

CASGEM Groundwater Basin Prioritization Results Sorted by Basin Number									Data Component Ranking Value										Overall Ranking		Impact Comments	Other Information Comments
Basin count	Basin Number	Basin Name	Sub-Basin Name	Hydrologic Region	DWR Region Office	Basin Area		2010 Population	Population	Population Growth	Public Supply Wells	Total Wells *	Irrigated Acreage	Groundwater Reliance			Impacts	Other Information	Overall Basin Ranking Score ***	Overall Basin Priority		
						Acres	Sq. Mile							GW Use **	Percent of Total Supply **	GW Reliance Total						
1	1-19	ANDERSON VALLEY		North Coast	NCRO	4,969	7.8	1,297	1	5	5	3.75	3	1	1	0	0	0	0.0	Very Low		
2	1-20	GARCIA RIVER VALLEY		North Coast	NCRO	2,242	3.5	119	1	0	0	2.25	3	2	1	0	0	0	0.0	Very Low		
3	1-21	FORT BRAGG TERRACE AREA		North Coast	NCRO	24,085	37.6	12,517	2	1	5	3.75	2	1	1	0	1	0	0.0	Very Low	The terrace deposits between Ten Mile River and Laguna Point and Alder Creek and Point Arena are susceptible to seawater intrusion. (B-118).	
4	1-37	COTTONEVA CREEK VALLEY		North Coast	NCRO	763	1.2	1	0	0	0	1.5	0	0	0	0	0	0	0.0	Very Low		
5	1-38	LOWER LAYTONVILLE VALLEY		North Coast	NCRO	2,152	3.4	107	1	0	0	2.25	2	1	1	0	0	0	0.0	Very Low		
6	1-39	BRANSCOMB TOWN AREA		North Coast	NCRO	1,381	2.2	95	1	0	0	3	1	1	1	0	0	0	0.0	Very Low		
7	1-40	TEN MILE RIVER VALLEY		North Coast	NCRO	1,491	2.3	61	1	0	0	3	0	0	0	0	0	0	0.0	Very Low		
8	1-41	LITTLE VALLEY		North Coast	NCRO	812	1.3	11	1	0	0	1.5	2	0	0	0	0	0	0.0	Very Low		
9	1-42	SHERWOOD VALLEY		North Coast	NCRO	1,150	1.8	13	1	0	0	1.5	0	0	0	0	0	0	0.0	Very Low		
10	1-43	WILLIAMS VALLEY		North Coast	NCRO	1,642	2.6	2	0	0	0	2.25	2	0	0	0	0	0	0.0	Very Low		
11	1-44	EDEN VALLEY		North Coast	NCRO	1,376	2.2	0	0	0	0	0	3	3	3	0	0	0	0.0	Very Low		
12	1-45	BIG RIVER VALLEY		North Coast	NCRO	1,685	2.6	29	1	0	5	1.5	0	0	0	0	0	0	0.0	Very Low		
13	1-46	NAVARRO RIVER VALLEY		North Coast	NCRO	770	1.2	36	1	0	0	1.5	0	0	0	0	0	0	0.0	Very Low		
14	1-49	ANNAPOLIS OHLSON RANCH FM HIGHLANDS		North Coast	NCRO	8,646	13.5	233	1	0	0	2.25	1	1	2	0	0	0	0.0	Very Low		
15	1-50	KNIGHTS VALLEY		North Coast	NCRO	4,086	6.4	102	1	0	0	2.25	4	2	4	0	0	0	0.0	Very Low		
16	1-51	POTTER VALLEY		North Coast	NCRO	8,237	12.9	1,145	1	0	1	3.75	4	0	0	0	0	0	0.0	Very Low		
17	1-52	UKIAH VALLEY		North Coast	NCRO	37,508	58.6	32,761	2	1	3	3.75	3	2	2	2	0	1	15.8	Medium	2010 Ukiah Valley Water Supply Assessment expresses concerns regarding SWRCB assertion that all or most of the "groundwater" in the basin is, for legal purposes, underflow from the Russian River and associated tributaries...which support endangered fishery.	
