-83	Cuddy Ranch Area	Kern, Ventura		No	Low/Limited Use.
San Joaquin Basin	5-84	Cuddy Valley	Kern		No	Low/Limited Use.
San Joaquin Basin	5-85	Mill Potrera Area	Kern		No	Low/Limited Use.
North Lahontan	6-1	Surprise Valley	Lassen, Modoc	DWR Bull. 98, v. 1, p. 172 ; v. 2 , Pl. 21, 22 ; DWR Bull. 66-60	No	Upland recharge on west side of valley from surface water into apexes of alluvial fans along base of Warner Mtns and extensive recharge areas along eastern side of valley as shown on Pl. 22, DWR Bull. 98. Mappable but volcanic areas not included.
North Lahontan	6-2	Madeline Plains	Lassen	DWR Bull. 98, v. 1, p. 188; v. 2 , Pl. 24, 25 ; DWR Bull. 66-60	No	Upland recharge areas consist of permeable lava flows. Infiltration through the lava then percolation valleyward. Mappable but volcanic areas not included.
North Lahontan	6-3	Willow Creek Valley	Lassen	DWR Bull. 98, v. 1, p. 200 ; v. 2 , Pl. 27, 28 ; DWR Bull. 66-60	No	Upland recharge areas consist of permeable lava flows. Infiltration through the lava then percolation valleyward.
North Lahontan	6-4	Honey Lake Valley	Lassen	DWR Bull. 98, v. 1, p. 213, v. 2, Pl. 31 ; DWR Bull. 66-60, Pl. 19; DWR Memorandum to Mr. James Welsh	No	Upland recharge area consists of permeable lava flows with percolation valleyward. Some subsurface inflow may enter from Secret Valley. Hot water encountered in some wells indicate considerable recharge from magma sources (DWR Memorandum). Mappable but volcanic areas not included.
North Lahontan	6- 5.01	Tahoe Valley South	El Dorado	USGS Water-Res. Inv. Report 97-4072, p. 20-25, Fig. 6; USGS Open-File Report (Crippen and Pavelka, 1969), p. 15-18, Fig. 7; CDMG Geologic Map, Walker Lake, Sacramento, Chico sheets	Yes	Delineated as a potentially rapid infiltration zone. Recharge is primarily from infiltration of precipitation into faults and fractures in bedrock, into soil and decomposed granite that overlies much of the bedrock.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
North Lahontan	6- 5.02	Tahoe Valley North	Placer	USGS Water-Res. Inv. Report 97-4072, Fig 6; USGS Open-File Report (Crippen and Pavelka, 1969), p. 15-18, Fig. 7; CDMG Geologic Map, Walker Lake, Sacramento, Chico sheets	Yes	Alluvial fill of high hydraulic permeability delineated as a potentially rapid infiltration zone. Recharge is primarily from infiltration of precipitation into faults and fractures in bedrock, into soil and decomposed granite that overlies much of the bedrock.
North Lahontan	6-6	Carson Valley	Alpine	USGS Water-Res. Inv. 86-4328, p. 17-46, Fig. 1, 7, 8, 13; CDMG Geologic Map, Walker Lake sheet	Yes	The western part of the valley was delineated as a potentially rapid infiltration zone. The area includes alluvial fans and associated drainage channels of the Sierra Nevada eastern slopes.
North Lahontan	6-7	Antelope Valley (Topaz Valley)	Mono	USDA Report (1969) "Water and Related Resources, Central Lahontan Basin, Walker River Sub-Basin, Nevada-California", p. 13, 54-59, General Geologic Map, General Soil Map; Price, et al, (1983) "Groundwater-Surface Water Interaction at Topaz Lake, Nevada", p. 35-39	Yes	Delineated as a potentially rapid infiltration zone. INCLUDES PART OF BASIN 6-106.
North Lahontan	6-8	Bridgeport Valley	Mono	DWR Unnumbered Report, "Bridgeport Valley Groundwater Investigation" (1960), p. 5-16, Pl. 2; USDA Report, p. 13, 54-59; CDMG Geologic Map, Walker Lake sheet	Yes	Alluvial fill was delineated as a potentially rapid infiltration zone.
