

CALIFORNIA GROUNDWATER ELEVATION MONITORING



BASIN PRIORITIZATION PROCESS

December, 2013



CALIFORNIA GROUNDWATER ELEVATION MONITORING BASIN PRIORITIZATION

INTRODUCTION

There are 515 alluvial groundwater basins and subbasins (basins) in California. These basins contribute 30 to 46 percent of the California's annual water supply. Statewide, approximately 30 million people, or 80 percent of Californians, live in areas overlying alluvial groundwater basins. At the local level, many municipal, agricultural, and disadvantaged communities rely on groundwater for nearly 100 percent of their water supply needs. Readily available quantities of high quality groundwater has provided long-term economic benefits to California and enabled the Central Valley to become a world leader in agricultural production. However, recent studies have identified the ongoing decline in California's groundwater quality and quantity—highlighting the vulnerability and bringing to question the long-term reliability and sustainability of California's groundwater resources (CWP, 2013; Harter, T., and J. Lund, 2012. ; Kuss, A., et al.; 2012; Scanlon, B. R., et al.; 2012; USGS, 2009; Walker, 2009).

Implementation of consistent data collection and assessment programs, along with application of effective local groundwater management practices, are important components to help minimize groundwater degradation and improve long-term reliability of groundwater resources. Financing groundwater data collection and management is a common challenge that requires alignment of State, regional, and local programs, and the strategic prioritization of resource management actions. Developing a common understanding of these priorities with respect to the California's 515 groundwater basins is an important first step toward the effective application of groundwater resource management practices. Historically, several programs have applied groundwater basin prioritization methods to help focus field investigations, to effectively utilize limited funding resources, and to align agency efforts ([SWRCB, 1999](#); [USGS, 2003](#))

CALIFORNIA STATEWIDE GROUNDWATER ELEVATION MONITORING (CASGEM) PROGRAM

As part of the California's 2009 Comprehensive Water Package, a series of special session bills were passed in part to help ensure a reliable water supply for future generations of Californians. One of the enacted bills was SBx7-6, titled *Groundwater Monitoring*. The SBx7-6 Groundwater Monitoring legislation added Part 2.11 to Division 6 of the California Water Code (§ 10920 et seq.), which established provisions and requirements for local agencies to develop and conduct groundwater level monitoring programs. In the fall of 2011, Assembly Bill 1152 provided subsequent clarification by amending portions of Sections 10927 and 10933 of the California Water Code (CWC).

The Department of Water Resources (DWR) is implementing the 2009 *Groundwater Monitoring* legislation under the California Statewide Groundwater Elevation Monitoring Program, or CASGEM Program. The overall purpose of CASGEM is to establish a permanent, locally managed program of regular and systematic groundwater level monitoring to track seasonal and long-term trends in groundwater elevations in all of California's 515 alluvial groundwater basins and to make this information readily available to the public. Groundwater basins and subbasins are defined as the 515 alluvial basins or subbasin (basins) outlined in DWR's [California's Groundwater, Bulletin 118, Update 2003](#).

As part of the CASGEM Program legislation, and pursuant to the CWC §10933, DWR is required to prioritize California groundwater basins, so as to help identify, evaluate, and determine the need for additional groundwater level monitoring. The CWC directs DWR to consider, to the extent available, all of the data components listed below.

1. The population overlying the basin,
2. The rate of current and projected growth of the population overlying the basin,
3. The number of public supply wells that draw from the basin,
4. The total number of wells that draw from the basin,
5. The irrigated acreage overlying the basin,
6. The degree to which persons overlying the basin rely on groundwater as their primary source of water,
7. Any documented impacts on the groundwater within the basin, including overdraft, subsidence, saline intrusion, and other water quality degradation, and
8. Any other information determined to be relevant by the department.

This report provides an overview of the CASGEM groundwater basin prioritization results, an explanation of how the basin prioritization results may be used, and a summary of the rationale used in the development of the CASGEM basin prioritization, based on the eight data components listed above.

CASGEM Groundwater Basin Prioritization Results

The CASGEM groundwater basin prioritization was developed as a statewide ranking of groundwater basin importance, with a general focus towards implementation of the CASGEM Program. Evaluation of groundwater basins at a statewide scale does not necessarily capture the local importance of the smaller size or lower-use groundwater basins. For many of California's low-use basins, groundwater provides close to 100 percent of the local urban and agricultural water demands. Thus, when reviewing the CASGEM groundwater basin prioritization results, it is important to recognize the findings are not intended to diminish the local importance of the smaller size or lower-use groundwater basins; rather, they are presented as a statewide assessment of groundwater basin prioritization, based on the evaluation of the eight required data components specified in the CWC.

The statewide summary of the CASGEM groundwater basin prioritization results are provided in Tables 1 and 2, and in Figure 1. A more detailed listing of the prioritization scoring for all 515 groundwater basins is provided in Appendix A. An explanation of the process for determining basin priority is provided in subsequent sections of this report.

As of December, 2013, the prioritization analysis ranks 46 of the 515 groundwater basins as High Priority, 80 as Medium Priority, 35 as Low Priority, and 354 as Very Low Priority. Draft groundwater basin prioritization results also indicate that 126 of the highest priority basins (High and Medium Priority) account for 92 percent of California’s annual groundwater extraction and 89 percent of the population that overlies these basins.

Table 1. Statewide Summary of CASGEM Groundwater Basin Prioritization

Basin Priority Ranking	Basin Count	Percent of Total	
		GW Use	Overlying Population
High	46	68%	69%
Medium	80	24%	20%
Low	35	6%	1%
Very Low	354	2%	10%
Totals:	515	100%	100%

The results in Table 1 show that the High Priority groundwater basins account for 68 percent of California’s average annual groundwater use and 69 percent of the 2010 population overlying these groundwater basins, while the Medium Priority groundwater basins account for 24 percent of the annual groundwater use and 20 percent of the overlying population. The remaining 389 groundwater basins ranked as Low or Very Low, account for a combined 8 percent of California’s groundwater use and 11 percent of the overlying population.

Table 2 lists the number of groundwater basins and their priority by hydrologic region, along with the percentages of groundwater use and population associated with the High and Medium Priority basins. The South Coast Hydrologic Region has the largest number of High and Medium Priority basins (36), followed by the Central Coast (25), and Sacramento River (21) regions. The San Joaquin region has 9 basins groundwater basins (82 percent) ranked as High or Medium Priority. The nine High and Medium Priority Basins account for over 99 percent of the San Joaquin region’s average annual groundwater use and over 99 percent of the population overlying the basin area in the region.

Table 2. CASGEM Groundwater Basin Prioritization Summary, by Hydrologic Region

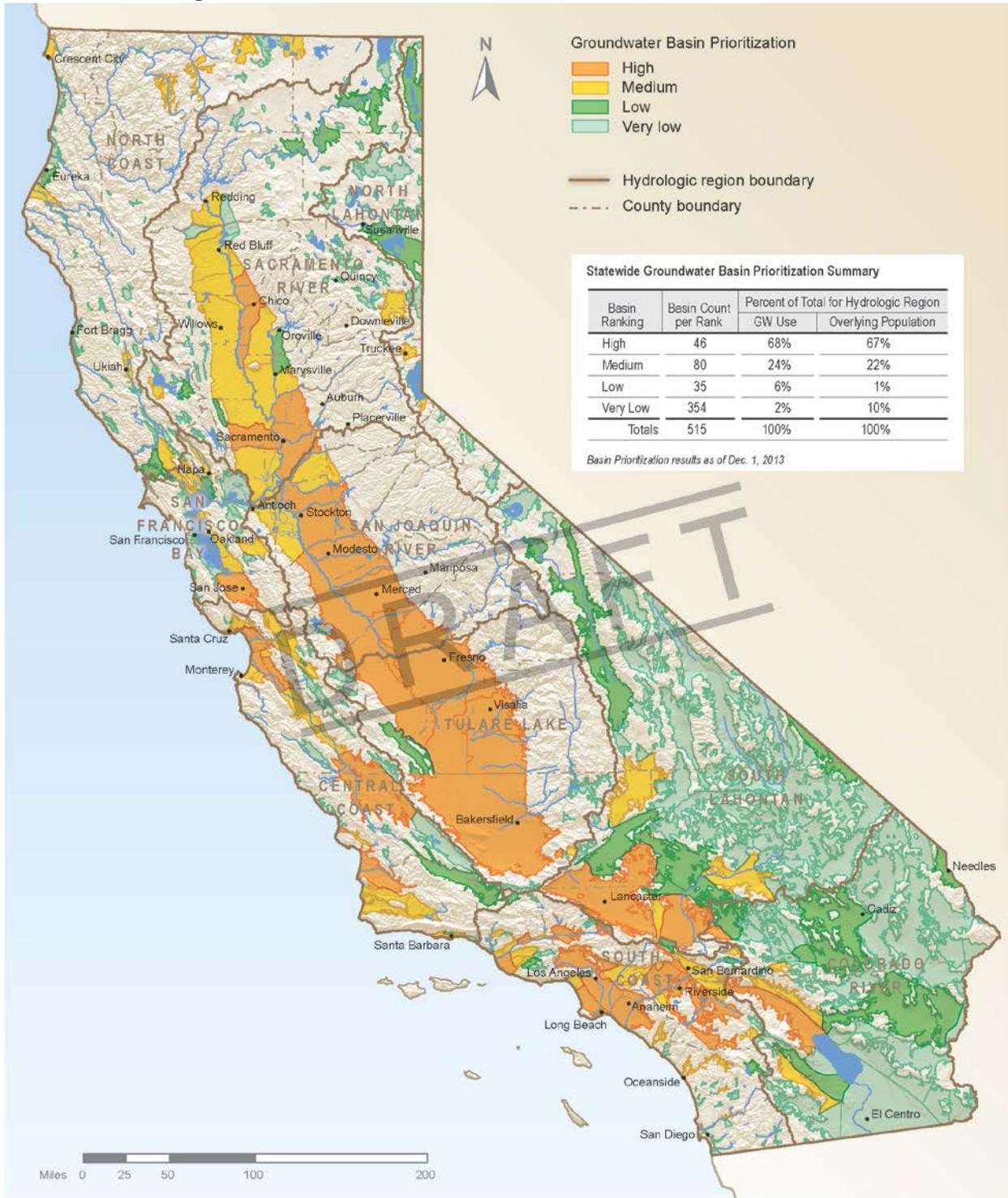
Hydrologic Region	CASGEM Groundwater Basin Ranking by Range and Hydrologic Region				HR Basin Count	Percent of Total Groundwater Use and Overlying Population for High & Medium Ranked Basins	
	High Ranking Range >19.7	Medium Ranking Range 12.6 - 19.6	Low Ranking Range 5.5 - 12.5	Very Low Ranking Range <5.4		Groundwater Use *	Overlying Population *
North Coast	0	8	2	53	63	84%	74%
San Francisco	1	6	1	25	33	88%	63%
Central Coast	8	16	1	35	60	91%	96%
South Coast	14	22	5	32	73	96%	94%
Sacramento River	5	16	7	60	88	89%	97%
San Joaquin River	7	2	0	2	11	99%	99%
Tulare Lake	7	1	1	10	19	98%	98%
North Lahontan	0	2	2	23	27	9%	55%
South Lahontan	2	3	7	65	77	55%	94%
Colorado River	2	4	9	49	64	77%	65%
Statewide	46	80	35	354	515	92%	89%

Note: * Estimated percentages are based on total groundwater use and population overlying all alluvial groundwater basins in the hydrologic region.

Figure 1 is a map of California’s ten Hydrologic regions and 515 groundwater basins. The individual groundwater basins are color coded from High Priority (orange) to Very Low Priority (light green). Figure 1 shows that many of the groundwater basins within the Central and South Coast regions, and most of the basins within Central Valley, area are ranked as either High or Medium Priority. All of the groundwater basins within the Central Valley portion of the San Joaquin River and Tulare Lake regions are ranked as High Priority. All but five of the groundwater basins in the Central Valley portion of the Sacramento River region are listed as either High or Medium Priority. The North Lahontan, South Lahontan, and Colorado River regions have the lowest number of High and Medium Priority groundwater basins, primarily due to the low groundwater use and population.

As of December 1, 2013, about 58 percent of the High and Medium Priority groundwater basins are fully monitored under the CASGEM Program. An additional 8 percent of High and Medium Priority basins are partially monitored under CASGEM – leaving 34 percent of the High and Medium Priority basins not monitored under CASGEM.

Figure 1. Statewide CASGEM Groundwater Basin Prioritization



Application of CASGEM Groundwater Basin Prioritization

The CASGEM basin prioritization is being used to focus and align limited resources towards the implementation of the CASGEM legislation that requires all groundwater basins to be monitored for seasonal and long-term groundwater elevation trends. Although participation in the CASGEM Program is voluntary, noncompliance with the CASGEM requirements could result in basin monitoring entities and overlying counties being ineligible for a water grant or loan awarded or administered by the State.

High and Medium Priority Basins: CASGEM basin prioritization findings indicate that 126 groundwater basins categorized as High and Medium Priority comprise 92 percent of California's annual groundwater pumping, and include 89 percent of the population overlying alluvial groundwater basin areas. Based on these findings and the limited resources for the CASGEM program, DWR will focus efforts on evaluating the status of groundwater level monitoring in High or Medium Priority groundwater basins where monitoring will have the greatest benefit.

If DWR determines that groundwater levels in all or part of a High or Medium Priority basin are not being monitored, or that a Monitoring Entity has not been designated for the basin or subbasin, then DWR will work cooperatively with local entities to establish a CASGEM monitoring program. If DWR is not able to designate a Monitoring Entity, then CASGEM program will compile a list of the High and Medium priority basins that are not being monitored. That list will be provided to the grants and loans programs at DWR, SWRCB, and DPH and the specific grant programs will determine eligibility for their respective grants with respect to the basin not being monitored under the CASGEM Program, as specified in the Water Code.

Low and Very Low Priority Basins: CASGEM basin prioritization results indicate that many of California's Low and Very Low Priority groundwater basins have few people, limited irrigation, and little to no groundwater use. Although the intent of the CASGEM legislation is to have adequate groundwater level monitoring for all 515 California groundwater basins, CASGEM legislation also prescribes the use of groundwater basin prioritization to help identify, evaluate, and determine the need for additional groundwater level monitoring.

Although the implementation of CASGEM-related groundwater level monitoring requirements will first focus on High and Medium Priority basins due to limited resources, this approach is not intended to diminish the importance of groundwater level monitoring and management in Low or Very Low Priority groundwater basins. Groundwater level monitoring and management in Low and Very Low Priority basins is still encouraged.

Additional Potential Applications of CASGEM Basin Prioritization: The primary application of CASGEM groundwater basin prioritization is to meet the requirements of the CASGEM legislation. However, based on the comprehensive set of data included in the CASGEM basin prioritization effort, the prioritization ranking could also help focus and align limited resources and assistance to local agencies trying to implement best practices and procedures for groundwater basin management and planning. High and Medium Priority basins would also

likely have a greater need and responsibility to implement effective and sustainable groundwater management practices. Similar to previous prioritization efforts related to groundwater quality monitoring and implementation of the groundwater ambient monitoring and assessment program (GAMA), the CASGEM groundwater basin prioritization results could also be used to promote:

- Informed decision making;
- A common vocabulary for communication between agencies
- Groundwater data collection and evaluation based on a common understanding of resource prioritization;
- A mechanism to align the goals, objectives, and priorities for groundwater resource management;
- Improved knowledge and understanding of local, regional, and statewide groundwater issues and concerns; and
- Collaboration and alignment of inter-basin agencies that have basin-wide or regional groundwater management objectives.

CASGEM Groundwater Basin Prioritization Process

The CASGEM basin prioritization process included an initial review and screening of groundwater basins for inclusion in the overall basin prioritization, followed by a more detailed analysis, review, and consideration of the eight data components stipulated in the CASGEM legislation listed below.

1. The population overlying the basin,
2. The rate of current and projected growth of the population overlying the basin,
3. The number of public supply wells that draw from the basin,
4. The total number of wells that draw from the basin,
5. The irrigated acreage overlying the basin,
6. The degree to which persons overlying the basin rely on groundwater as their primary source of water,
7. Any documented impacts on the groundwater within the basin, including overdraft, subsidence, saline intrusion, and other water quality degradation, and
8. Any other information determined to be relevant by the department.

Initial Groundwater Basin Screening: Review of previous efforts by the USGS to prioritize groundwater basins for groundwater quality sampling under the State Water Resource Control Board's GAMA program indicated that high use groundwater basins also commonly include basins having high public supply well density, high municipal groundwater use, and high agricultural groundwater use.

Using an approach similar to the GAMA Program, DWR selected *groundwater reliance* (data component number six listed above) as the primary component for the initial review and screening in the CASGEM groundwater basin prioritization process. Groundwater reliance data was developed using the 2005 DWR statewide land and water use information, which estimated California's total annual groundwater use at about 12 million acre-feet (MAF). Analysis of groundwater reliance included consideration of the total annual volume of groundwater use, the annual volume of groundwater use per acre, and the percent to which groundwater contributes to the overall water supply for the basin.

Initial review of groundwater volume by basin indicated that the top 125 groundwater using basins represent about 97 percent of California's total annual groundwater use (see Figure 2). All of the 125 high-use groundwater basins were subsequently included into the overall groundwater basin prioritization process.

The second step in the initial basin prioritization process was to capture some of the lower-use groundwater basins having documented impacts or other issues that could potentially affect local groundwater supply reliability. In this step, 71 low-use groundwater basins with an estimated use of between 2,000 and 9,500 acre-feet of groundwater per year were further evaluated by DWR Regional Office groundwater staff with respect to documented impacts (data component 7, listed above) and "other" issues (data component 8, listed above). If further review of the 71 low-use groundwater basins identified impacts or other supply reliability issues, these low-use basins were subsequently included in the overall groundwater basin prioritization process. Ultimately, 42 out of the 71 low-use basins were included into the larger basin prioritization process.

Figure 2 illustrates the distribution of annual groundwater use by groundwater basin, and illustrates that groundwater basins producing between 2,000 and 9,500 acre-feet of groundwater per year, represent two percent of California's annual groundwater use.

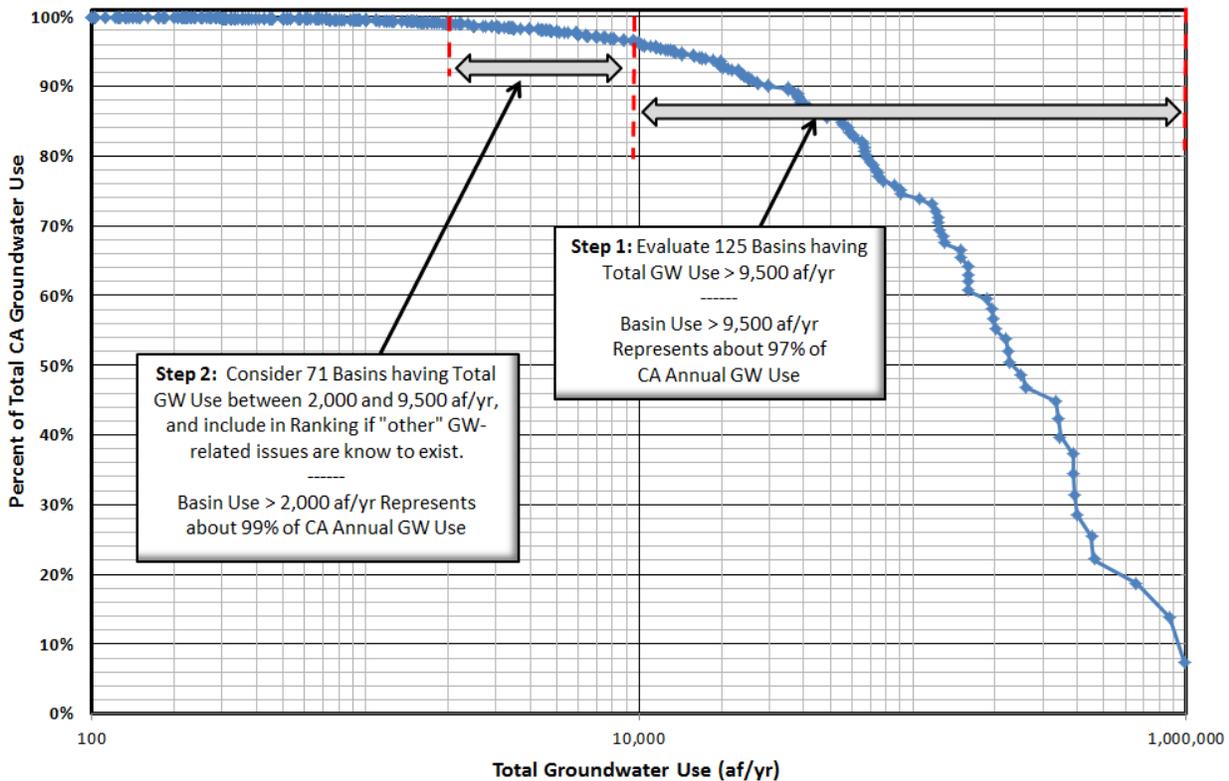
The remaining 319 very low-use groundwater basins, which have no documented impacts or issues and an estimated annual groundwater use of less than 2,000 acre-feet per year, were automatically ranked as CASGEM Very Low Priority groundwater basins, and were not included in any further evaluation or analysis.

Inclusion of Data Components One through Six: Following the initial review and screening of groundwater basins based on groundwater reliance, the groundwater data were normalized for further review and ranking. Due to the large variability in the size of the groundwater basins, the data associated with the first six data components were normalized by basin area to facilitate further basin-to-basin comparisons.

The normalized basin data for each groundwater data component were analyzed by their statistical distribution according to six ranking ranges (Very Low, Low, Moderately Low, Medium, Moderately High, and High). Each of the six data components were assigned a

corresponding ranking value from 0 to 5, based on six ranking ranges. The Very Low range included all the zero values associated with the particular data comment, while the remaining basin data ranked from Low to High, in most cases, was assigned a value from 1 to 5 based on proportionally grouping the data equally across the data distribution range. For example, a groundwater basin having a Very Low population density was assigned a 0, while basins having a High population density range were assigned a value of 5. Table 3 lists the data component ranges for the first six data components: population density, population growth, public supply well density, total well density, irrigated acreage, and groundwater reliance (volume and percent of total supply met by groundwater). Additional information regarding the data sources and processing methods are provided in the Data Component Sources and Processing section of this report.

Figure 2. Distribution of the Annual Volume of Groundwater Use by Groundwater Basin



Once the ranges for each of the first six data components were established, a basin prioritization database tool was developed to evaluate and prioritize groundwater basins based on the cumulative ranking of each data component. The basin prioritization tool allowed for rapid evaluation and prioritization of the basins in graphic and tabular form, and the ability to independently apply weighting factors to each of the eight datasets, if needed. The ability to apply weighting factors allowed for adjustments due to the variable quality of data within each of the data components. Additional information regarding processing for each data component is provided in the *Data Sources and Processing* section of this report.

Table 3. Data Component Ranking Ranges for CASGEM Groundwater Basin Ranking

Data Component Ranking	Data Component Ranking Value	Data Components and Ranking Ranges						
		Population		PSW Density	Total Well Density	Irrigated Acreage	Groundwater Reliance	
		Density	Projected Growth				GW Use	% of Total Supply
		per sq-mi	%	per sq.-mi	per sq. mi	ac/sq-mi	ac-ft/acre	%
Very Low	0	< 7	< 0	< 0.01	< 0.01	< 0.1	< 0.3	< 0.1
Low	1	7 - 250	0 - 6.0	0.01 - 0.1	0.01 - 2.0	0.1 - 60	0.3 - 20	0.1 - 20
Moderately Low	2	251 - 1000	6.1 - 15	0.11 - 0.25	2.1 - 5.0	61 - 115	0.21 - 0.4	21 - 40
Medium	3	1001 - 2500	15.1 - 25	0.26 - 0.50	5.1 - 10.0	116 - 250	0.41 - 0.6	41 - 60
Moderately High	4	2501 - 4000	25.1 - 40	0.51 - 1.0	10.1 - 20	251 - 350	0.61 - 0.8	61 - 80
High	5	≥ 4000	≥ 40%	≥ 1.0	> 20	> 350	> 0.8	> 80%

Note: Population growth is percent growth from 2010 to 2030.

Inclusion of Data Components Seven and Eight: Data component seven includes groundwater basin impacts associated with overdraft, subsidence, saline intrusion, and other water quality degradation issues. Data Component eight includes any other information determined to be relevant by DWR, such as environmental impacts associated with surface water-groundwater interaction, or other known groundwater issues that may justify an increase or decrease in the basin prioritization. Information associated with data components seven and eight were applied to the basin prioritization process by DWR Region office staff through review and consideration of information reported in DWR Bulletin 118, Update 2003, local groundwater management plans, or other readily available published information.

Based on the relative severity of groundwater basin impacts associated with component seven, an additional ranking value between 1 and 5 was applied to the total groundwater basin ranking value associated with data components one through six. A similar process was used to incorporate information associated with data component eight; however, a negative ranking value of up to -5 was also allowed, as appropriate, to help rectify known issues associated with basin-specific data relating to components one through six. All additional ranking value associated with data components seven and eight required a justification statement by the reviewer to support the change. Only one basin included a negative ranking value associated with data component eight.

Data Component Sources and Processing

Compilation and evaluation of data from multiple sources was required to achieve statewide prioritization of groundwater basins through consideration of data components one through six. Most of these datasets are not collected or stored at the groundwater basin scale, which is needed to facilitate prioritization under the CASGEM legislation. Compiling and evaluating multiple datasets from multiple sources posed a number of challenges; however, the spatial scale and distribution of the data provided a level of accuracy that is considered adequate for a statewide evaluation and prioritization of California groundwater basins. When appropriate, the spatial distribution of the data were normalized or reparsed to achieve better representation at the basin and subbasin scale. Inaccuracies associated with the spatial translation or rescaling of the data were minimized through multiple inspections of the data by DWR staff. A description of the data sources and evaluation process associated with data components one through six is provided below. A complete listing of the individual ranking values for each data component, along with the overall basin prioritization results, are provided in Appendix A.

Data Component 1: Population Overlying the Basin: Estimates of the population overlying the groundwater basins were derived using 2010 California census data processed by DWR's demographic staff in the Division of Statewide Integrated Water Management. Using GIS methods, the 2010 census data from the various population reporting centers were attributed to the overlying groundwater basins. If groundwater basin boundaries split population reporting centers, the population data was proportionally distributed to the overlying groundwater basins. Due to the variable size of the groundwater basins, the population data was normalized by dividing the total population of a groundwater basin by the basin area to produce a population density (persons per square mile) for each basin. Confidence with this set of the population data is considered high and no weighting factors were applied. The data ranking values associated with the total population data were subsequently combined with the data rankings from the other seven data components to create the overall groundwater basin prioritization results.

The 2010 census data estimates California population at about 37 million people, with the average population density of about 242 people per square mile. Although alluvial groundwater basins cover only 38 percent of California's total landmass, approximately 81 percent (30 million) of California's 37 million residents live in areas overlying alluvial groundwater basins. The average population density overlying alluvial groundwater basin areas is about 480 persons per square mile, approximately double the population density for the entire state. Even though roughly 80 percent of California's land area is designated as rural, about 87 percent of the population lives in urban areas.

There are numerous definitions for rural versus urban areas based on population density. Most of these definitions are associated with government assistance or reimbursement programs and come with their own classification system based on population densities. The US Census Bureau defines an urban area as having a nucleus of 50,000 or more people, and a population

density of 1,000 persons per square mile. Analysis of 2000 census data indicates that California’s urban population density ranges from 328 to 4,548 persons per square mile and the population density for rural areas ranges from 14 to 35 persons per square mile.

Although the rural versus urban population densities will not always have a direct relationship to the level of groundwater demand, the density ranges were used as a point of reference to help identify a reasonable range of population densities for the groundwater prioritization effort.

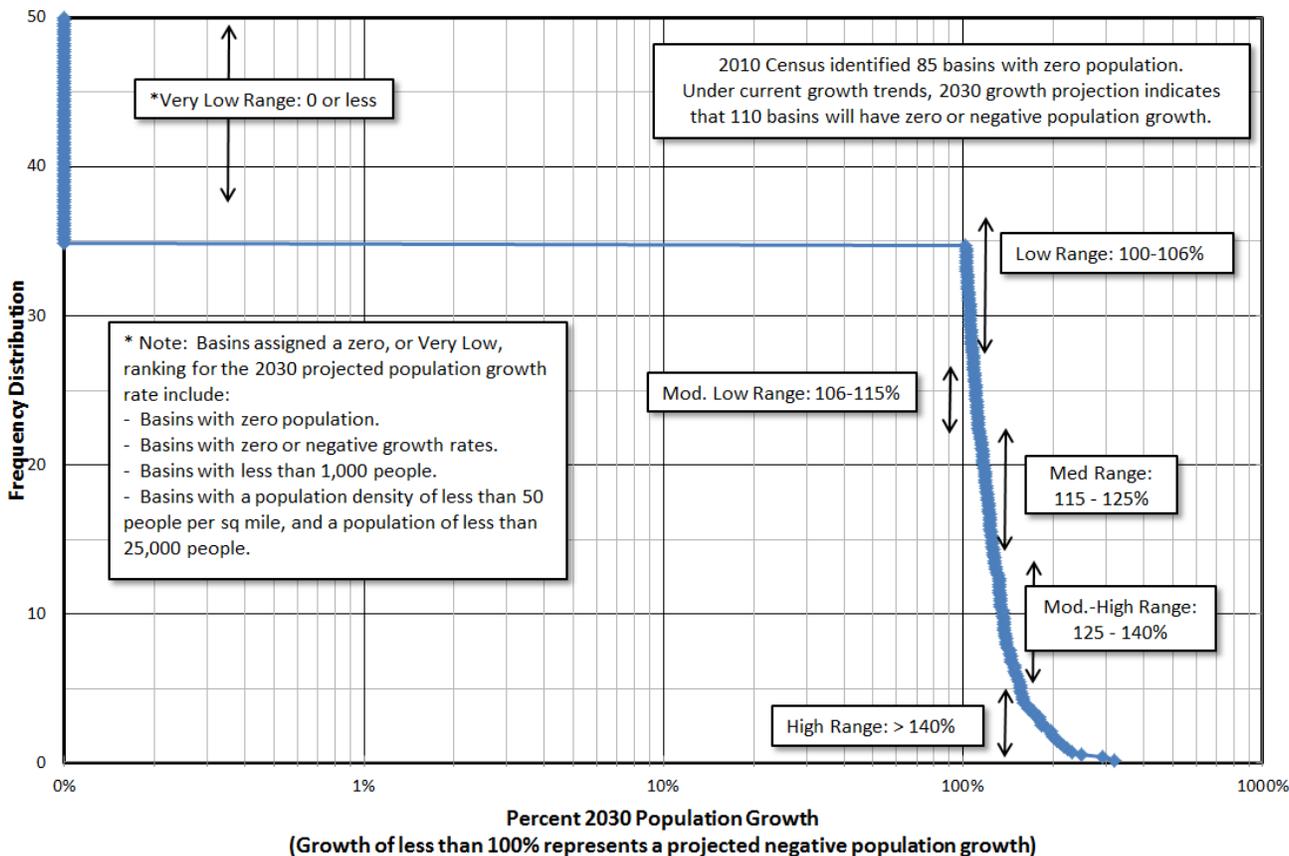
The distribution of population density by basin, along with the ranking ranges and values for this data set, are provided in Figure 3 and Table 4. The 2010 census data in Figure 3 shows that all basins with population density of less than seven persons per square mile were assigned a Very Low data ranking range, and a data ranking value of 0 towards the overall basin prioritization. The Very Low data ranking comprises a total of 196 basins, including 85 basins that are estimated to have zero population. The Low data ranking include 164 basins having a population density of 7 to 250 persons per square mile (0.4 persons per acre). Based on an average per capita use of 250 gallons per day per year, 250 persons per square mile equates to about one tenth of an acre-foot per acre of groundwater use per year. Together, the Very Low and Low ranges represent only nine percent of California’s overall population. The remaining dataset ranges (Moderately Low – High), include a total of 155 basins, representing over 90 percent of 2010 population overlying alluvial groundwater basins.

Table 4. Data Component Ranking Ranges for Population Density

Data Component Ranking	Ranking Value	Population Density (persons/sq-mile)	Total Number of Basins in Rank	Cumulative Percent of Dataset incorporated by the Ranking Interval
Very Low	0	< 7	196	100%
Low	1	7 – 250	164	100%
Moderately Low	2	251 – 1,000	71	91%
Medium	3	1,001 – 2,500	28	73%
Moderately High	4	2,501 – 4,000	26	60%
High	5	> 4,000	30	50%

Data Component #2: Projected Population Growth of the Overlying Basin: Population growth is based on 2010 census data and 2030 population growth projections generated by the Department of Finance and compiled by DWR’s demographic staff in the Division of Statewide Integrated Water Management. Confidence in the rate of population growth for overlying groundwater basins is confidence is considered high and no weighting factors were applied to the data.

Figure 3. Distribution Curve and Ranking Ranges for Population Density



As of the 2010 census, 85 groundwater basins were identified as unpopulated and an additional 185 groundwater basins were recorded to have a population of less than 1,000 people. Evaluation of the population growth rates revealed that many of the groundwater basins having the lowest population also had the highest projected growth, due to the situation where a relatively small increase in population for a low populated basin results in an extremely high rate of growth. For example, Yosemite Valley has an estimated 2010 population of 1,016 people, but due to a 2030 projected population of 3,247 people, the projected rate of growth exceeds 300 percent. In order to reduce the effects of very low populated basins skewing the overall dataset, and in recognition that the slightly higher populated basins tend to have higher statewide significance with respect to groundwater prioritization, all basins with a population of less than 1,000 were assigned Very Low data ranking, or zero for this particular data component. For similar reasons, basins with zero population or population densities less than 50 people per square mile were also assigned a Very Low data ranking, or zero for this particular data component. An exception was made two for basins with a population density of less than 50 people, but an overall 2010 population of greater than 25,000 people. For these two basins, ranking ranges and values were applied according to the breakdown shown in

Figure 4 and Table 5. The data ranking values associated with the population growth data were subsequently combined with the data rankings from the other seven data components to create the overall groundwater basin prioritization results.

Figure 4 and Table 5 provide the projected population growth data by basin, along with the breakdown of the various priority ranking ranges and values for this particular dataset, using a scale from 0 to 5. Table 5 shows that 336 groundwater basins were given a population growth ranking of Very Low, and a data ranking value of zero for this particular data component. The criteria for assigning the 336 groundwater basins a zero, or Very Low, ranking with respect to the 2030 projected population growth rate is summarized below.

- Groundwater Basins with zero 2010 population (85 basins)
- Groundwater Basins with a negative 2030 projected population growth (110 basins)
- Groundwater Basins with a positive 2030 growth rate, but with a population of less than 1,000 people (115 basins)
- Groundwater Basins with a positive 2030 growth rate, but a population density less than 50 people per square mile, and a current (2010) population of less than 25,000 people (2 basins)

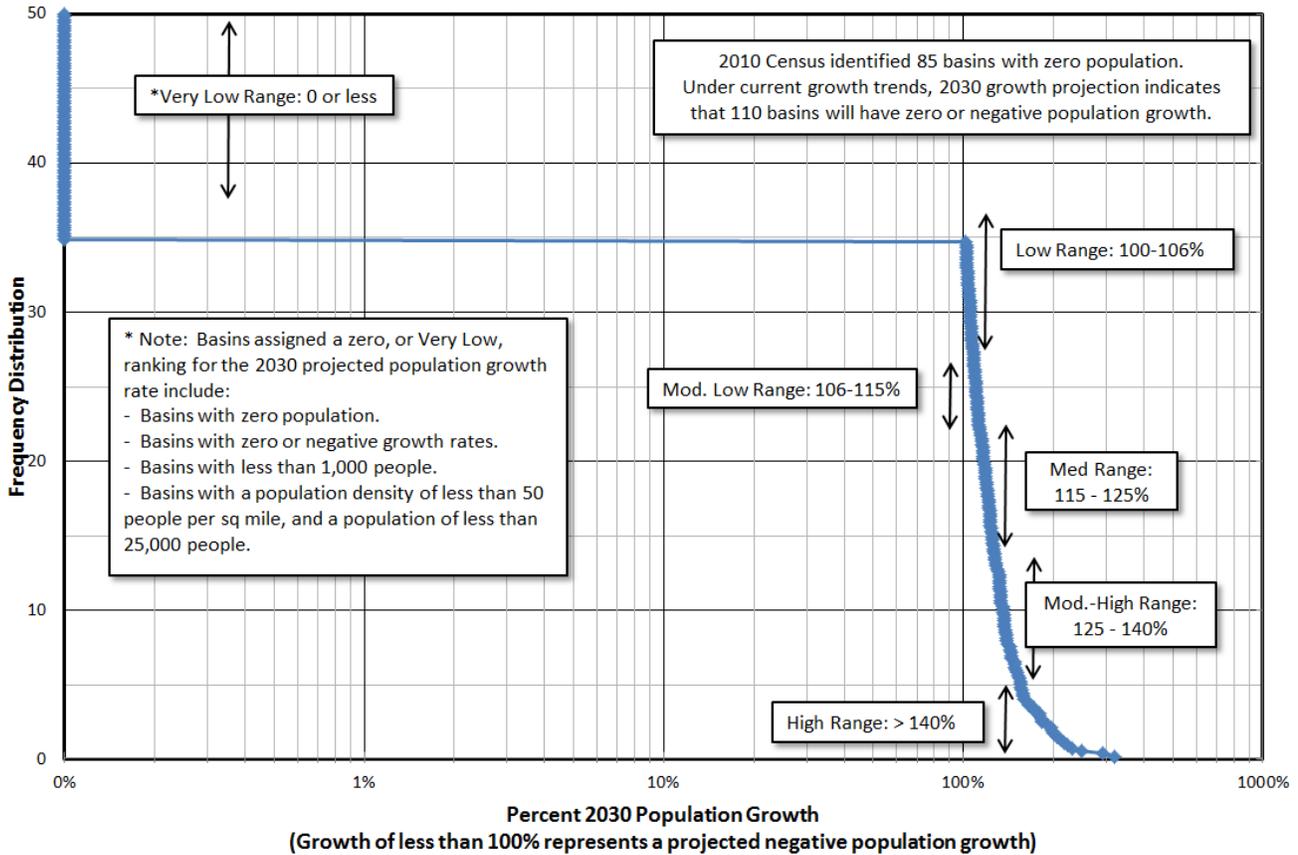
Table 5. Data Component Ranking Ranges for Population Growth

Data Component Ranking	Ranking Value	Population Growth (% population growth)	Total Number of Basins in Rank	Cumulative Percent of Dataset incorporated by the Ranking Interval
Very Low	0	< 100 %	336	100%
Low	1	100 – 106 %	55	97%
Moderately Low	2	107 – 115 %	36	75%
Medium	3	116 – 125 %	28	42%
Moderately High	4	126 – 140 %	29	22%
High	5	> 140 %	31	9%

Note: Population growth is estimated growth between 2010 and 2030, based on current growth trends. Population growth of less than 100% equals negative growth projection.

Although, the Very Low data ranking for population growth incorporates a large number of groundwater basins, it represents less than 7 percent of the population overlying groundwater basin areas, while the remaining 179 basins with a ranking of Low to High include over 93 percent of 2010 population overlying groundwater basin areas.

Figure 4. Distribution Curve and Ranking Ranges for Population Growth



Data Component #3: The Number of Public Supply Wells that Draw from the Basin: The number of public supply wells (PSWs) within a groundwater basin is directly related to the number of municipal water users who rely on groundwater, and serves as a key CASGEM data component in evaluating the relative priority of groundwater resources within a basin. Public supply well information was derived from the California Department of Public Health (DPH) Drinking Water Supply Database. The DPH PSW database was filtered to include only active wells within alluvial groundwater basins. The filtered PSW database resulted in about 12,000 active public supply wells over 316 groundwater basins. Due to the variable size of the groundwater basins, the PSW data was normalized by dividing the total number of PSWs by the basin area to produce a PSW Density (wells per square mile) for each basin. Data confidence is considered high, with a dataset weighting remaining at 100 percent. The data ranking values associated with the PSW data were subsequently combined with the data ranking values from the other seven data components to create the overall groundwater basin prioritization results.