18	1-53	SANEL VALLEY		North Coast	NCRO	5,568	8.7	698	1	0	4	3	4	2	3	0	0	0	0.0	Very Low		
19	1-54.01	ALEXANDER VALLEY	ALEXANDER AREA	North Coast	NCRO	24,464	38.2	2,098	1	0	4	3.75	4	0	1	0	0	0	0.0	Very Low		
20	1-54.02	ALEXANDER VALLEY	CLOVERDALE AREA	North Coast	NCRO	6,525	10.2	8,297	2	4	5	3.75	4	2	3	0	1	0	0.0	Very Low	Elevated Boron detected in 3 of 3 wells (B-118). Site in Southern Cloverdale is on the EPA's Superfund Priority List (MGM Brakes) VOCs detected in gw (EPA 1983).	
21	1-55.01	SANTA ROSA VALLEY	SANTA ROSA PLAIN	North Coast	NCRO	80,059	125.1	250,375	3	2	5	3.75	3	2	2	2	0	0	18.8	Medium		
22	1-55.02	SANTA ROSA VALLEY	HEALDSBURG AREA	North Coast	NCRO	15,400	24.1	10,515	2	0	5	3.75	4	0	0	0	0	0	0.0	Very Low		
23	1-55.03	SANTA ROSA VALLEY	RINCON VALLEY	North Coast	NCRO	5,549	8.7	21,787	4	3	5	3.75	1	2	3	0	0	0	0.0	Very Low		
24	1-56	MCDOWELL VALLEY		North Coast	NCRO	1,486	2.3	106	1	0	0	3.75	4	2	3	0	0	0	0.0	Very Low		
25	1-57	BODEGA BAY AREA		North Coast	NCRO	2,676	4.2	719	1	0	5	3	0	2	5	0	0	0	0.0	Very Low		
26	1-59	WILSON GROVE FORMATION HIGHLANDS		North Coast	NCRO	86,400	135.0	37,799	2	0	4	3.75	2	0	0	0	0	0	0.0	Very Low		
27	1-60	LOWER RUSSIAN RIVER VALLEY		North Coast	NCRO	6,640	10.4	3,754	2	2	5	3	3	2	1	0	1	0	0.0	Very Low	Brackish water found in wells near the Russian River from the river mouth to below Duncan Mills (5 to 6 miles). During a period of extremely low streamflow, saline water might extend 10 miles upstream from river mouth to Monte Rio.(B-118).	
28	1-61	FORT ROSS TERRACE DEPOSITS		North Coast	NCRO	8,483	13.3	1,075	1	2	4	3	0	1	4	0	1	0	0.0	Very Low	Seawater intrusion is not a common problem but it has occurred in localized areas near Point Arena and Iverson Point (DWR 1982). The Terrace deposits between Alder Creek and Point Arena are susceptible to seawater intrusion (DWR 1982, & B-118).	
29	2-1	PETALUMA VALLEY		San Francisco Bay	NCRO	46,043	71.9	49,915	2	3	3	3.75	3	1	2	1.5	2	0	18.3	Medium	Widespread and serious nitrate contamination affecting shallow wells in the upland area NW of Petaluma. Generally poor quality gw south of Petaluma. Potential for seawater intrusion in tidal reaches. Increasing MTBE contamination.(B-118 unpublished data).	
30	2-10	LIVERMORE VALLEY		San Francisco Bay	NCRO	69,531	108.6	196,658	3	3	3	3.75	2	1	2	1.5	1	0	17.3	Medium	Some areas have boron concentrations exceeding 2 mg/L (B-118 & Sorenson et. al. 1985).	
31	2-11	SUNOL VALLEY		San Francisco Bay	NCRO	16,623	26.0	808	1	0	0	2.25	1	1	3	0	0	0	0.0	Very Low		
32	2-19	KENWOOD VALLEY		San Francisco Bay	NCRO	5,135	8.0	6,057	2	1	5	3.75	3	1	1	0	0	0	0.0	Very Low		
33	2-2.01	NAPA-SONOMA VALLEY	NAPA VALLEY	San Francisco Bay	NCRO	45,895	71.7	91,234	3	1	5	3.75	4	3	3	3	1	0	20.8	Medium	Two isolated areas in the Sonoma Valley indicate substantial declines in gw elevations and RWQCB report that 43 underground fuel tank leaks have occurred in the basin (unpublished B-118 data) (Ludhorff & Scalmanini Consulting Engineers, 1999).	
34	2-2.02	NAPA-SONOMA VALLEY	SONOMA VALLEY	San Francisco Bay	NCRO	44,626	69.7	31,275	2	1	3	3.75	4	1	2	1.5	1	0	16.3	Medium	Brackish water occurs in deposits near San Pablo Bay and along the tidal portions of Sonoma creek. RWQCB reports 43 underground fuel tank leaks have occurred in the basin (unpublished B-118 data) (Ludhorff & Scalmanini, 1999).	