South Lahontan	6-9	Mono Valley	Mono	DWR Bull. 106-1, p. 91-97, Fig. 1; Winkler (1977) "An Ecological Study of Mono Lake, California", p. 18-23, Fig. 2-8, 2-9	Yes	Area west and south of the Mono Lake is delineated as a potentially rapid infiltration zone. This area of the basin is filled with quaternary coarse alluvial deposits and is a recharge zone for runoff from the Sierra Nevada.
South Lahontan	6-10	Adobe Lake Valley	Mono	DWR Bull. 106-1, p. 101-104, Fig. 2 ; CDMG Geologic Map, Mariposa sheet	Yes	Quaternary alluvium within the basin was delineated as a potentially rapid infiltration zone.
South Lahontan	6-11	Long Valley	Mono	DWR Bull. 106-1, p. 107-112, Fig. 3 ; CDMG Geologic Map, Mariposa sheet	Yes	Quaternary alluvium within the basin was delineated as a potentially rapid infiltration zone.
South Lahontan	6-12	Owens Valley	Inyo, Mono	DWR Bull. 106-1, p. 113-121, Fig. 4; USGS Water-Supply Paper 2370-B, Pl. 1, p. 59-73	Yes	Owens River flood-plain deposits and west of the river to the basin boundary along Sierra Nevada foothills delineated as a rapid infiltration zone.
South Lahontan	6-13	Black Springs Valley	Inyo	DWR Bull. 106-1, p. 113-121, Fig. 4 ; USGS Water-Supply Paper 2370-B	Yes	PARTLY INCLUDED WITH BASIN 6-12.
South Lahontan	6-14	Fish Lake Valley	Inyo, Mono	DWR Bull. 106-1, p. 135-137, Fig 6; CDMG Geologic Map, Mariposa sheet	Yes	Quaternary alluvium along foothills of the White Mountains was delineated as a potentially rapid infiltration zone.
South Lahontan	6-15	Deep Springs Valley	Inyo	DWR Bull. 106-1, p. 141-144, Fig 7; CDMG Geologic Map, Mariposa sheets	Yes	Quaternary alluvium was delineated as a potentially rapid infiltration area.
South Lahontan	6-16	Eureka Valley	Inyo	DWR Bull. 106-1, p. 145-148, Fig 8; CDMG Geologic Map, Mariposa sheet	Yes	Quaternary alluvium was delineated as a potentially rapid infiltration area.
South Lahontan	6-17	Saline Valley	Inyo	DWR Bull. 106-1 , p. 149-152 , Fig 9 ; CDMG Geologic Map, Death Valley sheet	Yes	Limited development. Areas delineated as a potentially rapid infiltration zones include alluvial deposits of Willow Creek, Waucabe Wash, Palm Springs and Upper Warm Spring.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
South Lahontan	6-18	Death Valley	Inyo, San Bernardino	DWR Bull. 106-1, p. 155-159, Fig 10; CDMG Geologic Map, Death Valley sheet	Yes	There are few areas with permanent residences and tourist facilities where either ground water or springs are the only water supply resources. Potentially rapid infiltration zones were delineated to where there is ground water usage within the valley.
South Lahontan	6-19	Wingate Valley	Inyo, San Bernardino	DWR Bull. 106-1, p.163-164, Fig. 11	No	Low/Limited Use basin. Military use only.
South Lahontan	6-20	Middle Amargosa Valley	Inyo, San Bernardino	DWR Bull. 106-1, p. 167-171, Fig. 12 ; CDMG Geologic Map, Death Valley sheet	Yes	Areas of potentially rapid infiltration are quaternary alluvium (except Lake Deposit) and alluvial fans along the Amargosa River channel.
South Lahontan	6-21	Lower Kingston Valley	San Bernardino	DWR Bull. 106-1	No	Undeveloped.
South Lahontan	6-22	Upper Kingston Valley	San Bernardino	DWR Bull. 106-1	No	Undeveloped.
South Lahontan	6-23	Riggs Valley	San Bernardino	DWR Bull. 106-1, p. 183-185, Fig. 15	No	Undeveloped.
South Lahontan	6-24	Red Pass Valley	San Bernardino	DWR Bull. 106-1, p. 187-188, Fig. 16	No	Undeveloped.
South Lahontan	6-25	Bicycle Valley	San Bernardino	DWR Bull. 106-1, p.191-193, Fig. 17	No	Undeveloped.