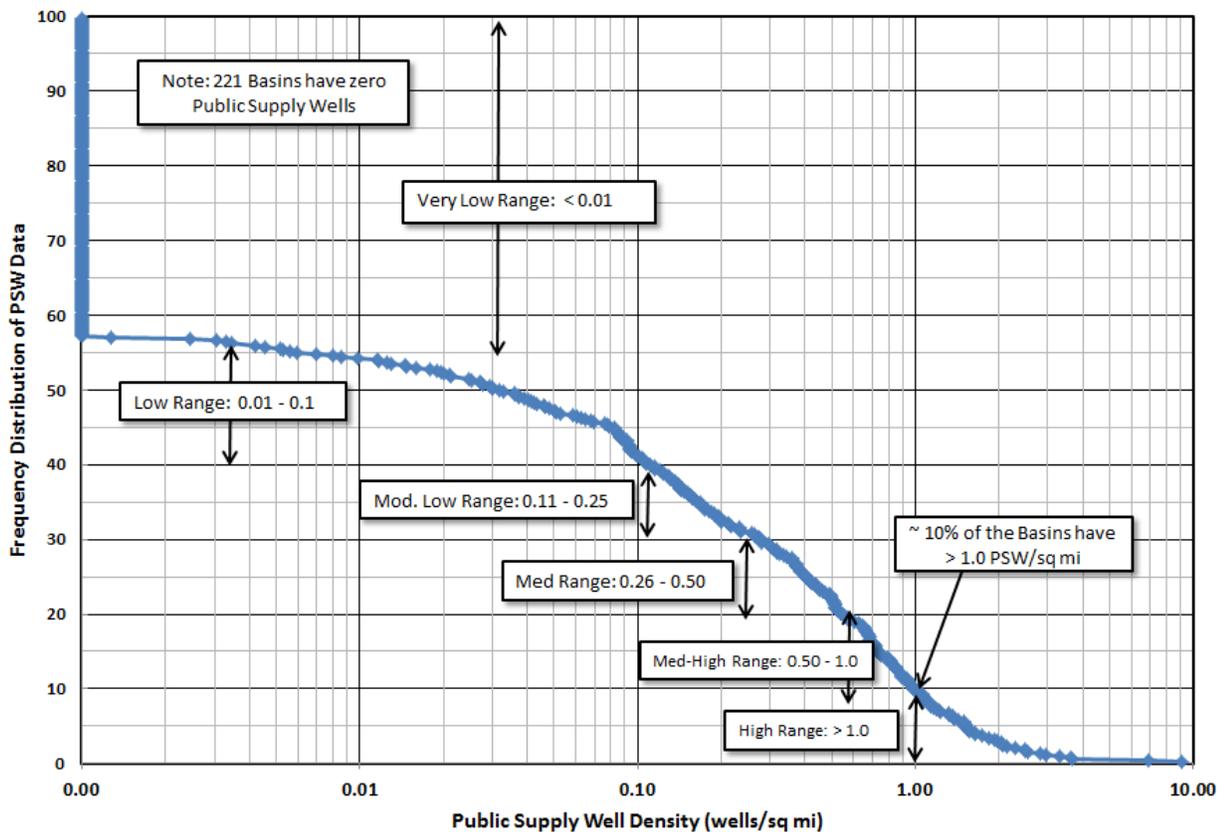
Figure 5 and Table 6 show the distribution of PSW density data by basin, along with the breakdown of the various ranking ranges and data ranking values for this particular dataset, based on a scale of 0 to 5. The data in Figure 5 and Table 6 indicates that 221 basins have zero PSWs and are assigned a Very Low, or zero priority ranking, for this dataset. The dataset with a

Low ranking includes 82 basins, while the remaining dataset rankings (Moderately Low to High) include 212 basins representing 92 percent of the 12,000 public supply wells.

Table 6. Data Component Ranking Ranges for Public Supply Well Density

Data Component Ranking	Ranking Value	Well Density (wells per sq. mile)	Total Number of Basins in Rank	Cumulative Percent of Dataset incorporated by the Ranking Interval
Very Low	0	< 0.0	221	100%
Low	1	0.00 – 0.10	82	99%
Moderately Low	2	0.11 – 0.25	53	92%
Medium	3	0.26 – 0.50	46	73%
Moderately High	4	0.51 – 1.0	63	51%
High	5	> 1.0	50	19%

Figure 5. Distribution Curve and Ranking Ranges for Public Supply Well Density



Data Component # 4: The Total Number of Wells that Draw from the Basin: The number and type of wells that draw groundwater from a basin is indicative of the overall demand and importance of the groundwater resources for the basin. Information associated with the total number of wells was derived from the DWR Well Master database (WellMa). The WellMa

database contains approximately 390,000 well locations by township, range, and section as recorded by the well drillers in the submitted Well Completion Reports. Due to the variable size of the groundwater basins, the well data was normalized by dividing the total number of wells by the basin area to produce a total well density (wells per square mile) for each basin.

The level of well log information within the WellMa database is not consistent throughout the state. Data pertaining to well use, well construction, or detailed well location is not available for many groundwater basin areas. Thus, evaluation of the well log data by well type (production versus monitoring wells) and by groundwater basin, was not possible at a statewide scale and the total number of well logs used for the basin prioritization analysis includes all well types (domestic, irrigation, observation, etc.). In highly urbanized groundwater basin areas, the number of total wells will be skewed by high numbers of shallow observation wells, typically associated with urban-related groundwater clean-up sites.

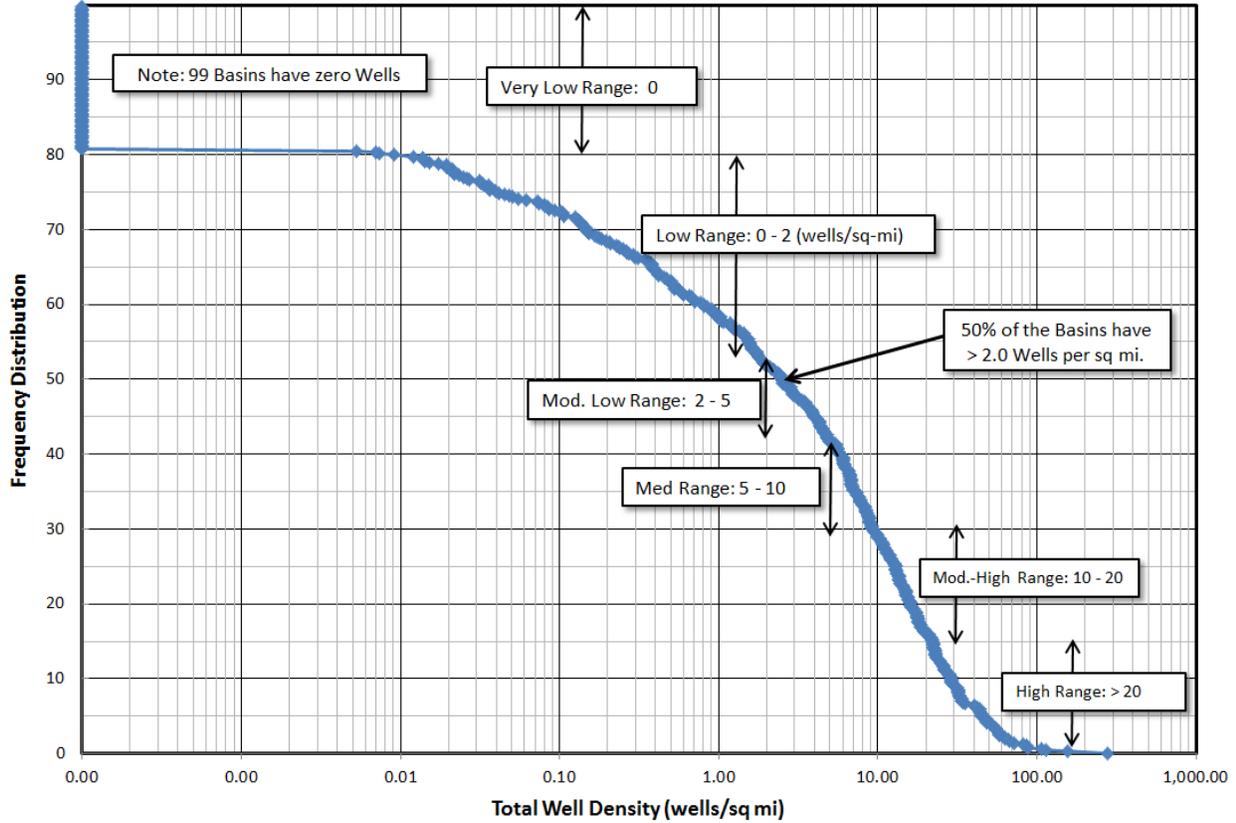
Because of the inherent deficiencies with the well log database, the confidence and weighting of this dataset was reduced. A data weighting of 75 percent was subsequently applied to the ranking values associated with total well data, prior to combining with the other seven data components to create the overall groundwater basin prioritization results. Figure 6 and Table 7 show the distribution of total well density data by basin, along with the breakdown of the various priority ranking ranges and data ranking values for this particular dataset, based on a scale of 0 to 5.

Table 7. Data Component Ranking Ranges for Total Well Density

Data Component Ranking	Ranking Value	Well Density (wells per sq. mile)	Total Number of Basins in Rank	Cumulative Percent of Dataset incorporated by the Ranking Interval
Very Low	0	< 0.0	99	100%
Low	1	0.0 – 2.0	149	99%
Moderately Low	2	2.1 – 5.0	52	98%
Medium	3	5.1 – 10.0	66	92%
Moderately High	4	10.1 – 20.0	66	79%
High	5	> 20.0	83	49%

The data in Figure 6 and Table 7 indicates that 99 groundwater basins are estimated to have zero wells and are assigned a Very Low, or zero priority ranking for this dataset, and approximately 149 basins have a total well density between 0 and 2.0 wells per square-mile. Although the Low and Very Low data ranking ranges for total well density includes 248 groundwater basins, the data ranking ranges represent only two percent of the California’s total number of well logs. The top two data ranking ranges (High and Moderately High) include 149 basins and 49 percent of the 390,000 well log records submitted to DWR.

Figure 6. Distribution Curve and Ranking Ranges for Total Well Density



Data Component #5: The Irrigated Acreage Overlying the Basin: Worldwide, almost 60 percent of our planet’s freshwater goes towards irrigation uses (USGS, 2000). In California, over nine million acres, or approximately 24 percent of the overlying groundwater basin areas are under irrigated lands. Statewide, agricultural use of groundwater represents about 76 percent of California’s average annual groundwater extraction.

Irrigated acreage data was derived from DWR 2005 land use data compiled by [Detailed Analysis Units](#) (DAU). Throughout most of California, DAU boundaries are a subset of watershed boundaries, which correspond to California’s 10 hydrologic regions. There are approximately 278 DAUs of varying size and shape in California. In areas where DWR land use data was not available, irrigated acreage data was derived from the Department of Conservation Farmland Mapping Program.

Irrigated acreage data were translated from irrigated acres by DAU to irrigated acres by groundwater basin, by evaluating the spatial relationship of each DAU versus groundwater basin areas, and re-proportioning the data accordingly. In some regions, DAU areas are fairly large and contain several groundwater basins. In other areas, several smaller DAUs comprise a single groundwater basin.

For areas having multiple groundwater basins within a single DAU, the irrigated acres for the DAU were fully distributed between the various groundwater basins, based on the groundwater basin size in relationship to the overall basin area within the particular DAU. This approach assumed that all irrigated acres for each DAU were solely derived from alluvial groundwater basin areas within the DAU. For areas characterized by multiple DAUs within a single groundwater basin, irrigated acres volume were aggregated from each DAUs. Due to the variable size of the groundwater basins, irrigated acreage data was normalized by dividing the total irrigated acres by the basin area in square miles.

Irrigated acreage derived from DWR land use data includes areas where crops are irrigated with surface water, groundwater, or both. Consequently, the irrigated acreage information does not necessarily correlate with groundwater demand and results in a reduction in the confidence associated with this dataset. In addition, in areas where the spatial distribution of the DAU was significantly different than the groundwater basin area, or in areas where multiple basins comprise a portion of multiple DAU areas, the redistribution of irrigated acres by DAU to irrigated acres by groundwater basin results in some additional level of uncertainty. A data weighting of 75 percent was applied to the ranking values associated with irrigated acreage data, prior to combining with the other seven data components to create the overall groundwater basin prioritization results.

Figure 7 and Table 8 show the data distribution for density of irrigated acres by basin, along with the breakdown of the various ranking ranges and ranking values for this particular dataset, based on a scale of 0 to 5.

Table 8. Data Component Ranking Ranges for Density of Irrigated Acres

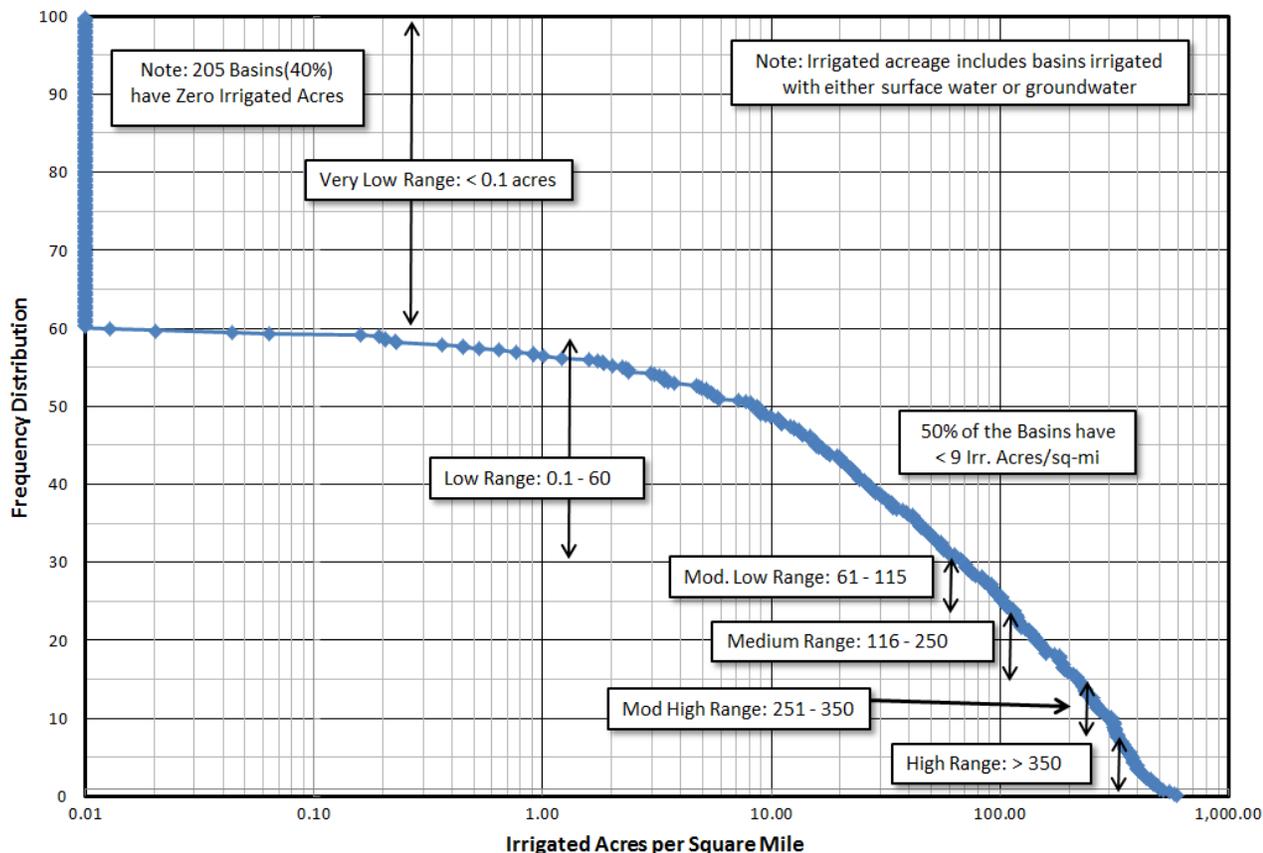
Data Component Ranking	Ranking Value	Density of Irrigated Acres (acres per sq. mile)	Total Number of Basins in Rank	Cumulative Percent of Dataset incorporated by the Ranking Interval
Very Low	0	< 0.1	205	100%
Low	1	0.1 – 60	150	99%
Moderately Low	2	61 – 115	39	98%
Medium	3	116 – 250	56	94%
Moderately High	4	251 – 350	32	84%
High	5	> 350	33	61%

Note: Irrigated acres includes groundwater basin areas irrigated with either surface water or groundwater

The data in Figure 7 and Table 8 indicates that 205 basins (40 percent) have zero irrigated acreage and have been assigned a Very Low data ranking, with a zero data ranking value. Low rankings were assigned for 150 groundwater basins with 0.1 to 60 acres of irrigated land per square mile. Although the Low and Very Low ranked basins constitute 67 percent (355) of the groundwater basins, they comprise less than two percent of the irrigated acreage overlying

California's groundwater basin areas. The 62 groundwater basins within the Medium to High rankings comprise about 84 percent of the irrigated groundwater basin areas.

Figure 7. Distribution Curve and Ranking Ranges for Density of Irrigated Acres



Data Component #6: The Degree to Which Persons Overlying the Basin Rely on Groundwater as their Primary Source of Water:

DWR selected groundwater reliance as the primary component for the initial review and screening in the CASGEM groundwater basin prioritization process (see previous section titled: *Initial Groundwater Basin Screening under CASGEM*). Analysis of groundwater reliance included consideration and review of the estimated annual volume of groundwater use and the percent to which groundwater pumping contributes to the overall water supply for the basin. The two data ranking values associated with groundwater reliance (volume and percent of overall supply) were averaged, prior to combining with the seven other data components to create the overall groundwater basin prioritization results.

Groundwater Reliance by Evaluation of Volume of Use: Statewide groundwater volume information was derived from 2005 DWR Land and Water Use (LWU) survey data, which is developed and compiled based on county boundaries and DAU areas. The translation of groundwater use from DAU to groundwater basin areas was similar to the approach taken for

the irrigated acreage data described in the previous section. However, in areas where the groundwater basins split by multiple DAU areas, considerable efforts were made by DWR Region staff to verify groundwater use by groundwater basin data through the review of aerial photography, local groundwater management plans, Bulletin 118-03 data, and other readily available sources of information. Because of the additional steps taken to help verify the estimated volume of groundwater use by groundwater basin area, confidence in this dataset is considered acceptable for the intended use, and no weighting factors were applied.

Table 9. Data Component Ranking Ranges for Groundwater Reliance, as it relates to Groundwater Use in acre-feet per acre

Data Component Ranking	Ranking Value	Groundwater Use Volume (ac-ft per acre)	Total Number of Basins in Rank	Cumulative Percent of Dataset incorporated by the Ranking Interval
Very Low	0	< 0.03	168	100%
Low	1	0.03 – 0.20	140	99%
Moderately Low	2	0.21 – 0.40	102	94%
Medium	3	0.41 – 0.60	30	81%
Moderately High	4	0.61 – 0.8	29	60%
High	5	> 0.8	46	47%

Figure 8 and Table 9 show the data distribution for volume of groundwater use by basin, along with the breakdown of the various ranking ranges and values for this particular dataset, based on a scale of 0 to 5. Evaluation of annual groundwater use data indicates that 307 groundwater basins falling within the Low and Very Low data ranges have a groundwater use of less than 0.2 acre-feet per square mile, and represent less than one percent of the estimated total groundwater use. Within the moderately high to high ranges, approximately 39 basins have an annual groundwater use between 0.61 and 0.8 acre-feet per square mile, and 46 basins have a groundwater use of greater than 0.8 acre-feet per square mile.

Groundwater Reliance by Evaluation the Overall Supply Met by Groundwater: Evaluation of groundwater reliance included an assessment of the percent to which groundwater contributes to the overall water supply for the basin. Groundwater use as a percent of the overall supply was evaluated using the DWR land and water use data compiled by DAU. The conversion of percent supply met by groundwater from DAU to groundwater basin areas was similar to the approach taken for the irrigated acreage and groundwater volume data described in the previous sections. Further verification of this data component proved difficult due the general lack of availability of supply information by groundwater basin area. Due to limitations associated with the translation of this data from DAU to groundwater basin and the limitations associated with verifying the data, the confidence level of this data set is somewhat diminished and the weighting of the data ranking value was reduced to 75 percent.

Figure 8. Distribution Curve and Ranking Ranges for Groundwater Reliance, as it relates to Groundwater Use in acre-feet per acre

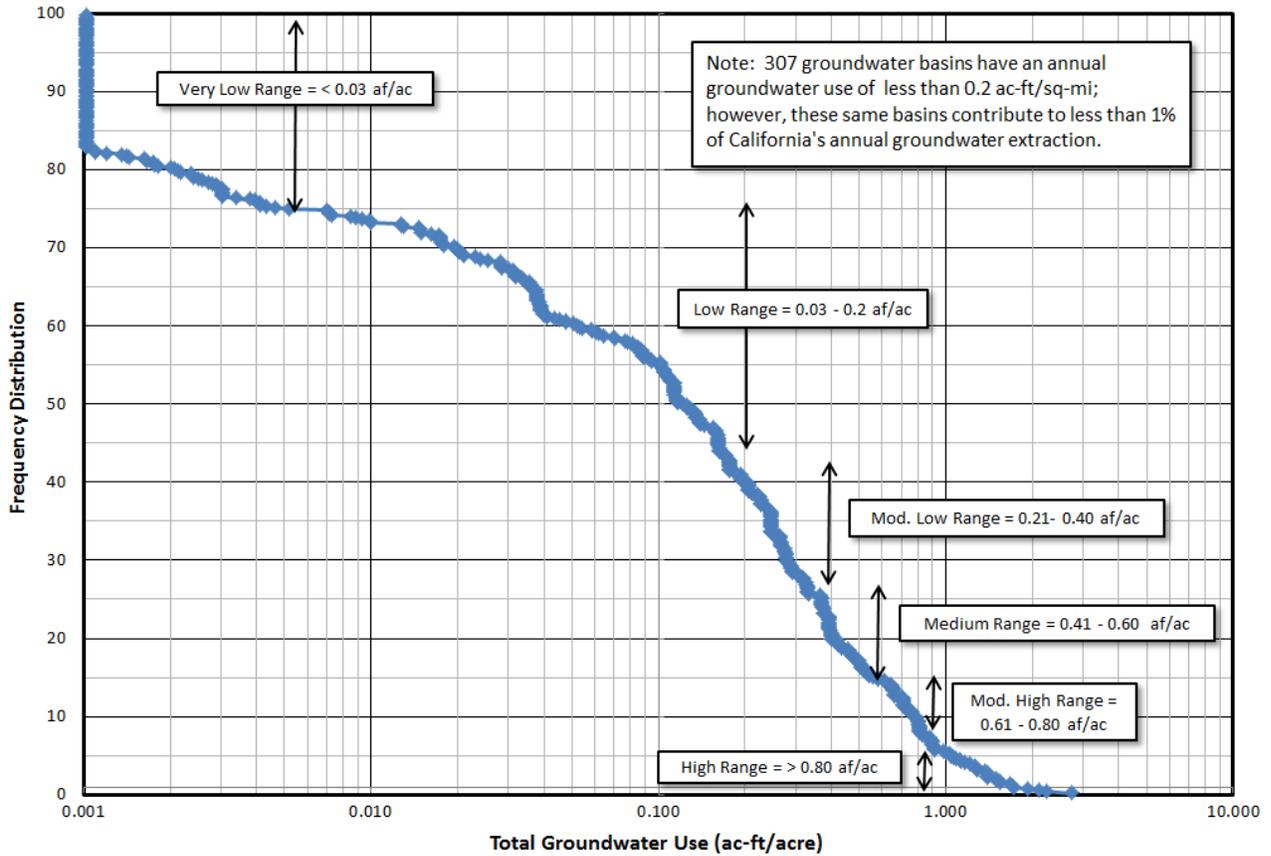
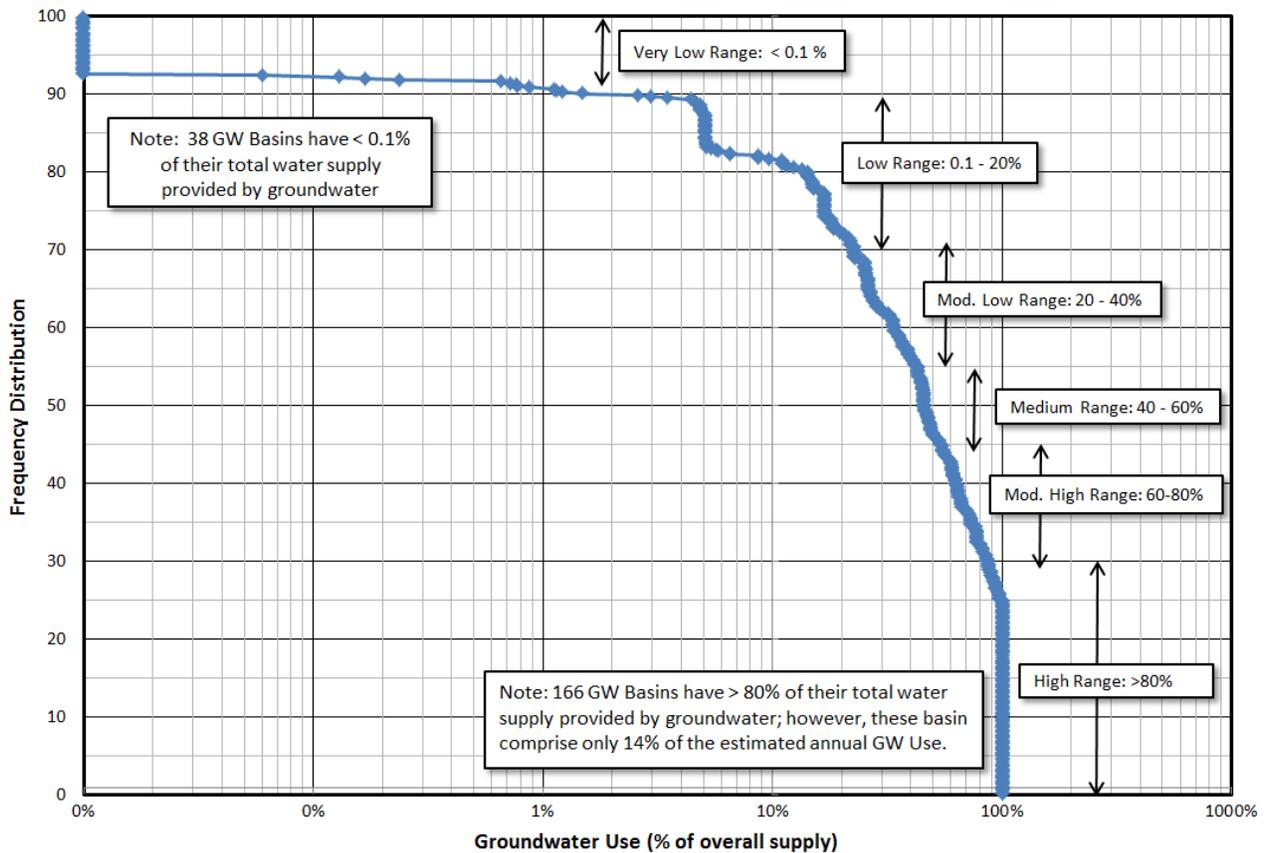


Figure 9 and Table 10 show the distribution of the groundwater reliance, with respect to the percent that groundwater contributes to the total water supply for the basin, and breakdown the data ranking ranges and values for this dataset, using a scale of 0 to 5. Information in Figure 9 and Table 10 indicates that groundwater contributes to less than 20 percent of the overall supply in 144 groundwater basins within the Low and Very Low data ranges. In approximately 152 basins, groundwater contributes to between 21 and 60 percent of the overall supply (Moderately Low to Medium data range), and for 219 basins, groundwater contributes to greater than 61 percent of the overall supply (Moderately High to High data range). Basins within the Medium to High ranking ranges also comprise about 52 percent of the statewide annual groundwater extraction.

Table 10. Data Component Ranking Ranges for Groundwater Reliance, as it relates to Percent of Total Water Supply Met by Groundwater

Data Component Ranking	Ranking Value	Groundwater Use % Total Supply Met by Groundwater (ac-ft per sq. mile)	Total Number of Basins in Rank	Cumulative Percent of Dataset incorporated by the Ranking Interval
Very Low	0	< 0.1 %	38	100%
Low	1	0.1 – 20 %	106	99%
Moderately Low	2	21 – 40 %	81	93%
Medium	3	41 – 60%	71	52%
Moderately High	4	61 – 80%	53	22%
High	5	> 80%	166	14%

Figure 9. Distribution Curve and Ranking Ranges for Groundwater Reliance, as it relates to Percent of Total Water Supply Met by Groundwater



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APPENDIX A

CASGEM Basin Prioritization Results Figures and Tables

Figure A1. Statewide CASGEM Groundwater Basin Prioritization

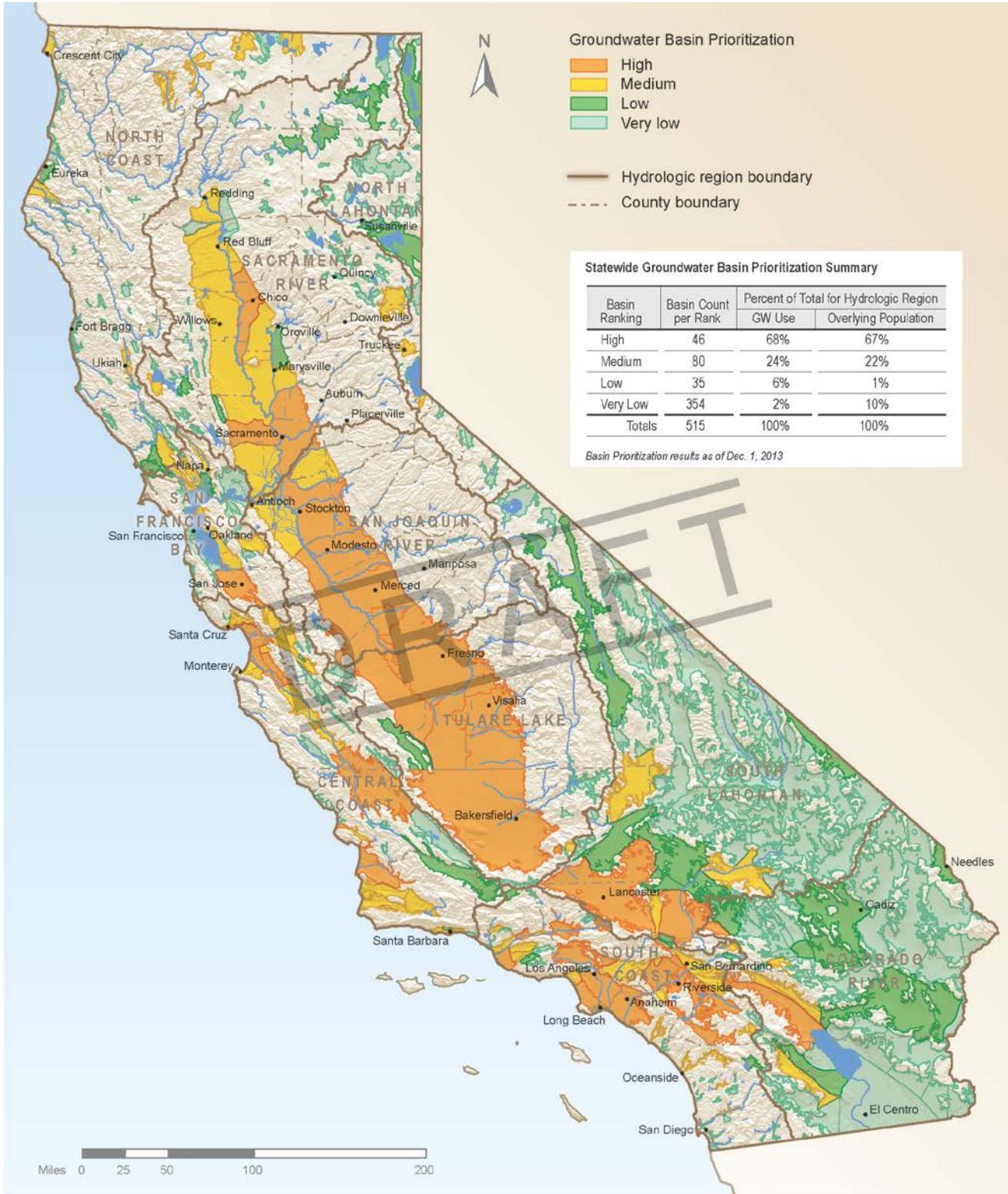
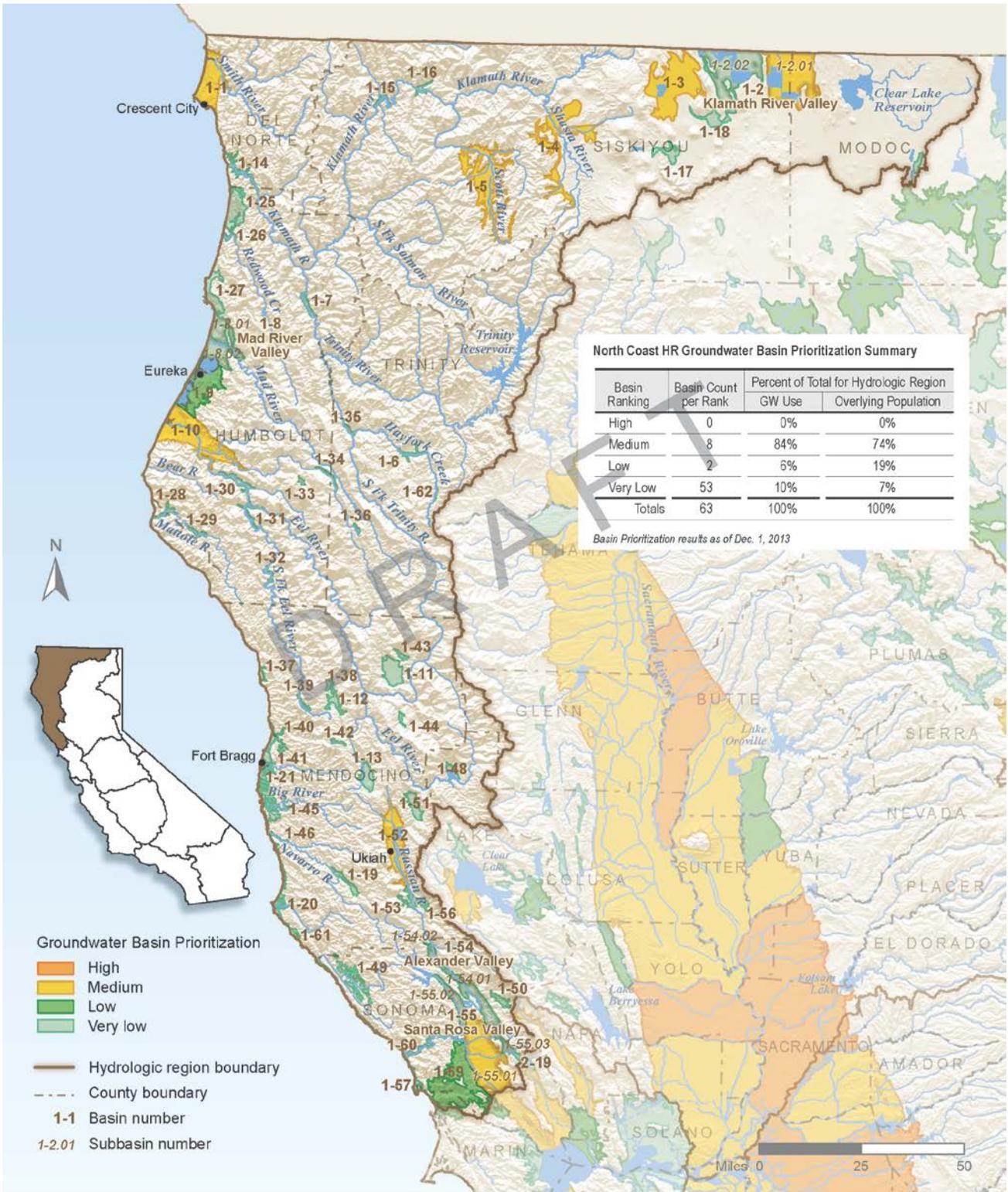


Figure A2. North Coast Hydrologic Region CASGEM Groundwater Basin Prioritization



Source: Department of Water Resources, CWP 2013

Figure A3. San Francisco Hydrologic Region CASGEM Groundwater Basin Prioritization

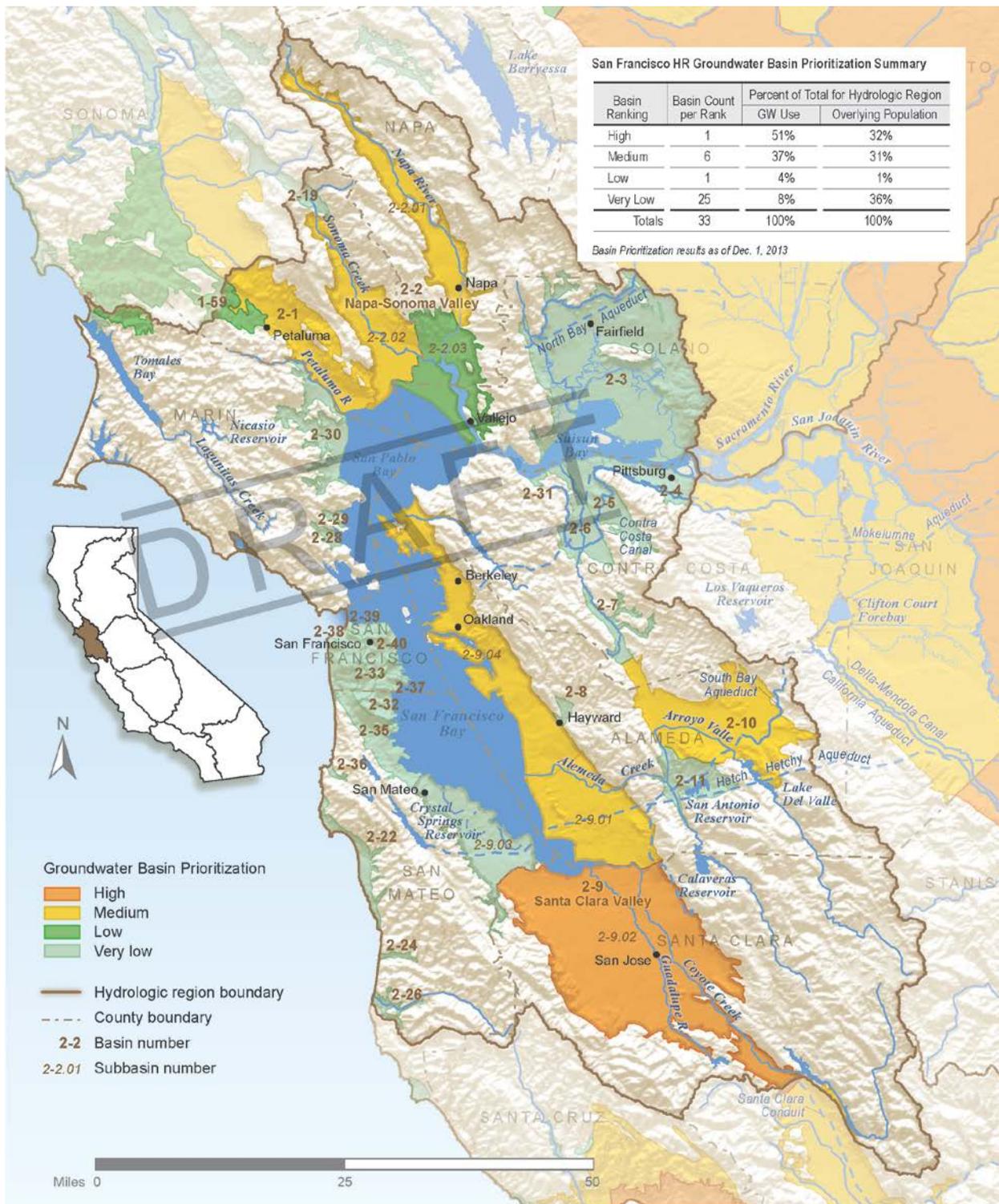
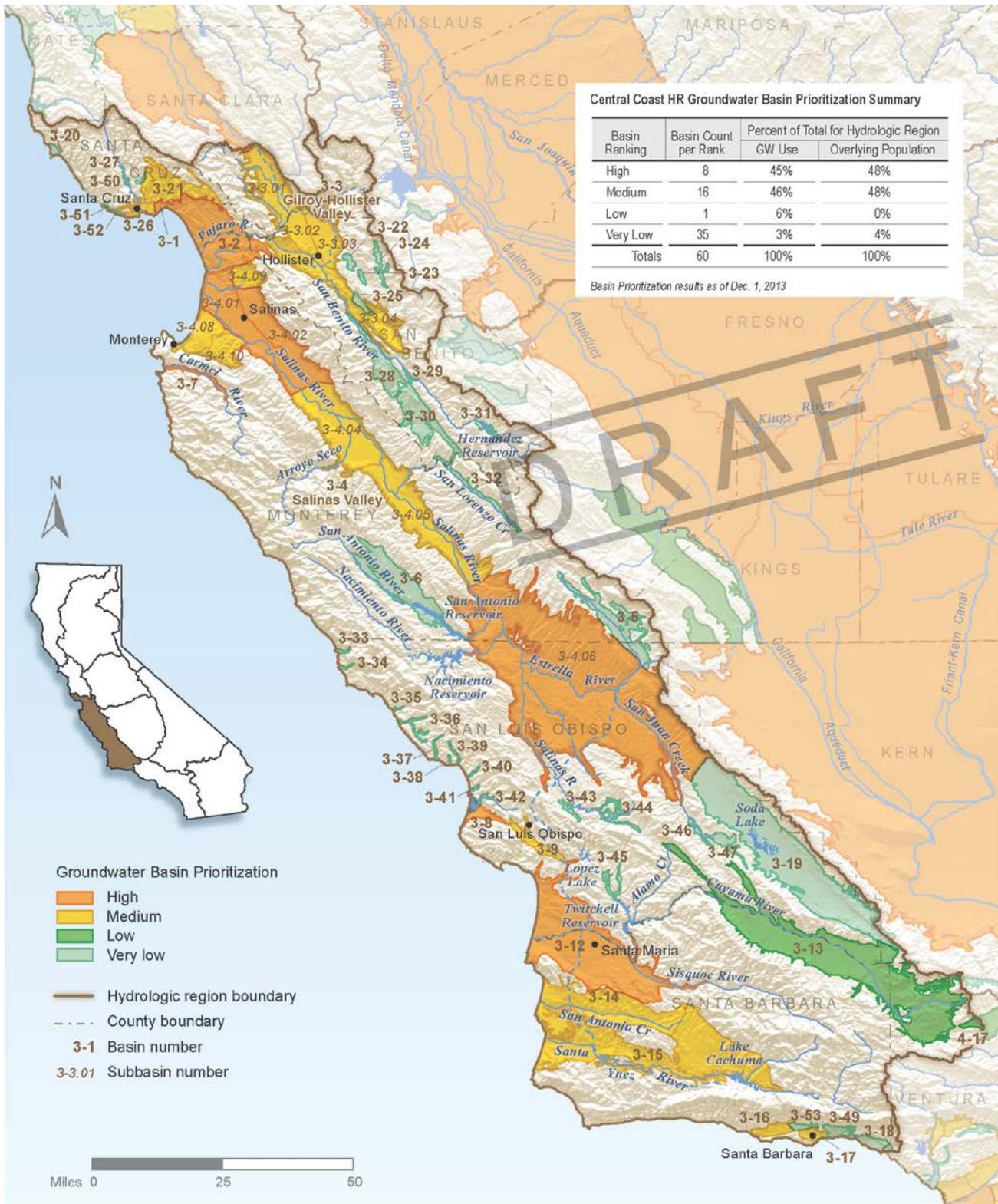
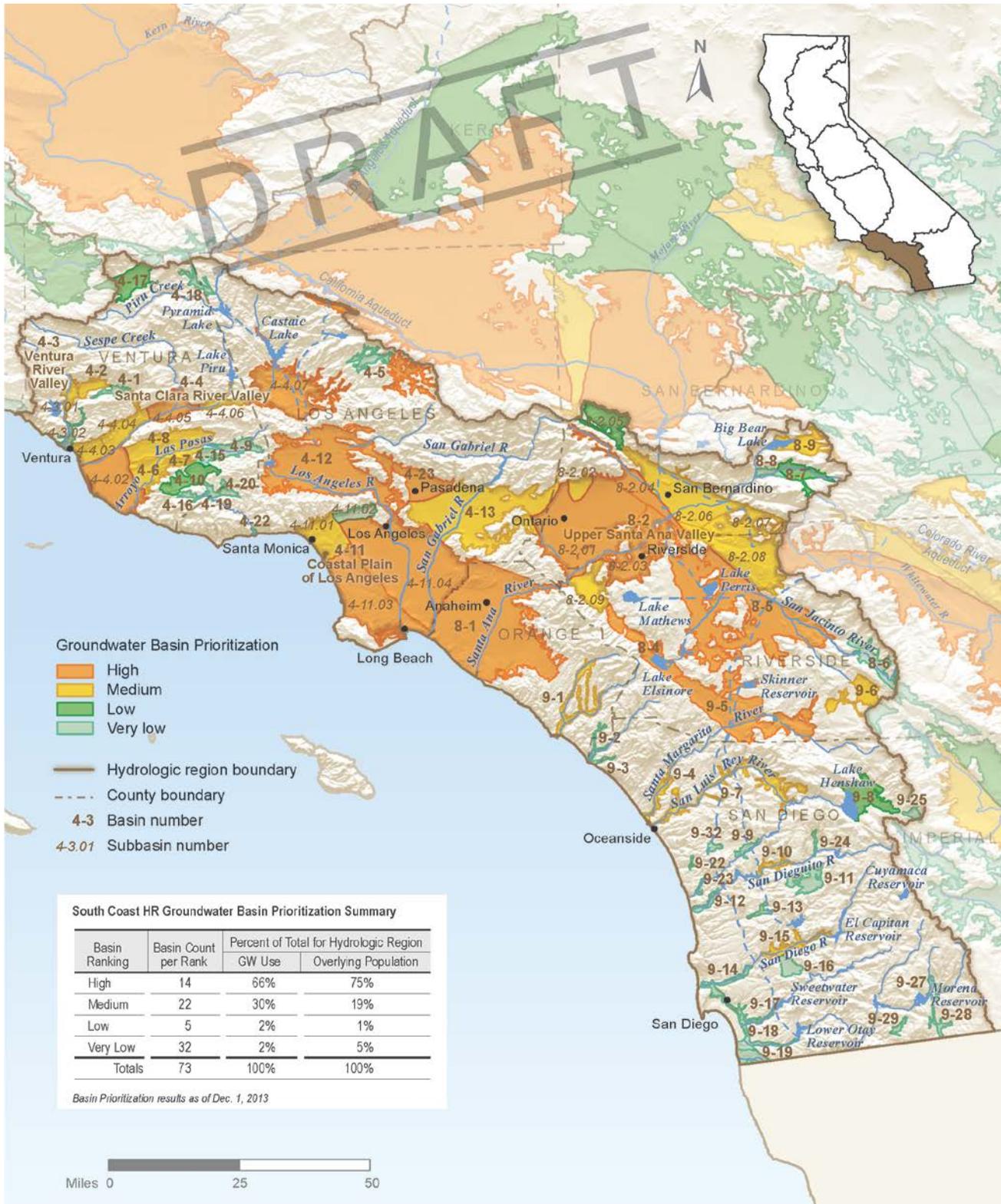