35	2-2.03	NAPA-SONOMA VALLEY	NAPA-SONOMA LOWLANDS	San Francisco Bay	NCRO	40,455	63.2	58,367	2	0	2	3	2	2	1	0	0	0	0.0	Very Low		
36	2-22	HALF MOON BAY TERRACE		San Francisco Bay	NCRO	9,189	14.4	19,825	3	3	5	3.75	3	1	3	0	0	0	0.0	Very Low		

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37	2-24	SAN GREGORIO VALLEY		San Francisco Bay	NCRO	1,074	1.7	66	1	0	0	2.25	3	0	0	0	0	0	0.0	Very Low		
38	2-26	PESCADERO VALLEY		San Francisco Bay	NCRO	2,904	4.5	571	1	0	4	3	3	0	0	0	0	0	0.0	Very Low		
39	2-27	SAND POINT AREA		San Francisco Bay	NCRO	1,405	2.2	43	1	0	5	0.75	0	1	4	0	0	0	0.0	Very Low		
40	2-28	ROSS VALLEY		San Francisco Bay	NCRO	1,763	2.8	7,194	4	2	0	3	1	0	0	0	0	0	0.0	Very Low		
41	2-29	SAN RAFAEL VALLEY		San Francisco Bay	NCRO	874	1.4	10,153	5	1	0	3.75	0	0	0	0	0	0	0.0	Very Low		
42	2-3	SUISUN-FAIRFIELD VALLEY		San Francisco Bay	NCRO	133,505	208.6	136,754	2	5	1	2.25	2	0	0	0	0	0	0.0	Very Low		
43	2-30	NOVATO VALLEY		San Francisco Bay	NCRO	20,519	32.1	42,516	3	2	0	3.75	3	0	0	0	0	0	0.0	Very Low		
44	2-31	ARROYO DEL HAMBRE VALLEY		San Francisco Bay	NCRO	786	1.2	3,230	4	0	0	0	0	0	0	0	0	0	0.0	Very Low		
45	2-32	VISITACION VALLEY		San Francisco Bay	NCRO	5,827	9.1	31,853	4	4	0	3.75	0	0	1	0	0	0	0.0	Very Low		
46	2-33	ISLAIS VALLEY		San Francisco Bay	NCRO	5,937	9.3	131,576	5	1	0	3	0	0	0	0	0	0	0.0	Very Low		
47	2-35	WESTSIDE		San Francisco Bay	NCRO	25,386	39.7	351,235	5	2	4	3.75	1	0	0	0	0	0	0.0	Very Low		
48	2-36	SAN PEDRO VALLEY		San Francisco Bay	NCRO	702	1.1	5,956	5	0	0	3.75	1	0	0	0	0	0	0.0	Very Low		
49	2-37	SOUTH SAN FRANCISCO		San Francisco Bay	NCRO	2,175	3.4	38,861	5	1	0	3.75	0	0	0	0	0	0	0.0	Very Low		
50	2-38	LOBOS		San Francisco Bay	NCRO	2,359	3.7	59,119	5	0	0	2.25	0	0	0	0	1	0	0.0	Very Low	Limited water quality data but basins beneath the entire San Francisco peninsula are similar (Phillips et.al. 1993). May contain high concentrations of nitrates, chloride, boron and TDS.(B-118)	
51	2-39	MARINA		San Francisco Bay	NCRO	2,186	3.4	45,294	5	0	0	2.25	0	0	0	0	1	0	0.0	Very Low	Limited water quality data but basins beneath the entire San Francisco peninsula are similar (Phillips et.al. 1993). May contain high concentrations of nitrates, chloride, boron and TDS.(B-118)	
52	2-4	PITTSBURG PLAIN		San Francisco Bay	NCRO	11,607	18.1	68,898	4	3	4	3.75	0	2	1	0	0	0	0.0	Very Low		
53	2-40	DOWNTOWN		San Francisco Bay	NCRO	7,635	11.9	323,721	5	1	0	3.75	0	0	0	0	1	0	0.0	Very Low	Groundwater is subject to high concentrations of nitrates, chloride, boron and TDS (B-118) & (Phillips et.al. 1993).	