South Lahontan	6-26	Avawatz Valley	San Bernardino		No	Low/Limited Use.
South Lahontan	6-27	Leach Valley	San Bernardino	DWR Bull. 106-1, p. 195-197, Fig. 18	No	Undeveloped.
South Lahontan	6-28	Pahrump Valley	Inyo	DWR Bull. 106-1, p. 213-216, Fig. 22; USGS Water-Supply Paper 2279, p. 10-18, Fig. 3,4,5, Pl. 1; CDMG Geologic Map, Death Valley sheet	Yes	Only California's side of the Pahrump valley has been delineated. Alluvial fan deposits (fanglomerates) between lacustrine deposits underlying center of the valley and mountains slope to the west were delineated as potentially rapid infiltration zones.
South Lahontan	6-29	Mesquite Valley	Inyo, San Bernardino	DWR Bull. 106-1, p. 221-226, Fig. 23	No	Undeveloped.
South Lahontan	6-30	Ivanpah Valley	San Bernardino	DWR Bull. 106-1, p. 231-235, Fig. 24	No	Undeveloped.
South Lahontan	6-31	Kelso Valley	San Bernardino	DWR Bull. 106-1, p. 241-243, Fig. 25	No	Undeveloped.
South Lahontan	6-32	Broadwell Valley	San Bernardino	DWR Bull. 106-1, p. 245-247, Fig. 26	No	Undeveloped.
South Lahontan	6-33	Soda Lake Valley	San Bernardino	DWR Bull. 106-1, p. 249-252, Fig. 27	No	Undeveloped.
South Lahontan	6-34	Silver Lake Valley	San Bernardino	DWR Bull. 106-1, p. 255-257, Fig. 28	No	Undeveloped.

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South Lahontan	6-35	Cronise Valley	San Bernardino	DWR Bull. 106-1, p. 259-262, Fig. 29	No	Undeveloped.
South Lahontan	6-36	Langford Valley	San Bernardino	DWR Bull. 106-1, p. 265-267, Fig. 30	No	Undeveloped.
South Lahontan	6-37	Coyote Lake Valley	San Bernardino	DWR Bull. 106-1, p. 269-272, Fig. 31	No	Undeveloped.
South Lahontan	6-38	Caves Canyon Valley	San Bernardino	DWR Bull. 106-1, p. 275-277, Fig. 32	No	Undeveloped.
South Lahontan	6-39	Troy Valley	San Bernardino	DWR Bull. 106-1, p. 279-282, Fig. 33	No	Undeveloped.
South Lahontan	6-40	Lower Mojave River Valley	San Bernardino	DWR Bull. 106-1, p. 285-293, Fig. 34; DWR Bull. 84, Pl. 2, 3, 4, Chapter II, III, V	Yes	River channel deposits and dune sand and older alluvium adjacent to the channel of the Mojave River were delineated as a potentially rapid infiltration zone within Mojave River Valley.
South Lahontan	6-41	Middle Mojave River Valley	San Bernardino	DWR Bull. 106-1, p. 299-304, Fig. 35; DWR Bull. 84, Pl. 2, 3, 4, Chapter II, III, V	Yes	River channel deposits and dune sand and older alluvium adjacent to the channel of the Mojave River were delineated as a potentially rapid infiltration zone within Mojave River Valley.
South Lahontan	6-42	Upper Mojave River Valley	San Bernardino	DWR Bull. 106-1, p. 307-313, Fig. 36; DWR Bull. 84, Pl. 2, 3, 4, Chapter II, III, V	Yes	River channel deposits and dune sand and older alluvium adjacent to the channel of the Mojave River were delineated as a potentially rapid infiltration zone within Mojave River Valley.
South Lahontan	6-43	El Mirage Valley	San Bernardino	DWR Bull. 106-1, p. 317-320, Fig. 37	No	Undeveloped.
South Lahontan	6-44	Antelope Valley	Kern, Los Angeles, San Bernardino	DWR Bull. 106-1, p. 323-332, Fig. 38; USGS Water-Res. Inv. 93-4141, p. 8-13, Fig. 5	Yes	A confining clayey layer within the Lancaster sub- basin above which there is shallow, semi-perched ground water is delineated as a potentially rapid infiltration zone because it is recharging a deeper aquifer in the area.