Figure A4. Central Coast Hydrologic Region CASGEM Groundwater Basin Prioritization



Source: Department of Water Resources, CWP 2013

Figure A5. South Coast Hydrologic Region CASGEM Groundwater Basin Prioritization



Source: Department of Water Resources, CWP 2013

Figure A6. Sacramento River Hydrologic Region CASGEM Groundwater Basin Prioritization

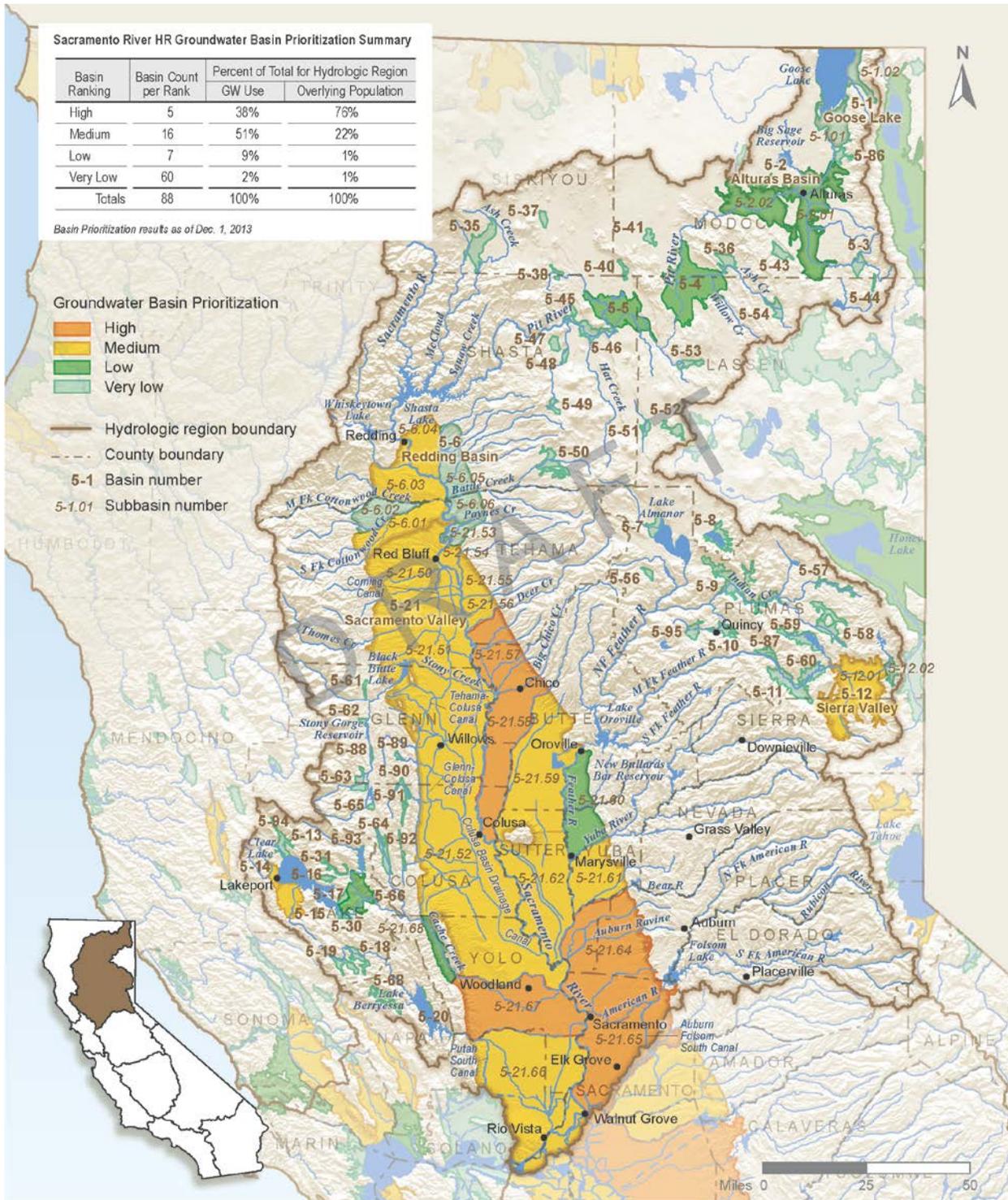
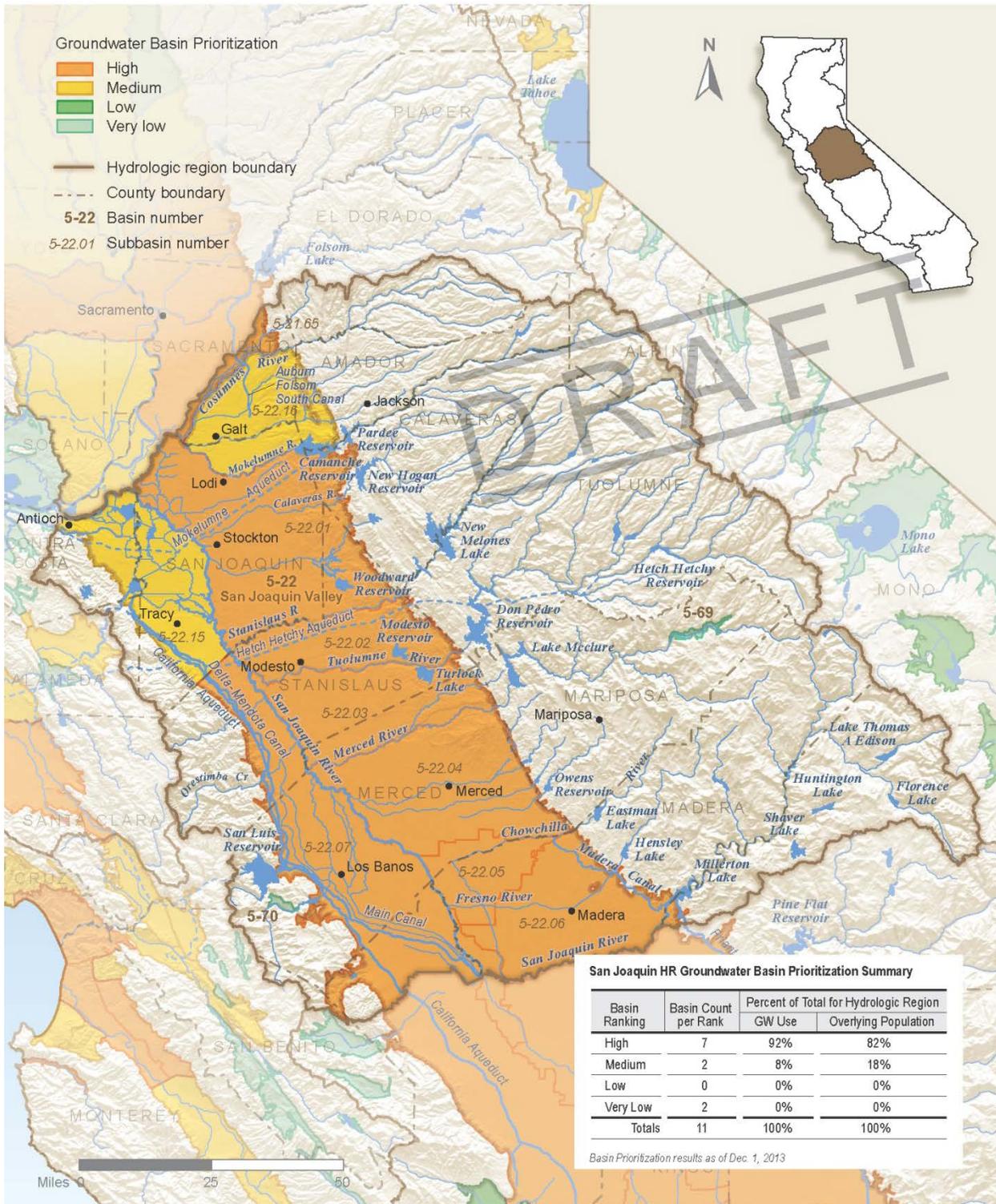
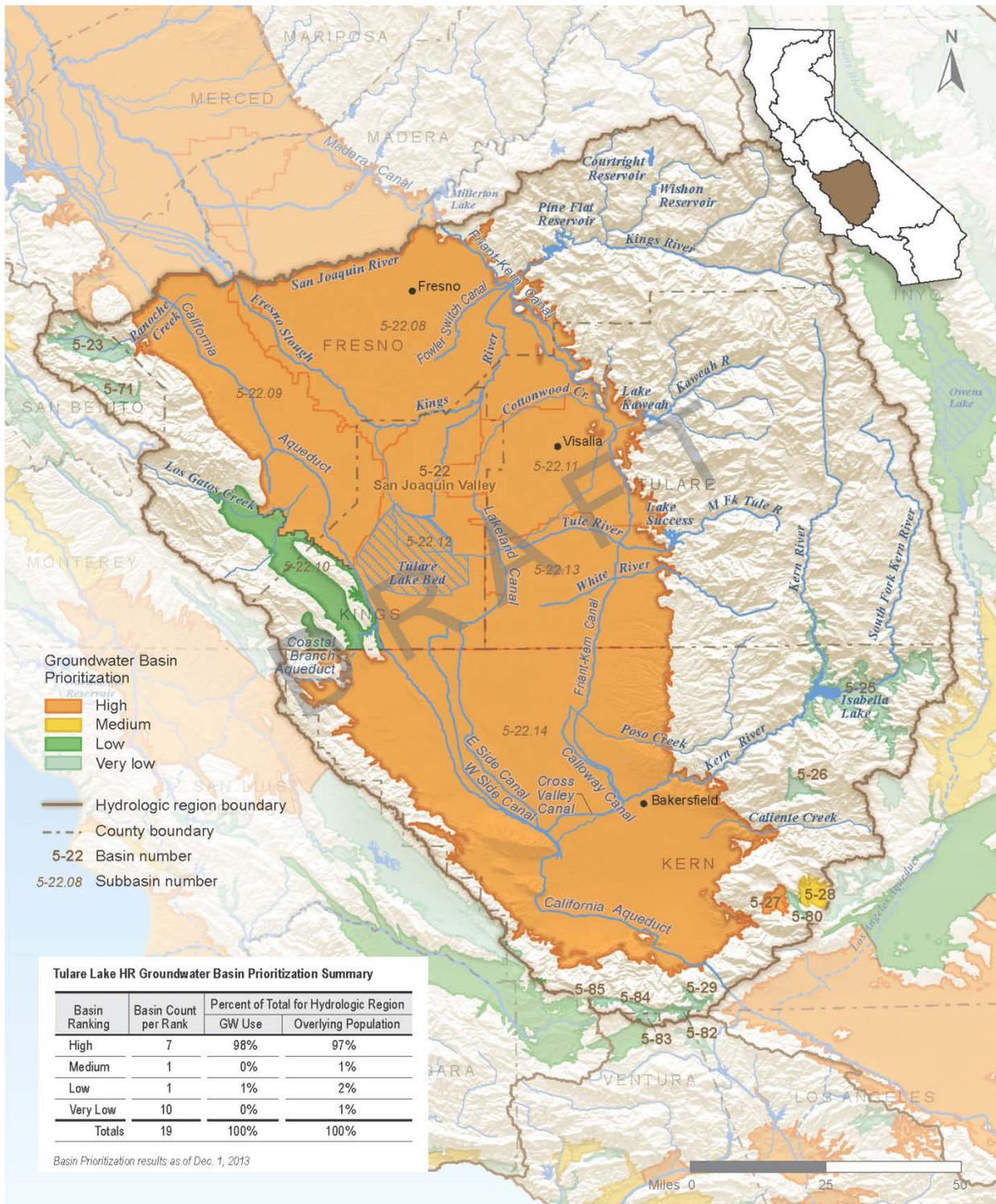


Figure A7. San Joaquin River Hydrologic Region CASGEM Groundwater Basin Prioritization



Source: Department of Water Resources, CWP 2013

Figure A8. Tulare Lake Hydrologic Region CASGEM Groundwater Basin Prioritization



Source: Department of Water Resources, CWP 2013

Figure A10. South Lahontan Hydrologic Region CASGEM Groundwater Basin Prioritization

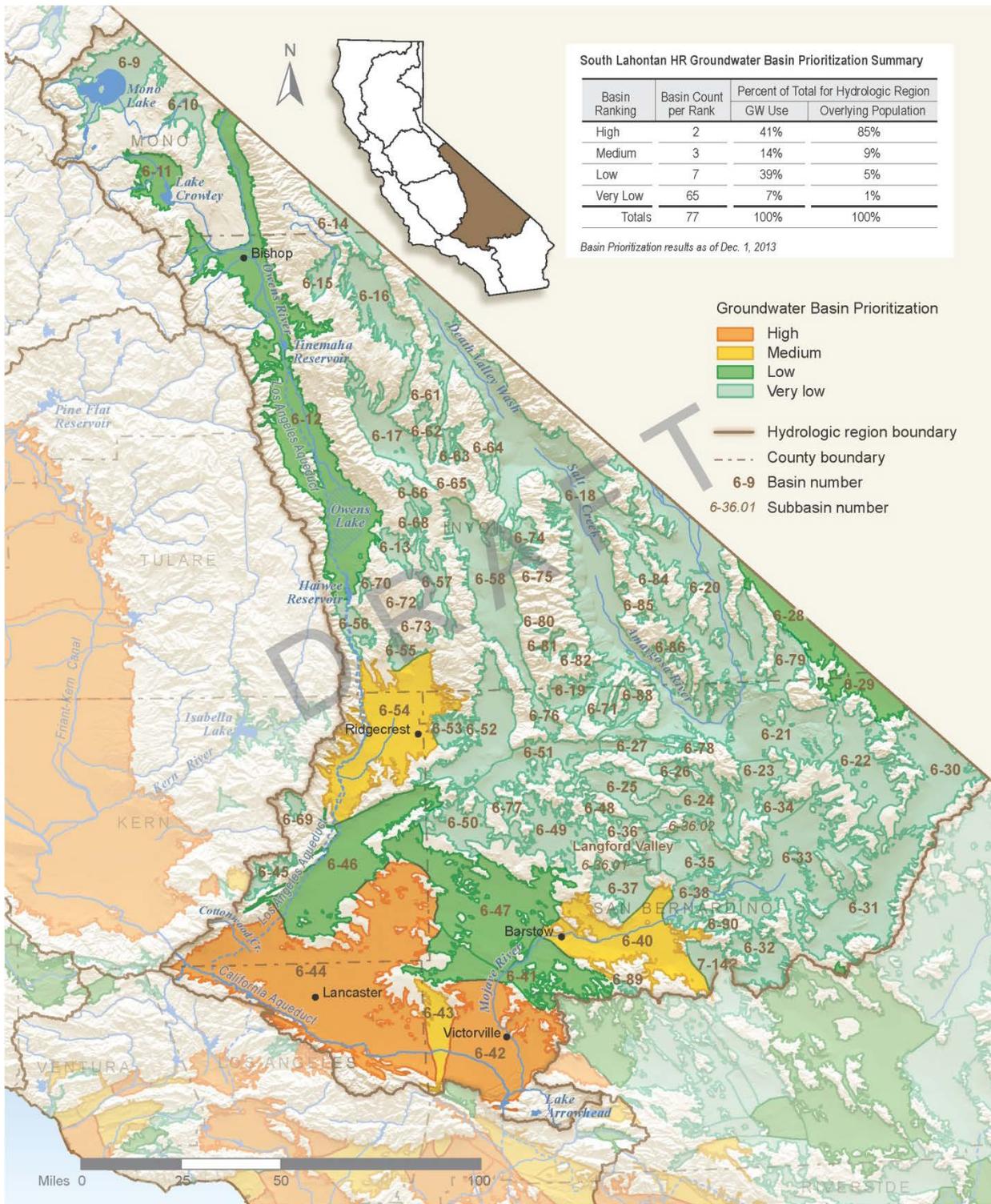
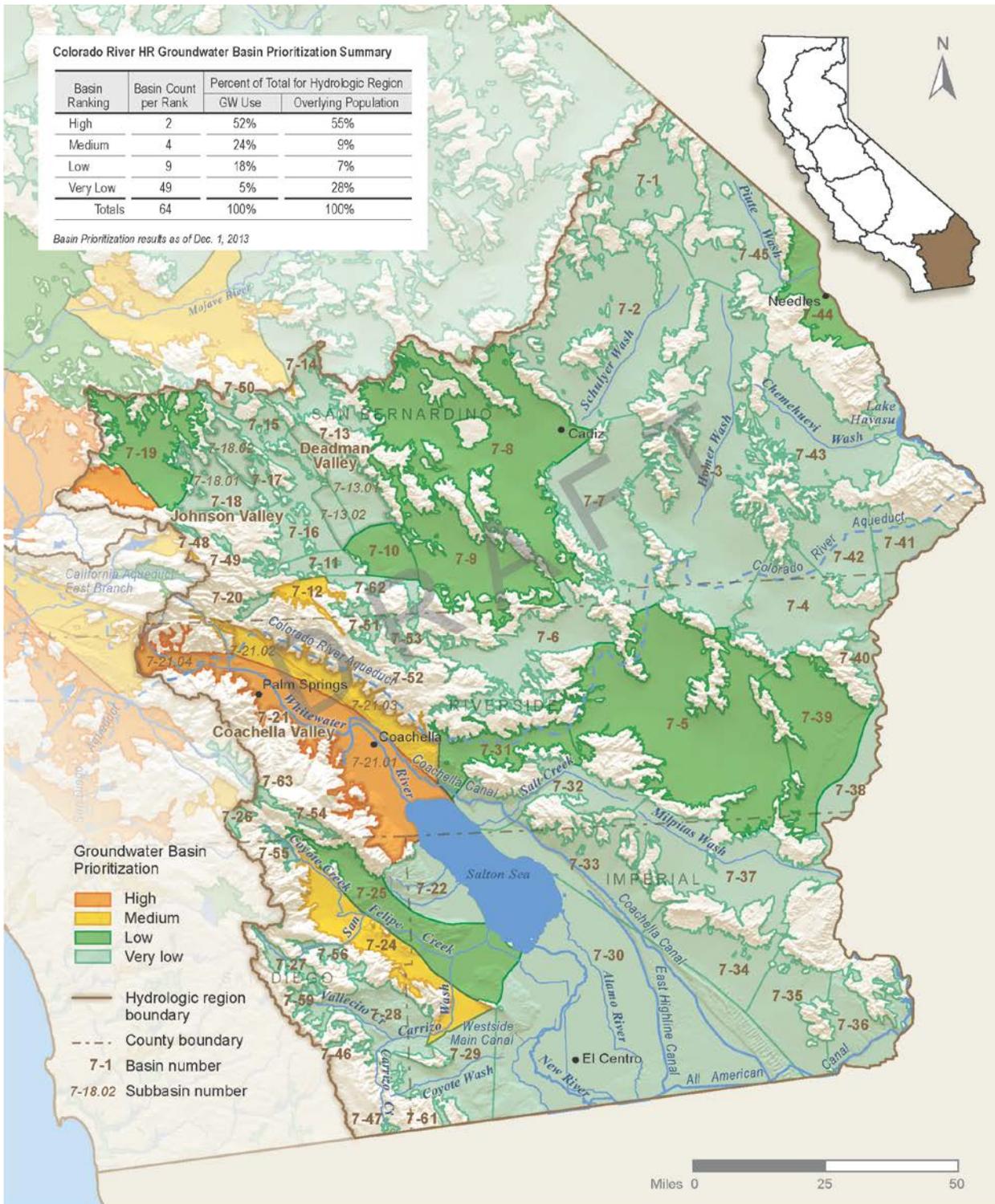


Figure A11. Colorado River Hydrologic Region CASGEM Groundwater Basin Prioritization



Source: Department of Water Resources, CWP 2013

Table A1. Data Component Ranking Ranges for CASGEM Groundwater Basin Ranking

Data Component Ranking	Data Component Ranking Value	Data Components and Ranking Ranges						
		Population		PSW Density	Total Well Density	Irrigated Acreage	Groundwater Reliance	
		Density	Projected Growth				GW Use	% of Total Supply
		per sq-mi	%	per sq.-mi	per sq. mi	ac/sq-mi	ac-ft/acre	%
Very Low	0	< 7	< 0	< 0.01	< 0.01	< 0.1	< 0.03	< 0.1
Low	1	7 - 250	0 - 6.0	0.01 - 0.1	0.01 - 2.0	0.1 - 60	0.03 - .20	0.1 - 20
Moderately Low	2	251 - 1000	6.1 - 15	0.11 - 0.25	2.1 - 5.0	61 - 115	0.21 - 0.40	21 - 40
Medium	3	1001 - 2500	15.1 - 25	0.26 - 0.50	5.1 - 10.0	116 - 250	0.41 - 0.60	41 - 60
Moderately High	4	2501 - 4000	25.1 - 40	0.51 - 1.0	10.1 - 20	251 - 350	0.61 - 0.8	61 - 80
High	5	≥ 4000	≥ 40%	≥ 1.0	> 20	> 350	> 0.8	> 80%

Note: Population growth is percent growth from 2010 to 2030.

Table A2. CASGEM Groundwater Basin Ranking by Hydrologic Region

Hydrologic Region	CASGEM Groundwater Basin Priority by Ranking Range and Hydrologic Region				HR Basin Count	Percent of Total Groundwater Use and Overlying Population for High & Medium Ranked Basins	
	High priority	Medium priority	Low priority	Very Low priority		Groundwater Use *	Overlying Population *
	Ranking Range >19.7	Ranking Range 12.6 - 19.6	Ranking Range 5.5 - 12.5	Ranking Range <5.4			
North Coast	0	8	2	53	63	84%	74%
San Francisco	1	6	1	25	33	88%	63%
Central Coast	8	16	1	35	60	91%	96%
South Coast	14	22	5	32	73	96%	94%
Sacramento River	5	16	7	60	88	89%	97%
San Joaquin River	7	2	0	2	11	99%	99%
Tulare Lake	7	1	1	10	19	98%	98%
North Lahontan	0	2	2	23	27	9%	55%
South Lahontan	2	3	7	65	77	55%	94%
Colorado River	2	4	9	49	64	77%	65%
Statewide	46	80	35	354	515	92%	89%

Note: * Estimated percentages are based on total groundwater use and population overlying all alluvial groundwater basins in the hydrologic region.

Table A3. Draft CASGEM Groundwater Basin Prioritization: Sorted by Basin Number.

CASGEM Groundwater Basin Prioritization Draft Results									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	1-1	SMITH RIVER PLAIN		North Coast	NRO	40,446	63.2	24,588	2	2	4	5	2	2	4	2.5			15.8	Medium		
2	1-12	LAYTONVILLE VALLEY		North Coast	NRO	5,020	7.8	1,167	1	0	3	5	1	2	4	2.5			0.0	Very Low		
3	1-13	LITTLE LAKE VALLEY		North Coast	NRO	10,018	15.7	5,993	2	1	0	5	1	0	0	0.0			0.0	Very Low		
4	1-19	ANDERSON VALLEY		North Coast	NCRO	4,969	7.8	1,297	1	5	5	5	3	0	5	1.9			0.0	Very Low		
5	1-21	FORT BRAGG TERRACE AREA		North Coast	NCRO	24,085	37.6	12,517	2	1	5	5	1	1	2	1.3	1		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)	
6	1-32	GARBERVILLE TOWN AREA		North Coast	NRO	2,112	3.3	1,391	2	2	3	5	1	1	3	1.6			0.0	Very Low		
7	1-51	POTTER VALLEY		North Coast	NCRO	8,237	12.9	1,145	1	0	1	5	5	1	1	0.9			0.0	Very Low		
8	1-52	UKIAH VALLEY		North Coast	NCRO	37,508	58.6	32,761	2	1	3	5	3	1	3	1.6		1	14.6	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.	
9	1-54.01	ALEXANDER VALLEY	ALEXANDER AREA	North Coast	NCRO	24,464	38.2	2,098	1	0	4	5	3	0	0	0.0			0.0	Very Low		
10	1-54.02	ALEXANDER VALLEY	CLOVERDALE AREA	North Coast	NCRO	6,525	10.2	8,297	2	4	5	5	3	1	2	1.3	1		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).	
11	1-55.01	SANTA ROSA VALLEY	SANTA ROSA PLAIN	North Coast	NCRO	80,059	125.1	250,375	3	2	5	5	3	2	4	2.5			18.5	Medium		
12	1-55.02	SANTA ROSA VALLEY	HEALDSBURG AREA	North Coast	NCRO	15,400	24.1	10,515	2	0	5	5	4	0	0	0.0			0.0	Very Low		
13	1-55.03	SANTA ROSA VALLEY	RINCON VALLEY	North Coast	NCRO	5,549	8.7	21,787	4	3	5	5	1	2	4	2.5			0.0	Very Low		
14	1-56	MCDOWELL VALLEY		North Coast	NCRO	1,486	2.3	106	1	0	0	5	4	2	3	2.1			0.0	Very Low		
15	1-59	WILSON GROVE FORMATION HIGHLANDS		North Coast	NCRO	86,400	135.0	37,799	2	0	4	5	1	1	3	1.6		-1	11.1	Low	NCRO Comment: Irrigated acreage and gw volume seems very high.	
16	2-1	PETALUMA VALLEY		San Francisco Bay	NCRO	46,043	71.9	49,915	2	3	3	5	1	1	3	1.6	2		16.1	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)	
17	2-10	LIVERMORE VALLEY		San Francisco Bay	NCRO	69,531	108.6	196,658	3	3	3	5	1	2	2	1.8	1		16.3	Medium	Some areas have boron concentrations exceeding 2 mg/L (B-118 & Sorenson et. al. 1985).	
18	2-19	KENWOOD VALLEY		San Francisco Bay	NCRO	5,135	8.0	6,057	2	1	5	5	3	1	3	1.6			0.0	Very Low		
19	2-2.01	NAPA-SONOMA VALLEY	NAPA VALLEY	San Francisco Bay	NCRO	45,895	71.7	91,234	3	1	5	5	4	3	3	2.6	1		19.4	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).	
20	2-2.02	NAPA-SONOMA VALLEY	SONOMA VALLEY	San Francisco Bay	NCRO	44,626	69.7	31,275	2	1	3	5	3	1	3	1.6	1		14.6	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).	
21	2-22	HALF MOON BAY TERRACE		San Francisco Bay	NCRO	9,189	14.4	19,825	3	3	5	5	2	0	0	0.0			0.0	Very Low		
22	2-29	SAN RAFAEL VALLEY		San Francisco Bay	NCRO	874	1.4	10,153	5	1	0	5	0	0	1	0.4			0.0	Very Low		
23	2-30	NOVATO VALLEY		San Francisco Bay	NCRO	20,519	32.1	42,516	3	2	0	5	1	0	1	0.4			0.0	Very Low		
24	2-32	VISITACION VALLEY		San Francisco Bay	NCRO	5,827	9.1	31,853	4	4	0	5	0	0	1	0.4			0.0	Very Low		

Table A3. Draft CASGEM Groundwater Basin Prioritization: Sorted by Basin Number.

CASGEM Groundwater Basin Prioritization Draft Results									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						
25	2-35	WESTSIDE		San Francisco Bay	NCRO	25,386	39.7	351,235	5	2	4	5	1	1	1	0.9			0.0	Very Low		
26	2-36	SAN PEDRO VALLEY		San Francisco Bay	NCRO	702	1.1	5,956	5	0	0	5	0	2	3	2.1			0.0	Very Low		
27	2-37	SOUTH SAN FRANCISCO		San Francisco Bay	NCRO	2,175	3.4	38,861	5	1	0	5	0	0	0	0.0			0.0	Very Low		
28	2-4	PITTSBURG PLAIN		San Francisco Bay	NCRO	11,607	18.1	68,898	4	3	4	5	0	1	1	0.9			0.0	Very Low		
29	2-40	DOWNTOWN		San Francisco Bay	NCRO	7,635	11.9	323,721	5	1	0	5	0	0	0	0.0	1		0.0	Very Low	Groundwater is subject to high concentrations of nitrates, chloride, boron and TDS (B-118) & (Phillips et.al. 1993).	
30	2-5	CLAYTON VALLEY		San Francisco Bay	NCRO	17,836	27.9	73,287	4	1	2	5	0	1	1	0.9			0.0	Very Low		
31	2-6	YGNACIO VALLEY		San Francisco Bay	NCRO	15,459	24.2	107,878	5	1	2	5	1	1	1	0.9	1		0.0	Very Low	Hydrographs created from DWR well data indicate groundwater levels have declined gradually over the period of record.(B-118)	
32	2-7	SAN RAMON VALLEY		San Francisco Bay	NCRO	7,053	11.0	30,112	4	2	0	5	1	1	1	0.9			0.0	Very Low		
33	2-8	CASTRO VALLEY		San Francisco Bay	NCRO	1,821	2.8	24,486	5	0	0	5	0	2	1	1.4			0.0	Very Low		
34	2-9.01	SANTA CLARA VALLEY	NILES CONE	San Francisco Bay	NCRO	57,906	90.5	321,494	4	1	3	5	1	3	1	1.9	1		15.4	Medium	Saline water intrusion has increased landward and into deeper aquifers since first documented in the 1920's.(B-118)	
35	2-9.02	SANTA CLARA VALLEY	SANTA CLARA	San Francisco Bay	NCRO	190,235	297.2	1,633,190	5	2	4	5	1	4	2	2.8	2		20.3	High	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). Historic subsidence issues and basin balance issues.(B-118)	
36	2-9.03	SANTA CLARA VALLEY	SAN MATEO PLAIN	San Francisco Bay	NCRO	37,708	58.9	291,899	5	3	2	5	1	1	1	0.9			0.0	Very Low		
37	2-9.04	SANTA CLARA VALLEY	EAST BAY PLAIN	San Francisco Bay	NCRO	77,292	120.8	881,718	5	1	1	5	1	2	1	1.4	1		13.9	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).	
38	3-1	SOQUEL VALLEY		Central Coast	SCRO	2,515	3.9	18,634	5	2	5	5	1	5	4	4.0	1		21.5	High	Water quality degradation, saline intrusion issues.	
39	3-16	GOLETA		Central Coast	SRO	9,229	14.4	47,252	4	1	5	5	2	3	2	2.3		1	18.5	Medium		Estimated overdraft for the north-central portion of the basin ins estimated at 1,180 af/yr (Santa Barbara Water Conservation Element, 2009)
40	3-17	SANTA BARBARA		Central Coast	SRO	6,173	9.6	63,966	5	0	4	5	1	3	2	2.3	2		17.8	Medium	WQ Impacts: Saline intrusion, locally high EC, hardness, hydrogen sulfides, and other constituents.(B-118)	
41	3-2	PAJARO VALLEY		Central Coast	SCRO	88,062	137.6	114,282	2	2	4	5	3	4	5	3.9	4		21.9	High	PVWMD 2011 Annual Report indicates that Pajaro Valley GW basin remains in significant overdraft, with continuing seawater intrusion and gw storage depletion.	
42	3-21	SANTA CRUZ PURISIMA FORMATION		Central Coast	SCRO	40,166	62.8	17,693	2	0	3	5	1	2	4	2.5		1	13.0	Medium		Basin comprises the highland area east of Santa Cruz and serves as a forebay to Pajaro, Soquel, and Terrace Basins to the west...which are in various stages of overdraft.
43	3-26	WEST SANTA CRUZ TERRACE		Central Coast	SCRO	7,863	12.3	70,336	5	1	3	5	1	2	4	2.5	2	1	19.0	Medium	Water quality degradation	Low gw use, but basin at high risk of seawater intrusion due to thin alluvial aquifer and dependency on up-gradient users to maintain positive westward flow conditions (2005, Santa Cruz UWMP).
44	3-27	SCOTTS VALLEY		Central Coast	SCRO	773	1.2	3,875	4	1	5	5	0	2	4	2.5	4		0.0	Very Low	Overdraft and water quality issues associated with contaminated sites within the basin.	
45	3-3.01	GILROY-HOLLISTER VALLEY	LLAGAS AREA	Central Coast	SCRO	55,967	87.4	91,706	3	2	5	5	4	2	1	1.4			18.1	Medium		

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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						
46	3-4.08	SALINAS VALLEY	SEASIDE AREA	Central Coast	SCRO	25,903	40.5	65,899	3	0	4	5	1	2	5	2.9	5		19.4	Medium	Seawater intrusion in Coastal basin due to excessive pumping	
47	3-4.09	SALINAS VALLEY	LANGLEY AREA	Central Coast	SCRO	15,344	24.0	9,833	2	1	5	5	2	5	5	4.4			17.6	Medium		
48	3-49	MONTECITO		Central Coast	SRO	6,286	9.8	9,885	3	0	4	5	1	1	2	1.3	1		0.0	Very Low	Locally high TDS within the basin. Wells exceed Federal iron and manganese concentrations (B-118).	
49	3-50	FELTON AREA		Central Coast	SCRO	1,155	1.8	3,024	3	1	0	5	0	2	4	2.5	3		0.0	Very Low	Overdraft	
50	3-52	NEEDLE ROCK POINT		Central Coast	SCRO	479	0.7	66	1	0	0	5	5	2	4	2.5			0.0	Very Low		
51	3-53	FOOTHILL		Central Coast	SRO	3,123	4.9	17,543	4	2	5	5	1	3	2	2.3	5		0.0	Very Low	USGS documented nitrates exceeding MCL and high sulfates in the basin. TDS is documented to be high in the basin and potential for saline intrusion.	
52	3-7	CARMEL VALLEY		Central Coast	SCRO	5,151	8.0	5,086	2	3	5	5	2	5	5	4.4	1	1	21.6	High	Excessive pumping of Cal-Am wells caused groundwater overdraft and Carmel River to dry, leading to court order.	SW-GW Interaction Issue. Cal-Am Water Company court ordered to reduce 2/3rds of diversions from Carmel River.
53	4-11.01	COASTAL PLAIN OF LOS ANGELES	SANTA MONICA	South Coast	SRO	31,846	49.8	465,606	5	3	2	5	0	1	2	1.3	3		18.0	Medium	MTBE contamination has led to significant reduction in groundwater production and locally high TDS.	
54	4-11.02	COASTAL PLAIN OF LOS ANGELES	HOLLYWOOD	South Coast	SRO	10,108	15.8	250,649	5	0	3	5	0	1	2	1.3	1		0.0	Very Low	MWD lists some TDS and VOC water quality issues.	
55	4-11.03	COASTAL PLAIN OF LOS ANGELES	WEST COAST	South Coast	SRO	93,795	146.6	1,195,195	5	1	3	5	0	3	2	2.3	5		20.0	High	Basin in overdraft since 1960's. Adjudicated basin. Saline intrusion problem and a seawater barrier project is in effect to reduce seawater intrusion.	
56	4-11.04	COASTAL PLAIN OF LOS ANGELES	CENTRAL	South Coast	SRO	180,357	281.8	3,052,303	5	2	5	5	1	5	2	3.3	5		24.8	High	Basin was adjudicated in the early 1960's due to overdraft. Several public supply wells are known to be impacted by various water quality issues.	
57	4-22	MALIBU VALLEY		South Coast	SRO	615	1.0	563	2	0	0	5	1	0	0	0.0	5		0.0	Very Low	Saline intrusion, high TDS and chlorides have been documented.	
58	5-10	AMERICAN VALLEY		Sacramento River	NRO	6,799	10.6	3,931	2	0	5	5	4	2	2	1.8			0.0	Very Low		
59	5-13	UPPER LAKE VALLEY		Sacramento River	NRO	7,260	11.3	2,055	1	3	4	5	3	0	0	0.0			0.0	Very Low		
60	5-14	SCOTTS VALLEY		Sacramento River	NRO	7,320	11.4	6,553	2	0	4	5	2	5	4	4.0			15.3	Medium		
61	5-15	BIG VALLEY		Sacramento River	NRO	24,212	37.8	6,344	1	2	2	5	3	5	4	4.0			15.0	Medium		
62	5-17	BURNS VALLEY		Sacramento River	NRO	2,873	4.5	2,691	2	4	0	5	1	2	4	2.5			0.0	Very Low		
63	5-21.54	SACRAMENTO VALLEY	ANTELOPE	Sacramento River	NRO	18,696	29.2	6,124	1	1	4	5	4	5	3	3.6	2		18.4	Medium	Nitrate issue in Domestic Wells.	
64	5-21.57	SACRAMENTO VALLEY	VINA	Sacramento River	NRO	124,577	194.7	71,397	2	4	3	5	3	5	5	4.4		1	20.4	High		GW from this basin is a key source of sw inflow and serves eastside creeks which have endangered spring run.
65	5-21.65	SACRAMENTO VALLEY	SOUTH AMERICAN	Sacramento River	NCRO	247,745	387.1	718,113	3	3	4	5	3	2	3	2.1	3		21.1	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).	
66	5-21.67	SACRAMENTO VALLEY	YOLO	Sacramento River	NCRO	225,718	352.7	194,158	2	3	3	5	5	5	3	3.6	1		20.1	High	Localized TDS problems preclude using gw for some M&I uses without treatment. Some subsidence in northeast of Davis and in northern Yolo.	
67	5-22.08	SAN JOAQUIN VALLEY	KINGS	Tulare Lake	SCRO	977,030	1,526.6	906,544	2	4	4	5	5	5	2	3.3			20.8	High		
68	5-28	TEHACHAPI VALLEY WEST		Tulare Lake	SCRO	14,854	23.2	17,313	2	5	5	5	1	2	1	1.4	1		18.9	Medium	Court adjudicated basin in overdraft, groundwater quality issues	
69	5-6.03	REDDING AREA	ANDERSON	Sacramento River	NRO	96,857	151.3	52,937	2	2	4	5	2	2	2	1.8			15.0	Medium		
70	5-6.04	REDDING AREA	ENTERPRISE	Sacramento River	NRO	60,862	95.1	68,627	2	3	4	5	2	1	1	0.9			15.1	Medium		
71	5-60	HUMBUG VALLEY		Sacramento River	NRO	9,979	15.6	3,299	1	0	4	5	1	0	2	0.8			0.0	Very Low		