54	2-5	CLAYTON VALLEY		San Francisco Bay	NCRO	17,836	27.9	73,287	4	1	2	3.75	1	1	1	0	0	0	0.0	Very Low		
55	2-6	YGNACIO VALLEY		San Francisco Bay	NCRO	15,459	24.2	107,878	5	1	2	3.75	1	1	1	0	1	0	0.0	Very Low	Hydrographs created from DWR well data indicate groundwater levels have declined gradually over the period of record.(B-118)	
56	2-7	SAN RAMON VALLEY		San Francisco Bay	NCRO	7,053	11.0	30,112	4	2	0	3.75	1	1	1	0	0	0	0.0	Very Low		
57	2-8	CASTRO VALLEY		San Francisco Bay	NCRO	1,821	2.8	24,486	5	0	0	3.75	0	2	1	0	0	0	0.0	Very Low		
58	2-9.01	SANTA CLARA VALLEY	NILES CONE	San Francisco Bay	NCRO	57,906	90.5	321,494	4	1	3	3.75	1	4	4	4	3	0	19.8	Medium	Saline water intrusion has increased landward and into deeper aquifers since first documented in the 1920's.(B-118)	
59	2-9.02	SANTA CLARA VALLEY	SANTA CLARA	San Francisco Bay	NCRO	190,235	297.2	1,633,190	5	2	4	3.75	0	5	4	4.5	1	0	20.3	Medium	Areas with elevated mineral levels have been observed in the northern basin (SCVWD 2001). Elevated nitrate in some wells in the southern portion of the Basin (SCVWD).	
60	2-9.03	SANTA CLARA VALLEY	SAN MATEO PLAIN	San Francisco Bay	NCRO	37,708	58.9	291,899	5	3	2	3.75	1	0	0	1.0	1	0	0.0	Very Low	2003 Water Board Study of South Bay groundwater basins	
61	2-9.04	SANTA CLARA VALLEY	EAST BAY PLAIN	San Francisco Bay	NCRO	77,292	120.8	881,718	5	1	1	3.75	1	0	0	1	2	0	14.8	Medium	SFRWQCB (1999) identified 13 locations as areas of major groundwater pollution. Most contamination appears to be restricted to the upper 50 feet of the subsurface. (B-118) & (RWQCB 1999)	
62	5-20	BERRYESSA VALLEY		Sacramento River	NCRO	1,375	2.1	0	0	0	0	0.75	0	0	0	0	0	0	0.0	Very Low		
63	5-21.60	SACRAMENTO VALLEY	NORTH YUBA	Sacramento River	NCRO	103,152	161.2	14,667	1	1	2	2.25	4	4	2	3	0	1	14.3	Medium		Strong SW-GW interaction with Feather and Yuba River
64	5-21.61	SACRAMENTO VALLEY	SOUTH YUBA	Sacramento River	NCRO	104,486	163.3	45,014	2	1	3	3	4	2	1	1.5	0	0	14.5	Medium		
65	5-21.62	SACRAMENTO VALLEY	SUTTER	Sacramento River	NCRO	234,264	366.0	82,125	1	4	2	3	5	4	1	2.5	0	0	17.5	Medium		

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66	5-21.64	SACRAMENTO VALLEY	NORTH AMERICAN	Sacramento River	NCRO	340,170	531.5	832,746	3	3	4	3	4	5	2	3.5	1	1	22.5	High	From B118: Elevated levels of TDS, chloride, sodium, bicarbonate, boron, fluoride, nitrate, iron manganese, and arsenic may be of concern in some locations (DWR 1997). There are 3 sites with significant groundwater contamination in the basin.	From B118: groundwater levels in southwestern Placer County and northern Sacramento County have generally declined with many wells declining at a rate of about one and one-half feet per year for the last 40 years or more (PCWA 1999)
67	5-21.65	SACRAMENTO VALLEY	SOUTH AMERICAN	Sacramento River	NCRO	247,745	387.1	718,113	3	3	4	3.75	3	3	2	2.5	3	0	22.3	High	From B118: Montgomery Watson (1997) listed seven sites within the subbasin with significant groundwater contamination. From Sac County GWMP: Overall decreasing groundwater level trend over past 50 years (~30ft)	
68	5-21.66	SACRAMENTO VALLEY	SOLANO	Sacramento River	NCRO	424,832	663.8	119,263	1	3	2	3	5	2	1	1.5	0	0	15.5	Medium		
69	5-21.67	SACRAMENTO VALLEY	YOLO	Sacramento River	NCRO	225,718	352.7	194,158	2	3	3	3.75	5	5	2	3.5	2	0	22.3	High	Localized TDS problems preclude using gw for some M&I uses without treatment. Some subsidence in northeast of Davis and in northern Yolo.	