South Lahontan	6-45	Tehachapi Valley East	Kern	DWR Bull. 106-1	No	Low/Limited Use basin.
South Lahontan	6-46	Fremont Valley	Kern	DWR Bull. 106-1, p. 345-356, Fig. 40; CDMG Geologic Map, Trona sheet; SAMDA, Inc. "Draft, Initial Study/Proposed Negative Declaration SAMDA Water Exploration", Appendices	Yes	Alluvium and alluvial fans deposits north of Cantil Valley fault (flow barrier) were delineated as a potentially rapid infiltration zone in the valley.
South Lahontan	6-47	Harper Valley	Kern, San Bernardino	DWR Bull. 106-1, p. 357-361, Fig. 41	No	Low/Limited Use basin. Low population.
South Lahontan	6-48	Goldstone Valley	San Bernardino	DWR Bull. 106-1, p. 365-367, Fig. 42	No	Low/Limited Use basin. Low population.
South Lahontan	6-49	Superior Valley	San Bernardino	DWR Bull. 106-1, p. 369-371, Fig. 43	No	Low/Limited Use basin. Low population.

Table 1: Documentation Table for Statewide Maps Showing Hydrogeologically Vulnerable Areas

Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
South Lahontan	6-50	Cuddeback Valley	San Bernardino	DWR Bull. 106-1, p. 373-376, Fig. 44	No	Low/Limited Use basin. Low population.
South Lahontan	6-51	Pilot Knob Valley	San Bernardino	DWR Bull. 106-1, p. 379-381, Fig. 45	No	Low/Limited Use basin. Low population.
South Lahontan	6-52	Searles Valley	Inyo, Kern, San Bernardino	DWR Bull. 106-1, p. 383-388, Fig. 46	No	Low/Limited Use basin. Low population.
South Lahontan	6-53	Salt Wells Valley	San Bernardino	DWR Bull. 106-1, p. 391-394, Fig. 47	No	Low/Limited Use basin. Low population.
South Lahontan	6-54	Indian Wells Valley	Inyo, Kern, San Bernardino	USGS Hydrologic Investigations Atlas, Dutcher, et al, (1968), "Geohydrologic Features of Indian Wells Valley, California", p. 12-16, Fig. 3; DWR Bull. 106-1, p. 397-401, Fig. 48; CDMG Geologic Map, Trona sheet	Yes	Alluvial fans and Recent alluvium within the western part of the valley where most of the ephemeral streams flow occur were delineated as a potential rapid infiltration zone.
South Lahontan	6-55	Coso Valley	Inyo	DWR Bull. 106-1, p. 407-409, Fig. 49	No	Low/Limited Use basin. Low population.
South Lahontan	6-56	Rose Valley	Inyo	DWR Bull. 106-1, p. 411-413, Fig. 50	No	Low/Limited Use basin. Low population.
South Lahontan	6-57	Darwin Valley	Inyo	DWR Bull. 106-1, p. 415-418, Fig. 51	No	Low/Limited Use basin. Low population.
South Lahontan	6-58	Panamint Valley	Inyo	DWR Bull. 106-1, p. 421-425, Fig. 52	No	Low/Limited Use basin. Low population.
South Lahontan	6-59	Granite Mountain Area	Mono		No	No DWR or USGS references found.
South Lahontan	6-60	Fish Slough Valley	Inyo, Mono		No	No DWR or USGS references found.
South Lahontan	6-61	Cameo Area	Inyo		No	No DWR or USGS references found.
South Lahontan	6-62	Race Track Valley	Inyo		No	No DWR or USGS references found.
South Lahontan	6-63	Hidden Valley	Inyo		No	No DWR or USGS references found.
South Lahontan	6-64	Marble Canyon Area	Inyo		No	No DWR or USGS references found.
South Lahontan	6-65	Cottonwood Springs Area	Inyo		No	No DWR or USGS references found.
South Lahontan	6-66	Lee Flat	Inyo		No	No DWR or USGS references found.
South Lahontan	6-67	Martis Valley (Truckee Valley)	Nevada, Placer		No	No DWR or USGS references found.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
South Lahontan	6-68	Santa Rosa Flat	Inyo		No	No DWR or USGS references found.