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
72	5-65	LITTLE INDIAN VALLEY		Sacramento River	NRO	1,269	2.0	112	1	0	0	5	1	1	2	1.3			0.0	Very Low		
73	5-80	BRITE VALLEY		Tulare Lake	SCRO	3,181	5.0	684	1	0	4	5	1	1	3	1.6	2		0.0	Very Low	Court adjudicated basin in overdraft	
74	6-5.01	TAHOE VALLEY	TAHOE SOUTH	North Lahontan	NCRO	14,814	23.1	25,967	3	0	5	5	0	2	5	2.9	1		15.6	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).	
75	6-5.02	TAHOE VALLEY	TAHOE WEST	North Lahontan	NCRO	6,173	9.6	3,110	2	0	5	5	0	2	4	2.5			0.0	Very Low		
76	8-1	COASTAL PLAIN OF ORANGE COUNTY		South Coast	SRO	223,222	348.8	2,309,966	5	2	4	5	1	5	5	4.4			19.9	High		
77	9-11	SANTA MARIA VALLEY		South Coast	SRO	12,379	19.3	16,695	2	2	0	5	1	0	0	0.0			0.0	Very Low		
78	9-13	POWAY VALLEY		South Coast	SRO	2,485	3.9	16,450	5	2	0	5	1	2	1	1.4			0.0	Very Low		
79	9-14	MISSION VALLEY		South Coast	SRO	7,387	11.5	37,066	4	3	0	5	0	2	1	1.4			0.0	Very Low		
80	9-15	SAN DIEGO RIVER VALLEY		South Coast	SRO	9,944	15.5	45,800	4	1	3	5	1	3	1	1.9	1		15.4	Medium	High Nitrates, Iron and Manganese treatment is required, high TDS (>3,000 mg/l) in western portion of basin	
81	9-16	EL CAJON VALLEY		South Coast	SRO	7,203	11.3	92,314	5	1	0	5	1	2	1	1.4	5		0.0	Very Low	High nitrates and TDS have impaired the basin for domestic use and high chlorides make the water marginal to inferior for irrigation uses (B-118).	
82	9-17	SWEETWATER VALLEY		South Coast	SRO	5,949	9.3	35,277	4	1	4	5	0	2	1	1.4	5		0.0	Very Low	TDS, chloride and sodium content of the groundwater generally exceed the recommended limits for drinking (B-118, & DWR 1986).	
83	9-9	ESCONDIDO VALLEY		South Coast	SRO	2,906	4.5	38,593	5	1	0	5	1	2	1	1.4	2		0.0	Very Low	Local sources of groundwater in this basin are categorized as suitable to inferior for domestic use. The water categorized as inferior typically contains high nitrate, TDS, or sulfate content (DWR 1967).	
84	1-11	COVELO ROUND VALLEY		North Coast	NRO	16,396	25.6	1,968	1	5	2	4	1	0	0	0.0			0.0	Very Low		
85	1-39	BRANSCOMB TOWN AREA		North Coast	NCRO	1,381	2.2	95	1	0	0	4	0	1	5	2.4			0.0	Very Low		
86	1-40	TEN MILE RIVER VALLEY		North Coast	NCRO	1,491	2.3	61	1	0	0	4	0	1	2	1.3			0.0	Very Low		
87	1-53	SANEL VALLEY		North Coast	NCRO	5,568	8.7	698	1	0	4	4	5	2	3	2.1			0.0	Very Low		
88	1-57	BODEGA BAY AREA		North Coast	NCRO	2,676	4.2	719	1	0	5	4	0	1	5	2.4			0.0	Very Low		
89	1-6	HAYFORK VALLEY		North Coast	NRO	3,295	5.1	814	1	0	0	4	3	2	4	2.5			0.0	Very Low		
90	1-60	LOWER RUSSIAN RIVER VALLEY		North Coast	NCRO	6,640	10.4	3,754	2	2	5	4	3	2	3	2.1	1		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)	
91	1-61	FORT ROSS TERRACE DEPOSITS		North Coast	NCRO	8,483	13.3	1,075	1	2	4	4	0	1	5	2.4	1		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).	
92	1-8.01	MAD RIVER VALLEY	MAD RIVER LOWLAND	North Coast	NRO	13,981	21.8	14,204	2	2	1	4	1	0	0	0.0			0.0	Very Low		
93	1-8.02	MAD RIVER VALLEY	DOWS PRAIRIE SCHOOL AREA	North Coast	NRO	25,570	40.0	23,086	2	1	3	4	3	0	0	0.0			0.0	Very Low		
94	1-9	EUREKA PLAIN		North Coast	NRO	37,405	58.4	50,231	2	1	1	4	1	2	2	1.8			9.5	Low		
95	2-2.03	NAPA-SONOMA VALLEY	NAPA-SONOMA LOWLANDS	San Francisco Bay	NCRO	40,455	63.2	58,367	2	0	2	4	2	2	1	1.4			9.9	Low		
96	2-26	PESCADERO VALLEY		San Francisco Bay	NCRO	2,904	4.5	571	1	0	4	4	3	2	3	2.1			0.0	Very Low		
97	2-28	ROSS VALLEY		San Francisco Bay	NCRO	1,763	2.8	7,194	4	2	0	4	0	0	1	0.4			0.0	Very Low		

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
98	2-33	ISLAIS VALLEY		San Francisco Bay	NCRO	5,937	9.3	131,576	5	1	0	4	0	0	1	0.4			0.0	Very Low		
99	3-3.03	GILROY-HOLLISTER VALLEY	HOLLISTER AREA	Central Coast	SCRO	32,729	51.1	22,013	2	1	4	4	3	2	3	2.1			14.4	Medium		
100	3-4.01	SALINAS VALLEY	180/400 FOOT AQUIFER	Central Coast	SCRO	84,321	131.8	55,740	2	0	4	4	5	5	5	4.4	5		22.1	High	Coastal basin with saline intrusion in both 180-Foot and 400-Foot aquifers due to excessive groundwater pumping	
101	3-4.02	SALINAS VALLEY	EAST SIDE AQUIFER	Central Coast	SCRO	57,452	89.8	128,646	3	4	4	4	5	5	5	4.4	3		25.1	High	Overdraft conditions in basin, high TDS and Nitrates exceeding drinking water standards in portions of the basin	
102	3-4.10	SALINAS VALLEY	CORRAL DE TIERRA AREA	Central Coast	SCRO	22,274	34.8	7,831	1	3	4	4	1	3	5	3.4			15.1	Medium		
103	4-5	ACTON VALLEY		South Coast	SRO	8,300	13.0	2,280	1	4	5	4	1	1	4	2.0	1		0.0	Very Low	Locally high concentrations of TDS, sulfate, and chloride and two wells in the basin with known concentrations of nitrates exceeding MCL (B-118).	
104	5-11	MOHAWK VALLEY		Sacramento River	NRO	18,987	29.7	1,375	1	0	3	4	1	0	0	0.0			0.0	Very Low		
105	5-12.02	SIERRA VALLEY	CHILCOOT	Sacramento River	NRO	7,551	11.8	308	1	0	3	4	3	1	2	1.3			0.0	Very Low		
106	5-18	COYOTE VALLEY		Sacramento River	NRO	6,528	10.2	2,252	1	5	2	4	3	2	3	2.1			0.0	Very Low		
107	5-19	COLLAYOMI VALLEY		Sacramento River	NRO	6,497	10.2	1,513	1	4	2	4	1	2	3	2.1			0.0	Very Low		
108	5-21.50	SACRAMENTO VALLEY	RED BLUFF	Sacramento River	NRO	274,489	428.9	28,053	1	2	2	4	2	2	5	2.9	2		14.4	Medium	Some gw quality impairments as per B-118, declining gw levels in west-side subdivision, and very high number of domestic gw use wells.	
109	5-21.51	SACRAMENTO VALLEY	CORNING	Sacramento River	NRO	205,473	321.1	18,852	1	2	1	4	3	4	4	3.5	2	2	16.8	Medium	Continued GW level decline over most of the basin.	This basin is becoming increasing dependent on GW due to uncertain reliability of CVP TCCA surface water supply.
110	5-21.58	SACRAMENTO VALLEY	WEST BUTTE	Sacramento River	NRO	181,479	283.6	36,152	1	4	2	4	5	5	5	4.4	3	1	22.1	High	Declining GW levels within the City of Chico and Durham areas (30-40' decline in mid-aquifer gw levels since 1998). High Nitrates in north and west Chico area. High density of GW contamination plumes surrounding City of Chico.	GW serves as a source of underflow to Butte Creek, which has endangered spring-run salmon.
111	5-21.59	SACRAMENTO VALLEY	EAST BUTTE	Sacramento River	NRO	265,312	414.6	38,465	1	4	2	4	5	4	1	2.4		1	17.1	Medium		GW basin provides underflow to Butte Creek which supports endangered spring-run salmon.
112	5-21.61	SACRAMENTO VALLEY	SOUTH YUBA	Sacramento River	NCRO	104,486	163.3	45,014	2	1	3	4	4	3	2	2.3			14.3	Medium		
113	5-21.62	SACRAMENTO VALLEY	SUTTER	Sacramento River	NCRO	234,264	366.0	82,125	1	4	2	4	5	2	1	1.4			15.1	Medium		
114	5-21.64	SACRAMENTO VALLEY	NORTH AMERICAN	Sacramento River	NCRO	340,170	531.5	832,746	3	3	4	4	3	5	3	3.6	1	1	20.9	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).
115	5-21.66	SACRAMENTO VALLEY	SOLANO	Sacramento River	NCRO	424,832	663.8	119,263	1	3	2	4	5	3	2	2.3			15.0	Medium		
116	5-21.68	SACRAMENTO VALLEY	CAPAY VALLEY	Sacramento River	NCRO	24,970	39.0	550	1	0	1	4	3	4	3	3.1			10.4	Low		
117	5-22.01	SAN JOAQUIN VALLEY	EASTERN SAN JOAQUIN	San Joaquin River	NCRO	707,073	1,104.8	582,662	2	4	3	4	5	3	2	2.3	3	2	23.0	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.

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
118	5-22.02	SAN JOAQUIN VALLEY	MODESTO	San Joaquin River	SCRO	246,518	385.2	294,872	2	3	4	4	4	5	2	3.3	4		22.3	High	Water quality degradation due to industrial and agricultural practices	
119	5-22.03	SAN JOAQUIN VALLEY	TURLOCK	San Joaquin River	SCRO	347,146	542.4	197,605	2	3	3	4	5	5	2	3.3	2		20.0	High	Groundwater overdraft documented in local GWMP.	
120	5-22.04	SAN JOAQUIN VALLEY	MERCED	San Joaquin River	SCRO	491,255	767.6	173,731	1	4	2	4	4	4	3	3.1	4		20.1	High	Overdraft and water quality degradation (MAGPI GWMP).	
121	5-22.06	SAN JOAQUIN VALLEY	MADERA	San Joaquin River	SCRO	393,429	614.7	116,919	1	5	2	4	5	5	3	3.6	5		23.4	High	Subsidence, critical overdraft, water quality degradation	
122	5-22.11	SAN JOAQUIN VALLEY	KAWEAH	Tulare Lake	SCRO	446,283	697.3	271,700	2	5	3	4	5	3	2	2.3	5		24.0	High	Overdraft, water quality issues.	
123	5-22.15	SAN JOAQUIN VALLEY	TRACY	San Joaquin River	NCRO	344,884	538.9	268,175	2	4	3	4	5	1	1	0.9	2		18.6	Medium	Poor water quality throughout the subbasin.(B-118)	
124	5-22.16	SAN JOAQUIN VALLEY	COSUMNES	San Joaquin River	NCRO	280,490	438.3	59,163	1	2	2	4	3	3	4	3.0			13.3	Medium		
125	5-26	WALKER BASIN CREEK VALLEY		Tulare Lake	SCRO	7,693	12.0	249	1	0	1	4	2	0	1	0.4			0.0	Very Low		
126	5-27	CUMMINGS VALLEY		Tulare Lake	SCRO	10,051	15.7	7,665	2	5	4	4	3	2	5	2.9	1	1	21.1	High	Basin in slight overdraft conditions	Adjudicated basin
127	5-50	NORTH FORK BATTLE CREEK		Sacramento River	NRO	12,755	19.9	528	1	0	3	4	1	0	1	0.4			0.0	Very Low		
128	5-6.01	REDDING AREA	BOWMAN	Sacramento River	NRO	78,426	122.5	7,165	1	5	2	4	1	2	2	1.8	1		14.5	Medium	Some localized high boron.	
129	5-87	MIDDLE FORK FEATHER RIVER		Sacramento River	NRO	4,342	6.8	177	1	0	2	4	1	0	2	0.8			0.0	Very Low		
130	5-9	INDIAN VALLEY		Sacramento River	NRO	29,413	46.0	1,718	1	0	2	4	3	0	2	0.8			0.0	Very Low		
131	5-94	MIDDLE CREEK		Sacramento River	NRO	705	1.1	10	1	0	0	4	1	2	4	2.5			0.0	Very Low		
132	5-95	MEADOW VALLEY		Sacramento River	NRO	5,734	9.0	387	1	0	2	4	1	1	2	1.3			0.0	Very Low		
133	6-5.03	TAHOE VALLEY	TAHOE NORTH	North Lahontan	NCRO	1,931	3.0	3,410	3	0	5	4	0	2	3	2.1			0.0	Very Low		
134	6-67	MARTIS VALLEY		North Lahontan	NCRO	36,381	56.8	14,743	2	4	3	4	0	2	5	2.9			14.9	Medium		
135	7-20	MORONGO VALLEY		Colorado River	SRO	7,286	11.4	2,983	2	5	5	4	0	0	0	0.0			0.0	Very Low		
136	7-26	TERWILLIGER VALLEY		Colorado River	SRO	8,081	12.6	1,085	1	5	1	4	1	1	5	2.4	1		0.0	Very Low	Locally elevated nitrates (B-118).	
137	8-2.03	UPPER SANTA ANA VALLEY	RIVERSIDE-ARLINGTON	South Coast	SRO	58,903	92.0	336,884	4	2	4	4	1	4	3	3.1	5		21.9	High	Water quality degradation issues known in several public supply wells.	
138	8-2.09	UPPER SANTA ANA VALLEY	TEMESCAL	South Coast	SRO	23,654	37.0	141,436	4	2	3	4	1	3	2	2.3	2		17.0	Medium	Groundwater quality impaired by nitrates and inorganics in some wells (B-118).	
139	8-9	BEAR VALLEY		South Coast	SRO	19,667	30.7	16,866	2	1	5	4	1	1	4	2.0	1		14.8	Medium	Fluoride problems in some wells (B-118).	
140	9-10	SAN PASQUAL VALLEY		South Coast	SRO	4,563	7.1	968	1	0	2	4	4	5	5	4.4	3	1	17.4	Medium	Nitrate problems are widespread (B-118). TDS is also known to be high in places. During dry years, the basin has experienced water level declines up to 20 feet in one year per GWMP.	LWU data based on DAU does not accurately depict Irrigated Acreage. 2006 Farmland Mapping Data indicate irrigated acreage is 2,691 and quick GIS estimate by SRO indicates irrigated acreage is at least 2,100 acres.
141	9-12	SAN DIEGUITO CREEK		South Coast	SRO	3,578	5.6	3,135	2	2	0	4	3	2	1	1.4			0.0	Very Low		
142	9-18	OTAY VALLEY		South Coast	SRO	6,869	10.7	39,191	4	1	0	4	1	2	1	1.4	5		0.0	Very Low	Groundwater is marginal to inferior for domestic use in the coastal plain due to high TDS content and suitable in the eastern part of the basin and is marginal to inferior for irrigation due to high chloride concentrations (B-118 & DWR 1967).	
143	9-23	SAN ELIJO VALLEY		South Coast	SRO	888	1.4	1,125	2	4	0	4	1	2	1	1.4	5		0.0	Very Low	High TDS limits beneficial uses (B-118)	
144	9-25	RANCHITA TOWN AREA		South Coast	SRO	3,146	4.9	168	1	0	0	4	1	2	5	2.9			0.0	Very Low		
145	9-29	POTRERO VALLEY		South Coast	SRO	2,035	3.2	475	1	0	4	4	1	2	5	2.9			0.0	Very Low		
146	9-32	SAN MARCOS AREA		South Coast	SRO	2,144	3.3	15,096	5	3	0	4	0	2	0	1.0			0.0	Very Low		
147	9-5	TEMECULA VALLEY		South Coast	SRO	88,338	138.0	219,431	3	5	3	4	1	3	3	2.6	5	1	23.4	High	Groundwater source is impaired in various parts of the basin due to elevated nitrates, fluoride, sulfates, TDS, and VOCs (B-118).	Basin is under Federal adjudication.

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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						
148	9-6	CAHUILLA VALLEY		South Coast	SRO	18,342	28.7	1,993	1	3	3	4	1	2	5	2.9	1	1	15.6	Medium	Locally, sulfates and nitrates are high for domestic use (DWR 1975). Nitrate concentrations reach as much as 128 mg/L (Moyle 1976).	Basin is federally adjudicated.
149	9-7	SAN LUIS REY VALLEY		South Coast	SRO	29,865	46.7	43,942	2	1	5	4	3	3	1	1.9	3		18.1	Medium	TDS is a concern according to MWD. B-118 indicates problems with nitrates, inorganics, radiologicals, and VOCs. Desalination generally required in all areas of the basin.	
150	1-10	EEL RIVER VALLEY		North Coast	NRO	73,701	115.2	21,558	1	2	2	3	3	4	5	3.9		1	14.4	Medium		Shallow basin with strong SW-GW interaction and fishery issues. Useable gw basin storage is estimated at 100,000 af and annual use is estimated at over one-half the total storage.
151	1-15	HAPPY CAMP TOWN AREA		North Coast	NRO	2,771	4.3	759	1	0	0	3	1	1	2	1.3			0.0	Very Low		
152	1-20	GARCIA RIVER VALLEY		North Coast	NCRO	2,242	3.5	119	1	0	0	3	2	0	4	1.5			0.0	Very Low		
153	1-27	BIG LAGOON AREA		North Coast	NRO	13,343	20.8	2,465	1	3	4	3	0	0	5	1.9			0.0	Very Low		
154	1-35	HYAMPOM VALLEY		North Coast	NRO	1,354	2.1	52	1	0	0	3	1	1	4	2.0			0.0	Very Low		
155	1-38	LOWER LAYTONVILLE VALLEY		North Coast	NCRO	2,152	3.4	107	1	0	0	3	0	1	5	2.4			0.0	Very Low		
156	1-4	SHASTA VALLEY	SHASTA VALLEY	North Coast	NRO	52,589	82.2	5,333	1	5	1	3	4	5	1	2.9	1	3	19.1	Medium	High Nitrates, ASAR, and TDS in portions of the basin. TMDL temperature issues along gw fed rivers.	Strong SW-GW Interaction and significant local issues regarding gw mgmt. Basin underflow from Pluto's Cave Basalts and portions of debris flow contribute to surface water flow and low temps in the Shasta River, which supports threatened salmon population.
157	1-43	WILLIAMS VALLEY		North Coast	NCRO	1,642	2.6	2	0	0	0	3	0	2	3	2.1			0.0	Very Low		
158	1-49	ANNAPOLIS OHLSON RANCH FM HIGHLANDS		North Coast	NCRO	8,646	13.5	233	1	0	0	3	1	1	5	2.4			0.0	Very Low		
159	1-5	SCOTT RIVER VALLEY		North Coast	NRO	63,780	99.7	3,520	1	0	1	3	4	4	3	3.1		3	13.4	Medium		GW Basin contributes to surface water flow in the Scott River which supports an threatened/endangered salmon. Adjudicated basin. Currently being reviewed for Public Trust issues regarding GW management.
160	1-50	KNIGHTS VALLEY		North Coast	NCRO	4,086	6.4	102	1	0	0	3	4	1	2	1.3			0.0	Very Low		
161	1-7	HOOPA VALLEY		North Coast	NRO	3,894	6.1	1,797	2	2	0	3	1	1	5	2.4			0.0	Very Low		
162	2-11	SUNOL VALLEY		San Francisco Bay	NCRO	16,623	26.0	808	1	0	0	3	1	0	0	0.0			0.0	Very Low		
163	2-24	SAN GREGORIO VALLEY		San Francisco Bay	NCRO	1,074	1.7	66	1	0	0	3	3	2	3	2.1			0.0	Very Low		
164	2-3	SUISUN-FAIRFIELD VALLEY		San Francisco Bay	NCRO	133,505	208.6	136,754	2	5	1	3	1	0	0	0.0			0.0	Very Low		
165	2-38	LOBOS		San Francisco Bay	NCRO	2,359	3.7	59,119	5	0	0	3	0	0	0	0.0	1		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)	
166	2-39	MARINA		San Francisco Bay	NCRO	2,186	3.4	45,294	5	0	0	3	0	0	0	0.0	1		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)	
167	3-15	SANTA YNEZ RIVER VALLEY		Central Coast	SRO	204,642	319.8	75,460	1	1	3	3	2	2	5	2.9	3		14.6	Medium	Overdraft has been documented by the county in the past. Also some groundwater quality impairments.	
168	3-18	CARPINTERIA		Central Coast	SRO	8,140	12.7	14,561	3	0	4	3	4	0	0	0.0			0.0	Very Low		
169	3-22	SANTA ANA VALLEY		Central Coast	SCRO	2,724	4.3	76	1	0	0	3	2	1	5	2.4			0.0	Very Low		
170	3-25	TRES PINOS VALLEY		Central Coast	SCRO	3,385	5.3	48	1	0	4	3	3	1	5	2.4			0.0	Very Low		
171	3-3.02	GILROY-HOLLISTER VALLEY	BOLSA AREA	Central Coast	SCRO	20,912	32.7	2,935	1	1	1	3	4	1	4	2.0	4		14.3	Medium	Water quality degradation, overdraft	
172	3-3.04	GILROY-HOLLISTER VALLEY	SAN JUAN BAUTISTA AREA	Central Coast	SCRO	74,305	116.1	26,150	1	1	3	3	2	1	4	2.0	4		14.8	Medium	Poor water quality due to high TDS	
173	3-4.04	SALINAS VALLEY	FOREBAY AQUIFER	Central Coast	SCRO	94,025	146.9	43,867	2	1	2	3	5	5	5	4.4			15.4	Medium		
174	4-12	SAN FERNANDO VALLEY		South Coast	SRO	145,354	227.1	1,745,338	5	3	3	3	1	4	2	2.8	3	1	20.8	High	Several public supply wells have shown contamination per Bulletin 118.	Basin is adjudicated.

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
175	4-13	SAN GABRIEL VALLEY		South Coast	SRO	127,278	198.9	1,275,187	5	1	5	3	1	5	4	4.0	1		19.0	Medium	Superfund sites are present within the basin and other areas with water quality impacts are known.	
176	4-19	THOUSAND OAKS AREA		South Coast	SRO	3,115	4.9	17,202	4	1	0	3	0	1	1	0.9	5		0.0	Very Low	High TDS, alkalinity, and hardness in the basin (B-118).	
177	4-3.02	VENTURA RIVER VALLEY	LOWER VENTURA RIVER	South Coast	SRO	5,312	8.3	15,920	3	1	0	3	1	1	1	0.9	3		0.0	Very Low	Oil, high sulfates, nitrates, and hydrogen sulfide are documented to be present in the basin.	
178	4-4.03	SANTA CLARA RIVER VALLEY	MOUND	South Coast	SRO	14,846	23.2	77,886	4	2	1	3	3	3	1	1.9	1		14.4	Medium	Some primary and secondary inorganic contaminants above the MCL (B-118).	
179	4-4.07	SANTA CLARA RIVER VALLEY	SANTA CLARA RIVER VALLEY EAST	South Coast	SRO	66,417	103.8	221,204	3	5	4	3	1	3	1	1.9	5		21.9	High	GW Quality Impacts: Nitrates, TCE, TDS, perchlorates, etc. (B-118)	
180	5-16	HIGH VALLEY		Sacramento River	NRO	2,356	3.7	34	1	0	3	3	1	2	4	2.5			0.0	Very Low		
181	5-21.52	SACRAMENTO VALLEY	COLUSA	Sacramento River	NRO	917,793	1,434.1	48,369	1	3	1	3	5	2	2	1.8	3	3	18.8	Medium	Severely declining GW levels along the west-side of Glenn Co. Moderately declining GW levels in the Capay area. High TDS shallow aquifer in Maxwell-Williams area.	Increase in housing development along I5. GW-SW interaction is important to maintaining waterfowl refuges. Area is being highlighted as solution area for Delta outflow issues...proposed increase in CU and GW pumping.
182	5-21.53	SACRAMENTO VALLEY	BEND	Sacramento River	NRO	21,748	34.0	554	1	0	1	3	1	0	0	0.0			0.0	Very Low		
183	5-21.55	SACRAMENTO VALLEY	DYE CREEK	Sacramento River	NRO	27,709	43.3	1,626	1	0	1	3	3	5	3	3.6	1	2	13.1	Medium	Some documented Boron issues along east-side of basin.	Strong SW-GW interaction. GW Basin provides underflow to Mill Creek which supports endangered spring-run salmon.
184	5-21.56	SACRAMENTO VALLEY	LOS MOLINOS	Sacramento River	NRO	33,148	51.8	2,220	1	0	2	3	2	5	3	3.6	1	2	13.4	Medium	Boron issues along east-side of basin.	GW basin provides underflow to Mill Creek which supports endangered spring-run salmon. High sw-gw interaction for much of the western basin.
185	5-21.60	SACRAMENTO VALLEY	NORTH YUBA	Sacramento River	NCRO	103,152	161.2	14,667	1	1	2	3	4	5	2	3.3			12.5	Low		
186	5-22.05	SAN JOAQUIN VALLEY	CHOWCHILLA	San Joaquin River	SCRO	159,319	248.9	15,820	1	4	2	3	5	5	3	3.6	5	3	24.6	High	Overdraft, subsidence, water quality degradation	The basin is strategically important for it's agricultural production.
187	5-22.07	SAN JOAQUIN VALLEY	DELTA-MENDOTA	San Joaquin River	SCRO	746,697	1,166.7	107,879	1	5	1	3	5	3	2	2.3	2	3	20.3	High	Overdraft issues in basin discussed in San Luis and Delta Mendota Water Authority GWMP	Important agricultural region.
188	5-22.12	SAN JOAQUIN VALLEY	TULARE LAKE	Tulare Lake	SCRO	524,539	819.6	125,701	1	4	1	3	5	5	3	3.6	5		20.6	High	Subsidence, overdraft, water quality degradation	
189	5-22.13	SAN JOAQUIN VALLEY	TULE	Tulare Lake	SCRO	469,959	734.3	108,660	1	4	2	3	5	5	4	4.0	4		21.0	High	Critical aquifer overdraft conditions in basin. High Nitrate and TDS in some locations and some inorganic contamination issues.	
190	5-25	KERN RIVER VALLEY		Tulare Lake	SCRO	79,678	124.5	10,364	1	1	4	3	1	0	0	0.0			0.0	Very Low		
191	5-30	LOWER LAKE VALLEY		Sacramento River	NRO	2,404	3.8	2,694	2	0	5	3	1	2	4	2.5			0.0	Very Low		
192	5-31	LONG VALLEY		Sacramento River	NRO	2,799	4.4	194	1	0	0	3	2	2	4	2.5			0.0	Very Low		
193	5-48	BURNEY CREEK VALLEY		Sacramento River	NRO	2,352	3.7	1,466	2	1	0	3	5	2	2	1.8			0.0	Very Low		
194	5-5	FALL RIVER VALLEY		Sacramento River	NRO	54,803	85.6	1,629	1	0	1	3	4	2	2	1.8	1	1	11.0	Low	Locally high nitrates. Variable gw level trends with some regions showing declines.	Strong sw-gw interaction and gw dependent fisheries.
195	5-6.02	REDDING AREA	ROSEWOOD	Sacramento River	NRO	46,455	72.6	1,009	1	0	0	3	1	0	0	0.0			0.0	Very Low		
196	5-6.05	REDDING AREA	MILLVILLE	Sacramento River	NRO	65,226	101.9	2,640	1	0	1	3	1	0	0	0.0			0.0	Very Low		
197	5-63	STONYFORD TOWN AREA		Sacramento River	NRO	6,437	10.1	183	1	0	3	3	2	1	2	1.3			0.0	Very Low		
198	5-82	CUDDY CANYON VALLEY		Tulare Lake	SCRO	3,308	5.2	2,641	2	4	5	3	0	1	5	2.4			0.0	Very Low		
199	5-84	CUDDY VALLEY		Tulare Lake	SCRO	3,474	5.4	779	1	0	5	3	0	1	5	2.4			0.0	Very Low		
200	6-108	OLYMPIC VALLEY		North Lahontan	NCRO	702	1.1	471	2	0	5	3	0	2	3	2.1			0.0	Very Low		

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
201	6-4	HONEY LAKE VALLEY		North Lahontan	NRO	311,741	487.1	23,566	1	0	1	3	2	2	3	2.1	2	2	11.9	Low	GW Quality Issues: High boron, arsenic, ASAR, TDS, and Nitrates between Lichfield and Honey Lake, east of Honey Lake, and north of Herlong area. GW contamination from Herlong Army depot. Increased GW demand associated with prison expansion.	Interstate basin. Local concerns over gw export from Fish Springs Ranch to Reno.
202	6-45	TEHACHAPI VALLEY EAST		South Lahontan	SRO	24,055	37.6	480	1	0	2	3	1	0	5	1.9	5		0.0	Very Low	Court adjudicated basin in overdraft. Groundwater quality issues.	
203	6-6	CARSON VALLEY		North Lahontan	NCRO	10,716	16.7	328	1	0	3	3	3	0	0	0.0			0.0	Very Low		
204	6-7	ANTELOPE VALLEY		North Lahontan	NCRO	20,125	31.4	876	1	0	3	3	5	0	0	0.0			0.0	Very Low		
205	6-96	EAGLE LAKE AREA		North Lahontan	NRO	12,700	19.8	41	0	0	0	3	0	1	1	0.9			0.0	Very Low		
206	8-2.01	UPPER SANTA ANA VALLEY	CHINO	South Coast	SRO	154,693	241.7	898,653	4	2	4	3	2	4	4	3.5	4	1	22.3	High	Locally high nitrates and TDS.	Basin is adjudicated.
207	8-2.04	UPPER SANTA ANA VALLEY	RIALTO-COLTON	South Coast	SRO	30,224	47.2	145,832	4	1	4	3	1	5	4	4.0	5		21.0	High	Extensive perchlorate contamination in basin.	
208	8-2.06	UPPER SANTA ANA VALLEY	BUNKER HILL	South Coast	SRO	80,972	126.5	363,394	4	1	5	3	1	5	4	4.0			17.0	Medium		
209	8-2.07	UPPER SANTA ANA VALLEY	YUCAIPA	South Coast	SRO	25,410	39.7	65,180	3	1	4	3	1	4	4	3.5	5		19.5	Medium	Groundwater extractions exceeds recharge. Documented impacts of nitrates and sulfates. (B-118)	
210	8-4	ELSINORE		South Coast	SRO	25,873	40.4	60,946	3	4	4	3	1	2	3	2.1	3	1	20.1	High	High TDS due to Nitrate and Sulfate in some portions of the basin (Elsinore Gw AdvisoryComm). Some fluoride impacts to groundwater (B-118).	Study done for Elsinore Basin GW Advisory Committee (Nov. 2012) indicates an average annual gw budget deficit of 1,800 af/yr for the last 11 years. Between 1990 and 2000 cumulative deficit was 19,000 af.
211	8-5	SAN JACINTO		South Coast	SRO	188,623	294.7	474,317	3	4	2	3	2	2	3	2.1	5		19.9	High	Basin is in overdraft (MWD). Groundwater quality issues documented in DWR B-118. Pumping has increased some contaminant distribution in the basin.	
212	9-1	SAN JUAN VALLEY		South Coast	SRO	16,797	26.2	61,131	3	1	3	3	2	2	1	1.4	2		14.1	Medium	TDS is generally high, springs with high fluorine, local pesticide contamination, and secondary inorganic contamination (B-118). Desalters used to treat water.	
213	9-19	TIA JUANA		South Coast	SRO	7,448	11.6	50,694	5	1	0	3	1	2	1	1.4	5	1	0.0	Very Low	Chloride and sulfate exceed MCL in some wells(Izbicki 1985). MCL for aluminum, barium, lead, selenium, and silver concentrations are exceeded individually in some wells (Dudek 1994).	Adjudicated
214	9-28	CAMPO VALLEY		South Coast	SRO	3,569	5.6	985	1	0	4	3	1	2	5	2.9		1	0.0	Very Low		Basin area is listed by EPA as a "Sole Source Aquifer" in EPA Region 9.
215	9-4	SANTA MARGARITA VALLEY		South Coast	SRO	7,998	12.5	4,121	2	1	4	3	1	4	5	3.9	2	1	16.9	Medium	Groundwater in SW part of basin is marginal to inferior for domestic and agricultural uses (DWR 1967). Mg, SO4, Cl, NO3, and TDS concentrations are locally high for domestic. Use; Cl, B, and TDS are locally high for ag use (DWR 1975).	Basin is federally adjudicated.
216	1-14	LOWER KLAMATH RIVER VALLEY		North Coast	NRO	7,026	11.0	806	1	0	5	2	1	1	5	2.4			0.0	Very Low		
217	1-18	RED ROCK VALLEY		North Coast	NRO	8,996	14.1	23	0	0	0	2	4	0	0	0.0			0.0	Very Low		
218	1-26	REDWOOD CREEK AREA		North Coast	NRO	1,996	3.1	234	1	0	4	2	2	2	5	2.9			0.0	Very Low		
219	1-3	BUTTE VALLEY		North Coast	NRO	79,689	124.5	1,464	1	0	1	2	3	4	5	3.9	2	1	12.6	Medium	Some high TDS wells. Declining GW levels over the last 5-years and increases agricultural acreage.	Strong sw-gw interaction and reliance of gw for Meiss Lake wildlife area.
220	1-34	DINSMORES TOWN AREA		North Coast	NRO	2,276	3.6	183	1	0	5	2	1	1	5	2.4			0.0	Very Low		
221	1-36	HETTENSHAW VALLEY		North Coast	NRO	846	1.3	5	0	0	0	2	0	1	0	0.5			0.0	Very Low		
222	1-37	COTTONEVA CREEK VALLEY		North Coast	NCRO	763	1.2	1	0	0	0	2	0	1	2	1.3			0.0	Very Low		
223	1-41	LITTLE VALLEY		North Coast	NCRO	812	1.3	11	1	0	0	2	0	1	2	1.3			0.0	Very Low		
224	1-42	SHERWOOD VALLEY		North Coast	NCRO	1,150	1.8	13	1	0	0	2	0	2	3	2.1			0.0	Very Low		
225	1-45	BIG RIVER VALLEY		North Coast	NCRO	1,685	2.6	29	1	0	5	2	0	1	2	1.3			0.0	Very Low		
226	1-46	NAVARRO RIVER VALLEY		North Coast	NCRO	770	1.2	36	1	0	0	2	0	0	5	1.9			0.0	Very Low		

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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						
227	1-48	GRAVELLY VALLEY		North Coast	NRO	2,974	4.6	6	0	0	5	2	0	2	0	1.0			0.0	Very Low		
228	3-12	SANTA MARIA		Central Coast	SRO	184,248	287.9	201,759	2	3	4	2	3	4	5	3.9	4		20.6	High	Documented overdraft of basin. Water quality degradation due to farming practices.	
229	3-14	SAN ANTONIO CREEK VALLEY		Central Coast	SRO	81,941	128.0	2,279	1	0	1	2	2	1	5	2.4	4	2	13.4	Medium	Overdraft, water quality degradation	Santa Barbara Water Element, Table 1, p.10, indicates San Antonio basin overdraft by ~ 9,000 af/yr
230	3-20	ANO NUEVO AREA		Central Coast	SCRO	2,030	3.2	46	1	0	4	2	3	2	4	2.5			0.0	Very Low		
231	3-31	HERNANDEZ VALLEY		Central Coast	SCRO	2,865	4.5	3	0	0	0	2	0	1	5	2.4			0.0	Very Low		
232	3-4.05	SALINAS VALLEY	UPPER VALLEY AQUIFER	Central Coast	SCRO	98,164	153.4	15,862	1	1	2	2	4	5	5	4.4	1		13.9	Medium	Poor quality water along the eastern side of subbasin. PSW above MCL for inorganics and Nitrates (B-118).	
233	3-51	MAJORS CREEK		Central Coast	SCRO	364	0.6	53	1	0	0	2	5	2	4	2.5			0.0	Very Low		
234	3-6	LOCKWOOD VALLEY		Central Coast	SCRO	59,933	93.6	1,171	1	0	2	2	1	0	5	1.9			0.0	Very Low		
235	4-10	CONEJO		South Coast	SRO	18,848	29.4	96,704	4	2	1	2	1	1	1	0.9	1		11.1	Low	Locally high TDS in basin and one well with nitrate levels above MCL (B-118).	
236	4-16	HIDDEN VALLEY		South Coast	SRO	2,217	3.5	503	1	0	4	2	1	1	1	0.9			0.0	Very Low		
237	4-2	OJAI VALLEY		South Coast	SRO	6,851	10.7	8,268	2	0	4	2	3	4	1	2.4	2		14.1	Medium	High nitrates and sulfates reported in the basin. Medium to high levels of nitrates reported in the basin.	
238	4-20	RUSSELL VALLEY		South Coast	SRO	3,087	4.8	18,860	4	0	0	2	0	1	1	0.9	3		0.0	Very Low	TDS and sulfate exceed MCL for some wells in the basin per Bulletin 118.	
239	4-4.04	SANTA CLARA RIVER VALLEY	SANTA PAULA	South Coast	SRO	22,899	35.8	46,816	3	1	3	2	4	5	1	2.9	5		19.4	Medium	Nitrates can fluctuate significantly in the basin, and above MCL. Other inorganics present above MCL. TDS is known to be high.	
240	4-6	PLEASANT VALLEY		South Coast	SRO	21,654	33.8	69,392	3	3	4	2	4	5	1	2.9			17.4	Medium		
241	5-1.02	GOOSE LAKE	FANDANGO VALLEY	Sacramento River	NRO	18,439	28.8	124	0	0	1	2	2	0	0	0.0			0.0	Very Low		
242	5-12.01	SIERRA VALLEY	SIERRA VALLEY	Sacramento River	NRO	117,680	183.9	2,196	1	5	1	2	3	1	2	1.3	4	2	18.0	Medium	Declining GW Levels and artesian well production along the east and northeast side of the valley. Poor quality water in west-central side of valley (boron, fluoride, arsenic, & sodium).	Shallow Volcanic basin is highly reliant on GW (more than indicated by DAU analysis). Requires active GWM and current Sierra Valley GW Mgmt is not actively being implemented.
243	5-2.01	ALTURAS AREA	SOUTH FORK PITT RIVER	Sacramento River	NRO	114,164	178.4	4,429	1	0	1	2	3	1	2	1.3	1		8.0	Low	Declining GW Levels in some parts of the basin.	
244	5-2.02	ALTURAS AREA	WARM SPRINGS VALLEY	Sacramento River	NRO	68,009	106.3	964	1	0	1	2	3	1	2	1.3	1		8.0	Low		40' declining in GW levels since 2000, along the west side of the basin.
245	5-22.09	SAN JOAQUIN VALLEY	WESTSIDE	Tulare Lake	SCRO	640,504	1,000.8	27,285	1	1	1	2	5	2	3	2.1	5	5	20.4	High	Subsidence, critical overdraft, saline conditions, subsidence	Additional points added for critical agricultural importance, very high TDS and pesticide contamination issues
246	5-22.14	SAN JOAQUIN VALLEY	KERN COUNTY	Tulare Lake	SCRO	#####	3,047.1	700,323	1	5	2	2	4	3	2	2.3	5	1	20.8	High	Subsidence, overdraft, water quality degradation	Agricultural importance, large basin which results in low population density.
247	5-35	MCCLOUD AREA		Sacramento River	NRO	21,320	33.3	822	1	0	1	2	1	1	2	1.3			0.0	Very Low		
248	5-36	ROUND VALLEY		Sacramento River	NRO	7,266	11.4	27	0	0	0	2	3	1	3	1.6			0.0	Very Low		
249	5-4	BIG VALLEY		Sacramento River	NRO	92,050	143.8	1,046	1	0	1	2	3	2	2	1.8	3		10.5	Low	Declining GW Levels over much of the basin.	
250	5-40	HOT SPRINGS VALLEY		Sacramento River	NRO	2,404	3.8	12	0	0	0	2	3	0	1	0.4			0.0	Very Low		
251	5-45	CAYTON VALLEY		Sacramento River	NRO	1,306	2.0	2	0	0	0	2	5	0	2	0.8			0.0	Very Low		
252	5-66	CLEAR LAKE CACHE FORMATION		Sacramento River	NRO	29,717	46.4	7,960	1	5	1	2	1	2	4	2.5			11.8	Low		
253	5-68	POPE VALLEY		Sacramento River	NCRO	7,177	11.2	110	1	0	0	2	3	2	5	2.9			0.0	Very Low		
254	5-7	LAKE ALMANOR VALLEY		Sacramento River	NRO	7,152	11.2	2,121	1	0	3	2	3	1	2	1.3			0.0	Very Low		
255	5-83	CUDDY RANCH AREA		Tulare Lake	SCRO	4,213	6.6	774	1	0	5	2	1	1	4	2.0			0.0	Very Low		
256	5-85	MIL POTRERO AREA		Tulare Lake	SCRO	2,314	3.6	1,288	2	5	5	2	0	1	5	2.4			0.0	Very Low		
257	5-86	JOSEPH CREEK		Sacramento River	NRO	4,458	7.0	13	0	0	0	2	2	1	2	1.3			0.0	Very Low		