70	5-21.68	SACRAMENTO VALLEY	CAPAY VALLEY	Sacramento River	NCRO	24,970	39.0	550	1	0	1	3	3	2	3	2.5	1	0	11.5	Low	moderate to high levels of boron.	
71	5-22.01	SAN JOAQUIN VALLEY	EASTERN SAN JOAQUIN	San Joaquin River	NCRO	707,073	1,104.8	582,662	2	4	3	3	5	4	3	3.5	3	2	25.5	High	Estimated that 70,000 af/year of overdraft occurs in northeastern San Joaquin County and about 35,000 af/year of overdraft occurs in the Stockton East Water District (B-118) & (USBR 1996). Basin experiencing long term gw overdraft 160,000AF/yr (local GWMP)	From B118: as a result of overdraft poor quality groundwater has been moving east along a 16- mile front on the east side of the Delta and has continued to migrate eastward (USACE 2001). Large areas of nitrate contamination are located in the subbasin.
72	5-22.15	SAN JOAQUIN VALLEY	TRACY	San Joaquin River	NCRO	344,884	538.9	268,175	2	4	3	3	5	1	1	1	1	0	19.0	Medium	Poor water quality throughout the subbasin.(B-118)	
73	5-22.16	SAN JOAQUIN VALLEY	COSUMNES	San Joaquin River	NCRO	280,490	438.3	59,163	1	2	2	3	3	4	4	4	0	0	15.0	Medium		
74	5-68	POPE VALLEY		Sacramento River	NCRO	7,177	11.2	110	1	0	0	1.5	4	2	1	0	0	0	0.0	Very Low		
75	6-105	SLINKARD VALLEY		North Lahontan	NCRO	4,517	7.1	0	0	0	0	0	0	0	0	0	0	0	0.0	Very Low		
76	6-106	LITTLE ANTELOPE VALLEY		North Lahontan	NCRO	2,491	3.9	0	0	0	0	0.75	3	0	0	0	0	0	0.0	Very Low		
77	6-107	SWEETWATER FLAT		North Lahontan	NCRO	4,747	7.4	0	0	0	0	0	1	0	0	0	0	0	0.0	Very Low		
78	6-108	OLYMPIC VALLEY		North Lahontan	NCRO	702	1.1	471	2	0	5	2.25	0	0	0	0	0	0	0.0	Very Low		
79	6-5.01	TAHOE VALLEY	TAHOE SOUTH	North Lahontan	NCRO	14,814	23.1	25,967	3	0	5	3.75	0	4	5	4.5	2	0	18.3	Medium	STPUD reports that MTBE has had a major impact on the groundwater supply within its service area, resulting in 12 of 34 production wells unusable and the destruction of 2 wells. (B-118) & (Berghson 2000)	
80	6-5.02	TAHOE VALLEY	TAHOE WEST	North Lahontan	NCRO	6,173	9.6	3,110	2	0	5	3.75	0	1	4	0	0	0	0.0	Very Low		
81	6-5.03	TAHOE VALLEY	TAHOE NORTH	North Lahontan	NCRO	1,931	3.0	3,410	3	0	5	3	0	3	4	0	0	0	0.0	Very Low		
82	6-6	CARSON VALLEY		North Lahontan	NCRO	10,716	16.7	328	1	0	3	2.25	3	0	0	0	0	0	0.0	Very Low		
83	6-67	MARTIS VALLEY		North Lahontan	NCRO	36,381	56.8	14,743	2	4	3	3	0	3	5	4	0	1	17.0	Medium		Strong SW-GW interaction with Martis Creek, as per 2013 GWMP
84	6-7	ANTELOPE VALLEY		North Lahontan	NCRO	20,125	31.4	876	1	0	3	2.25	5	0	1	0	0	0	0.0	Very Low		
85	6-8	BRIDGEPORT VALLEY		North Lahontan	NCRO	32,545	50.9	586	1	0	2	0.75	4	0	1	0	0	0	0.0	Very Low		

NOTE: * Data component values were reduced by 25% due to data confidence, prior to calculating total GW basin ranking value
** Sub-fields that are used to determine the overall GW Reliance Total ((GW Use + GW %)/2)
*** Overall Basin Ranking Score = Population + Population Growth + PSW + (Total Wells x .75) + Irr Acreage + (GW Use + GW %)/2 + Impacts + Other