South Lahontan	6-69	Kelso Lander Valley	Kern	DWR Bull. 106-1, p. 429-430, Fig. 53	No	Low/Limited Use basin.
South Lahontan	6-70	Cactus Flat	Inyo		No	No DWR or USGS references found.
South Lahontan	6-71	Lost Lake Vallev	San Bernardino		No	No DWR or USGS references found.
South Lahontan	6-72	Coles Flat	Inyo		No	No DWR or USGS references found.
South Lahontan	6-73	Wild Horse Mesa Area	Inyo		No	No DWR or USGS references found.
South Lahontan	6-74	Harrisburg Flats	Inyo		No	No DWR or USGS references found.
South Lahontan	6-75	Wildrose Canyon	Inyo		No	No DWR or USGS references found.
South Lahontan	6-76	Brown Mountain Valley	San Bernardino	DWR Bull. 106-1, p. 433-435, Fig. 54	No	Low/Limited Use basin. Low population.
South Lahontan	6-77	Grass Valley	San Bernardino	DWR Bull. 106-1, p. 437-438, Fig. 55	No	Unused, military only.
South Lahontan	6-78	Denning Spring Valley	San Bernardino		No	Low/Limited Use basin. Low population.
South Lahontan	6-79	California Valley	Inyo, San Bernardino	DWR Bull. 106-1, p. 207-209, Fig. 21	No	Low/Limited Use basin. Low population.
South Lahontan	6-80	Middle Park Valley	Inyo		No	No DWR or USGS references found.
South Lahontan	6-81	Butte Valley	Inyo		No	No DWR or USGS references found.
South Lahontan	6-82	Spring Canyon Area	Inyo		No	No DWR or USGS references found.
South Lahontan	6-83	Furnace Creek Area	Inyo		No	No DWR or USGS references found.
South Lahontan	6-84	Greenwater Valley	Inyo		No	No DWR or USGS references found.
South Lahontan	6-85	Gold Valley	Inyo		No	No DWR or USGS references found.
South Lahontan	6-86	Rhodes Hill Area	Inyo		No	No DWR or USGS references found.
South Lahontan	6-87	Butterbread Canyon Valley	Kern		No	No DWR or USGS references found.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
South Lahontan	6-88	Owl Lake Valley	San Bernardino		No	No DWR or USGS references found.
South Lahontan	6-89	Kane Wash Area	San Bernardino		No	No DWR or USGS references found.
South Lahontan	6-90	Cady Fault Area	San Bernardino		No	No DWR or USGS references found.
North Lahontan	6-91	Cow Head Lake Valley	Modoc		No	No DWR or USGS references found.
North Lahontan	6-92	Pine Creek Valley	Lassen		No	No DWR or USGS references found.
North Lahontan	6-93	Harvey Valley	Lassen		No	No DWR or USGS references found.
North Lahontan	6-94	Grasshopper Valley	Lassen		No	No DWR or USGS references found.
North Lahontan	6-95	Dry Valley	Lassen		No	No DWR or USGS references found.
North Lahontan	6-96	Eagle Lake Area	Lassen		No	No DWR or USGS references found.
North Lahontan	6-97	Horse Lake Valley	Lassen		No	No DWR or USGS references found.
North Lahontan	6-98	Tuledad Canyon Area	Lassen		No	No DWR or USGS references found.
North Lahontan	6-99	Painters Flat	Lassen		No	No DWR or USGS references found.
North Lahontan	6-100	Secret Valley	Lassen		No	No DWR or USGS references found.
North Lahontan	6-101	Bull Flat	Lassen		No	No DWR or USGS references found.
North Lahontan	6-102	Modoc Plateau Recent Volcanic Areas	Lassen		No	No DWR or USGS references found.
North Lahontan	6-103	Modoc Plateau Pleistocene Volcanic Areas	Lassen		No	No DWR or USGS references found.
North Lahontan	6-104	Long Valley	Lassen, Sierra		No	No DWR or USGS references found.
North Lahontan	6-105	Slinkard Valley	Mono		No	No DWR or USGS references found.

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North Lahontan	6-106	Little Antelope Valley	Mono		Yes	No DWR or USGS references found. PARTLY INCLUDED WITH BASIN 6-7.