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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						
258	6-3	WILLOW CREEK VALLEY		North Lahontan	NRO	11,698	18.3	62	0	0	0	2	4	1	1	0.9			0.0	Very Low		
259	6-36.02	LANGFORD VALLEY	IRWIN	South Lahontan	SRO	10,557	16.5	8,845	2	5	1	2	0	0	5	1.9	3		0.0	Very Low	Locally high iron and fluoride concentrations.(B-118)	
260	6-44	ANTELOPE VALLEY		South Lahontan	SRO	#####	1,585.3	398,864	2	4	2	2	1	1	3	1.6	5	3	19.9	High	Closed basin. Water quality impacts per IRWMP, DWR B-118, and other sources. Extractions likely exceed natural recharge.	Pending Adjudication, water reliability issues, and renewed subsidence
261	7-27	SAN FELIPE VALLEY		Colorado River	SRO	23,573	36.8	188	0	0	1	2	0	1	5	2.4	3		0.0	Very Low	Significant groundwater declines documented in the late 1950s through early 1970s (B-118)	
262	7-47	JACUMBA VALLEY		Colorado River	SRO	2,472	3.9	517	1	0	4	2	0	1	5	2.4	5	3	0.0	Very Low	According to San Diego County documents, some wells are reportedly going dry; this is a small basin with over 500 residents and no source of imported water. TDS of some groundwaters recharging the basin are high.	According to aerial imagery review, GIS, and other docs, approximately 500 acres of crops are irrigated and Bulletin 118 boundary is significantly over exaggerated (incorporating bedrock areas probably 30 percent of which are included in Bull 118 boundary).
263	7-49	PIPES CANYON FAULT VALLEY		Colorado River	SRO	3,408	5.3	5	0	0	0	2	0	0	5	1.9			0.0	Very Low		
264	8-2.08	UPPER SANTA ANA VALLEY	SAN TIMOTEO	South Coast	SRO	73,541	114.9	54,169	2	5	3	2	1	3	3	2.6	3	1	18.9	Medium	Locally high nitrates and salinity (B-118). GAMA reported upper basin water quality issues.	Parts of the subbasin are adjudicated.
265	9-2	SAN MATEO VALLEY		South Coast	SRO	3,009	4.7	554	1	0	4	2	2	3	1	1.9	3		0.0	Very Low	Locally high TDS and some elevated nitrates in wells (B-118)	
266	9-22	BATIQUITOS LAGOON VALLEY		South Coast	SRO	745	1.2	2,109	3	5	0	2	1	2	1	1.4	4		0.0	Very Low	The groundwater in this basin was rated inferior for irrigation because of high chloride content and marginal for domestic use because of high sulfate and TDS concentrations (DWR 1967).	
267	9-27	COTTONWOOD VALLEY		South Coast	SRO	3,871	6.0	44	1	0	4	2	1	2	5	2.9		1	0.0	Very Low		Basin area is listed by EPA as a "Sole Source Aquifer" in EPA Region 9.
268	1-16	SEIAD VALLEY		North Coast	NRO	2,243	3.5	132	1	0	4	1	1	1	0	0.5			0.0	Very Low		
269	1-17	BRAY TOWN AREA		North Coast	NRO	8,027	12.5	0	0	0	0	1	2	2	5	2.9			0.0	Very Low		
270	1-2.01	KLAMATH RIVER VALLEY	TULELAKE	North Coast	NRO	85,934	134.3	2,261	1	0	1	1	5	5	1	2.9	4	2	15.4	Medium	Declining GW levels in lower aquifer. Local GW Quality issues. On-going high volume of gw being extracted associated with surface water cutbacks from Klamath Project and gw transfers associated with Klamath Basin Agreement	Interstate gw transfer issue. Strong sw-gw interaction and fisheries issues. Potential intra-basin issues associated with increased annual extraction.
271	1-2.02	KLAMATH RIVER VALLEY	LOWER KLAMATH	North Coast	NRO	75,333	117.7	41	0	0	0	1	3	1	2	1.3	1		5.3	Very Low	GW Quality issues in refuge area. High temp and high TDS for deep wells.	
272	1-25	PRAIRIE CREEK AREA		North Coast	NRO	20,013	31.3	4	0	0	0	1	0	1	5	2.4			0.0	Very Low		
273	1-28	MATTOLE RIVER VALLEY		North Coast	NRO	3,150	4.9	72	1	0	0	1	2	1	1	0.9			0.0	Very Low		
274	1-29	HONEYDEW TOWN AREA		North Coast	NRO	2,369	3.7	19	0	0	0	1	1	0	1	0.4			0.0	Very Low		
275	1-30	PEPPERWOOD TOWN AREA		North Coast	NRO	6,288	9.8	315	1	0	0	1	1	1	5	2.4			0.0	Very Low		
276	1-31	WEOTT TOWN AREA		North Coast	NRO	3,653	5.7	364	1	0	4	1	1	1	5	2.4			0.0	Very Low		
277	2-27	SAND POINT AREA		San Francisco Bay	NCRO	1,405	2.2	43	1	0	5	1	0	1	3	1.6			0.0	Very Low		
278	3-13	CUYAMA VALLEY		Central Coast	SRO	242,114	378.3	1,236	0	0	1	1	1	2	5	2.9	5	1	11.4	Low	Local salinity and TDS impairments in basin (B-118)	NRO: Declining Groundwater levels of 150-300' over the last 40-50 years (DWR, 1998). Conservation Assessment by TNC (2009) indicates annual gw budget deficit of ~ 28,500 af
279	3-19	CARRIZO PLAIN		Central Coast	SRO	210,896	329.5	440	0	0	1	1	0	0	5	1.9			0.0	Very Low		
280	3-28	SAN BENITO RIVER VALLEY		Central Coast	SCRO	24,223	37.8	101	0	0	2	1	1	1	5	2.4			0.0	Very Low		
281	3-30	BITTER WATER VALLEY		Central Coast	SCRO	32,222	50.3	38	0	0	0	1	1	1	5	2.4			0.0	Very Low		
282	3-32	PEACH TREE VALLEY		Central Coast	SCRO	9,791	15.3	7	0	0	0	1	1	1	5	2.4			0.0	Very Low		
283	3-4.06	SALINAS VALLEY	PASO ROBLES AREA	Central Coast	SCRO	597,241	933.2	56,077	1	4	2	1	1	1	5	2.4	4	5	19.9	High	Nitrate and TDS impacts to groundwater (B-118)	County groundwater ordinance banning further residential development in basin.
284	3-45	HUASNA VALLEY		Central Coast	SRO	4,706	7.4	55	1	0	0	1	1	0	0	0.0			0.0	Very Low		
285	3-5	CHOLAME VALLEY		Central Coast	SCRO	39,847	62.3	48	0	0	1	1	1	1	5	2.4			0.0	Very Low		

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
286	4-1	UPPER OJAI VALLEY		South Coast	SRO	3,815	6.0	616	1	0	2	1	2	1	1	0.9	5		0.0	Very Low	Groundwater has been documented to contain high levels of boron, sodium chloride, high TDS, sulfate, nitrates, iron, and chlorides (B-118)	
287	4-15	TIERRA REJADA		South Coast	SRO	4,611	7.2	3,673	2	3	0	1	2	1	1	0.9	1		0.0	Very Low	Locally high nitrates documented in the basin (B-118).	
288	4-17	LOCKWOOD VALLEY		South Coast	SRO	21,841	34.1	241	1	0	1	1	0	1	1	0.9	5		8.6	Low	Boron, arsenic, and radioactive uranium in some wells (B-118).	
289	4-23	RAYMOND		South Coast	SRO	26,310	41.1	223,100	5	2	5	1	0	5	4	4.0	4		20.8	High	Water quality impacts and a superfund.	
290	4-3.01	VENTURA RIVER VALLEY	UPPER VENTURA RIVER	South Coast	SRO	7,430	11.6	15,961	3	0	5	1	2	3	1	1.9	3		15.1	Medium	TDS is known to be high in some parts of the basin (B-118).	
291	4-4.02	SANTA CLARA RIVER VALLEY	OXNARD	South Coast	SRO	58,200	90.9	235,973	4	3	4	1	4	5	1	2.9	5		22.6	High	Saline intrusion, nitrates, pesticides, and PCBs have impacted some water wells per (B-118).	
292	4-4.05	SANTA CLARA RIVER VALLEY	FILLMORE	South Coast	SRO	20,842	32.6	16,417	2	2	4	1	5	5	1	2.9	5		20.4	High	Many groundwater quality impairments in the basin; Nitrates problematic during dry periods; High TDS, etc. (B-118)	
293	4-4.06	SANTA CLARA RIVER VALLEY	PIRU	South Coast	SRO	8,915	13.9	2,666	1	4	3	1	4	5	1	2.9	3		17.6	Medium	GW Quality impacts: nitrates, storm runoff, leaking tanks, etc. (B-118). High Selenium and other inorganics, average TDS was 1450 mg/l (Ventura co 2011 annual gw report)	
294	4-7	ARROYO SANTA ROSA VALLEY		South Coast	SRO	3,747	5.9	2,211	2	0	4	1	4	5	1	2.9	3		15.6	Medium	Elevated sulfates, nitrates, and TDS in the basin.(B-118)	
295	4-8	LAS POSAS VALLEY		South Coast	SRO	42,353	66.2	39,835	2	2	3	1	4	5	1	2.9	3		16.6	Medium	TDS is generally high in this basin.	
296	4-9	SIMI VALLEY		South Coast	SRO	12,192	19.0	98,625	5	1	2	1	1	1	1	0.9	3		0.0	Very Low	VOCs, elevated TDS, and nitrates (B-118)	
297	5-1.01	GOOSE LAKE	GOOSE VALLEY	Sacramento River	NRO	35,966	56.2	57	0	0	0	1	3	2	2	1.8			4.8	Very Low		
298	5-20	BERRYESSA VALLEY		Sacramento River	NCRO	1,375	2.1	0	0	0	0	1	0	2	5	2.9			0.0	Very Low		
299	5-22.10	SAN JOAQUIN VALLEY	PLEASANT VALLEY	Tulare Lake	SCRO	145,782	227.8	34,213	1	3	0	1	3	2	5	2.9			9.9	Low		
300	5-23	PANOCH VALLEY		Tulare Lake	SCRO	33,090	51.7	41	0	0	0	1	1	0	5	1.9			0.0	Very Low		
301	5-29	CASTAC LAKE VALLEY		Tulare Lake	SCRO	3,573	5.6	366	1	0	5	1	0	1	5	2.4			0.0	Very Low		
302	5-3	JESS VALLEY		Sacramento River	NRO	6,708	10.5	13	0	0	0	1	4	1	2	1.3			0.0	Very Low		
303	5-41	EGG LAKE VALLEY		Sacramento River	NRO	4,101	6.4	0	0	0	0	1	0	0	3	1.1			0.0	Very Low		
304	5-46	LAKE BRITTON AREA		Sacramento River	NRO	14,055	22.0	84	0	0	2	1	1	0	2	0.8			0.0	Very Low		
305	5-47	GOOSE VALLEY		Sacramento River	NRO	4,208	6.6	10	0	0	0	1	5	0	2	0.8			0.0	Very Low		
306	5-51	BUTTE CREEK VALLEY		Sacramento River	NRO	3,227	5.0	0	0	0	0	1	0	0	2	0.8			0.0	Very Low		
307	5-54	ASH VALLEY		Sacramento River	NRO	6,008	9.4	3	0	0	0	1	3	0	2	0.8			0.0	Very Low		
308	5-58	CLOVER VALLEY		Sacramento River	NRO	16,784	26.2	0	0	0	0	1	0	0	2	0.8			0.0	Very Low		
309	5-59	GRIZZLY VALLEY		Sacramento River	NRO	13,441	21.0	0	0	0	0	1	0	0	0	0.0			0.0	Very Low		
310	5-6.06	REDDING AREA	SOUTH BATTLE CREEK	Sacramento River	NRO	33,835	52.9	48	0	0	0	1	1	1	2	1.3			0.0	Very Low		
311	5-61	CHROME TOWN AREA		Sacramento River	NRO	1,408	2.2	6	0	0	0	1	0	1	1	0.9			0.0	Very Low		
312	5-64	BEAR VALLEY		Sacramento River	NRO	9,104	14.2	4	0	0	0	1	1	0	4	1.5			0.0	Very Low		
313	5-69	YOSEMITE VALLEY		San Joaquin River	SCRO	7,465	11.7	1,016	1	5	4	1	0	2	5	2.9			0.0	Very Low		
314	5-8	MOUNTAIN MEADOWS VALLEY		Sacramento River	NRO	8,145	12.7	0	0	0	0	1	4	0	0	0.0			0.0	Very Low		
315	5-90	FUNKS CREEK		Sacramento River	NRO	3,012	4.7	0	0	0	0	1	0	2	1	1.4			0.0	Very Low		
316	5-91	ANTELOPE CREEK		Sacramento River	NRO	2,040	3.2	3	0	0	0	1	1	0	1	0.4			0.0	Very Low		

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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						
317	5-92	BLANCHARD VALLEY		Sacramento River	NRO	2,221	3.5	0	0	0	0	1	0	0	1	0.4			0.0	Very Low		
318	5-93	NORTH FORK CACHE CREEK		Sacramento River	NRO	3,474	5.4	0	0	0	0	1	0	0	4	1.5			0.0	Very Low		
319	6-1	SURPRISE VALLEY		North Lahontan	NRO	228,460	357.0	1,127	0	0	1	1	3	1	3	1.6	2		7.6	Low	Declining GW Levels and GW Quality issues (sodium sulfate, high TDS, and thermal waters) in various portions of the basin.	
320	6-10	ADOBE LAKE VALLEY		South Lahontan	SRO	39,978	62.5	4	0	0	0	1	2	0	5	1.9			0.0	Very Low		
321	6-100	SECRET VALLEY		North Lahontan	NRO	33,680	52.6	26	0	0	0	1	1	1	1	0.9			0.0	Very Low		
322	6-104	LONG VALLEY		North Lahontan	NRO	46,836	73.2	141	0	0	0	1	1	0	2	0.8	3		0.0	Very Low		Groundwater Exports to Reno are being evaluated. Long Valley Creek is a major source of recharge to Honey Lake GW Basin. Long Valley also provides underflow to Cold Spring Valley.
323	6-106	LITTLE ANTELOPE VALLEY		North Lahontan	NCRO	2,491	3.9	0	0	0	0	1	3	0	0	0.0			0.0	Very Low		
324	6-11	LONG VALLEY		South Lahontan	SRO	72,028	112.5	800	1	0	2	1	1	2	3	2.1	1		7.6	Low	Local impairments from thermal waters and some springs with high TDS, fluoride, boron, and other elements, but water quality suitable overall.	
325	6-12	OWENS VALLEY		South Lahontan	SRO	663,458	1,036.7	17,664	1	0	1	1	1	1	4	2.0	2		7.5	Low	Minor impairments locally due to inorganics.	
326	6-13	BLACK SPRINGS VALLEY		South Lahontan	SRO	30,911	48.3	0	0	0	0	1	1	0	3	1.1			0.0	Very Low		
327	6-14	FISH LAKE VALLEY		South Lahontan	SRO	48,333	75.5	36	0	0	0	1	1	3	5	3.4			4.9	Very Low		
328	6-15	DEEP SPRINGS VALLEY		South Lahontan	SRO	30,048	47.0	5	0	0	1	1	1	0	5	1.9			0.0	Very Low		
329	6-18	DEATH VALLEY		South Lahontan	SRO	926,496	1,447.7	190	0	0	1	1	1	0	0	0.0			0.0	Very Low		
330	6-2	MADLINE PLAINS		North Lahontan	NRO	156,152	244.0	151	0	0	0	1	2	1	3	1.6	1		4.9	Very Low	Localized naturally occurring water quality issues (high TDS, nitrates, boron, ASAR, etc)	
331	6-20	MIDDLE AMARGOSA VALLEY		South Lahontan	SRO	392,862	613.8	230	0	0	1	1	1	0	5	1.9	4		0.0	Very Low	Water quality is rated inferior to marginal for domestic purposes due to elevated fluoride and boron contents; however, locally groundwater is of good quality. (B-118)	
332	6-22	UPPER KINGSTON VALLEY		South Lahontan	SRO	178,533	279.0	37	0	0	1	1	0	0	5	1.9	4		0.0	Very Low	Groundwater is marginal to inferior for domestic or irrigation purposes due to elevated fluoride and TDS (B-118).	
333	6-25	BICYCLE VALLEY		South Lahontan	SRO	90,100	140.8	0	0	0	1	1	0	0	0	0.0	3		0.0	Very Low	Elevated TDS and fluoride (B-118).	
334	6-28	PAHRUMP VALLEY		South Lahontan	SRO	93,747	146.5	99	0	0	0	1	1	1	5	2.4	5		8.9	Low	Water levels generally declining per B-118 and USGS NWIS. State of Nevada Department of Water Resources has documented overdraft and subsidence conditions in this basin (http://water.nv.gov/documents/presentations/pahrump.pdf)	
335	6-29	MESQUITE VALLEY		South Lahontan	SRO	89,012	139.1	64	0	0	0	1	1	1	5	2.4	3		6.9	Low	Declining water levels. Locally high TDS in southern portion of basin makes GW marginal to inferior for domestic uses. (B-118)	
336	6-30	IVANPAH VALLEY		South Lahontan	SRO	200,155	312.7	40	0	0	1	1	0	0	5	1.9	4		0.0	Very Low	Basin groundwater is rated marginal to inferior for both domestic and irrigational use because of elevated fluoride and sodium.(B-118)	
337	6-31	KELSO VALLEY		South Lahontan	SRO	257,279	402.0	20	0	0	0	1	0	0	5	1.9			0.0	Very Low		

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
338	6-32	BROADWELL VALLEY		South Lahontan	SRO	92,688	144.8	8	0	0	1	1	0	0	5	1.9			0.0	Very Low		
339	6-33	SODA LAKE VALLEY		South Lahontan	SRO	383,560	599.3	750	0	0	1	1	0	0	5	1.9	5		0.0	Very Low	Groundwater quality is rated marginal to inferior for both domestic and irrigation purposes. This assessment is based on 66 analyses showing elevated concentrations of fluoride, boron, and TDS. Geotracker shows many LUST sites.	
340	6-34	SILVER LAKE VALLEY		South Lahontan	SRO	35,519	55.5	0	0	0	0	1	0	0	0	0.0	4		0.0	Very Low	Groundwater in this basin is rated marginal to inferior for both domestic and irrigation uses because of elevated concentrations of fluoride, boron, and TDS. (B-118)	
341	6-35	CRONISE VALLEY		South Lahontan	SRO	127,313	198.9	2	0	0	0	1	0	0	0	0.0			0.0	Very Low		
342	6-37	COYOTE LAKE VALLEY		South Lahontan	SRO	88,735	138.6	99	0	0	0	1	0	0	5	1.9	4		0.0	Very Low	Groundwater quality is rated as inferior to marginal for both domestic and irrigation purposes because of elevated levels of fluoride, boron, sodium, and TDS. (B-118).	
343	6-38	CAVES CANYON VALLEY		South Lahontan	SRO	73,542	114.9	88	0	0	1	1	0	0	5	1.9	3		0.0	Very Low	Suitability of groundwater quality is rated inferior for irrigation and suitable to inferior for domestic use (DWR 1964). Historical measurements show TDS content ranging from 622 to 1,272 mg/L with an average of 904 mg/L (DWR 1964).	
344	6-40	LOWER MOJAVE RIVER VALLEY		South Lahontan	SRO	287,563	449.3	32,938	1	1	2	1	0	1	5	2.4	5	1	13.1	Medium	Groundwater basin has been in overdraft. Water quality has been impaired from natural sources, leaking tanks, and superfund sites from military bases.	Basin is adjudicated. USGS reports GW Level declines of 100 ft since the 1930s
345	6-41	MIDDLE MOJAVE RIVER VALLEY		South Lahontan	SRO	212,595	332.2	6,654	1	0	1	1	0	1	5	2.4	3	1	9.1	Low	Groundwater Quality impairments for VOCs, salts, nitrates, and irrigation effluents. Waste water treatment plant have also affected groundwater quality. Some nitrates and fluoride exceed MCL.	Basin is adjudicated.
346	6-42	UPPER MOJAVE RIVER VALLEY		South Lahontan	SRO	415,295	648.9	355,338	2	5	3	1	0	2	5	2.9	5	2	20.6	High	Overdraft. Water quality impacts in basin including nitrates, inorganics, and fuel additives, etc. Superfund site within basin.	Basin is adjudicated (+1). Irrigated Acreage of zero from DAU isn't correct, add +1
347	6-43	EL MIRAGE VALLEY		South Lahontan	SRO	76,292	119.2	10,933	1	4	2	1	0	1	5	2.4	4		14.1	Medium	Groundwater levels have declined significantly in parts of the basin, some have recovered. Water is rated marginal to inferior for domestic and irrigation purposes. (B-118). Some documented VOCs issues also.	
348	6-46	FREMONT VALLEY		South Lahontan	SRO	336,682	526.1	16,883	1	0	1	1	0	1	5	2.4	5		10.1	Low	Basin has naturally high TDS locally and other constituents. Groundwater levels have shown significant decline throughout the basin.	
349	6-47	HARPER VALLEY		South Lahontan	SRO	411,827	643.5	1,634	0	0	1	1	0	1	5	2.4	5	1	10.1	Low	Extensive chromium issues well known in Hinkley. In addition, water quality of the basin is generally marginal to inferior for irrigation and domestic uses because of high concentrations of boron, fluoride, and sodium.	Adjudicated Basin
350	6-48	GOLDSTONE VALLEY		South Lahontan	SRO	28,287	44.2	0	0	0	0	1	0	0	0	0.0	3		0.0	Very Low	Groundwater quality in the basin is rated as inferior for irrigation purposes and marginal for domestic use because of elevated concentrations of chloride, fluoride, and TDS.	
351	6-49	SUPERIOR VALLEY		South Lahontan	SRO	121,084	189.2	0	0	0	1	1	0	0	5	1.9			0.0	Very Low		
352	6-51	PILOT KNOB VALLEY		South Lahontan	SRO	139,460	217.9	0	0	0	1	1	0	0	5	1.9			0.0	Very Low		

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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						
353	6-52	SEARLES VALLEY		South Lahontan	SRO	198,115	309.6	1,651	0	0	0	1	0	0	5	1.9	5		0.0	Very Low	Water locally beneficial in the north, but generally unsuitable for beneficial uses due to high concentrations of fluoride, boron, sodium, chloride, sulfate, and TDS. Water levels have declined due to pumping for evaporates.	
354	6-53	SALT WELLS VALLEY		South Lahontan	SRO	29,629	46.3	0	0	0	0	1	0	0	5	1.9	5		0.0	Very Low	The groundwater is rated inferior for all beneficial uses because of high TDS content that ranges from about 4,000 mg/L to 39,000 mg/L. Other impairments are elevated concentrations of sodium, chloride, and boron (DWR 1964).	
355	6-54	INDIAN WELLS VALLEY		South Lahontan	SRO	383,492	599.2	34,837	1	4	1	1	0	1	5	2.4	5		14.1	Medium	Overdraft has been documented since the 1960's. Water quality issues with respect to overdraft and mixing of aquifers.	
356	6-56	ROSE VALLEY		South Lahontan	SRO	42,709	66.7	10	0	0	1	1	0	1	5	2.4			0.0	Very Low		
357	6-57	DARWIN VALLEY		South Lahontan	SRO	44,386	69.4	39	0	0	0	1	0	0	5	1.9			0.0	Very Low		
358	6-58	PANAMINT VALLEY		South Lahontan	SRO	260,754	407.4	7	0	0	1	1	0	0	5	1.9	4		0.0	Very Low	Water from most wells located on the valley floor is ranked inferior for domestic use and marginal to inferior for irrigation purposes.	
359	6-66	LEE FLAT		South Lahontan	SRO	20,380	31.8	0	0	0	0	1	0	0	5	1.9			0.0	Very Low		
360	6-69	KELSO LANDER VALLEY		South Lahontan	SRO	11,208	17.5	0	0	0	0	1	0	0	5	1.9			0.0	Very Low		
361	6-8	BRIDGEPORT VALLEY		North Lahontan	NCRO	32,545	50.9	586	1	0	2	1	4	0	0	0.0			0.0	Very Low		
362	6-9	MONO VALLEY		South Lahontan	SRO	173,299	270.8	385	0	0	1	1	0	0	3	1.1			0.0	Very Low		
363	6-91	COW HEAD LAKE VALLEY		North Lahontan	NRO	5,625	8.8	0	0	0	0	1	5	0	3	1.1			0.0	Very Low		
364	6-94	GRASSHOPPER VALLEY		North Lahontan	NRO	17,665	27.6	0	0	0	0	1	1	0	3	1.1			0.0	Very Low		
365	6-95	DRY VALLEY		North Lahontan	NRO	6,498	10.2	2	0	0	0	1	1	1	3	1.6			0.0	Very Low		
366	7-1	LANFAIR VALLEY		Colorado River	SRO	158,360	247.4	19	0	0	0	1	0	0	5	1.9			0.0	Very Low		
367	7-10	TWENTYNINE PALMS VALLEY		Colorado River	SRO	62,829	98.2	22,113	1	2	0	1	0	1	5	2.4	1		7.1	Low	Some wells in the basin exceed the recommended levels for drinking water in fluoride, TDS, and sulfate concentrations. Thermal waters also occur in this basin (DWR 1984).	
368	7-11	COPPER MOUNTAIN VALLEY		Colorado River	SRO	30,540	47.7	6,085	1	5	1	1	0	1	5	2.4	1		0.0	Very Low	Locally high TDS and septic tank problems.	
369	7-12	WARREN VALLEY		Colorado River	SRO	23,952	37.4	22,860	2	5	4	1	0	1	5	2.4		1	15.1	Medium		Basin is adjudicated.
370	7-13.01	DEADMAN VALLEY	DEADMAN LAKE	Colorado River	SRO	89,793	140.3	22	0	0	0	1	0	0	5	1.9			0.0	Very Low		
371	7-14	LAVIC VALLEY		Colorado River	SRO	103,132	161.1	0	0	0	0	1	0	0	5	1.9			0.0	Very Low		
372	7-16	AMES VALLEY		Colorado River	SRO	109,340	170.8	4,540	1	0	1	1	0	0	5	1.9	2		0.0	Very Low	Groundwater in the basin has locally high TDS, fluoride, and chloride contents (DWR 1975). TDS content reaches about 1,000 mg/L southwest of Emerson Lake (MWA 1999).	
373	7-18.01	JOHNSON VALLEY	SOGGY LAKE	Colorado River	SRO	77,865	121.7	354	0	0	1	1	0	0	5	1.9			0.0	Very Low		
374	7-19	LUCERNE VALLEY		Colorado River	SRO	148,467	232.0	3,311	1	0	1	1	0	1	5	2.4	4	1	10.1	Low	Water level declines noted from 40 to 100 feet. Evidence of subsidence from overdraft of basin. Locally high nitrates and TDS (B-118).	Fall 1954 - Fall 2002 Change in GW Storage is estimated at - 460TAF (Napoli)
375	7-2	FENNER VALLEY		Colorado River	SRO	457,633	715.1	31	0	0	1	1	0	0	5	1.9			0.0	Very Low		

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
376	7-21.01	COACHELLA VALLEY	INDIO	Colorado River	SRO	299,784	468.4	368,855	2	5	3	1	3	4	3	3.1	5		21.1	High	Nitrates and addition of salts due to Colorado River imported water. Local areas of elevated fluoride.	
377	7-21.02	COACHELLA VALLEY	MISSION CREEK	Colorado River	SRO	48,966	76.5	18,974	1	5	2	1	0	2	3	2.1	2		12.9	Medium	Radiological and nitrate issues in the basin (B-118).	
378	7-21.03	COACHELLA VALLEY	DESERT HOT SPRINGS	Colorado River	SRO	101,862	159.2	22,568	1	5	1	1	1	4	3	3.1	3		14.6	Medium	High TDS and declining water levels have been documented for a long period of time in the Desert Hot Springs Subbasin.	
379	7-21.04	COACHELLA VALLEY	SAN GORGONIO PASS	Colorado River	SRO	38,823	60.7	29,540	2	5	3	1	1	4	3	3.1	5	1	20.6	High	Basin is in overdraft.	Basin is adjudicated.
380	7-22	WEST SALTON SEA		Colorado River	SRO	106,408	166.3	5,352	1	0	0	1	0	0	1	0.4	3		0.0	Very Low	Groundwater is marginal to poor for domestic and irrigation use because of elevated fluoride, boron, and TDS.	
381	7-24	BORREGO VALLEY		Colorado River	SRO	153,978	240.6	3,853	1	0	2	1	1	1	2	1.3	5	2	12.8	Medium	Overdraft conditions over 60 years. Some wells have been abandoned or destroyed due to high nitrates.	Most demand for basin is concentrated in north in a small area.
382	7-25	OCOTILLO-CLARK VALLEY		Colorado River	SRO	224,416	350.6	27	0	0	1	1	1	0	1	0.4	3		5.9	Low	High TDS, sulfate, chloride, and fluoride concentrations locally impair groundwater for domestic and irrigation use.	
383	7-28	VALLECITO-CARRIZO VALLEY		Colorado River	SRO	122,943	192.1	77	0	0	1	1	0	0	3	1.1	3		0.0	Very Low	Groundwater quality is marginal for domestic use because of elevated levels of fluoride and mineral content.	
384	7-29	COYOTE WELLS VALLEY		Colorado River	SRO	147,088	229.8	374	0	0	1	1	0	0	1	0.4	4		0.0	Very Low	Basin is in overdraft (B-118). There are local fluoride issues and elevated TDS in some of the shallower wells in the basin.	
385	7-3	WARD VALLEY		Colorado River	SRO	564,569	882.1	22	0	0	0	1	0	0	5	1.9			0.0	Very Low		
386	7-30	IMPERIAL VALLEY		Colorado River	SRO	969,017	1,514.1	164,037	1	4	1	1	4	0	0	0.0			0.0	Very Low		
387	7-31	OROCOPIA VALLEY		Colorado River	SRO	97,214	151.9	2,243	1	0	0	1	0	3	3	2.6	3		7.4	Low	Some natural occurrences of elements or compounds that exceed drinking water standards.	
388	7-32	CHOCOLATE VALLEY		Colorado River	SRO	130,507	203.9	658	0	0	0	1	0	0	1	0.4	4		0.0	Very Low	Groundwater quality impairment due to elevated levels of fluoride, boron, and TDS (B-118). Elevated fluoride levels were found in nearly all mineral analyses of groundwater.	
389	7-33	EAST SALTON SEA		Colorado River	SRO	197,043	307.9	1,093	0	0	0	1	1	0	0	0.0			0.0	Very Low		
390	7-36	YUMA VALLEY		Colorado River	SRO	125,741	196.5	3,146	1	0	1	1	2	0	1	0.4			0.0	Very Low		
391	7-37	ARROYO SECO VALLEY		Colorado River	SRO	259,806	405.9	6	0	0	1	1	0	0	1	0.4			0.0	Very Low		
392	7-38	PALO VERDE VALLEY		Colorado River	SRO	74,004	115.6	7,459	1	4	2	1	5	0	1	0.4	2		0.0	Very Low	Some elevated TDS in groundwater makes water unsuitable for domestic or irrigation purposes.(B-118)	
393	7-39	PALO VERDE MESA		Colorado River	SRO	228,010	356.3	9,231	1	0	1	1	2	0	1	0.4	3		7.6	Low	Arsenic, selenium, fluoride, chloride, boron, sulfate, and TDS concentrations are high (DWR 1975).	
394	7-4	RICE VALLEY		Colorado River	SRO	190,622	297.8	23	0	0	0	1	0	0	2	0.8			0.0	Very Low		
395	7-41	CALZONA VALLEY		Colorado River	SRO	81,708	127.7	1,608	1	0	0	1	0	0	5	1.9			0.0	Very Low		
396	7-42	VIDAL VALLEY		Colorado River	SRO	139,577	218.1	10	0	0	1	1	0	0	5	1.9	4		0.0	Very Low	Fluoride, chloride, sulfate, and TDS concentrations are high (DWR 1975). GW near town of Vidal has fluoride concentrations making water unusable domestically and sodium contents make water marginal for irrigation.	
397	7-43	CHEMEHUEVI VALLEY		Colorado River	SRO	275,713	430.8	395	0	0	0	1	0	0	5	1.9	3		0.0	Very Low	Concentrations of sulfate, chloride, fluoride, and TDS are high (DWR 1975).	

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
398	7-44	NEEDLES VALLEY		Colorado River	SRO	89,101	139.2	4,902	1	0	2	1	0	0	1	0.4	3		7.1	Low	Concentrations of sulfate, chloride, fluoride, and TDS content levels are high in the basin (DWR 1975).	
399	7-45	PIUTE VALLEY		Colorado River	SRO	177,319	277.1	2	0	0	0	1	0	0	1	0.4			0.0	Very Low		
400	7-48	HELENDALE FAULT VALLEY		Colorado River	SRO	2,637	4.1	9	0	0	0	1	0	0	5	1.9			0.0	Very Low		
401	7-5	CHUCKWALLA VALLEY		Colorado River	SRO	608,995	951.6	7,853	1	0	1	1	1	0	3	1.1	3	1	8.6	Low	Sulfate, chloride, fluoride, and TDS concentrations are high for domestic use (DWR 1975). High of boron and TDS concentrations, and high sodium percentage impair groundwater for irrigation use (DWR 1975).	Aerial imagery review indicates there are probably more than 1,000 acres irrigated
402	7-51	LOST HORSE VALLEY		Colorado River	SRO	17,455	27.3	0	0	0	0	1	0	1	5	2.4			0.0	Very Low		
403	7-56	YAQUI WELL AREA		Colorado River	SRO	15,098	23.6	4	0	0	1	1	0	1	5	2.4			0.0	Very Low		
404	7-59	MASON VALLEY		Colorado River	SRO	5,567	8.7	23	0	0	2	1	0	1	5	2.4			0.0	Very Low		
405	7-6	PINTO VALLEY		Colorado River	SRO	184,377	288.1	7	0	0	1	1	0	0	3	1.1			0.0	Very Low		
406	7-62	JOSHUA TREE		Colorado River	SRO	27,422	42.8	4,951	1	5	3	1	0	1	5	2.4	2		0.0	Very Low	Fluoride concentration in water from some wells has reached 9.0 mg/L, exceeding recommended maximum concentration levels of 1.4 mg/L (B-118, DWR 1984).	
407	7-63	VANDEVENTER FLAT		Colorado River	SRO	6,787	10.6	50	0	0	0	1	0	0	0	0.0			0.0	Very Low		
408	7-7	CADIZ VALLEY		Colorado River	SRO	272,931	426.5	10	0	0	0	1	0	0	5	1.9			0.0	Very Low		
409	7-8	BRISTOL VALLEY		Colorado River	SRO	501,834	784.1	27	0	0	1	1	0	0	5	1.9	3	2	8.6	Low	Fluoride content in some wells exceeds the recommended MCL level (C-118). TDS content is extremely high in some wells near Bristol Lake (DWR 1967).	Aerial imagery review in GIS indicates there are over 1,500 acres irrigated.
410	7-9	DALE VALLEY		Colorado River	SRO	214,650	335.4	1,197	0	0	1	1	0	0	5	1.9	5	-3	5.6	Low	Groundwater quality in basin is generally unsuitable for domestic and agricultural uses (DWR 1979). TDS and F concentrations impair for domestic use, and B and Na concentrations impair agricultural use in basin (DWR 1979). USGS data shows declining water levels.	Groundwater extraction seems very high for a basin with documented water quality issues. Bull. 118 indicates a GW production of 1 AFY, but it is likely more than that, but less than 4,535 AFY.
411	8-2.02	UPPER SANTA ANA VALLEY	CUCAMONGA	South Coast	SRO	9,574	15.0	51,001	4	1	5	1	1	5	2	3.3	3		17.8	Medium	High nitrates reported in 14 of 24 wells tested (B-118)	
412	8-2.05	UPPER SANTA ANA VALLEY	CAJON	South Coast	SRO	23,306	36.4	520	1	0	1	1	0	5	4	4.0			6.8	Low		
413	8-6	HEMET LAKE VALLEY		South Coast	SRO	16,811	26.3	464	1	0	3	1	1	0	3	1.1	2		0.0	Very Low	Locally high nitrates and TDS.(B-118)	
414	8-7	BIG MEADOWS VALLEY		South Coast	SRO	14,263	22.3	51	0	0	4	1	1	5	4	4.0			9.5	Low		
415	9-3	SAN ONOFRE VALLEY		South Coast	SRO	1,261	2.0	3,133	3	5	5	1	0	2	1	1.4			0.0	Very Low		
416	9-8	WARNER VALLEY		South Coast	SRO	24,150	37.7	185	0	0	4	1	0	2	1	1.4	1		7.1	Low	Groundwater generally suitable except for elevated fluoride contents near hot springs	
417	1-22	FAIRCHILD SWAMP VALLEY		North Coast	NRO	3,278	5.1	0	0	0	0	0	0	1	1	0.9			0.0	Very Low		
418	1-33	LARABEE VALLEY		North Coast	NRO	967	1.5	9	0	0	0	0	0	1	5	2.4			0.0	Very Low		
419	1-44	EDEN VALLEY		North Coast	NCRO	1,376	2.2	0	0	0	0	0	1	2	3	2.1			0.0	Very Low		
420	1-62	WILSON POINT AREA		North Coast	NRO	709	1.1	14	1	0	0	0	1	1	4	2.0			0.0	Very Low		
421	2-31	ARROYO DEL HAMBRE VALLEY		San Francisco Bay	NCRO	786	1.2	3,230	4	0	0	0	0	1	1	0.9			0.0	Very Low		
422	3-23	UPPER SANTA ANA VALLEY		Central Coast	SCRO	1,431	2.2	5	0	0	0	0	0	1	5	2.4			0.0	Very Low		
423	3-24	QUIEN SABE VALLEY		Central Coast	SCRO	4,706	7.4	5	0	0	0	0	0	1	5	2.4			0.0	Very Low		
424	3-29	DRY LAKE VALLEY		Central Coast	SCRO	1,416	2.2	8	0	0	0	0	1	1	5	2.4			0.0	Very Low		
425	3-33	SAN CARPOFORO VALLEY		Central Coast	SRO	1,054	1.6	4	0	0	0	0	0	3	5	3.4			0.0	Very Low		
426	3-34	ARROYO DE LA CRUZ VALLEY		Central Coast	SRO	1,028	1.6	1	0	0	0	0	1	3	5	3.4			0.0	Very Low		
427	3-35	SAN SIMEON VALLEY		Central Coast	SRO	560	0.9	9	1	0	5	0	2	3	5	3.4			0.0	Very Low		
428	3-36	SANTA ROSA VALLEY		Central Coast	SRO	3,525	5.5	920	1	0	2	0	2	0	0	0.0			0.0	Very Low		
429	3-37	VILLA VALLEY		Central Coast	SRO	1,358	2.1	21	1	0	0	0	3	4	4	3.5			0.0	Very Low		
430	3-38	CAYUCOS VALLEY		Central Coast	SRO	336	0.5	3	0	0	0	0	1	4	4	3.5			0.0	Very Low		

Table A3. Draft CASGEM Groundwater Basin Prioritization: Sorted by Basin Number.