North Lahontan	6-107	Sweetwater Flat	Mono		No	No DWR or USGS references found.
Colorado Desert	7-1	Lanfair Valley	San Bernardino	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-2	Fenner Valley	San Bernardino	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-3	Ward Valley	Riverside, San Bernardino	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-4	Rice Valley	Riverside, San Bernardino	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-5	Chuckwalla Valley	Imperial, Riverside	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-6	Pinto Valley	Riverside, San Bernardino	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-7	Cadiz Valley	Riverside, San Bernardino	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-8	Bristol Valley	San Bernardino	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-9	Dale Valley	Riverside, San Bernardino	DWR Report No. 4, p. 26	No	Low/Limited Use basin. Low population.
Colorado Desert	7-10	Twentynine Palms Valley	San Bernardino	DWR Report No. 4, C304, p. 24-26	Yes	Alluvial deposits, alluvial fans, and Tertiary sands south of the Base Line Fault delineated as potentially rapid infiltration zones based on soil infiltration and fault barrier north of the Little San Bernardino Mountains.
Colorado Desert	7-11	Copper Mountain Valley	San Bernardino	DWR Report No. 4, p. 26	No	Low/Limited Use basin. Low population.
Colorado Desert	7-12	Warren Valley	San Bernardino	DWR Report No. 4	No	Low/Limited Use basin. Low population. Poor water quality.
Colorado Desert	7-13	Deadman Valley	San Bernardino	DWR Report No. 4, p. 26	No	Low/Limited Use basin. Low population. Poor water quality.
Colorado Desert	7-14	Lavic Valley	San Bernardino	DWR Report No. 4	No	Low/Limited Use basin. Low population. Poor water quality.

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Colorado Desert	7-15	Bessemer Valley	San Bernardino	DWR Report No. 4, p. 26	No	Low/Limited Use basin. Low population. Poor water quality.
Colorado Desert	7-16	Ames Valley	San Bernardino	DWR Report No. 4, p. 26	No	Low/Limited Use basin. Low population. Poor water quality.
Colorado Desert	7-17	Means Valley	San Bernardino	DWR Report No. 4, p. 27	No	Low/Limited Use basin. Low population. Poor water quality.
Colorado Desert	7-18	Johnson Valley	San Bernardino	DWR Report No. 4, p. 28	No	Low/Limited Use basin. Low population. Poor water quality.
Colorado Desert	7-19	Lucerne Valley	San Bernardino	DWR Report No. 4, p. 16, 26	Yes	Alluvial deposits west of Helendale fault were delineated as a potentially rapid infiltration and recharge zone for runoff from the mountains.
Colorado Desert	7-20	Morongo Valley	San Bernardino	DWR Report No. 4, p. 27	No	Low/Limited Use basin. Low population.
Colorado Desert	7-21	Coachella Valley	Imperial, Riverside	DWR Report No. 4, p. 27; DWR Bull. 108, Pl. 3A, 3B, 3C	Yes	High permeability river channel deposits and alluvial fans were delineated as a potentially rapid infiltration zones within the Coachella Valley. Areas underlain by bedrock and playa deposits were excluded from these zones.
Colorado Desert	7-22	West Salton Sea Basin	Imperial	DWR Report No. 4	Yes	INCLUDED WITH BASIN 7-30.
Colorado Desert	7-23	Clark Valley	San Diego	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-24	Borrego Valley	San Diego	DWR Report No. 4, p. 29-30, Pl. 1	Yes	Alluvial and alluvial fan deposits west of Borrego Sink were delineated as a potentially rapid infiltration zone
Colorado Desert	7-25	Ocotillo Valley	Imperial, San Diego	DWR Report No. 4, p. 29, Pl. 1	Yes	INCLUDED WITH BASIN 7-30.
Colorado Desert	7-26	Terwilliger Valley	Riverside	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-27	San Felipe Valley	San Diego	DWR Report No. 4	No	Low/Limited Use basin. Low population.
Colorado Desert	7-28	Vallecito- Carrizo Valley	Imperial, San Diego		No	Low/Limited Use.
Colorado Desert	7-29	Coyote Wells Valley	Imperial, San Diego	DWR Report No. 4	No	PARTLY INCLUDED WITH BASIN 7-30.
Colorado Desert	7-30	Imperial Valley	Imperial	DWR Report No. 4, p. 30-31, Pl. 2; USGS Prof. Paper 486-K, p. K13-K24	Yes	Quaternary alluvial deposits of sand, gravel and silt were delineated as a potentially rapid infiltration zones in the Imperial Valley.
Colorado Desert	7-31	Orcopia Valley	Riverside		No	Low/Limited Use.
Colorado Desert	7-32	Chocolate Valley	Riverside		No	Low/Limited Use.

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Hydrologic Study Area	DWR Basin No.	Basin Name	County	References (Primary References in Bold)	Included in Map?	Justification / Comments (Primary Source: DWR Bulletin 118 v.1975)
Colorado Desert	7-33	East Salton Sea Basin	Imperial, Riverside		Yes	PARTLY INCLUDED WITH BASIN 7-30.
Colorado Desert	7-34	Amos Valley	Imperial		Yes	PARTLY INCLUDED WITH BASIN 7-30.
Colorado Desert	7-35	Ogilby Valley	Imperial		Yes	PARTLY INCLUDED WITH BASIN 7-30.
Colorado Desert	7-36	Yuma Valley	Imperial	DWR Report No. 4, p. 31, Pl. 1	Yes	Younger alluvium along Colorado River was delineated as a potentially rapid infiltration zone. Shallow ground water is used for domestic purpose in this area.
Colorado Desert	7-37	Arroyo Seco Valley	Imperial, Riverside		No	Low/Limited Use.
Colorado Desert	7-38	Palo Verde Valley	Imperial, Riverside	DWR Report No. 4, p. 31-32, Pl. 2	Yes	Colorado River Alluvial deposits were delineated as a potentially rapid infiltration zone within Palo Verde Valley.
Colorado Desert	7-39	Palo Verde Mesa	Imperial, Riverside		Yes	PARTLY INCLUDED WITH BASIN 7-38.
Colorado Desert	7-40	Quien Sabe Point Valley	Riverside		No	Low/Limited Use.
Colorado Desert	7-41	Calzona Valley	Riverside, San Bernardino		No	Low/Limited Use.
Colorado Desert	7-42	Vidal Valley	Riverside, San Bernardino		No	Low/Limited Use.
Colorado Desert	7-43	Chemehuevi Valley	San Bernardino		No	Low/Limited Use.
Colorado Desert	7-44	Needles Basin	San Bernardino	USGS Prof. Paper 486-J, p. J13-J19, Pl. 1	Yes	Younger alluvium (flood-plain) deposits of the Colorado River were delineated as a potentially rapid infiltration zones in this area.
Colorado Desert	7-45	Piute Valley	San Bernardino		No	Low/Limited Use.
Colorado Desert	7-46	Canebrake Valley	San Diego		No	Low/Limited Use.
Colorado Desert	7-47	Jacumba Valley	San Diego		No	Low/Limited Use.
Colorado Desert	7-48	Helendale Fault Valley	San Bernardino		No	Low/Limited Use.
Colorado Desert	7-49	Pipes Canyon Fault Valley	San Bernardino		No	Low/Limited Use.
Colorado Desert	7-50	Iron Ridge Area	San Bernardino		No	Low/Limited Use.

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Colorado Desert	7-51	Lost Horse Valley	Riverside, San Bernardino		No	Low/Limited Use.
Colorado Desert	7-52	Pleasant Valley	Riverside		No	Low/Limited Use.
Colorado Desert	7-53	Hexie Mountain Area	Riverside		No	Low/Limited Use.
Colorado Desert	7-54	Buck Ridge Fault Valley	Riverside		No	Low/Limited Use.
Colorado Desert	7-55	Collins Valley	Riverside, San Diego		No	Low/Limited Use.
Colorado Desert	7-56	Yaqui Well Area	San Diego		No	Low/Limited Use.
Colorado Desert	7-57	Pinyon Wash Area	San Diego		No	Low/Limited Use.
Colorado Desert	7-58	Whale Peak Area	San Diego		No	Low/Limited Use.
Colorado Desert	7-59	Mason Valley	San Diego		No	Low/Limited Use.
Colorado Desert	7-60	Jacumba Valley-East	Imperial, San Diego		No	Low/Limited Use.