CASGEM Groundwater Basin Prioritization Draft Results									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						
431	3-39	OLD VALLEY		Central Coast	SRO	1,179	1.8	217	1	0	0	0	1	4	4	3.5			0.0	Very Low		
432	3-40	TORO VALLEY		Central Coast	SRO	722	1.1	8	1	0	0	0	1	4	4	3.5			0.0	Very Low		
433	3-41	MORRO VALLEY		Central Coast	SRO	646	1.0	399	2	0	5	0	5	4	4	3.5			0.0	Very Low		
434	3-42	CHORRO VALLEY		Central Coast	SRO	1,547	2.4	247	1	0	3	0	3	4	4	3.5			0.0	Very Low		
435	3-43	RINCONADA VALLEY		Central Coast	SRO	2,579	4.0	11	0	0	0	0	0	1	5	2.4			0.0	Very Low		
436	3-44	POZO VALLEY		Central Coast	SRO	6,852	10.7	52	0	0	4	4	0	1	5	2.4			0.0	Very Low		
437	3-46	RAFAEL VALLEY		Central Coast	SRO	2,996	4.7	0	0	0	0	0	0	1	5	2.4			0.0	Very Low		
438	3-47	BIG SPRING AREA		Central Coast	SRO	7,332	11.5	0	0	0	0	0	0	1	5	2.4			0.0	Very Low		
439	3-8	LOS OSOS VALLEY		Central Coast	SCRO	6,994	10.9	13,948	3	0	5	0	2	4	4	3.5	5	2	20.0	High	Documented saline intrusion due to "serious" overdraft, also nitrate impairment.	Interlocutory Stipulated Judgment against water suppliers and purveyors in basin and proceeding with adjudication. Also add one point due to total well count error for this basin.
440	3-9	SAN LUIS OBISPO VALLEY		Central Coast	SCRO	12,724	19.9	18,834	2	1	5	0	3	4	4	3.5	3	1	17.8	Medium	Overdraft Conditions	While only 18,000 may live in the actual basin, over 45,000 (2010 census) rely on the basin for 2/3rds of their drinking water.
441	4-18	HUNGRY VALLEY		South Coast	SRO	5,324	8.3	2	0	0	2	0	0	1	1	0.9	1		0.0	Very Low	Water is slightly alkaline (B-118).	
442	5-37	TOAD WELL AREA		Sacramento River	NRO	3,356	5.2	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
443	5-38	PONDOSA TOWN AREA		Sacramento River	NRO	2,082	3.3	0	0	0	0	0	0	2	2	1.8			0.0	Very Low		
444	5-43	ROCK PRAIRIE VALLEY		Sacramento River	NRO	5,740	9.0	0	0	0	0	0	0	0	2	0.8			0.0	Very Low		
445	5-44	LONG VALLEY		Sacramento River	NRO	1,088	1.7	0	0	0	0	0	0	0	2	0.8			0.0	Very Low		
446	5-49	DRY BURNEY CREEK VALLEY		Sacramento River	NRO	3,074	4.8	0	0	0	0	0	0	0	2	0.8			0.0	Very Low		
447	5-52	GRAYS VALLEY		Sacramento River	NRO	5,440	8.5	0	0	0	0	0	0	0	2	0.8			0.0	Very Low		
448	5-53	DIXIE VALLEY		Sacramento River	NRO	4,866	7.6	6	0	0	0	0	4	0	2	0.8			0.0	Very Low		
449	5-56	YELLOW CREEK VALLEY		Sacramento River	NRO	2,311	3.6	2	0	0	0	0	0	0	2	0.8			0.0	Very Low		
450	5-57	LAST CHANCE CREEK VALLEY		Sacramento River	NRO	4,659	7.3	0	0	0	0	0	0	1	2	1.3			0.0	Very Low		
451	5-62	ELK CREEK AREA		Sacramento River	NRO	1,438	2.2	174	1	0	0	0	1	1	1	0.9			0.0	Very Low		
452	5-70	LOS BANOS CREEK VALLEY		San Joaquin River	SCRO	4,835	7.6	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
453	5-71	VALLECITOS CREEK VALLEY		Tulare Lake	SCRO	15,110	23.6	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
454	5-88	STONY GORGE RESERVOIR		Sacramento River	NRO	1,065	1.7	0	0	0	0	0	1	0	1	0.4			0.0	Very Low		
455	5-89	SQUAW FLAT		Sacramento River	NRO	1,294	2.0	0	0	0	0	0	0	0	2	0.8			0.0	Very Low		
456	6-101	BULL FLAT		North Lahontan	NRO	18,151	28.4	2	0	0	0	0	0	0	1	0.4			0.0	Very Low		
457	6-105	SLINKARD VALLEY		North Lahontan	NCRO	4,517	7.1	0	0	0	0	0	1	0	0	0.0			0.0	Very Low		
458	6-107	SWEETWATER FLAT		North Lahontan	NCRO	4,747	7.4	0	0	0	0	0	1	0	0	0.0			0.0	Very Low		
459	6-16	EUREKA VALLEY		South Lahontan	SRO	129,329	202.1	10	0	0	0	0	0	0	5	1.9			0.0	Very Low		
460	6-17	SALINE VALLEY		South Lahontan	SRO	146,850	229.5	0	0	0	0	0	0	0	0	0.0	5		0.0	Very Low	GW Quality Impairments: High TDS and Fluorides, groundwater is inferior for domestic use. (B-118)	
461	6-19	WINGATE VALLEY		South Lahontan	SRO	71,755	112.1	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
462	6-21	LOWER KINGSTON VALLEY		South Lahontan	SRO	241,892	378.0	0	0	0	0	0	0	0	5	1.9	5		0.0	Very Low	Groundwater is inferior for domestic or irrigation purposes due to elevated fluoride, chloride, boron, sulfate and TDS (B-118)	
463	6-23	RIGGS VALLEY		South Lahontan	SRO	88,274	137.9	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		

Table A3. Draft CASGEM Groundwater Basin Prioritization: Sorted by Basin Number.

CASGEM Groundwater Basin Prioritization Draft Results									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						
464	6-24	RED PASS VALLEY		South Lahontan	SRO	97,088	151.7	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
465	6-26	AVAWATZ VALLEY		South Lahontan	SRO	27,826	43.5	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
466	6-27	LEACH VALLEY		South Lahontan	SRO	61,620	96.3	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
467	6-36.01	LANGFORD VALLEY	LANGFORD WELL LAKE	South Lahontan	SRO	19,457	30.4	0	0	0	1	0	0	0	5	1.9			0.0	Very Low		
468	6-50	CUDDEBACK VALLEY		South Lahontan	SRO	95,418	149.1	97	0	0	0	0	0	0	5	1.9	3		0.0	Very Low	Groundwater quality is ranked marginal to inferior for most beneficial uses due to elevated concentrations of chloride and TDS.	
469	6-55	COSO VALLEY		South Lahontan	SRO	25,684	40.1	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
470	6-61	CAMEO AREA		South Lahontan	SRO	9,349	14.6	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
471	6-62	RACE TRACK VALLEY		South Lahontan	SRO	14,184	22.2	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
472	6-63	HIDDEN VALLEY		South Lahontan	SRO	18,037	28.2	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
473	6-64	MARBLE CANYON AREA		South Lahontan	SRO	10,422	16.3	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
474	6-65	COTTONWOOD SPRING AREA		South Lahontan	SRO	3,918	6.1	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
475	6-68	SANTA ROSA FLAT		South Lahontan	SRO	16,861	26.3	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
476	6-70	CACTUS FLAT		South Lahontan	SRO	7,056	11.0	0	0	0	0	0	0	1	5	2.4			0.0	Very Low		
477	6-71	LOST LAKE VALLEY		South Lahontan	SRO	23,414	36.6	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
478	6-72	COLES FLAT		South Lahontan	SRO	2,961	4.6	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
479	6-73	WILD HORSE MESA AREA		South Lahontan	SRO	3,337	5.2	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
480	6-74	HARRISBURG FLATS		South Lahontan	SRO	25,077	39.2	1	0	0	0	0	0	0	5	1.9			0.0	Very Low		
481	6-75	WILDROSE CANYON		South Lahontan	SRO	5,182	8.1	1	0	0	2	0	0	0	5	1.9			0.0	Very Low		
482	6-76	BROWN MOUNTAIN VALLEY		South Lahontan	SRO	21,862	34.2	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
483	6-77	GRASS VALLEY		South Lahontan	SRO	10,034	15.7	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
484	6-78	DENNING SPRING VALLEY		South Lahontan	SRO	7,289	11.4	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
485	6-79	CALIFORNIA VALLEY		South Lahontan	SRO	58,639	91.6	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
486	6-80	MIDDLE PARK CANYON		South Lahontan	SRO	1,752	2.7	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
487	6-81	BUTTE VALLEY		South Lahontan	SRO	8,853	13.8	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
488	6-82	SPRING CANYON VALLEY		South Lahontan	SRO	4,832	7.5	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
489	6-84	GREENWATER VALLEY		South Lahontan	SRO	60,260	94.2	0	0	0	0	0	1	0	5	1.9			0.0	Very Low		
490	6-85	GOLD VALLEY		South Lahontan	SRO	3,234	5.1	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
491	6-86	RHODES HILL AREA		South Lahontan	SRO	15,697	24.5	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
492	6-88	OWL LAKE VALLEY		South Lahontan	SRO	22,402	35.0	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
493	6-89	KANE WASH AREA		South Lahontan	SRO	5,997	9.4	0	0	0	0	0	0	1	5	2.4			0.0	Very Low		
494	6-90	CADY FAULT AREA		South Lahontan	SRO	8,015	12.5	6	0	0	0	0	0	0	5	1.9			0.0	Very Low		

Table A3. Draft CASGEM Groundwater Basin Prioritization: Sorted by Basin Number.

CASGEM Groundwater Basin Prioritization Draft Results									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						
495	6-92	PINE CREEK VALLEY		North Lahontan	NRO	9,526	14.9	0	0	0	0	0	0	0	1	0.4			0.0	Very Low		
496	6-93	HARVEY VALLEY		North Lahontan	NRO	4,503	7.0	0	0	0	0	0	1	0	1	0.4			0.0	Very Low		
497	6-97	HORSE LAKE VALLEY		North Lahontan	NRO	3,827	6.0	0	0	0	0	0	3	0	1	0.4			0.0	Very Low		
498	6-98	TULEDAD CANYON VALLEY		North Lahontan	NRO	5,167	8.1	0	0	0	0	0	1	0	0	0.0			0.0	Very Low		
499	6-99	PAINTERS FLAT		North Lahontan	NRO	6,395	10.0	0	0	0	0	0	0	0	3	1.1			0.0	Very Low		
500	7-13.02	DEADMAN VALLEY	SURPRISE SPRING	Colorado River	SRO	29,507	46.1	179	0	0	2	0	0	0	5	1.9			0.0	Very Low		
501	7-15	BESSEMER VALLEY		Colorado River	SRO	39,379	61.5	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
502	7-17	MEANS VALLEY		Colorado River	SRO	15,061	23.5	46	0	0	0	0	0	0	5	1.9	2		0.0	Very Low	Fluoride, nitrate, and TDS concentrations are impairments locally.	
503	7-18.02	JOHNSON VALLEY	UPPER JOHNSON VALLEY	Colorado River	SRO	35,050	54.8	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
504	7-34	AMOS VALLEY		Colorado River	SRO	131,584	205.6	9	0	0	1	0	0	0	0	0.0			0.0	Very Low		
505	7-35	OGILBY VALLEY		Colorado River	SRO	135,017	211.0	36	0	0	1	0	1	0	1	0.4			0.0	Very Low		
506	7-40	QUIEN SABE POINT VALLEY		Colorado River	SRO	25,489	39.8	112	0	0	0	0	1	0	2	0.8			0.0	Very Low		
507	7-46	CANEBRAKE VALLEY		Colorado River	SRO	5,460	8.5	2	0	0	0	0	0	1	5	2.4			0.0	Very Low		
508	7-50	IRON RIDGE AREA		Colorado River	SRO	5,284	8.3	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
509	7-52	PLEASANT VALLEY		Colorado River	SRO	9,733	15.2	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
510	7-53	HEXIE MOUNTAIN AREA		Colorado River	SRO	11,236	17.6	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
511	7-54	BUCK RIDGE FAULT VALLEY		Colorado River	SRO	6,974	10.9	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
512	7-55	COLLINS VALLEY		Colorado River	SRO	7,121	11.1	11	0	0	0	0	0	1	5	2.4			0.0	Very Low		
513	7-61	DAVIES VALLEY		Colorado River	SRO	3,600	5.6	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
514	8-8	SEVEN OAKS VALLEY		South Coast	SRO	4,103	6.4	7	0	0	2	0	0	0	0	0.0			0.0	Very Low		
515	9-24	PAMO VALLEY		South Coast	SRO	1,514	2.4	0	0	0	0	0	0	2	5	2.9			0.0	Very Low		

NOTE: * Data component values were reduced by 25% due to data confidence, prior to calculating total GW basin ranking value
 Overall Basin Ranking = Population + Population Growth + PSW + (Total Wells x .75) + (Irr Acreage x 0.75) + ((GW Use + (GW % x .75))/2) + Impacts + Other

Table A4. Draft CASGEM Groundwater Basin Prioritization: Sorted by Basin Prioritization.

CASGEM Groundwater Basin Prioritization Draft Results									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	3-4.02	SALINAS VALLEY	EAST SIDE AQUIFER	Central Coast	SCRO	57,452	89.8	128,646	3	4	4	4	5	5	5	4.4	3		25.1	High	Overdraft conditions in basin, high TDS and Nitrates exceeding drinking water standards in portions of the basin	
2	4-11.04	COASTAL PLAIN OF LOS ANGELES	CENTRAL	South Coast	SRO	180,357	281.8	3,052,303	5	2	5	5	1	5	2	3.3	5		24.8	High	Basin was adjudicated in the early 1960's due to overdraft. Several public supply wells are known to be impacted by various water quality issues.	
3	5-22.05	SAN JOAQUIN VALLEY	CHOWCHILLA	San Joaquin River	SCRO	159,319	248.9	15,820	1	4	2	3	5	5	3	3.6	5	3	24.6	High	Overdraft, subsidence, water quality degradation	The basin is strategically important for it's agricultural production.
4	5-22.11	SAN JOAQUIN VALLEY	KAWEAH	Tulare Lake	SCRO	446,283	697.3	271,700	2	5	3	4	5	3	2	2.3	5		24.0	High	Overdraft, water quality issues.	
5	5-22.06	SAN JOAQUIN VALLEY	MADERA	San Joaquin River	SCRO	393,429	614.7	116,919	1	5	2	4	5	5	3	3.6	5		23.4	High	Subsidence, critical overdraft, water quality degradation	
6	9-5	TEMECULA VALLEY		South Coast	SRO	88,338	138.0	219,431	3	5	3	4	1	3	3	2.6	5	1	23.4	High	Groundwater source is impaired in various parts of the basin due to elevated nitrates, fluoride, sulfates, TDS, and VOCs (B-118).	Basin is under Federal adjudication.
7	5-22.01	SAN JOAQUIN VALLEY	EASTERN SAN JOAQUIN	San Joaquin River	NCRO	707,073	1,104.8	582,662	2	4	3	4	5	3	2	2.3	3	2	23.0	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.
8	4-4.02	SANTA CLARA RIVER VALLEY	OXNARD	South Coast	SRO	58,200	90.9	235,973	4	3	4	1	4	5	1	2.9	5		22.6	High	Saline intrusion, nitrates, pesticides, and PCBs have impacted some water wells per (B-118).	
9	5-22.02	SAN JOAQUIN VALLEY	MODESTO	San Joaquin River	SCRO	246,518	385.2	294,872	2	3	4	4	4	5	2	3.3	4		22.3	High	Water quality degradation due to industrial and agricultural practices	
10	8-2.01	UPPER SANTA ANA VALLEY	CHINO	South Coast	SRO	154,693	241.7	898,653	4	2	4	3	2	4	4	3.5	4	1	22.3	High	Locally high nitrates and TDS.	Basin is adjudicated.
11	3-4.01	SALINAS VALLEY	180/400 FOOT AQUIFER	Central Coast	SCRO	84,321	131.8	55,740	2	0	4	4	5	5	5	4.4	5		22.1	High	Coastal basin with saline intrusion in both 180-Foot and 400-Foot aquifers due to excessive groundwater pumping	
12	5-21.58	SACRAMENTO VALLEY	WEST BUTTE	Sacramento River	NRO	181,479	283.6	36,152	1	4	2	4	5	5	5	4.4	3	1	22.1	High	Declining GW levels within the City of Chico and Durham areas (30-40' decline in mid-aquifer gw levels since 1998). High Nitrates in north and west Chico area. High density of GW contamination plumes surrounding City of Chico.	GW serves as a source of underflow to Butte Creek, which has endangered spring-run salmon.
13	3-2	PAJARO VALLEY		Central Coast	SCRO	88,062	137.6	114,282	2	2	4	5	3	4	5	3.9	4		21.9	High	PVWMD 2011 Annual Report indicates that Pajaro Valley GW basin remains in significant overdraft, with continuing seawater intrusion and gw storage depletion.	
14	8-2.03	UPPER SANTA ANA VALLEY	RIVERSIDE-ARLINGTON	South Coast	SRO	58,903	92.0	336,884	4	2	4	4	1	4	3	3.1	5		21.9	High	Water quality degradation issues known in several public supply wells.	
15	4-4.07	SANTA CLARA RIVER VALLEY	SANTA CLARA RIVER VALLEY EAST	South Coast	SRO	66,417	103.8	221,204	3	5	4	3	1	3	1	1.9	5		21.9	High	GW Quality Impacts: Nitrates, TCE, TDS, perchlorates, etc. (B-118)	
16	3-7	CARMEL VALLEY		Central Coast	SCRO	5,151	8.0	5,086	2	3	5	5	2	5	5	4.4	1	1	21.6	High	Excessive pumping of Cal-Am wells caused groundwater overdraft and Carmel River to dry, leading to court order.	SW-GW Interaction Issue. Cal-Am Water Company court ordered to reduce 2/3rds of diversions from Carmel River.
17	3-1	SOQUEL VALLEY		Central Coast	SCRO	2,515	3.9	18,634	5	2	5	5	1	5	4	4.0	1		21.5	High	Water quality degradation, saline intrusion issues.	
18	5-21.65	SACRAMENTO VALLEY	SOUTH AMERICAN	Sacramento River	NCRO	247,745	387.1	718,113	3	3	4	5	3	2	3	2.1	3		21.1	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).	
19	5-27	CUMMINGS VALLEY		Tulare Lake	SCRO	10,051	15.7	7,665	2	5	4	4	3	2	5	2.9	1	1	21.1	High	Basin in slight overdraft conditions	Adjudicated basin
20	7-21.01	COACHELLA VALLEY	INDIO	Colorado River	SRO	299,784	468.4	368,855	2	5	3	1	3	4	3	3.1	5		21.1	High	Nitrates and addition of salts due to Colorado River imported water. Local areas of elevated fluoride.	

Table A4. Draft CASGEM Groundwater Basin Prioritization: Sorted by Basin Prioritization.

CASGEM Groundwater Basin Prioritization Draft Results									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						
21	5-22.13	SAN JOAQUIN VALLEY	TULE	Tulare Lake	SCRO	469,959	734.3	108,660	1	4	2	3	5	5	4	4.0	4		21.0	High	Critical aquifer overdraft conditions in basin. High Nitrate and TDS in some locations and some inorganic contamination issues.	
22	8-2.04	UPPER SANTA ANA VALLEY	RIALTO-COLTON	South Coast	SRO	30,224	47.2	145,832	4	1	4	3	1	5	4	4.0	5		21.0	High	Extensive perchlorate contamination in basin.	
23	5-21.64	SACRAMENTO VALLEY	NORTH AMERICAN	Sacramento River	NCRO	340,170	531.5	832,746	3	3	4	4	3	5	3	3.6	1	1	20.9	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).
24	5-22.08	SAN JOAQUIN VALLEY	KINGS	Tulare Lake	SCRO	977,030	1,526.6	906,544	2	4	4	5	5	5	2	3.3			20.8	High		
25	4-12	SAN FERNANDO VALLEY		South Coast	SRO	145,354	227.1	1,745,338	5	3	3	3	1	4	2	2.8	3	1	20.8	High	Several public supply wells have shown contamination per Bulletin 118.	Basin is adjudicated.
26	5-22.14	SAN JOAQUIN VALLEY	KERN COUNTY	Tulare Lake	SCRO	#####	3,047.1	700,323	1	5	2	2	4	3	2	2.3	5	1	20.8	High	Subsidence, overdraft, water quality degradation	Agricultural importance, large basin which results in low population density.
27	4-23	RAYMOND		South Coast	SRO	26,310	41.1	223,100	5	2	5	1	0	5	4	4.0	4		20.8	High	Water quality impacts and a superfund.	
28	5-22.12	SAN JOAQUIN VALLEY	TULARE LAKE	Tulare Lake	SCRO	524,539	819.6	125,701	1	4	1	3	5	5	3	3.6	5		20.6	High	Subsidence, overdraft, water quality degradation	
29	3-12	SANTA MARIA		Central Coast	SRO	184,248	287.9	201,759	2	3	4	2	3	4	5	3.9	4		20.6	High	Documented overdraft of basin. Water quality degradation due to farming practices.	
30	6-42	UPPER MOJAVE RIVER VALLEY		South Lahontan	SRO	415,295	648.9	355,338	2	5	3	1	0	2	5	2.9	5	2	20.6	High	Overdraft. Water quality impacts in basin including nitrates, inorganics, and fuel additives, etc. Superfund site within basin.	Basin is adjudicated (+1). Irrigated Acreage of zero from DAU isn't correct, add +1
31	7-21.04	COACHELLA VALLEY	SAN GORGONIO PASS	Colorado River	SRO	38,823	60.7	29,540	2	5	3	1	1	4	3	3.1	5	1	20.6	High	Basin is in overdraft.	Basin is adjudicated.
32	5-21.57	SACRAMENTO VALLEY	VINA	Sacramento River	NRO	124,577	194.7	71,397	2	4	3	5	3	5	5	4.4		1	20.4	High		GW from this basin is a key source of sw inflow and serves eastside creeks which have endangered spring run.
33	5-22.09	SAN JOAQUIN VALLEY	WESTSIDE	Tulare Lake	SCRO	640,504	1,000.8	27,285	1	1	1	2	5	2	3	2.1	5	5	20.4	High	Subsidence, critical overdraft, saline conditions, subsidence	Additional points added for critical agricultural importance, very high TDS and pesticide contamination issues
34	4-4.05	SANTA CLARA RIVER VALLEY	FILLMORE	South Coast	SRO	20,842	32.6	16,417	2	2	4	1	5	5	1	2.9	5		20.4	High	Many groundwater quality impairments in the basin; Nitrates problematic during dry periods; High TDS, etc. (B-118)	
35	2-9.02	SANTA CLARA VALLEY	SANTA CLARA	San Francisco Bay	NCRO	190,235	297.2	1,633,190	5	2	4	5	1	4	2	2.8	2		20.3	High	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). Historic subsidence issues and basin balance issues.(B-118)	
36	5-22.07	SAN JOAQUIN VALLEY	DELTA-MENDOTA	San Joaquin River	SCRO	746,697	1,166.7	107,879	1	5	1	3	5	3	2	2.3	2	3	20.3	High	Overdraft issues in basin discussed in San Luis and Delta Mendota Water Authority GWMP	Important agricultural region.
37	5-21.67	SACRAMENTO VALLEY	YOLO	Sacramento River	NCRO	225,718	352.7	194,158	2	3	3	5	5	5	3	3.6	1		20.1	High	Localized TDS problems preclude using gw for some M&I uses without treatment. Some subsidence in northeast of Davis and in northern Yolo.	
38	5-22.04	SAN JOAQUIN VALLEY	MERCED	San Joaquin River	SCRO	491,255	767.6	173,731	1	4	2	4	4	4	3	3.1	4		20.1	High	Overdraft and water quality degradation (MAGPI GWMP).	
39	8-4	ELSINORE		South Coast	SRO	25,873	40.4	60,946	3	4	4	3	1	2	3	2.1	3	1	20.1	High	High TDS due to Nitrate and Sulfate in some portions of the basin (Elsinore Gw AdvisoryComm). Some fluoride impacts to groundwater (B-118).	Study done for Elsinore Basin GW Advisory Committee (Nov. 2012) indicates an average annual gw budget deficit of 1,800 af/yr for the last 11 years. Between 1990 and 2000 cumulative deficit was 19,000 af.
40	4-11.03	COASTAL PLAIN OF LOS ANGELES	WEST COAST	South Coast	SRO	93,795	146.6	1,195,195	5	1	3	5	0	3	2	2.3	5		20.0	High	Basin in overdraft since 1960's. Adjudicated basin. Saline intrusion problem and a seawater barrier project is in effect to reduce seawater intrusion.	

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CASGEM Groundwater Basin Prioritization Draft Results									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						
41	5-22.03	SAN JOAQUIN VALLEY	TURLOCK	San Joaquin River	SCRO	347,146	542.4	197,605	2	3	3	4	5	5	2	3.3	2		20.0	High	Groundwater overdraft documented in local GWMP.	
42	3-8	LOS OSOS VALLEY		Central Coast	SCRO	6,994	10.9	13,948	3	0	5	0	2	4	4	3.5	5	2	20.0	High	Documented saline intrusion due to "serious" overdraft, also nitrate impairment.	Interlocutory Stipulated Judgment against water suppliers and purveyors in basin and proceeding with adjudication. Also add one point due to total well count error for this basin.
43	8-1	COASTAL PLAIN OF ORANGE COUNTY		South Coast	SRO	223,222	348.8	2,309,966	5	2	4	5	1	5	5	4.4			19.9	High		
44	8-5	SAN JACINTO		South Coast	SRO	188,623	294.7	474,317	3	4	2	3	2	2	3	2.1	5		19.9	High	Basin is in overdraft (MWD). Groundwater quality issues documented in DWR B-118. Pumping has increased some contaminant distribution in the basin.	
45	6-44	ANTELOPE VALLEY		South Lahontan	SRO	#####	1,585.3	398,864	2	4	2	2	1	1	3	1.6	5	3	19.9	High	Closed basin. Water quality impacts per IRWMP, DWR B-118, and other sources. Extractions likely exceed natural recharge.	Pending Adjudication, water reliability issues, and renewed subsidence
46	3-4.06	SALINAS VALLEY	PASO ROBLES AREA	Central Coast	SCRO	597,241	933.2	56,077	1	4	2	1	1	1	5	2.4	4	5	19.9	High	Nitrate and TDS impacts to groundwater (B-118)	County groundwater ordinance banning further residential development in basin.
1	8-2.07	UPPER SANTA ANA VALLEY	YUCAIPA	South Coast	SRO	25,410	39.7	65,180	3	1	4	3	1	4	4	3.5	5		19.5	Medium	Groundwater extractions exceeds recharge. Documented impacts of nitrates and sulfates. (B-118)	
2	2-2.01	NAPA-SONOMA VALLEY	NAPA VALLEY	San Francisco Bay	NCRO	45,895	71.7	91,234	3	1	5	5	4	3	3	2.6	1		19.4	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).	
3	3-4.08	SALINAS VALLEY	SEASIDE AREA	Central Coast	SCRO	25,903	40.5	65,899	3	0	4	5	1	2	5	2.9	5		19.4	Medium	Seawater intrusion in Coastal basin due to excessive pumping	
4	4-4.04	SANTA CLARA RIVER VALLEY	SANTA PAULA	South Coast	SRO	22,899	35.8	46,816	3	1	3	2	4	5	1	2.9	5		19.4	Medium	Nitrates can fluctuate significantly in the basin, and above MCL. Other inorganics present above MCL. TDS is known to be high.	
5	1-4	SHASTA VALLEY	SHASTA VALLEY	North Coast	NRO	52,589	82.2	5,333	1	5	1	3	4	5	1	2.9	1	3	19.1	Medium	High Nitrates, ASAR, and TDS in portions of the basin. TMDL temperature issues along gw fed rivers.	Strong SW-GW Interaction and significant local issues regarding gw mgmt. Basin underflow from Pluto's Cave Basalts and portions of debris flow contribute to surface water flow and low temps in the Shasta River, which supports threatened salmon population.
6	3-26	WEST SANTA CRUZ TERRACE		Central Coast	SCRO	7,863	12.3	70,336	5	1	3	5	1	2	4	2.5	2	1	19.0	Medium	Water quality degradation	Low gw use, but basin at high risk of seawater intrusion due to thin alluvial aquifer and dependency on up-gradient users to maintain positive westward flow conditions (2005, Santa Cruz UWMP).
7	4-13	SAN GABRIEL VALLEY		South Coast	SRO	127,278	198.9	1,275,187	5	1	5	3	1	5	4	4.0	1		19.0	Medium	Superfund sites are present within the basin and other areas with water quality impacts are known.	
8	5-28	TEHACHAPI VALLEY WEST		Tulare Lake	SCRO	14,854	23.2	17,313	2	5	5	5	1	2	1	1.4	1		18.9	Medium	Court adjudicated basin in overdraft, groundwater quality issues	
9	8-2.08	UPPER SANTA ANA VALLEY	SAN TIMOTEO	South Coast	SRO	73,541	114.9	54,169	2	5	3	2	1	3	3	2.6	3	1	18.9	Medium	Locally high nitrates and salinity (B-118). GAMA reported upper basin water quality issues.	Parts of the subbasin are adjudicated.
10	5-21.52	SACRAMENTO VALLEY	COLUSA	Sacramento River	NRO	917,793	1,434.1	48,369	1	3	1	3	5	2	2	1.8	3	3	18.8	Medium	Severely declining GW levels along the west-side of Glenn Co. Moderately declining GW levels in the Capay area. High TDS shallow aquifer in Maxwell-Williams area.	Increase in housing development along I5. GW-SW interaction is important to maintaining waterfowl refuges. Area is being highlighted as solution area for Delta outflow issues...proposed increase in CU and GW pumping.
11	5-22.15	SAN JOAQUIN VALLEY	TRACY	San Joaquin River	NCRO	344,884	538.9	268,175	2	4	3	4	5	1	1	0.9	2		18.6	Medium	Poor water quality throughout the subbasin.(B-118)	
12	1-55.01	SANTA ROSA VALLEY	SANTA ROSA PLAIN	North Coast	NCRO	80,059	125.1	250,375	3	2	5	5	3	2	4	2.5			18.5	Medium		

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
13	3-16	GOLETA		Central Coast	SRO	9,229	14.4	47,252	4	1	5	5	2	3	2	2.3		1	18.5	Medium	Estimated overdraft for the north-central portion of the basin ins estimated at 1,180 af/yr (Santa Barbara Water Conservation Element, 2009)	
14	5-21.54	SACRAMENTO VALLEY	ANTELOPE	Sacramento River	NRO	18,696	29.2	6,124	1	1	4	5	4	5	3	3.6	2		18.4	Medium	Nitrate issue in Domestic Wells.	
15	3-3.01	GILROY-HOLLISTER VALLEY	LLAGAS AREA	Central Coast	SCRO	55,967	87.4	91,706	3	2	5	5	4	2	1	1.4			18.1	Medium		
16	9-7	SAN LUIS REY VALLEY		South Coast	SRO	29,865	46.7	43,942	2	1	5	4	3	3	1	1.9	3		18.1	Medium	TDS is a concern according to MWD. B-118 indicates problems with nitrates, inorganics, radiologicals, and VOCs. Desalination generally required in all areas of the basin.	
17	4-11.01	COASTAL PLAIN OF LOS ANGELES	SANTA MONICA	South Coast	SRO	31,846	49.8	465,606	5	3	2	5	0	1	2	1.3	3		18.0	Medium	MTBE contamination has led to significant reduction in groundwater production and locally high TDS.	
18	5-12.01	SIERRA VALLEY	SIERRA VALLEY	Sacramento River	NRO	117,680	183.9	2,196	1	5	1	2	3	1	2	1.3	4	2	18.0	Medium	Declining GW Levels and artesian well production along the east and northeast side of the valley. Poor quality water in west-central side of valley (boron, fluoride, arsenic, & sodium).	
19	3-17	SANTA BARBARA		Central Coast	SRO	6,173	9.6	63,966	5	0	4	5	1	3	2	2.3	2		17.8	Medium	WQ Impacts: Saline intrusion, locally high EC, hardness, hydrogen sulfides, and other constituents.(B-118)	
20	8-2.02	UPPER SANTA ANA VALLEY	CUCAMONGA	South Coast	SRO	9,574	15.0	51,001	4	1	5	1	1	5	2	3.3	3		17.8	Medium	High nitrates reported in 14 of 24 wells tested (B-118)	
21	3-9	SAN LUIS OBISPO VALLEY		Central Coast	SCRO	12,724	19.9	18,834	2	1	5	0	3	4	4	3.5	3	1	17.8	Medium	Overdraft Conditions	
22	3-4.09	SALINAS VALLEY	LANGLEY AREA	Central Coast	SCRO	15,344	24.0	9,833	2	1	5	5	2	5	5	4.4			17.6	Medium		
23	4-4.06	SANTA CLARA RIVER VALLEY	PIRU	South Coast	SRO	8,915	13.9	2,666	1	4	3	1	4	5	1	2.9	3		17.6	Medium	GW Quality impacts: nitrates, storm runoff, leaking tanks, etc. (B-118). High Selenium and other inorganics, average TDS was 1450 mg/l (Ventura co 2011 annual gw report)	
24	9-10	SAN PASQUAL VALLEY		South Coast	SRO	4,563	7.1	968	1	0	2	4	4	5	5	4.4	3	1	17.4	Medium	Nitrate problems are widespread (B-118). TDS is also known to be high in places. During dry years, the basin has experienced water level declines up to 20 feet in one year per GWMP.	
25	4-6	PLEASANT VALLEY		South Coast	SRO	21,654	33.8	69,392	3	3	4	2	4	5	1	2.9			17.4	Medium		
26	5-21.59	SACRAMENTO VALLEY	EAST BUTTE	Sacramento River	NRO	265,312	414.6	38,465	1	4	2	4	5	4	1	2.4		1	17.1	Medium	GW basin provides underflow to Butte Creek which supports endangered spring-run salmon.	
27	8-2.09	UPPER SANTA ANA VALLEY	TEMESCAL	South Coast	SRO	23,654	37.0	141,436	4	2	3	4	1	3	2	2.3	2		17.0	Medium	Groundwater quality impaired by nitrates and inorganics in some wells (B-118).	
28	8-2.06	UPPER SANTA ANA VALLEY	BUNKER HILL	South Coast	SRO	80,972	126.5	363,394	4	1	5	3	1	5	4	4.0			17.0	Medium		
29	9-4	SANTA MARGARITA VALLEY		South Coast	SRO	7,998	12.5	4,121	2	1	4	3	1	4	5	3.9	2	1	16.9	Medium	Groundwater in SW part of basin is marginal to inferior for domestic and agricultural uses (DWR 1967). Mg, SO4, Cl, NO3, and TDS concentrations are locally high for domestic. Use; Cl, B, and TDS are locally high for ag use (DWR 1975).	
30	5-21.51	SACRAMENTO VALLEY	CORNING	Sacramento River	NRO	205,473	321.1	18,852	1	2	1	4	3	4	4	3.5	2	2	16.8	Medium	Continued GW level decline over most of the basin.	
31	4-8	LAS POSAS VALLEY		South Coast	SRO	42,353	66.2	39,835	2	2	3	1	4	5	1	2.9	3		16.6	Medium	TDS is generally high in this basin.	
32	2-10	LIVERMORE VALLEY		San Francisco Bay	NCRO	69,531	108.6	196,658	3	3	3	5	1	2	2	1.8	1		16.3	Medium	Some areas have boron concentrations exceeding 2 mg/L (B-118 & Sorenson et. al. 1985).	

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CASGEM Groundwater Basin Prioritization Draft Results									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						
33	2-1	PETALUMA VALLEY		San Francisco Bay	NCRO	46,043	71.9	49,915	2	3	3	5	1	1	3	1.6	2		16.1	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)	
34	1-1	SMITH RIVER PLAIN		North Coast	NRO	40,446	63.2	24,588	2	2	4	5	2	2	4	2.5			15.8	Medium		
35	6-5.01	TAHOE VALLEY	TAHOE SOUTH	North Lahontan	NCRO	14,814	23.1	25,967	3	0	5	5	0	2	5	2.9	1		15.6	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).	
36	9-6	CAHUILLA VALLEY		South Coast	SRO	18,342	28.7	1,993	1	3	3	4	1	2	5	2.9	1	1	15.6	Medium	Locally, sulfates and nitrates are high for domestic use (DWR 1975). Nitrate concentrations reach as much as 128 mg/L (Moyle 1976).	Basin is federally adjudicated.
37	4-7	ARROYO SANTA ROSA VALLEY		South Coast	SRO	3,747	5.9	2,211	2	0	4	1	4	5	1	2.9	3		15.6	Medium	Elevated sulfates, nitrates, and TDS in the basin.(B-118)	
38	2-9.01	SANTA CLARA VALLEY	NILES CONE	San Francisco Bay	NCRO	57,906	90.5	321,494	4	1	3	5	1	3	1	1.9	1		15.4	Medium	Saline water intrusion has increased landward and into deeper aquifers since first documented in the 1920's.(B-118)	
39	9-15	SAN DIEGO RIVER VALLEY		South Coast	SRO	9,944	15.5	45,800	4	1	3	5	1	3	1	1.9	1		15.4	Medium	High Nitrates, Iron and Manganese treatment is required, high TDS (>3,000 mg/l) in western portion of basin	
40	3-4.04	SALINAS VALLEY	FOREBAY AQUIFER	Central Coast	SCRO	94,025	146.9	43,867	2	1	2	3	5	5	5	4.4			15.4	Medium		
41	1-2.01	KLAMATH RIVER VALLEY	TULELAKE	North Coast	NRO	85,934	134.3	2,261	1	0	1	1	5	5	1	2.9	4	2	15.4	Medium	Declining GW levels in lower aquifer. Local GW Quality issues. On-going high volume of gw being extracted associated with surface water cutbacks from Klamath Project and gw transfers associated with Klamath Basin Agreement	Interstate gw transfer issue. Strong sw-gw interaction and fisheries issues. Potential intra-basin issues associated with increased annual extraction.
42	5-14	SCOTTS VALLEY		Sacramento River	NRO	7,320	11.4	6,553	2	0	4	5	2	5	4	4.0			15.3	Medium		
43	5-6.04	REDDING AREA	ENTERPRISE	Sacramento River	NRO	60,862	95.1	68,627	2	3	4	5	2	1	1	0.9			15.1	Medium		
44	3-4.10	SALINAS VALLEY	CORRAL DE TIERRA AREA	Central Coast	SCRO	22,274	34.8	7,831	1	3	4	4	1	3	5	3.4			15.1	Medium		
45	5-21.62	SACRAMENTO VALLEY	SUTTER	Sacramento River	NCRO	234,264	366.0	82,125	1	4	2	4	5	2	1	1.4			15.1	Medium		
46	4-3.01	VENTURA RIVER VALLEY	UPPER VENTURA RIVER	South Coast	SRO	7,430	11.6	15,961	3	0	5	1	2	3	1	1.9	3		15.1	Medium	TDS is known to be high in some parts of the basin (B-118).	
47	7-12	WARREN VALLEY		Colorado River	SRO	23,952	37.4	22,860	2	5	4	1	0	1	5	2.4		1	15.1	Medium		Basin is adjudicated.
48	5-15	BIG VALLEY		Sacramento River	NRO	24,212	37.8	6,344	1	2	2	5	3	5	4	4.0			15.0	Medium		
49	5-6.03	REDDING AREA	ANDERSON	Sacramento River	NRO	96,857	151.3	52,937	2	2	4	5	2	2	2	1.8			15.0	Medium		
50	5-21.66	SACRAMENTO VALLEY	SOLANO	Sacramento River	NCRO	424,832	663.8	119,263	1	3	2	4	5	3	2	2.3			15.0	Medium		
51	6-67	MARTIS VALLEY		North Lahontan	NCRO	36,381	56.8	14,743	2	4	3	4	0	2	5	2.9			14.9	Medium		
52	8-9	BEAR VALLEY		South Coast	SRO	19,667	30.7	16,866	2	1	5	4	1	1	4	2.0	1		14.8	Medium	Fluoride problems in some wells (B-118).	
53	3-3.04	GILROY-HOLLISTER VALLEY	SAN JUAN BAUTISTA AREA	Central Coast	SCRO	74,305	116.1	26,150	1	1	3	3	2	1	4	2.0	4		14.8	Medium	Poor water quality due to high TDS	
54	1-52	UKIAH VALLEY		North Coast	NCRO	37,508	58.6	32,761	2	1	3	5	3	1	3	1.6		1	14.6	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.

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
55	2-2.02	NAPA-SONOMA VALLEY	SONOMA VALLEY	San Francisco Bay	NCRO	44,626	69.7	31,275	2	1	3	5	3	1	3	1.6	1		14.6	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).	
56	3-15	SANTA YNEZ RIVER VALLEY		Central Coast	SRO	204,642	319.8	75,460	1	1	3	3	2	2	5	2.9	3		14.6	Medium	Overdraft has been documented by the county in the past. Also some groundwater quality impairments.	
57	7-21.03	COACHELLA VALLEY	DESERT HOT SPRINGS	Colorado River	SRO	101,862	159.2	22,568	1	5	1	1	1	4	3	3.1	3		14.6	Medium	High TDS and declining water levels have been documented for a long period of time in the Desert Hot Springs Subbasin.	
58	5-6.01	REDDING AREA	BOWMAN	Sacramento River	NRO	78,426	122.5	7,165	1	5	2	4	1	2	2	1.8	1		14.5	Medium	Some localized high boron.	
59	3-3.03	GILROY-HOLLISTER VALLEY	HOLLISTER AREA	Central Coast	SCRO	32,729	51.1	22,013	2	1	4	4	3	2	3	2.1			14.4	Medium		
60	5-21.50	SACRAMENTO VALLEY	RED BLUFF	Sacramento River	NRO	274,489	428.9	28,053	1	2	2	4	2	2	5	2.9	2		14.4	Medium	Some gw quality impairments as per B-118, declining gw levels in west-side subdivision, and very high number of domestic gw use wells.	
61	1-10	EEL RIVER VALLEY		North Coast	NRO	73,701	115.2	21,558	1	2	2	3	3	4	5	3.9		1	14.4	Medium		Shallow basin with strong SW-GW interaction and fishery issues. Useable gw basin storage is estimated at 100,000 af and annual use is estimated at over one-half the total storage.
62	4-4.03	SANTA CLARA RIVER VALLEY	MOUND	South Coast	SRO	14,846	23.2	77,886	4	2	1	3	3	3	1	1.9	1		14.4	Medium	Some primary and secondary inorganic contaminants above the MCL (B-118).	
63	5-21.61	SACRAMENTO VALLEY	SOUTH YUBA	Sacramento River	NCRO	104,486	163.3	45,014	2	1	3	4	4	3	2	2.3			14.3	Medium		
64	3-3.02	GILROY-HOLLISTER VALLEY	BOLSA AREA	Central Coast	SCRO	20,912	32.7	2,935	1	1	1	3	4	1	4	2.0	4		14.3	Medium	Water quality degradation, overdraft	
65	9-1	SAN JUAN VALLEY		South Coast	SRO	16,797	26.2	61,131	3	1	3	3	2	2	1	1.4	2		14.1	Medium	TDS is generally high, springs with high fluorine, local pesticide contamination, and secondary inorganic contamination (B-118). Desalters used to treat water.	
66	4-2	OJAI VALLEY		South Coast	SRO	6,851	10.7	8,268	2	0	4	2	3	4	1	2.4	2		14.1	Medium	High nitrates and sulfates reported in the basin. Medium to high levels of nitrates reported in the basin.	
67	6-43	EL MIRAGE VALLEY		South Lahontan	SRO	76,292	119.2	10,933	1	4	2	1	0	1	5	2.4	4		14.1	Medium	Groundwater levels have declined significantly in parts of the basin, some have recovered. Water is rated marginal to inferior for domestic and irrigation purposes. (B-118). Some documented VOCs issues also.	
68	6-54	INDIAN WELLS VALLEY		South Lahontan	SRO	383,492	599.2	34,837	1	4	1	1	0	1	5	2.4	5		14.1	Medium	Overdraft has been documented since the 1960's. Water quality issues with respect to overdraft and mixing of aquifers.	
69	2-9.04	SANTA CLARA VALLEY	EAST BAY PLAIN	San Francisco Bay	NCRO	77,292	120.8	881,718	5	1	1	5	1	2	1	1.4	1		13.9	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).	
70	3-4.05	SALINAS VALLEY	UPPER VALLEY AQUIFER	Central Coast	SCRO	98,164	153.4	15,862	1	1	2	2	4	5	5	4.4	1		13.9	Medium	Poor quality water along the eastern side of subbasin. PSW above MCL for inorganics and Nitrates (B-118).	
71	1-5	SCOTT RIVER VALLEY		North Coast	NRO	63,780	99.7	3,520	1	0	1	3	4	4	3	3.1		3	13.4	Medium		GW Basin contributes to surface water flow in the Scott River which supports an threatened/endangered salmon. Adjudicated basin. Currently being reviewed for Public Trust issues regarding GW management.
72	5-21.56	SACRAMENTO VALLEY	LOS MOLINOS	Sacramento River	NRO	33,148	51.8	2,220	1	0	2	3	2	5	3	3.6	1	2	13.4	Medium	Boron issues along east-side of basin.	GW basin provides underflow to Mill Creek which supports endangered spring-run salmon. High sw-gw interaction for much of the western basin.

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
73	3-14	SAN ANTONIO CREEK VALLEY		Central Coast	SRO	81,941	128.0	2,279	1	0	1	2	2	1	5	2.4	4	2	13.4	Medium	Overdraft, water quality degradation	Santa Barbara Water Element, Table 1, p.10, indicates San Antonio basin overdraft by ~ 9,000 af/yr
74	5-22.16	SAN JOAQUIN VALLEY	COSUMNES	San Joaquin River	NCRO	280,490	438.3	59,163	1	2	2	4	3	3	4	3.0			13.3	Medium		
75	5-21.55	SACRAMENTO VALLEY	DYE CREEK	Sacramento River	NRO	27,709	43.3	1,626	1	0	1	3	3	5	3	3.6	1	2	13.1	Medium	Some documented Boron issues along east-side of basin.	Strong SW-GW interaction. GW Basin provides underflow to Mill Creek which supports endangered spring-run salmon.
76	6-40	LOWER MOJAVE RIVER VALLEY		South Lahontan	SRO	287,563	449.3	32,938	1	1	2	1	0	1	5	2.4	5	1	13.1	Medium	Groundwater basin has been in overdraft. Water quality has been impaired from natural sources, leaking tanks, and superfund sites from military bases.	Basin is adjudicated. USGS reports GW Level declines of 100 ft since the 1930s
77	3-21	SANTA CRUZ PURISIMA FORMATION		Central Coast	SCRO	40,166	62.8	17,693	2	0	3	5	1	2	4	2.5		1	13.0	Medium		Basin comprises the highland area east of Santa Cruz and serves as a forebay to Pajaro, Soquel, and Terrace Basins to the west...which are in various stages of overdraft.
78	7-21.02	COACHELLA VALLEY	MISSION CREEK	Colorado River	SRO	48,966	76.5	18,974	1	5	2	1	0	2	3	2.1	2		12.9	Medium	Radiological and nitrate issues in the basin (B-118).	
79	7-24	BORREGO VALLEY		Colorado River	SRO	153,978	240.6	3,853	1	0	2	1	1	1	2	1.3	5	2	12.8	Medium	Overdraft conditions over 60 years. Some wells have been abandoned or destroyed due to high nitrates.	Most demand for basin is concentrated in north in a small area.
80	1-3	BUTTE VALLEY		North Coast	NRO	79,689	124.5	1,464	1	0	1	2	3	4	5	3.9	2	1	12.6	Medium	Some high TDS wells. Declining GW levels over the last 5-years and increases agricultural acreage.	Strong sw-gw interaction and reliance of gw for Meiss Lake wildlife area.
1	5-21.60	SACRAMENTO VALLEY	NORTH YUBA	Sacramento River	NCRO	103,152	161.2	14,667	1	1	2	3	4	5	2	3.3			12.5	Low		
2	6-4	HONEY LAKE VALLEY		North Lahontan	NRO	311,741	487.1	23,566	1	0	1	3	2	2	3	2.1	2	2	11.9	Low	GW Quality Issues: High boron, arsenic, ASAR, TDS, and Nitrates between Lichfield and Honey Lake, east of Honey Lake, and north of Herlong area. GW contamination from Herlong Army depot. Increased GW demand associated with prison expansion.	Interstate basin. Local concerns over gw export from Fish Springs Ranch to Reno.
3	5-66	CLEAR LAKE CACHE FORMATION		Sacramento River	NRO	29,717	46.4	7,960	1	5	1	2	1	2	4	2.5			11.8	Low		
4	3-13	CUYAMA VALLEY		Central Coast	SRO	242,114	378.3	1,236	0	0	1	1	1	2	5	2.9	5	1	11.4	Low	Local salinity and TDS impairments in basin (B-118)	NRO: Declining Groundwater levels of 150-300' over the last 40-50 years (DWR, 1998). Conservation Assessment by TNC (2009) indicates annual gw budget deficit of ~ 28,500 af
5	1-59	WILSON GROVE FORMATION HIGHLANDS		North Coast	NCRO	86,400	135.0	37,799	2	0	4	5	1	1	3	1.6		-1	11.1	Low		NCRO Comment: Irrigated acreage and gw volume seems very high.
6	4-10	CONEJO		South Coast	SRO	18,848	29.4	96,704	4	2	1	2	1	1	1	0.9	1		11.1	Low	Locally high TDS in basin and one well with nitrate levels above MCL (B-118).	
7	5-5	FALL RIVER VALLEY		Sacramento River	NRO	54,803	85.6	1,629	1	0	1	3	4	2	2	1.8	1	1	11.0	Low	Locally high nitrates. Variable gw level trends with some regions showing declines.	Strong sw-gw interaction and gw dependent fisheries.
8	5-4	BIG VALLEY		Sacramento River	NRO	92,050	143.8	1,046	1	0	1	2	3	2	2	1.8	3		10.5	Low	Declining GW Levels over much of the basin.	
9	5-21.68	SACRAMENTO VALLEY	CAPAY VALLEY	Sacramento River	NCRO	24,970	39.0	550	1	0	1	4	3	4	3	3.1			10.4	Low		
10	6-46	FREMONT VALLEY		South Lahontan	SRO	336,682	526.1	16,883	1	0	1	1	0	1	5	2.4	5		10.1	Low	Basin has naturally high TDS locally and other constituents. Groundwater levels have shown significant decline throughout the basin.	
11	6-47	HARPER VALLEY		South Lahontan	SRO	411,827	643.5	1,634	0	0	1	1	0	1	5	2.4	5	1	10.1	Low	Extensive chromium issues well known in Hinkley. In addition, water quality of the basin is generally marginal to inferior for irrigation and domestic uses because of high concentrations of boron, fluoride, and sodium.	Adjudicated Basin

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
12	7-19	LUCERNE VALLEY		Colorado River	SRO	148,467	232.0	3,311	1	0	1	1	0	1	5	2.4	4	1	10.1	Low	Water level declines noted from 40 to 100 feet. Evidence of subsidence from overdraft of basin. Locally high nitrates and TDS (B-118).	Fall 1954 - Fall 2002 Change in GW Storage is estimated at - 460TAF (Napoli)
13	2-2.03	NAPA-SONOMA VALLEY	NAPA-SONOMA LOWLANDS	San Francisco Bay	NCRO	40,455	63.2	58,367	2	0	2	4	2	2	1	1.4			9.9	Low		
14	5-22.10	SAN JOAQUIN VALLEY	PLEASANT VALLEY	Tulare Lake	SCRO	145,782	227.8	34,213	1	3	0	1	3	2	5	2.9			9.9	Low		
15	1-9	EUREKA PLAIN		North Coast	NRO	37,405	58.4	50,231	2	1	1	4	1	2	2	1.8			9.5	Low		
16	8-7	BIG MEADOWS VALLEY		South Coast	SRO	14,263	22.3	51	0	0	4	1	1	5	4	4.0			9.5	Low		
17	6-41	MIDDLE MOJAVE RIVER VALLEY		South Lahontan	SRO	212,595	332.2	6,654	1	0	1	1	0	1	5	2.4	3	1	9.1	Low	Groundwater Quality impairments for VOCs, salts, nitrates, and irrigation effluents. Waste water treatment plant have also affected groundwater quality. Some nitrates and fluoride exceed MCL.	Basin is adjudicated.
18	6-28	PAHRUMP VALLEY		South Lahontan	SRO	93,747	146.5	99	0	0	0	1	1	1	5	2.4	5		8.9	Low	Water levels generally declining per B-118 and USGS NWIS. State of Nevada Department of Water Resources has documented overdraft and subsidence conditions in this basin (http://water.nv.gov/documents/presentations/pahru mp.pdf)	
19	4-17	LOCKWOOD VALLEY		South Coast	SRO	21,841	34.1	241	1	0	1	1	0	1	1	0.9	5		8.6	Low	Boron, arsenic, and radioactive uranium in some wells (B-118).	
20	7-5	CHUCKWALLA VALLEY		Colorado River	SRO	608,995	951.6	7,853	1	0	1	1	1	0	3	1.1	3	1	8.6	Low	Sulfate, chloride, fluoride, and TDS concentrations are high for domestic use (DWR 1975). High of boron and TDS concentrations, and high sodium percentage impair groundwater for irrigation use (DWR 1975).	Aerial imagery review indicates there are probably more than 1,000 acres irrigated
21	7-8	BRISTOL VALLEY		Colorado River	SRO	501,834	784.1	27	0	0	1	1	0	0	5	1.9	3	2	8.6	Low	Fluoride content in some wells exceeds the recommended MCL level (C-118). TDS content is extremely high in some wells near Bristol Lake (DWR 1967).	Aerial imagery review in GIS indicates there are over 1,500 acres irrigated.
22	5-2.01	ALTURAS AREA	SOUTH FORK PITT RIVER	Sacramento River	NRO	114,164	178.4	4,429	1	0	1	2	3	1	2	1.3	1		8.0	Low	Declining GW Levels in some parts of the basin.	
23	5-2.02	ALTURAS AREA	WARM SPRINGS VALLEY	Sacramento River	NRO	68,009	106.3	964	1	0	1	2	3	1	2	1.3		1	8.0	Low		40' declining in GW levels since 2000, along the west side of the basin.
24	6-1	SURPRISE VALLEY		North Lahontan	NRO	228,460	357.0	1,127	0	0	1	1	3	1	3	1.6	2		7.6	Low	Declining GW Levels and GW Quality issues (sodium sulfate, high TDS, and thermal waters) in various portions of the basin.	
25	6-11	LONG VALLEY		South Lahontan	SRO	72,028	112.5	800	1	0	2	1	1	2	3	2.1	1		7.6	Low	Local impairments from thermal waters and some springs with high TDS, fluoride, boron, and other elements, but water quality suitable overall.	
26	7-39	PALO VERDE MESA		Colorado River	SRO	228,010	356.3	9,231	1	0	1	1	2	0	1	0.4	3		7.6	Low	Arsenic, selenium, fluoride, chloride, boron, sulfate, and TDS concentrations are high (DWR 1975).	
27	6-12	OWENS VALLEY		South Lahontan	SRO	663,458	1,036.7	17,664	1	0	1	1	1	1	4	2.0	2		7.5	Low	Minor impairments locally due to inorganics.	
28	7-31	OROCOPIA VALLEY		Colorado River	SRO	97,214	151.9	2,243	1	0	0	1	0	3	3	2.6	3		7.4	Low	Some natural occurrences of elements or compounds that exceed drinking water standards.	
29	7-10	TWENTYNINE PALMS VALLEY		Colorado River	SRO	62,829	98.2	22,113	1	2	0	1	0	1	5	2.4	1		7.1	Low	Some wells in the basin exceed the recommended levels for drinking water in fluoride, TDS, and sulfate concentrations. Thermal waters also occur in this basin (DWR 1984).	
30	7-44	NEEDLES VALLEY		Colorado River	SRO	89,101	139.2	4,902	1	0	2	1	0	0	1	0.4	3		7.1	Low	Concentrations of sulfate, chloride, fluoride, and TDS content levels are high in the basin (DWR 1975).	
31	9-8	WARNER VALLEY		South Coast	SRO	24,150	37.7	185	0	0	4	1	0	2	1	1.4	1		7.1	Low	Groundwater generally suitable except for elevated fluoride contents near hot springs	

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
32	6-29	MESQUITE VALLEY		South Lahontan	SRO	89,012	139.1	64	0	0	0	1	1	1	5	2.4	3		6.9	Low	Declining water levels. Locally high TDS in southern portion of basin makes GW marginal to inferior for domestic uses. (B-118)	
33	8-2.05	UPPER SANTA ANA VALLEY	CAJON	South Coast	SRO	23,306	36.4	520	1	0	1	1	0	5	4	4.0			6.8	Low		
34	7-25	OCOTILLO-CLARK VALLEY		Colorado River	SRO	224,416	350.6	27	0	0	1	1	1	0	1	0.4	3		5.9	Low	High TDS, sulfate, chloride, and fluoride concentrations locally impair groundwater for domestic and irrigation use.	
35	7-9	DALE VALLEY		Colorado River	SRO	214,650	335.4	1,197	0	0	1	1	0	0	5	1.9	5	-3	5.6	Low	Groundwater quality in basin is generally unsuitable for domestic and agricultural uses (DWR 1979). TDS and F concentrations impair for domestic use, and B and Na concentrations impair agricultural use in basin (DWR 1979). USGS data shows declining water levels.	Groundwater extraction seems very high for a basin with documented water quality issues. Bull. 118 indicates a GW production of 1 AFY, but it is likely more than that, but less than 4,535 AFY.
1	1-2.02	KLAMATH RIVER VALLEY	LOWER KLAMATH	North Coast	NRO	75,333	117.7	41	0	0	0	1	3	1	2	1.3	1		5.3	Very Low	GW Quality issues in refuge area. High temp and high TDS for deep wells.	
2	6-14	FISH LAKE VALLEY		South Lahontan	SRO	48,333	75.5	36	0	0	0	1	1	3	5	3.4			4.9	Very Low		
3	6-2	MADELINE PLAINS		North Lahontan	NRO	156,152	244.0	151	0	0	0	1	2	1	3	1.6	1		4.9	Very Low	Localized naturally occurring water quality issues (high TDS, nitrates, boron, ASAR, etc)	
4	5-1.01	GOOSE LAKE	GOOSE VALLEY	Sacramento River	NRO	35,966	56.2	57	0	0	0	1	3	2	2	1.8			4.8	Very Low		
5	1-12	LAYTONVILLE VALLEY		North Coast	NRO	5,020	7.8	1,167	1	0	3	5	1	2	4	2.5			0.0	Very Low		
6	1-13	LITTLE LAKE VALLEY		North Coast	NRO	10,018	15.7	5,993	2	1	0	5	1	0	0	0.0			0.0	Very Low		
7	1-19	ANDERSON VALLEY		North Coast	NCRO	4,969	7.8	1,297	1	5	5	5	3	0	5	1.9			0.0	Very Low		
8	1-21	FORT BRAGG TERRACE AREA		North Coast	NCRO	24,085	37.6	12,517	2	1	5	5	1	1	2	1.3	1		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)	
9	1-32	GARBERVILLE TOWN AREA		North Coast	NRO	2,112	3.3	1,391	2	2	3	5	1	1	3	1.6			0.0	Very Low		
10	1-51	POTTER VALLEY		North Coast	NCRO	8,237	12.9	1,145	1	0	1	5	5	1	1	0.9			0.0	Very Low		
11	1-54.01	ALEXANDER VALLEY	ALEXANDER AREA	North Coast	NCRO	24,464	38.2	2,098	1	0	4	5	3	0	0	0.0			0.0	Very Low		
12	1-54.02	ALEXANDER VALLEY	CLOVERDALE AREA	North Coast	NCRO	6,525	10.2	8,297	2	4	5	5	3	1	2	1.3	1		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).	
13	1-55.02	SANTA ROSA VALLEY	HEALDSBURG AREA	North Coast	NCRO	15,400	24.1	10,515	2	0	5	5	4	0	0	0.0			0.0	Very Low		
14	1-55.03	SANTA ROSA VALLEY	RINCON VALLEY	North Coast	NCRO	5,549	8.7	21,787	4	3	5	5	1	2	4	2.5			0.0	Very Low		
15	1-56	McDOWELL VALLEY		North Coast	NCRO	1,486	2.3	106	1	0	0	5	4	2	3	2.1			0.0	Very Low		
16	2-19	KENWOOD VALLEY		San Francisco Bay	NCRO	5,135	8.0	6,057	2	1	5	5	3	1	3	1.6			0.0	Very Low		
17	2-22	HALF MOON BAY TERRACE		San Francisco Bay	NCRO	9,189	14.4	19,825	3	3	5	5	2	0	0	0.0			0.0	Very Low		
18	2-29	SAN RAFAEL VALLEY		San Francisco Bay	NCRO	874	1.4	10,153	5	1	0	5	0	0	1	0.4			0.0	Very Low		
19	2-30	NOVATO VALLEY		San Francisco Bay	NCRO	20,519	32.1	42,516	3	2	0	5	1	0	1	0.4			0.0	Very Low		
20	2-32	VISITACION VALLEY		San Francisco Bay	NCRO	5,827	9.1	31,853	4	4	0	5	0	0	1	0.4			0.0	Very Low		
21	2-35	WESTSIDE		San Francisco Bay	NCRO	25,386	39.7	351,235	5	2	4	5	1	1	1	0.9			0.0	Very Low		
22	2-36	SAN PEDRO VALLEY		San Francisco Bay	NCRO	702	1.1	5,956	5	0	0	5	0	2	3	2.1			0.0	Very Low		
23	2-37	SOUTH SAN FRANCISCO		San Francisco Bay	NCRO	2,175	3.4	38,861	5	1	0	5	0	0	0	0.0			0.0	Very Low		
24	2-4	PITTSBURG PLAIN		San Francisco Bay	NCRO	11,607	18.1	68,898	4	3	4	5	0	1	1	0.9			0.0	Very Low		
25	2-40	DOWNTOWN		San Francisco Bay	NCRO	7,635	11.9	323,721	5	1	0	5	0	0	0	0.0	1		0.0	Very Low	Groundwater is subject to high concentrations of nitrates, chloride, boron and TDS (B-118) & (Phillips et.al. 1993).	
26	2-5	CLAYTON VALLEY		San Francisco Bay	NCRO	17,836	27.9	73,287	4	1	2	5	0	1	1	0.9			0.0	Very Low		

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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						
27	2-6	YGNACIO VALLEY		San Francisco Bay	NCRO	15,459	24.2	107,878	5	1	2	5	1	1	1	0.9	1		0.0	Very Low	Hydrographs created from DWR well data indicate groundwater levels have declined gradually over the period of record.(B-118)	
28	2-7	SAN RAMON VALLEY		San Francisco Bay	NCRO	7,053	11.0	30,112	4	2	0	5	1	1	1	0.9			0.0	Very Low		
29	2-8	CASTRO VALLEY		San Francisco Bay	NCRO	1,821	2.8	24,486	5	0	0	5	0	2	1	1.4			0.0	Very Low		
30	2-9.03	SANTA CLARA VALLEY	SAN MATEO PLAIN	San Francisco Bay	NCRO	37,708	58.9	291,899	5	3	2	5	1	1	1	0.9			0.0	Very Low		
31	3-27	SCOTTS VALLEY		Central Coast	SCRO	773	1.2	3,875	4	1	5	5	0	2	4	2.5	4		0.0	Very Low	Overdraft and water quality issues associated with contaminated sites within the basin.	
32	3-49	MONTECITO		Central Coast	SRO	6,286	9.8	9,885	3	0	4	5	1	1	2	1.3	1		0.0	Very Low	Locally high TDS within the basin. Wells exceed Federal iron and manganese concentrations (B-118).	
33	3-50	FELTON AREA		Central Coast	SCRO	1,155	1.8	3,024	3	1	0	5	0	2	4	2.5	3		0.0	Very Low	Overdraft	
34	3-52	NEEDLE ROCK POINT		Central Coast	SCRO	479	0.7	66	1	0	0	5	5	2	4	2.5			0.0	Very Low		
35	3-53	FOOTHILL		Central Coast	SRO	3,123	4.9	17,543	4	2	5	5	1	3	2	2.3	5		0.0	Very Low	USGS documented nitrates exceeding MCL and high sulfates in the basin. TDS is documented to be high in the basin and potential for saline intrusion.	
36	4-11.02	COASTAL PLAIN OF LOS ANGELES	HOLLYWOOD	South Coast	SRO	10,108	15.8	250,649	5	0	3	5	0	1	2	1.3	1		0.0	Very Low	MWD lists some TDS and VOC water quality issues.	
37	4-22	MALIBU VALLEY		South Coast	SRO	615	1.0	563	2	0	0	5	1	0	0	0.0	5		0.0	Very Low	Saline intrusion, high TDS and chlorides have been documented.	
38	5-10	AMERICAN VALLEY		Sacramento River	NRO	6,799	10.6	3,931	2	0	5	5	4	2	2	1.8			0.0	Very Low		
39	5-13	UPPER LAKE VALLEY		Sacramento River	NRO	7,260	11.3	2,055	1	3	4	5	3	0	0	0.0			0.0	Very Low		
40	5-17	BURNS VALLEY		Sacramento River	NRO	2,873	4.5	2,691	2	4	0	5	1	2	4	2.5			0.0	Very Low		
41	5-60	HUMBUG VALLEY		Sacramento River	NRO	9,979	15.6	3,299	1	0	4	5	1	0	2	0.8			0.0	Very Low		
42	5-65	LITTLE INDIAN VALLEY		Sacramento River	NRO	1,269	2.0	112	1	0	0	5	1	1	2	1.3			0.0	Very Low		
43	5-80	BRITE VALLEY		Tulare Lake	SCRO	3,181	5.0	684	1	0	4	5	1	1	3	1.6	2		0.0	Very Low	Court adjudicated basin in overdraft	
44	6-5.02	TAHOE VALLEY	TAHOE WEST	North Lahontan	NCRO	6,173	9.6	3,110	2	0	5	5	0	2	4	2.5			0.0	Very Low		
45	9-11	SANTA MARIA VALLEY		South Coast	SRO	12,379	19.3	16,695	2	2	0	5	1	0	0	0.0			0.0	Very Low		
46	9-13	POWAY VALLEY		South Coast	SRO	2,485	3.9	16,450	5	2	0	5	1	2	1	1.4			0.0	Very Low		
47	9-14	MISSION VALLEY		South Coast	SRO	7,387	11.5	37,066	4	3	0	5	0	2	1	1.4			0.0	Very Low		
48	9-16	EL CAJON VALLEY		South Coast	SRO	7,203	11.3	92,314	5	1	0	5	1	2	1	1.4	5		0.0	Very Low	High nitrates and TDS have impaired the basin for domestic use and high chlorides make the water marginal to inferior for irrigation uses (B-118).	
49	9-17	SWEETWATER VALLEY		South Coast	SRO	5,949	9.3	35,277	4	1	4	5	0	2	1	1.4	5		0.0	Very Low	TDS, chloride and sodium content of the groundwater generally exceed the recommended limits for drinking (B-118, & DWR 1986).	
50	9-9	ESCONDIDO VALLEY		South Coast	SRO	2,906	4.5	38,593	5	1	0	5	1	2	1	1.4	2		0.0	Very Low	Local sources of groundwater in this basin are categorized as suitable to inferior for domestic use. The water categorized as inferior typically contains high nitrate, TDS, or sulfate content (DWR 1967).	
51	1-11	COVELO ROUND VALLEY		North Coast	NRO	16,396	25.6	1,968	1	5	2	4	1	0	0	0.0			0.0	Very Low		
52	1-39	BRANSCOMB TOWN AREA		North Coast	NCRO	1,381	2.2	95	1	0	0	4	0	1	5	2.4			0.0	Very Low		
53	1-40	TEN MILE RIVER VALLEY		North Coast	NCRO	1,491	2.3	61	1	0	0	4	0	1	2	1.3			0.0	Very Low		
54	1-53	SANEL VALLEY		North Coast	NCRO	5,568	8.7	698	1	0	4	4	5	2	3	2.1			0.0	Very Low		
55	1-57	BODEGA BAY AREA		North Coast	NCRO	2,676	4.2	719	1	0	5	4	0	1	5	2.4			0.0	Very Low		
56	1-6	HAYFORK VALLEY		North Coast	NRO	3,295	5.1	814	1	0	0	4	3	2	4	2.5			0.0	Very Low		

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
57	1-60	LOWER RUSSIAN RIVER VALLEY		North Coast	NCRO	6,640	10.4	3,754	2	2	5	4	3	2	3	2.1	1		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)	
58	1-61	FORT ROSS TERRACE DEPOSITS		North Coast	NCRO	8,483	13.3	1,075	1	2	4	4	0	1	5	2.4	1		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).	
59	1-8.01	MAD RIVER VALLEY	MAD RIVER LOWLAND	North Coast	NRO	13,981	21.8	14,204	2	2	1	4	1	0	0	0.0			0.0	Very Low		
60	1-8.02	MAD RIVER VALLEY	DOWS PRAIRIE SCHOOL AREA	North Coast	NRO	25,570	40.0	23,086	2	1	3	4	3	0	0	0.0			0.0	Very Low		
61	2-26	PESCADERO VALLEY		San Francisco Bay	NCRO	2,904	4.5	571	1	0	4	4	3	2	3	2.1			0.0	Very Low		
62	2-28	ROSS VALLEY		San Francisco Bay	NCRO	1,763	2.8	7,194	4	2	0	4	0	0	1	0.4			0.0	Very Low		
63	2-33	ISLAIS VALLEY		San Francisco Bay	NCRO	5,937	9.3	131,576	5	1	0	4	0	0	1	0.4			0.0	Very Low		
64	4-5	ACTON VALLEY		South Coast	SRO	8,300	13.0	2,280	1	4	5	4	1	1	4	2.0	1		0.0	Very Low	Locally high concentrations of TDS, sulfate, and chloride and two wells in the basin with known concentrations of nitrates exceeding MCL (B-118).	
65	5-11	MOHAWK VALLEY		Sacramento River	NRO	18,987	29.7	1,375	1	0	3	4	1	0	0	0.0			0.0	Very Low		
66	5-12.02	SIERRA VALLEY	CHILCOOT	Sacramento River	NRO	7,551	11.8	308	1	0	3	4	3	1	2	1.3			0.0	Very Low		
67	5-18	COYOTE VALLEY		Sacramento River	NRO	6,528	10.2	2,252	1	5	2	4	3	2	3	2.1			0.0	Very Low		
68	5-19	COLLAYOMI VALLEY		Sacramento River	NRO	6,497	10.2	1,513	1	4	2	4	1	2	3	2.1			0.0	Very Low		
69	5-26	WALKER BASIN CREEK VALLEY		Tulare Lake	SCRO	7,693	12.0	249	1	0	1	4	2	0	1	0.4			0.0	Very Low		
70	5-50	NORTH FORK BATTLE CREEK		Sacramento River	NRO	12,755	19.9	528	1	0	3	4	1	0	1	0.4			0.0	Very Low		
71	5-87	MIDDLE FORK FEATHER RIVER		Sacramento River	NRO	4,342	6.8	177	1	0	2	4	1	0	2	0.8			0.0	Very Low		
72	5-9	INDIAN VALLEY		Sacramento River	NRO	29,413	46.0	1,718	1	0	2	4	3	0	2	0.8			0.0	Very Low		
73	5-94	MIDDLE CREEK		Sacramento River	NRO	705	1.1	10	1	0	0	4	1	2	4	2.5			0.0	Very Low		
74	5-95	MEADOW VALLEY		Sacramento River	NRO	5,734	9.0	387	1	0	2	4	1	1	2	1.3			0.0	Very Low		
75	6-5.03	TAHOE VALLEY	TAHOE NORTH	North Lahontan	NCRO	1,931	3.0	3,410	3	0	5	4	0	2	3	2.1			0.0	Very Low		
76	7-20	MORONGO VALLEY		Colorado River	SRO	7,286	11.4	2,983	2	5	5	4	0	0	0	0.0			0.0	Very Low		
77	7-26	TERWILLIGER VALLEY		Colorado River	SRO	8,081	12.6	1,085	1	5	1	4	1	1	5	2.4	1		0.0	Very Low	Locally elevated nitrates (B-118).	
78	9-12	SAN DIEGUITO CREEK		South Coast	SRO	3,578	5.6	3,135	2	2	0	4	3	2	1	1.4			0.0	Very Low		
79	9-18	OTAY VALLEY		South Coast	SRO	6,869	10.7	39,191	4	1	0	4	1	2	1	1.4	5		0.0	Very Low	Groundwater is marginal to inferior for domestic use in the coastal plain due to high TDS content and suitable in the eastern part of the basin and is marginal to inferior for irrigation due to high chloride concentrations (B-118 & DWR 1967).	
80	9-23	SAN ELIJO VALLEY		South Coast	SRO	888	1.4	1,125	2	4	0	4	1	2	1	1.4	5		0.0	Very Low	High TDS limits beneficial uses (B-118)	
81	9-25	RANCHITA TOWN AREA		South Coast	SRO	3,146	4.9	168	1	0	0	4	1	2	5	2.9			0.0	Very Low		
82	9-29	POTRERO VALLEY		South Coast	SRO	2,035	3.2	475	1	0	4	4	1	2	5	2.9			0.0	Very Low		

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
83	9-32	SAN MARCOS AREA		South Coast	SRO	2,144	3.3	15,096	5	3	0	4	0	2	0	1.0			0.0	Very Low		
84	1-15	HAPPY CAMP TOWN AREA		North Coast	NRO	2,771	4.3	759	1	0	0	3	1	1	2	1.3			0.0	Very Low		
85	1-20	GARCIA RIVER VALLEY		North Coast	NCRO	2,242	3.5	119	1	0	0	3	2	0	4	1.5			0.0	Very Low		
86	1-27	BIG LAGOON AREA		North Coast	NRO	13,343	20.8	2,465	1	3	4	3	0	0	5	1.9			0.0	Very Low		
87	1-35	HYAMPOM VALLEY		North Coast	NRO	1,354	2.1	52	1	0	0	3	1	1	4	2.0			0.0	Very Low		
88	1-38	LOWER LAYTONVILLE VALLEY		North Coast	NCRO	2,152	3.4	107	1	0	0	3	0	1	5	2.4			0.0	Very Low		
89	1-43	WILLIAMS VALLEY		North Coast	NCRO	1,642	2.6	2	0	0	0	3	0	2	3	2.1			0.0	Very Low		
90	1-49	ANNAPOLIS OHLSON RANCH FM HIGHLANDS		North Coast	NCRO	8,646	13.5	233	1	0	0	3	1	1	5	2.4			0.0	Very Low		
91	1-50	KNIGHTS VALLEY		North Coast	NCRO	4,086	6.4	102	1	0	0	3	4	1	2	1.3			0.0	Very Low		
92	1-7	HOOPA VALLEY		North Coast	NRO	3,894	6.1	1,797	2	2	0	3	1	1	5	2.4			0.0	Very Low		
93	2-11	SUNOL VALLEY		San Francisco Bay	NCRO	16,623	26.0	808	1	0	0	3	1	0	0	0.0			0.0	Very Low		
94	2-24	SAN GREGORIO VALLEY		San Francisco Bay	NCRO	1,074	1.7	66	1	0	0	3	3	2	3	2.1			0.0	Very Low		
95	2-3	SUISUN-FAIRFIELD VALLEY		San Francisco Bay	NCRO	133,505	208.6	136,754	2	5	1	3	1	0	0	0.0			0.0	Very Low		
96	2-38	LOBOS		San Francisco Bay	NCRO	2,359	3.7	59,119	5	0	0	3	0	0	0	0.0	1		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)	
97	2-39	MARINA		San Francisco Bay	NCRO	2,186	3.4	45,294	5	0	0	3	0	0	0	0.0	1		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)	
98	3-18	CARPINTERIA		Central Coast	SRO	8,140	12.7	14,561	3	0	4	3	4	0	0	0.0			0.0	Very Low		
99	3-22	SANTA ANA VALLEY		Central Coast	SCRO	2,724	4.3	76	1	0	0	3	2	1	5	2.4			0.0	Very Low		
100	3-25	TRES PINOS VALLEY		Central Coast	SCRO	3,385	5.3	48	1	0	4	3	3	1	5	2.4			0.0	Very Low		
101	4-19	THOUSAND OAKS AREA		South Coast	SRO	3,115	4.9	17,202	4	1	0	3	0	1	1	0.9	5		0.0	Very Low	High TDS, alkalinity, and hardness in the basin (B-118).	
102	4-3.02	VENTURA RIVER VALLEY	LOWER VENTURA RIVER	South Coast	SRO	5,312	8.3	15,920	3	1	0	3	1	1	1	0.9	3		0.0	Very Low	Oil, high sulfates, nitrates, and hydrogen sulfide are documented to be present in the basin.	
103	5-16	HIGH VALLEY		Sacramento River	NRO	2,356	3.7	34	1	0	3	3	1	2	4	2.5			0.0	Very Low		
104	5-21.53	SACRAMENTO VALLEY	BEND	Sacramento River	NRO	21,748	34.0	554	1	0	1	3	1	0	0	0.0			0.0	Very Low		
105	5-25	KERN RIVER VALLEY		Tulare Lake	SCRO	79,678	124.5	10,364	1	1	4	3	1	0	0	0.0			0.0	Very Low		
106	5-30	LOWER LAKE VALLEY		Sacramento River	NRO	2,404	3.8	2,694	2	0	5	3	1	2	4	2.5			0.0	Very Low		
107	5-31	LONG VALLEY		Sacramento River	NRO	2,799	4.4	194	1	0	0	3	2	2	4	2.5			0.0	Very Low		
108	5-48	BURNEY CREEK VALLEY		Sacramento River	NRO	2,352	3.7	1,466	2	1	0	3	5	2	2	1.8			0.0	Very Low		
109	5-6.02	REDDING AREA	ROSEWOOD	Sacramento River	NRO	46,455	72.6	1,009	1	0	0	3	1	0	0	0.0			0.0	Very Low		
110	5-6.05	REDDING AREA	MILLVILLE	Sacramento River	NRO	65,226	101.9	2,640	1	0	1	3	1	0	0	0.0			0.0	Very Low		
111	5-63	STONYFORD TOWN AREA		Sacramento River	NRO	6,437	10.1	183	1	0	3	3	2	1	2	1.3			0.0	Very Low		
112	5-82	CUDDY CANYON VALLEY		Tulare Lake	SCRO	3,308	5.2	2,641	2	4	5	3	0	1	5	2.4			0.0	Very Low		
113	5-84	CUDDY VALLEY		Tulare Lake	SCRO	3,474	5.4	779	1	0	5	3	0	1	5	2.4			0.0	Very Low		
114	6-108	OLYMPIC VALLEY		North Lahontan	NCRO	702	1.1	471	2	0	5	3	0	2	3	2.1			0.0	Very Low		
115	6-45	TEHACHAPI VALLEY EAST		South Lahontan	SRO	24,055	37.6	480	1	0	2	3	1	0	5	1.9	5		0.0	Very Low	Court adjudicated basin in overdraft. Groundwater quality issues.	
116	6-6	CARSON VALLEY		North Lahontan	NCRO	10,716	16.7	328	1	0	3	3	3	0	0	0.0			0.0	Very Low		
117	6-7	ANTELOPE VALLEY		North Lahontan	NCRO	20,125	31.4	876	1	0	3	3	5	0	0	0.0			0.0	Very Low		
118	6-96	EAGLE LAKE AREA		North Lahontan	NRO	12,700	19.8	41	0	0	0	3	0	1	1	0.9			0.0	Very Low		

Table A4. Draft CASGEM Groundwater Basin Prioritization: Sorted by Basin Prioritization.