Colorado Desert	7-61	Davies Valley	Imperial		No	Low/Limited Use.
South Coastal	8-1	Coastal Plain of Orange County	Orange	DWR Unnumbered Progress Report (Weber, et al, July 1967), Pl. 11 and Pl. 3, 4, 4A, cross-section A/A'-E/E'	Yes	Rapid infiltration zones where thickness of confining layer is less then 20 feet and where the upper aquifer (Talbot Formation) crops out along the southern slopes of Puente and Chino Hills and northern slopes of Coyote Hills.
South Coastal	8-2	Upper Santa Ana Valley	Riverside, San Bernardino	DWR Bull. 104-3, App A (Chino-Riverside); DWR Bull. 104-5, p. 10, Fig. 3, 11 (Bunker Hill); DWR Bull. 15, App B, p. 107-126, Fig. B1-B3 (San Jacinto)	Yes	Infiltration >1 in/hr (p. 5-52, Pl. 2, 1), unconfined areas (Pl. 6-9, cross-section A/A'-l/l'); USGS Water-Supply Paper 1999-C (Chino). Unconfined areas (p.10, Fig. 3), spreading grounds (Fig.11) (Bunker Hill). Specific Yield > 10% (Pl. B-1A-1B, B-3A) (San Jacinto).
South Coastal	8-3	Cajalco Valley (Inundated by Lake Mathews)	Riverside		No	No DWR or USGS references found.
South Coastal	8-4	Elsinore Basin	Riverside	DWR Bull. 15	Yes	Areas of alluvium with specific yield of more than 10%, 50 feet above water table.

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South Coastal	8-5	San Jacinto Basin	Riverside	DWR Bull. 15	Yes	Areas of alluvium with specific yield of more than 10%, 50 feet above water table.
South Coastal	8-6	Hemet Lake Valley (Garner Valley)	Riverside	DWR Bull. 118	No	Low/Limited Use basin. Low population.
South Coastal	8-7	Big Meadows Valley	San Bernardino	DWR Bull. 118	No	Low/Limited Use basin. Low population.
South Coastal	8-8	Seven Oaks Valley	San Bernardino	DWR Bull. 118	No	Low/Limited Use basin. Low population.
South Coastal	8-9	Bear Valley	San Bernardino	DWR Bull. 118	No	Low/Limited Use basin. Low population.
South Coastal	9-1	San Juan Valley	Orange	DWR Bull. 106-2	No	Low/Limited Use basin. (San Diego)
South Coastal	9-2	San Mateo Vaalley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin. (San Diego)
South Coastal	9-3	San Onofre Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin. (San Diego)
South Coastal	9-4	Santa Margarita Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin. (San Diego)
South Coastal	9-5	Temecula Valley	Riverside	DWR Bull. 106-2, Pl. 2A, p. 46-47	Yes	Stream channel deposits and Temecula Arkose formation delineated as potentially rapid infiltration zones.
South Coastal	9-6	Coahuila Valley	Riverside	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-7	San Luis Rey Valley	San Diego	DWR Bull. 106-2, Pl. 2A, p. 46-47	Yes	Stream channel deposits and Pala Fanglomerate formation delineated as potentially rapid infiltration zones.
South Coastal	9-8	Warner Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-9	Escondido Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-10	San Pasqual Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-11	Santa Maria Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-12	San Dieguito Creek	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-13	Poway Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.

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South Coastal	9-14	Mission Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-15	San Diego River Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-16	El Cajon Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-17	Sweetwater Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-18	Otay Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-19	Tia Juana Basin	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-20	Jamul Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-21	Las Pulgas Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-22	Batiquitos Lagoon Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-23	San Elijo Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-24	Pamo Valley	San Diego	DWR Bull. 106-2	No	Low/Limited Use basin.
South Coastal	9-25	Ranchita Town Area	San Diego		No	Low/Limited Use.
South Coastal	9-26	Pine Valley	San Diego		No	Low/Limited Use.
South Coastal	9-27	Cottonwood Valley	San Diego		No	Low/Limited Use.
South Coastal	9-28	Campo Valley	San Diego		No	Low/Limited Use.
South Coastal	9-29	Potrero Valley	San Diego		No	Low/Limited Use.
South Coastal	9-30	Tecate Valley	San Diego		No	Low/Limited Use.