CASGEM Groundwater Basin Prioritization Draft Results									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						
119	9-19	TIA JUANA		South Coast	SRO	7,448	11.6	50,694	5	1	0	3	1	2	1	1.4	5	1	0.0	Very Low	Chloride and sulfate exceed MCL in some wells(Izbicki 1985). MCL for aluminum, barium, lead, selenium, and silver concentrations are exceeded individually in some wells (Dudek 1994).	Adjudicated
120	9-28	CAMPO VALLEY		South Coast	SRO	3,569	5.6	985	1	0	4	3	1	2	5	2.9		1	0.0	Very Low		Basin area is listed by EPA as a "Sole Source Aquifer" in EPA Region 9.
121	1-14	LOWER KLAMATH RIVER VALLEY		North Coast	NRO	7,026	11.0	806	1	0	5	2	1	1	5	2.4			0.0	Very Low		
122	1-18	RED ROCK VALLEY		North Coast	NRO	8,996	14.1	23	0	0	0	2	4	0	0	0.0			0.0	Very Low		
123	1-26	REDWOOD CREEK AREA		North Coast	NRO	1,996	3.1	234	1	0	4	2	2	2	5	2.9			0.0	Very Low		
124	1-34	DINSMORES TOWN AREA		North Coast	NRO	2,276	3.6	183	1	0	5	2	1	1	5	2.4			0.0	Very Low		
125	1-36	HETTENSCHAW VALLEY		North Coast	NRO	846	1.3	5	0	0	0	2	0	1	0	0.5			0.0	Very Low		
126	1-37	COTTONEVA CREEK VALLEY		North Coast	NCRO	763	1.2	1	0	0	0	2	0	1	2	1.3			0.0	Very Low		
127	1-41	LITTLE VALLEY		North Coast	NCRO	812	1.3	11	1	0	0	2	0	1	2	1.3			0.0	Very Low		
128	1-42	SHERWOOD VALLEY		North Coast	NCRO	1,150	1.8	13	1	0	0	2	0	2	3	2.1			0.0	Very Low		
129	1-45	BIG RIVER VALLEY		North Coast	NCRO	1,685	2.6	29	1	0	5	2	0	1	2	1.3			0.0	Very Low		
130	1-46	NAVARRO RIVER VALLEY		North Coast	NCRO	770	1.2	36	1	0	0	2	0	0	5	1.9			0.0	Very Low		
131	1-48	GRAVELLY VALLEY		North Coast	NRO	2,974	4.6	6	0	0	5	2	0	2	0	1.0			0.0	Very Low		
132	3-20	ANO NUEVO AREA		Central Coast	SCRO	2,030	3.2	46	1	0	4	2	3	2	4	2.5			0.0	Very Low		
133	3-31	HERNANDEZ VALLEY		Central Coast	SCRO	2,865	4.5	3	0	0	0	2	0	1	5	2.4			0.0	Very Low		
134	3-51	MAJORS CREEK		Central Coast	SCRO	364	0.6	53	1	0	0	2	5	2	4	2.5			0.0	Very Low		
135	3-6	LOCKWOOD VALLEY		Central Coast	SCRO	59,933	93.6	1,171	1	0	2	2	1	0	5	1.9			0.0	Very Low		
136	4-16	HIDDEN VALLEY		South Coast	SRO	2,217	3.5	503	1	0	4	2	1	1	1	0.9			0.0	Very Low		
137	4-20	RUSSELL VALLEY		South Coast	SRO	3,087	4.8	18,860	4	0	0	2	0	1	1	0.9	3		0.0	Very Low	TDS and sulfate exceed MCL for some wells in the basin per Bulletin 118.	
138	5-1.02	GOOSE LAKE	FANDANGO VALLEY	Sacramento River	NRO	18,439	28.8	124	0	0	1	2	2	0	0	0.0			0.0	Very Low		
139	5-35	MCCLLOUD AREA		Sacramento River	NRO	21,320	33.3	822	1	0	1	2	1	1	2	1.3			0.0	Very Low		
140	5-36	ROUND VALLEY		Sacramento River	NRO	7,266	11.4	27	0	0	0	2	3	1	3	1.6			0.0	Very Low		
141	5-40	HOT SPRINGS VALLEY		Sacramento River	NRO	2,404	3.8	12	0	0	0	2	3	0	1	0.4			0.0	Very Low		
142	5-45	CAYTON VALLEY		Sacramento River	NRO	1,306	2.0	2	0	0	0	2	5	0	2	0.8			0.0	Very Low		
143	5-68	POPE VALLEY		Sacramento River	NCRO	7,177	11.2	110	1	0	0	2	3	2	5	2.9			0.0	Very Low		
144	5-7	LAKE ALMANOR VALLEY		Sacramento River	NRO	7,152	11.2	2,121	1	0	3	2	3	1	2	1.3			0.0	Very Low		
145	5-83	CUDDY RANCH AREA		Tulare Lake	SCRO	4,213	6.6	774	1	0	5	2	1	1	4	2.0			0.0	Very Low		
146	5-85	MIL POTRERO AREA		Tulare Lake	SCRO	2,314	3.6	1,288	2	5	5	2	0	1	5	2.4			0.0	Very Low		
147	5-86	JOSEPH CREEK		Sacramento River	NRO	4,458	7.0	13	0	0	0	2	2	1	2	1.3			0.0	Very Low		
148	6-3	WILLOW CREEK VALLEY		North Lahontan	NRO	11,698	18.3	62	0	0	0	2	4	1	1	0.9			0.0	Very Low		
149	6-36.02	LANGFORD VALLEY	IRWIN	South Lahontan	SRO	10,557	16.5	8,845	2	5	1	2	0	0	5	1.9	3		0.0	Very Low	Locally high iron and fluoride concentrations.(B-118)	
150	7-27	SAN FELIPE VALLEY		Colorado River	SRO	23,573	36.8	188	0	0	1	2	0	1	5	2.4	3		0.0	Very Low	Significant groundwater declines documented in the late 1950s through early 1970s (B-118)	
151	7-47	JACUMBA VALLEY		Colorado River	SRO	2,472	3.9	517	1	0	4	2	0	1	5	2.4	5	3	0.0	Very Low	According to San Diego County documents, some wells are reportedly going dry; this is a small basin with over 500 residents and no source of imported water. TDS of some groundwaters recharging the basin are high.	According to aerial imagery review, GIS, and other docs,approximately 500 acres of crops are irrigated and Bulletin 118 boundary is significantly over exaggerated (incorporating bedrock areas probably 30 percent of which are included in Bull 118 boundary).
152	7-49	PIPES CANYON FAULT VALLEY		Colorado River	SRO	3,408	5.3	5	0	0	0	2	0	0	5	1.9			0.0	Very Low		
153	9-2	SAN MATEO VALLEY		South Coast	SRO	3,009	4.7	554	1	0	4	2	2	3	1	1.9	3		0.0	Very Low	Locally high TDS and some elevated nitrates in wells (B-118)	

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CASGEM Groundwater Basin Prioritization Draft Results									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						
154	9-22	BATIQUITOS LAGOON VALLEY		South Coast	SRO	745	1.2	2,109	3	5	0	2	1	2	1	1.4	4		0.0	Very Low	The groundwater in this basin was rated inferior for irrigation because of high chloride content and marginal for domestic use because of high sulfate and TDS concentrations (DWR 1967).	
155	9-27	COTTONWOOD VALLEY		South Coast	SRO	3,871	6.0	44	1	0	4	2	1	2	5	2.9		1	0.0	Very Low		Basin area is listed by EPA as a "Sole Source Aquifer" in EPA Region 9.
156	1-16	SEIAD VALLEY		North Coast	NRO	2,243	3.5	132	1	0	4	1	1	1	0	0.5			0.0	Very Low		
157	1-17	BRAY TOWN AREA		North Coast	NRO	8,027	12.5	0	0	0	0	1	2	2	5	2.9			0.0	Very Low		
158	1-25	PRAIRIE CREEK AREA		North Coast	NRO	20,013	31.3	4	0	0	0	1	0	1	5	2.4			0.0	Very Low		
159	1-28	MATTOLE RIVER VALLEY		North Coast	NRO	3,150	4.9	72	1	0	0	1	2	1	1	0.9			0.0	Very Low		
160	1-29	HONEYDEW TOWN AREA		North Coast	NRO	2,369	3.7	19	0	0	0	1	1	0	1	0.4			0.0	Very Low		
161	1-30	PEPPERWOOD TOWN AREA		North Coast	NRO	6,288	9.8	315	1	0	0	1	1	1	5	2.4			0.0	Very Low		
162	1-31	WEOTT TOWN AREA		North Coast	NRO	3,653	5.7	364	1	0	4	1	1	1	5	2.4			0.0	Very Low		
163	2-27	SAND POINT AREA		San Francisco Bay	NCRO	1,405	2.2	43	1	0	5	1	0	1	3	1.6			0.0	Very Low		
164	3-19	CARRIZO PLAIN		Central Coast	SRO	210,896	329.5	440	0	0	1	1	0	0	5	1.9			0.0	Very Low		
165	3-28	SAN BENITO RIVER VALLEY		Central Coast	SCRO	24,223	37.8	101	0	0	2	1	1	1	5	2.4			0.0	Very Low		
166	3-30	BITTER WATER VALLEY		Central Coast	SCRO	32,222	50.3	38	0	0	0	1	1	1	5	2.4			0.0	Very Low		
167	3-32	PEACH TREE VALLEY		Central Coast	SCRO	9,791	15.3	7	0	0	0	1	1	1	5	2.4			0.0	Very Low		
168	3-45	HUASNA VALLEY		Central Coast	SRO	4,706	7.4	55	1	0	0	1	1	0	0	0.0			0.0	Very Low		
169	3-5	CHOLAME VALLEY		Central Coast	SCRO	39,847	62.3	48	0	0	1	1	1	1	5	2.4			0.0	Very Low		
170	4-1	UPPER OJAI VALLEY		South Coast	SRO	3,815	6.0	616	1	0	2	1	2	1	1	0.9	5		0.0	Very Low	Groundwater has been documented to contain high levels of boron, sodium chloride, high TDS, sulfate, nitrates, iron, and chlorides (B-118)	
171	4-15	TIERRA REJADA		South Coast	SRO	4,611	7.2	3,673	2	3	0	1	2	1	1	0.9	1		0.0	Very Low	Locally high nitrates documented in the basin (B-118).	
172	4-9	SIMI VALLEY		South Coast	SRO	12,192	19.0	98,625	5	1	2	1	1	1	1	0.9	3		0.0	Very Low	VOCS, elevated TDS, and nitrates (B-118)	
173	5-20	BERRYESSA VALLEY		Sacramento River	NCRO	1,375	2.1	0	0	0	0	1	0	2	5	2.9			0.0	Very Low		
174	5-23	PANOCH VALLEY		Tulare Lake	SCRO	33,090	51.7	41	0	0	0	1	1	0	5	1.9			0.0	Very Low		
175	5-29	CASTAC LAKE VALLEY		Tulare Lake	SCRO	3,573	5.6	366	1	0	5	1	0	1	5	2.4			0.0	Very Low		
176	5-3	JESS VALLEY		Sacramento River	NRO	6,708	10.5	13	0	0	0	1	4	1	2	1.3			0.0	Very Low		
177	5-41	EGG LAKE VALLEY		Sacramento River	NRO	4,101	6.4	0	0	0	0	1	0	0	3	1.1			0.0	Very Low		
178	5-46	LAKE BRITTON AREA		Sacramento River	NRO	14,055	22.0	84	0	0	2	1	1	0	2	0.8			0.0	Very Low		
179	5-47	GOOSE VALLEY		Sacramento River	NRO	4,208	6.6	10	0	0	0	1	5	0	2	0.8			0.0	Very Low		
180	5-51	BUTTE CREEK VALLEY		Sacramento River	NRO	3,227	5.0	0	0	0	0	1	0	0	2	0.8			0.0	Very Low		
181	5-54	ASH VALLEY		Sacramento River	NRO	6,008	9.4	3	0	0	0	1	3	0	2	0.8			0.0	Very Low		
182	5-58	CLOVER VALLEY		Sacramento River	NRO	16,784	26.2	0	0	0	0	1	0	0	2	0.8			0.0	Very Low		
183	5-59	GRIZZLY VALLEY		Sacramento River	NRO	13,441	21.0	0	0	0	0	1	0	0	0	0.0			0.0	Very Low		
184	5-6.06	REDDING AREA	SOUTH BATTLE CREEK	Sacramento River	NRO	33,835	52.9	48	0	0	0	1	1	1	2	1.3			0.0	Very Low		
185	5-61	CHROME TOWN AREA		Sacramento River	NRO	1,408	2.2	6	0	0	0	1	0	1	1	0.9			0.0	Very Low		
186	5-64	BEAR VALLEY		Sacramento River	NRO	9,104	14.2	4	0	0	0	1	1	0	4	1.5			0.0	Very Low		
187	5-69	YOSEMITE VALLEY		San Joaquin River	SCRO	7,465	11.7	1,016	1	5	4	1	0	2	5	2.9			0.0	Very Low		
188	5-8	MOUNTAIN MEADOWS VALLEY		Sacramento River	NRO	8,145	12.7	0	0	0	0	1	4	0	0	0.0			0.0	Very Low		
189	5-90	FUNKS CREEK		Sacramento River	NRO	3,012	4.7	0	0	0	0	1	0	2	1	1.4			0.0	Very Low		
190	5-91	ANTELOPE CREEK		Sacramento River	NRO	2,040	3.2	3	0	0	0	1	1	0	1	0.4			0.0	Very Low		

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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						
191	5-92	BLANCHARD VALLEY		Sacramento River	NRO	2,221	3.5	0	0	0	0	1	0	0	1	0.4			0.0	Very Low		
192	5-93	NORTH FORK CACHE CREEK		Sacramento River	NRO	3,474	5.4	0	0	0	0	1	0	0	4	1.5			0.0	Very Low		
193	6-10	ADOBE LAKE VALLEY		South Lahontan	SRO	39,978	62.5	4	0	0	0	1	2	0	5	1.9			0.0	Very Low		
194	6-100	SECRET VALLEY		North Lahontan	NRO	33,680	52.6	26	0	0	0	1	1	1	1	0.9			0.0	Very Low		
195	6-104	LONG VALLEY		North Lahontan	NRO	46,836	73.2	141	0	0	0	1	1	0	2	0.8		3	0.0	Very Low		Groundwater Exports to Reno are being evaluated. Long Valley Creek is a major source of recharge to Honey Lake GW Basin. Long Valley also provides underflow to Cold Spring Valley.
196	6-106	LITTLE ANTELOPE VALLEY		North Lahontan	NCRO	2,491	3.9	0	0	0	0	1	3	0	0	0.0			0.0	Very Low		
197	6-13	BLACK SPRINGS VALLEY		South Lahontan	SRO	30,911	48.3	0	0	0	0	1	1	0	3	1.1			0.0	Very Low		
198	6-15	DEEP SPRINGS VALLEY		South Lahontan	SRO	30,048	47.0	5	0	0	1	1	1	0	5	1.9			0.0	Very Low		
199	6-18	DEATH VALLEY		South Lahontan	SRO	926,496	1,447.7	190	0	0	1	1	1	0	0	0.0			0.0	Very Low		
200	6-20	MIDDLE AMARGOSA VALLEY		South Lahontan	SRO	392,862	613.8	230	0	0	1	1	1	0	5	1.9	4		0.0	Very Low		Water quality is rated inferior to marginal for domestic purposes due to elevated fluoride and boron contents; however, locally groundwater is of good quality. (B-118)
201	6-22	UPPER KINGSTON VALLEY		South Lahontan	SRO	178,533	279.0	37	0	0	1	1	0	0	5	1.9	4		0.0	Very Low		Groundwater is marginal to inferior for domestic or irrigation purposes due to elevated fluoride and TDS (B-118).
202	6-25	BICYCLE VALLEY		South Lahontan	SRO	90,100	140.8	0	0	0	1	1	0	0	0	0.0	3		0.0	Very Low		Elevated TDS and fluoride (B-118).
203	6-30	IVANPAH VALLEY		South Lahontan	SRO	200,155	312.7	40	0	0	1	1	0	0	5	1.9	4		0.0	Very Low		Basin groundwater is rated marginal to inferior for both domestic and irrigational use because of elevated fluoride and sodium.(B-118)
204	6-31	KELSO VALLEY		South Lahontan	SRO	257,279	402.0	20	0	0	0	1	0	0	5	1.9			0.0	Very Low		
205	6-32	BROADWELL VALLEY		South Lahontan	SRO	92,688	144.8	8	0	0	1	1	0	0	5	1.9			0.0	Very Low		
206	6-33	SODA LAKE VALLEY		South Lahontan	SRO	383,560	599.3	750	0	0	1	1	0	0	5	1.9	5		0.0	Very Low		Groundwater quality is rated marginal to inferior for both domestic and irrigation purposes. This assessment is based on 66 analyses showing elevated concentrations of fluoride, boron, and TDS. Geotracker shows many LUST sites.
207	6-34	SILVER LAKE VALLEY		South Lahontan	SRO	35,519	55.5	0	0	0	0	1	0	0	0	0.0	4		0.0	Very Low		Groundwater in this basin is rated marginal to inferior for both domestic and irrigation uses because of elevated concentrations of fluoride, boron, and TDS. (B-118)
208	6-35	CRONISE VALLEY		South Lahontan	SRO	127,313	198.9	2	0	0	0	1	0	0	0	0.0			0.0	Very Low		
209	6-37	COYOTE LAKE VALLEY		South Lahontan	SRO	88,735	138.6	99	0	0	0	1	0	0	5	1.9	4		0.0	Very Low		Groundwater quality is rated as inferior to marginal for both domestic and irrigation purposes because of elevated levels of fluoride, boron, sodium, and TDS. (B-118).
210	6-38	CAVES CANYON VALLEY		South Lahontan	SRO	73,542	114.9	88	0	0	1	1	0	0	5	1.9	3		0.0	Very Low		Suitability of groundwater quality is rated inferior for irrigation and suitable to inferior for domestic use (DWR 1964). Historical measurements show TDS content ranging from 622 to 1,272 mg/L with an average of 904 mg/L (DWR 1964).

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						Acres	Sq. Mile							GW Use	Percent of Total Supply *	GW Reliance Total						
211	6-48	GOLDSTONE VALLEY		South Lahontan	SRO	28,287	44.2	0	0	0	0	1	0	0	0	0.0	3		0.0	Very Low	Groundwater quality in the basin is rated as inferior for irrigation purposes and marginal for domestic use because of elevated concentrations of chloride, fluoride, and TDS.	
212	6-49	SUPERIOR VALLEY		South Lahontan	SRO	121,084	189.2	0	0	0	1	1	0	0	5	1.9			0.0	Very Low		
213	6-51	PILOT KNOB VALLEY		South Lahontan	SRO	139,460	217.9	0	0	0	1	1	0	0	5	1.9			0.0	Very Low		
214	6-52	SEARLES VALLEY		South Lahontan	SRO	198,115	309.6	1,651	0	0	0	1	0	0	5	1.9	5		0.0	Very Low	Water locally beneficial in the north, but generally unsuitable for beneficial uses due to high concentrations of fluoride, boron, sodium, chloride, sulfate, and TDS. Water levels have declined due to pumping for evaporates.	
215	6-53	SALT WELLS VALLEY		South Lahontan	SRO	29,629	46.3	0	0	0	0	1	0	0	5	1.9	5		0.0	Very Low	The groundwater is rated inferior for all beneficial uses because of high TDS content that ranges from about 4,000 mg/L to 39,000 mg/L. Other impairments are elevated concentrations of sodium, chloride, and boron (DWR 1964).	
216	6-56	ROSE VALLEY		South Lahontan	SRO	42,709	66.7	10	0	0	1	1	0	1	5	2.4			0.0	Very Low		
217	6-57	DARWIN VALLEY		South Lahontan	SRO	44,386	69.4	39	0	0	0	1	0	0	5	1.9			0.0	Very Low		
218	6-58	PANAMINT VALLEY		South Lahontan	SRO	260,754	407.4	7	0	0	1	1	0	0	5	1.9	4		0.0	Very Low	Water from most wells located on the valley floor is ranked inferior for domestic use and marginal to inferior for irrigation purposes.	
219	6-66	LEE FLAT		South Lahontan	SRO	20,380	31.8	0	0	0	0	1	0	0	5	1.9			0.0	Very Low		
220	6-69	KELSO LANDER VALLEY		South Lahontan	SRO	11,208	17.5	0	0	0	0	1	0	0	5	1.9			0.0	Very Low		
221	6-8	BRIDGEPORT VALLEY		North Lahontan	NCRO	32,545	50.9	586	1	0	2	1	4	0	0	0.0			0.0	Very Low		
222	6-9	MONO VALLEY		South Lahontan	SRO	173,299	270.8	385	0	0	1	1	0	0	3	1.1			0.0	Very Low		
223	6-91	COW HEAD LAKE VALLEY		North Lahontan	NRO	5,625	8.8	0	0	0	0	1	5	0	3	1.1			0.0	Very Low		
224	6-94	GRASSHOPPER VALLEY		North Lahontan	NRO	17,665	27.6	0	0	0	0	1	1	0	3	1.1			0.0	Very Low		
225	6-95	DRY VALLEY		North Lahontan	NRO	6,498	10.2	2	0	0	0	1	1	1	3	1.6			0.0	Very Low		
226	7-1	LANFAIR VALLEY		Colorado River	SRO	158,360	247.4	19	0	0	0	1	0	0	5	1.9			0.0	Very Low		
227	7-11	COPPER MOUNTAIN VALLEY		Colorado River	SRO	30,540	47.7	6,085	1	5	1	1	0	1	5	2.4	1		0.0	Very Low	Locally high TDS and septic tank problems.	
228	7-13.01	DEADMAN VALLEY	DEADMAN LAKE	Colorado River	SRO	89,793	140.3	22	0	0	0	1	0	0	5	1.9			0.0	Very Low		
229	7-14	LAVIC VALLEY		Colorado River	SRO	103,132	161.1	0	0	0	0	1	0	0	5	1.9			0.0	Very Low		
230	7-16	AMES VALLEY		Colorado River	SRO	109,340	170.8	4,540	1	0	1	1	0	0	5	1.9	2		0.0	Very Low	Groundwater in the basin has locally high TDS, fluoride, and chloride contents (DWR 1975). TDS content reaches about 1,000 mg/L southwest of Emerson Lake (MWA 1999).	
231	7-18.01	JOHNSON VALLEY	SOGGY LAKE	Colorado River	SRO	77,865	121.7	354	0	0	1	1	0	0	5	1.9			0.0	Very Low		
232	7-2	FENNER VALLEY		Colorado River	SRO	457,633	715.1	31	0	0	1	1	0	0	5	1.9			0.0	Very Low		
233	7-22	WEST SALTON SEA		Colorado River	SRO	106,408	166.3	5,352	1	0	0	1	0	0	1	0.4	3		0.0	Very Low	Groundwater is marginal to poor for domestic and irrigation use because of elevated fluoride, boron, and TDS.	

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CASGEM Groundwater Basin Prioritization Draft Results									Data Component Ranking Value										Overall Ranking		Impact Comments	Other Information Comments
									Population	Population Growth	Public Supply Wells	Total Wells *	Irrigated Acreage *	Groundwater Reliance			Impacts	Other Information	Overall Basin Ranking Score *	Overall Basin Priority		
														GW Use	Percent of Total Supply *	GW Reliance Total						
Basin count	Basin Number	Basin Name	Sub-Basin Name	Hydrologic Region	DWR Region Office	Basin Area		2010 Population														
						Acres	Sq. Mile															
234	7-28	VALLECITO-CARRIZO VALLEY		Colorado River	SRO	122,943	192.1	77	0	0	1	1	0	0	3	1.1	3		0.0	Very Low	Groundwater quality is marginal for domestic use because of elevated levels of fluoride and mineral content.	
235	7-29	COYOTE WELLS VALLEY		Colorado River	SRO	147,088	229.8	374	0	0	1	1	0	0	1	0.4	4		0.0	Very Low	Basin is in overdraft (B-118). There are local fluoride issues and elevated TDS in some of the shallower wells in the basin.	
236	7-3	WARD VALLEY		Colorado River	SRO	564,569	882.1	22	0	0	0	1	0	0	5	1.9			0.0	Very Low		
237	7-30	IMPERIAL VALLEY		Colorado River	SRO	969,017	1,514.1	164,037	1	4	1	1	4	0	0	0.0			0.0	Very Low		
238	7-32	CHOCOLATE VALLEY		Colorado River	SRO	130,507	203.9	658	0	0	0	1	0	0	1	0.4	4		0.0	Very Low	Groundwater quality impairment due to elevated levels of fluoride, boron, and TDS (B-118). Elevated fluoride levels were found in nearly all mineral analyses of groundwater.	
239	7-33	EAST SALTON SEA		Colorado River	SRO	197,043	307.9	1,093	0	0	0	1	1	0	0	0.0			0.0	Very Low		
240	7-36	YUMA VALLEY		Colorado River	SRO	125,741	196.5	3,146	1	0	1	1	2	0	1	0.4			0.0	Very Low		
241	7-37	ARROYO SECO VALLEY		Colorado River	SRO	259,806	405.9	6	0	0	1	1	0	0	1	0.4			0.0	Very Low		
242	7-38	PALO VERDE VALLEY		Colorado River	SRO	74,004	115.6	7,459	1	4	2	1	5	0	1	0.4	2		0.0	Very Low	Some elevated TDS in groundwater makes water unsuitable for domestic or irrigation purposes.(B-118)	
243	7-4	RICE VALLEY		Colorado River	SRO	190,622	297.8	23	0	0	0	1	0	0	2	0.8			0.0	Very Low		
244	7-41	CALZONA VALLEY		Colorado River	SRO	81,708	127.7	1,608	1	0	0	1	0	0	5	1.9			0.0	Very Low		
245	7-42	VIDAL VALLEY		Colorado River	SRO	139,577	218.1	10	0	0	1	1	0	0	5	1.9	4		0.0	Very Low	Fluoride, chloride, sulfate, and TDS concentrations are high (DWR 1975). GW near town of Vidal has fluoride concentrations making water unusable domestically and sodium contents make water marginal for irrigation.	
246	7-43	CHEMEHUEVI VALLEY		Colorado River	SRO	275,713	430.8	395	0	0	0	1	0	0	5	1.9	3		0.0	Very Low	Concentrations of sulfate, chloride, fluoride, and TDS are high (DWR 1975).	
247	7-45	PIUTE VALLEY		Colorado River	SRO	177,319	277.1	2	0	0	0	1	0	0	1	0.4			0.0	Very Low		
248	7-48	HELENDALE FAULT VALLEY		Colorado River	SRO	2,637	4.1	9	0	0	0	1	0	0	5	1.9			0.0	Very Low		
249	7-51	LOST HORSE VALLEY		Colorado River	SRO	17,455	27.3	0	0	0	0	1	0	1	5	2.4			0.0	Very Low		
250	7-56	YAQUI WELL AREA		Colorado River	SRO	15,098	23.6	4	0	0	1	1	0	1	5	2.4			0.0	Very Low		
251	7-59	MASON VALLEY		Colorado River	SRO	5,567	8.7	23	0	0	2	1	0	1	5	2.4			0.0	Very Low		
252	7-6	PINTO VALLEY		Colorado River	SRO	184,377	288.1	7	0	0	1	1	0	0	3	1.1			0.0	Very Low		
253	7-62	JOSHUA TREE		Colorado River	SRO	27,422	42.8	4,951	1	5	3	1	0	1	5	2.4	2		0.0	Very Low	Fluoride concentration in water from some wells has reached 9.0 mg/L, exceeding recommended maximum concentration levels of 1.4 mg/L (B-118, DWR 1984).	
254	7-63	VANDEVENTER FLAT		Colorado River	SRO	6,787	10.6	50	0	0	0	1	0	0	0	0.0			0.0	Very Low		
255	7-7	CADIZ VALLEY		Colorado River	SRO	272,931	426.5	10	0	0	0	1	0	0	5	1.9			0.0	Very Low		
256	8-6	HEMET LAKE VALLEY		South Coast	SRO	16,811	26.3	464	1	0	3	1	1	0	3	1.1	2		0.0	Very Low	Locally high nitrates and TDS.(B-118)	
257	9-3	SAN ONOFRE VALLEY		South Coast	SRO	1,261	2.0	3,133	3	5	5	1	0	2	1	1.4			0.0	Very Low		
258	1-22	FAIRCHILD SWAMP VALLEY		North Coast	NRO	3,278	5.1	0	0	0	0	0	0	1	1	0.9			0.0	Very Low		
259	1-33	LARABEE VALLEY		North Coast	NRO	967	1.5	9	0	0	0	0	0	1	5	2.4			0.0	Very Low		
260	1-44	EDEN VALLEY		North Coast	NCRO	1,376	2.2	0	0	0	0	0	1	2	3	2.1			0.0	Very Low		
261	1-62	WILSON POINT AREA		North Coast	NRO	709	1.1	14	1	0	0	0	1	1	4	2.0			0.0	Very Low		
262	2-31	ARROYO DEL HAMBRE VALLEY		San Francisco Bay	NCRO	786	1.2	3,230	4	0	0	0	0	1	1	0.9			0.0	Very Low		

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CASGEM Groundwater Basin Prioritization Draft Results									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						
263	3-23	UPPER SANTA ANA VALLEY		Central Coast	SCRO	1,431	2.2	5	0	0	0	0	0	1	5	2.4			0.0	Very Low		
264	3-24	QUIEN SABE VALLEY		Central Coast	SCRO	4,706	7.4	5	0	0	0	0	0	1	5	2.4			0.0	Very Low		
265	3-29	DRY LAKE VALLEY		Central Coast	SCRO	1,416	2.2	8	0	0	0	0	1	1	5	2.4			0.0	Very Low		
266	3-33	SAN CARPOFORO VALLEY		Central Coast	SRO	1,054	1.6	4	0	0	0	0	0	3	5	3.4			0.0	Very Low		
267	3-34	ARROYO DE LA CRUZ VALLEY		Central Coast	SRO	1,028	1.6	1	0	0	0	0	1	3	5	3.4			0.0	Very Low		
268	3-35	SAN SIMEON VALLEY		Central Coast	SRO	560	0.9	9	1	0	5	0	2	3	5	3.4			0.0	Very Low		
269	3-36	SANTA ROSA VALLEY		Central Coast	SRO	3,525	5.5	920	1	0	2	0	2	0	0	0.0			0.0	Very Low		
270	3-37	VILLA VALLEY		Central Coast	SRO	1,358	2.1	21	1	0	0	0	3	4	4	3.5			0.0	Very Low		
271	3-38	CAYUCOS VALLEY		Central Coast	SRO	336	0.5	3	0	0	0	0	1	4	4	3.5			0.0	Very Low		
272	3-39	OLD VALLEY		Central Coast	SRO	1,179	1.8	217	1	0	0	0	1	4	4	3.5			0.0	Very Low		
273	3-40	TORO VALLEY		Central Coast	SRO	722	1.1	8	1	0	0	0	1	4	4	3.5			0.0	Very Low		
274	3-41	MORRO VALLEY		Central Coast	SRO	646	1.0	399	2	0	5	0	5	4	4	3.5			0.0	Very Low		
275	3-42	CHORRO VALLEY		Central Coast	SRO	1,547	2.4	247	1	0	3	0	3	4	4	3.5			0.0	Very Low		
276	3-43	RINCONADA VALLEY		Central Coast	SRO	2,579	4.0	11	0	0	0	0	0	1	5	2.4			0.0	Very Low		
277	3-44	POZO VALLEY		Central Coast	SRO	6,852	10.7	52	0	0	4	0	1	1	5	2.4			0.0	Very Low		
278	3-46	RAFAEL VALLEY		Central Coast	SRO	2,996	4.7	0	0	0	0	0	0	1	5	2.4			0.0	Very Low		
279	3-47	BIG SPRING AREA		Central Coast	SRO	7,332	11.5	0	0	0	0	0	0	1	5	2.4			0.0	Very Low		
280	4-18	HUNGRY VALLEY		South Coast	SRO	5,324	8.3	2	0	0	2	0	0	1	1	0.9	1		0.0	Very Low	Water is slightly alkaline (B-118).	
281	5-37	TOAD WELL AREA		Sacramento River	NRO	3,356	5.2	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
282	5-38	PONDOSA TOWN AREA		Sacramento River	NRO	2,082	3.3	0	0	0	0	0	0	2	2	1.8			0.0	Very Low		
283	5-43	ROCK PRAIRIE VALLEY		Sacramento River	NRO	5,740	9.0	0	0	0	0	0	0	0	2	0.8			0.0	Very Low		
284	5-44	LONG VALLEY		Sacramento River	NRO	1,088	1.7	0	0	0	0	0	0	0	2	0.8			0.0	Very Low		
285	5-49	DRY BURNEY CREEK VALLEY		Sacramento River	NRO	3,074	4.8	0	0	0	0	0	0	0	2	0.8			0.0	Very Low		
286	5-52	GRAYS VALLEY		Sacramento River	NRO	5,440	8.5	0	0	0	0	0	0	0	2	0.8			0.0	Very Low		
287	5-53	DIXIE VALLEY		Sacramento River	NRO	4,866	7.6	6	0	0	0	0	4	0	2	0.8			0.0	Very Low		
288	5-56	YELLOW CREEK VALLEY		Sacramento River	NRO	2,311	3.6	2	0	0	0	0	0	0	2	0.8			0.0	Very Low		
289	5-57	LAST CHANCE CREEK VALLEY		Sacramento River	NRO	4,659	7.3	0	0	0	0	0	0	1	2	1.3			0.0	Very Low		
290	5-62	ELK CREEK AREA		Sacramento River	NRO	1,438	2.2	174	1	0	0	0	1	1	1	0.9			0.0	Very Low		
291	5-70	LOS BANOS CREEK VALLEY		San Joaquin River	SCRO	4,835	7.6	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
292	5-71	VALLECITOS CREEK VALLEY		Tulare Lake	SCRO	15,110	23.6	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
293	5-88	STONY GORGE RESERVOIR		Sacramento River	NRO	1,065	1.7	0	0	0	0	0	1	0	1	0.4			0.0	Very Low		
294	5-89	SQUAW FLAT		Sacramento River	NRO	1,294	2.0	0	0	0	0	0	0	0	2	0.8			0.0	Very Low		
295	6-101	BULL FLAT		North Lahontan	NRO	18,151	28.4	2	0	0	0	0	0	0	1	0.4			0.0	Very Low		
296	6-105	SLINKARD VALLEY		North Lahontan	NCRO	4,517	7.1	0	0	0	0	0	1	0	0	0.0			0.0	Very Low		
297	6-107	SWEETWATER FLAT		North Lahontan	NCRO	4,747	7.4	0	0	0	0	0	1	0	0	0.0			0.0	Very Low		
298	6-16	EUREKA VALLEY		South Lahontan	SRO	129,329	202.1	10	0	0	0	0	0	0	5	1.9			0.0	Very Low		
299	6-17	SALINE VALLEY		South Lahontan	SRO	146,850	229.5	0	0	0	0	0	0	0	0	0.0	5		0.0	Very Low	GW Quality Impairments: High TDS and Fluorides, groundwater is inferior for domestic use. (B-118)	
300	6-19	WINGATE VALLEY		South Lahontan	SRO	71,755	112.1	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
301	6-21	LOWER KINGSTON VALLEY		South Lahontan	SRO	241,892	378.0	0	0	0	0	0	0	0	5	1.9	5		0.0	Very Low	Groundwater is inferior for domestic or irrigation purposes due to elevated fluoride, chloride, boron, sulfate and TDS (B-118)	
302	6-23	RIGGS VALLEY		South Lahontan	SRO	88,274	137.9	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		

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									Population	Population Growth	Public Supply Wells	Total Wells *	Irrigated Acreage *	Groundwater Reliance			Impacts	Other Information	Overall Basin Ranking Score *	Overall Basin Priority		
														GW Use	Percent of Total Supply *	GW Reliance Total						
Basin count	Basin Number	Basin Name	Sub-Basin Name	Hydrologic Region	DWR Region Office	Basin Area		2010 Population														
						Acres	Sq. Mile															
303	6-24	RED PASS VALLEY		South Lahontan	SRO	97,088	151.7	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
304	6-26	AVAWATZ VALLEY		South Lahontan	SRO	27,826	43.5	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
305	6-27	LEACH VALLEY		South Lahontan	SRO	61,620	96.3	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
306	6-36.01	LANGFORD VALLEY	LANGFORD WELL LAKE	South Lahontan	SRO	19,457	30.4	0	0	0	1	0	0	0	5	1.9			0.0	Very Low		
307	6-50	CUDDEBACK VALLEY		South Lahontan	SRO	95,418	149.1	97	0	0	0	0	0	0	5	1.9	3		0.0	Very Low	Groundwater quality is ranked marginal to inferior for most beneficial uses due to elevated concentrations of chloride and TDS.	
308	6-55	COSO VALLEY		South Lahontan	SRO	25,684	40.1	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
309	6-61	CAMEO AREA		South Lahontan	SRO	9,349	14.6	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
310	6-62	RACE TRACK VALLEY		South Lahontan	SRO	14,184	22.2	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
311	6-63	HIDDEN VALLEY		South Lahontan	SRO	18,037	28.2	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
312	6-64	MARBLE CANYON AREA		South Lahontan	SRO	10,422	16.3	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
313	6-65	COTTONWOOD SPRING AREA		South Lahontan	SRO	3,918	6.1	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
314	6-68	SANTA ROSA FLAT		South Lahontan	SRO	16,861	26.3	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
315	6-70	CACTUS FLAT		South Lahontan	SRO	7,056	11.0	0	0	0	0	0	0	1	5	2.4			0.0	Very Low		
316	6-71	LOST LAKE VALLEY		South Lahontan	SRO	23,414	36.6	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
317	6-72	COLES FLAT		South Lahontan	SRO	2,961	4.6	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
318	6-73	WILD HORSE MESA AREA		South Lahontan	SRO	3,337	5.2	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
319	6-74	HARRISBURG FLATS		South Lahontan	SRO	25,077	39.2	1	0	0	0	0	0	0	5	1.9			0.0	Very Low		
320	6-75	WILDROSE CANYON		South Lahontan	SRO	5,182	8.1	1	0	0	2	0	0	0	5	1.9			0.0	Very Low		
321	6-76	BROWN MOUNTAIN VALLEY		South Lahontan	SRO	21,862	34.2	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
322	6-77	GRASS VALLEY		South Lahontan	SRO	10,034	15.7	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
323	6-78	DENNING SPRING VALLEY		South Lahontan	SRO	7,289	11.4	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
324	6-79	CALIFORNIA VALLEY		South Lahontan	SRO	58,639	91.6	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
325	6-80	MIDDLE PARK CANYON		South Lahontan	SRO	1,752	2.7	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
326	6-81	BUTTE VALLEY		South Lahontan	SRO	8,853	13.8	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
327	6-82	SPRING CANYON VALLEY		South Lahontan	SRO	4,832	7.5	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
328	6-84	GREENWATER VALLEY		South Lahontan	SRO	60,260	94.2	0	0	0	0	0	1	0	5	1.9			0.0	Very Low		
329	6-85	GOLD VALLEY		South Lahontan	SRO	3,234	5.1	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
330	6-86	RHODES HILL AREA		South Lahontan	SRO	15,697	24.5	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
331	6-88	OWL LAKE VALLEY		South Lahontan	SRO	22,402	35.0	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
332	6-89	KANE WASH AREA		South Lahontan	SRO	5,997	9.4	0	0	0	0	0	0	1	5	2.4			0.0	Very Low		
333	6-90	CADY FAULT AREA		South Lahontan	SRO	8,015	12.5	6	0	0	0	0	0	0	5	1.9			0.0	Very Low		

Table A4. Draft CASGEM Groundwater Basin Prioritization: Sorted by Basin Prioritization.

CASGEM Groundwater Basin Prioritization Draft Results									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						
334	6-92	PINE CREEK VALLEY		North Lahontan	NRO	9,526	14.9	0	0	0	0	0	0	0	1	0.4			0.0	Very Low		
335	6-93	HARVEY VALLEY		North Lahontan	NRO	4,503	7.0	0	0	0	0	0	1	0	1	0.4			0.0	Very Low		
336	6-97	HORSE LAKE VALLEY		North Lahontan	NRO	3,827	6.0	0	0	0	0	0	3	0	1	0.4			0.0	Very Low		
337	6-98	TULEDAD CANYON VALLEY		North Lahontan	NRO	5,167	8.1	0	0	0	0	0	1	0	0	0.0			0.0	Very Low		
338	6-99	PAINTERS FLAT		North Lahontan	NRO	6,395	10.0	0	0	0	0	0	0	0	3	1.1			0.0	Very Low		
339	7-13.02	DEADMAN VALLEY	SURPRISE SPRING	Colorado River	SRO	29,507	46.1	179	0	0	2	0	0	0	5	1.9			0.0	Very Low		
340	7-15	BESSEMER VALLEY		Colorado River	SRO	39,379	61.5	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
341	7-17	MEANS VALLEY		Colorado River	SRO	15,061	23.5	46	0	0	0	0	0	0	5	1.9	2		0.0	Very Low	Fluoride, nitrate, and TDS concentrations are impairments locally.	
342	7-18.02	JOHNSON VALLEY	UPPER JOHNSON VALLEY	Colorado River	SRO	35,050	54.8	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
343	7-34	AMOS VALLEY		Colorado River	SRO	131,584	205.6	9	0	0	1	0	0	0	0	0.0			0.0	Very Low		
344	7-35	OGILBY VALLEY		Colorado River	SRO	135,017	211.0	36	0	0	1	0	1	0	1	0.4			0.0	Very Low		
345	7-40	QUIEN SABE POINT VALLEY		Colorado River	SRO	25,489	39.8	112	0	0	0	0	1	0	2	0.8			0.0	Very Low		
346	7-46	CANEBRAKE VALLEY		Colorado River	SRO	5,460	8.5	2	0	0	0	0	0	1	5	2.4			0.0	Very Low		
347	7-50	IRON RIDGE AREA		Colorado River	SRO	5,284	8.3	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
348	7-52	PLEASANT VALLEY		Colorado River	SRO	9,733	15.2	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
349	7-53	HEXIE MOUNTAIN AREA		Colorado River	SRO	11,236	17.6	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
350	7-54	BUCK RIDGE FAULT VALLEY		Colorado River	SRO	6,974	10.9	0	0	0	0	0	0	0	0	0.0			0.0	Very Low		
351	7-55	COLLINS VALLEY		Colorado River	SRO	7,121	11.1	11	0	0	0	0	0	1	5	2.4			0.0	Very Low		
352	7-61	DAVIES VALLEY		Colorado River	SRO	3,600	5.6	0	0	0	0	0	0	0	5	1.9			0.0	Very Low		
353	8-8	SEVEN OAKS VALLEY		South Coast	SRO	4,103	6.4	7	0	0	2	0	0	0	0	0.0			0.0	Very Low		
354	9-24	PAMO VALLEY		South Coast	SRO	1,514	2.4	0	0	0	0	0	0	2	5	2.9			0.0	Very Low		

NOTE: * Data component values were reduced by 25% due to data confidence, prior to calculating total GW basin ranking value
 Overall Basin Ranking = Population + Population Growth + PSW + (Total Wells x .75) + (Irr Acreage x 0.75) + ((GW Use + (GW % x .75))/2) + Impacts + Other