

8-002.01 UPPER SANTA ANA VALLEY - CHINO

Basin Boundaries

Summary

The Chino groundwater subbasin underlies southeast Los Angeles County, northwest Riverside County, and southwest San Bernardino County. The subbasin is bound on the northwest by the San Jose fault, on the north by the Cucamonga fault and impermeable rocks of the San Gabriel Mountains, and on the east by the Rialto-Colton fault. The subbasin is bound on the southeast by the Jurupa Hills, Pedley Hills, La Sierra Hills, and the approximate location of the Santa Ana River. The Chino fault and impermeable rocks of the Chino Hills and Puente Hills bound the southwest side of the basin. In some areas, the subbasin boundary coincides with the Chino Basin (1978) groundwater adjudication boundary. The boundary is defined by fifty eight (58) segments detailed in the descriptions below.

Segment Descriptions

<u>Segment Label</u>	<u>Segment Type</u>	<u>Description</u>	<u>Ref</u>
1-2	I Fault	Begins from point (1) and follows the San Jose fault and the Chino Basin judgment (1978) boundary to point (2).	{a}
2-3	I Fault	Begins from point (2) and follows the Red Hill Fault and the Chino Basin judgment (1978) boundary to point (3).	{b}
3-4	E Alluvial	Continues from point (3) and generally follows the contact of Quaternary alluvium with Cretaceous to pre-Cretaceous metamorphic rocks (4).	{c}
4-5	I Fault	Continues from point (4) and follows the Rialto-Colton fault and the Chino Basin judgment (1978) boundary to point (5).	{d}
5-6	I Groundwater Divide	Continues from point (5) and follows a groundwater divide and the Chino Basin judgment (1978) boundary to point (6).	{b}
6-7	E Alluvial	Continues from point (6) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous metasedimentary rocks of the Jurupa Hills to point (7).	{c}
7-8	I Watershed	Continues from point (7) and follows a watershed boundary and the Chino Basin judgment (1978) boundary to point (8).	{e}
8-9	E Alluvial	Continues from point (8) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous metasedimentary rocks of the Pedley Hills to point (9).	{c}
9-10	I Non-Alluvial	Continues from point (9) and follows a line connecting plutonic rocks of the Pedley Hills to point (10).	{c}
10-11	E Alluvial	Continues from point (10) and follows the contact of Quaternary alluvium with Cretaceous and pre-Cretaceous metamorphic rocks of the Pedley Hills to point (11).	{c}
11-12	I Non-Alluvial	Continues from point (11) and follows a groundwater barrier resulting from plutonic rocks of the Pedley Hills and La Sierra Hills to point (12).	{c}

12-13	E Alluvial	Continues from point (12) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks of the Pedley Hills to point (13).	{c}
13-14	I Management Area	Continues from point (13) and follows the boundary of the City of Corona AB3030 Groundwater Management Plan to point (14).	{f}
14-15	E Alluvial	Continues from point (14) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks to point (15).	{c}
15-16	I Management Area	Continues from point (15) and follows the boundary of the City of Corona AB3030 Groundwater Management Plan and a groundwater divide to point (16).	{f}
16-17	E Alluvial	Continues from point (16) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks to point (17).	{c}
17-18	I Management Area	Continues from point (17) and follows the boundary of the City of Corona AB3030 Groundwater Management Plan and a groundwater divide to point (18).	{f}
18-19	E Alluvial	Continues from point (18) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and Miocene Sycamore Formation, Monterey Formation, and Glendora Volcanic Rocks that form the Chino Hills and Puente Hills to point (19).	{c}
19-20	I Fault	Continues from point (19) and follows the Chino Fault and the San Jose Fault to point (20).	{d}
20-1	E Alluvial	Continues from point (20) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (1).	{c}
21-21	E Alluvial	Island within the basin boundary: Begins from point (21) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (21).	{c}
22-22	E Alluvial	Island within the basin boundary: Begins from point (22) and follows the contact of Quaternary alluvium with consolidated Tertiary nonmarine sediments and ends at point (22).	{c}
23-23	E Alluvial	Island within the basin boundary: Begins from point (23) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (23).	{c}
24-24	E Alluvial	Island within the basin boundary: Begins from point (24) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (24).	{c}
25-25	E Alluvial	Island within the basin boundary: Begins from point (25) and follows the geologic contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (25).	{c}
26-26	E Alluvial	Island within the basin boundary: Begins from point (26) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (26).	{c}
27-27	E Alluvial	Island within the basin boundary: Begins from point (27) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (27).	{c}

28-28	^E Alluvial	Island within the basin boundary: Begins from point (28) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (28).	{c}
29-29	^E Alluvial	Island within the basin boundary: Begins from point (29) and follows the contact of Quaternary alluvium with pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (29).	{c}
30-30	^E Alluvial	Island within the basin boundary: Begins from point (30) and follows the contact of Quaternary alluvium with pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (30).	{c}
31-31	^E Alluvial	Island within the basin boundary: Begins from point (31) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (31).	{c}
32-32	^E Alluvial	Island within the basin boundary: Begins from point (32) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (32).	{c}
33-33	^E Alluvial	Island within the basin boundary: Begins from point (33) and follows the contact of Quaternary alluvium with pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (33).	{c}
34-34	^E Alluvial	Island within the basin boundary: Begins from point (34) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (34).	{c}
35-35	^E Alluvial	Island within the basin boundary: Begins from point (35) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (35).	{c}
36-36	^E Alluvial	Island within the basin boundary: Begins from point (36) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (36).	{c}
37-37	^E Alluvial	Island within the basin boundary: Begins from point (37) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (37).	{c}
38-38	^E Alluvial	Island within the basin boundary: Begins from point (38) and follows the contact of Quaternary alluvium with pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (38).	{c}
39-39	^E Alluvial	Island within the basin boundary: Begins from point (39) and follows the contact of Quaternary alluvium with pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (39).	{c}
40-40	^E Alluvial	Island within the basin boundary: Begins from point (40) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (40).	{c}
41-41	^E Alluvial	Island within the basin boundary: Begins from point (41) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and pre-Cretaceous to Cretaceous metamorphic rocks and ends at point (41).	{c}
42-42	^E Alluvial	Island within the basin boundary: Begins from point (42) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (42).	{c}

43-43	E Alluvial	Island within the basin boundary: Begins from point (43) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (43).	{c}
44-44	E Alluvial	Island within the basin boundary: Begins from point (44) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (44).	{c}
45-45	E Alluvial	Island within the basin boundary: Begins from point (45) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (45).	{c}
46-46	E Alluvial	Island within the basin boundary: Begins from point (46) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (46).	{c}
47-47	E Alluvial	Island within the basin boundary: Begins from point (47) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (47).	{c}
48-48	E Alluvial	Island within the basin boundary: Begins from point (48) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (48).	{c}
49-49	E Alluvial	Island within the basin boundary: Begins from point (49) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (49).	{c}
50-50	E Alluvial	Island within the basin boundary: Begins from point (50) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (50).	{c}
51-51	E Alluvial	Island within the basin boundary: Begins from point (51) and follows the contact of Quaternary alluvium with Miocene Puente Formation and ends at point (51).	{c}
52-52	E Alluvial	Island within the basin boundary: Begins from point (52) and follows the contact of Quaternary alluvium with Cretaceous tonalite and ends at point (52).	{c}
53-53	E Alluvial	Island within the basin boundary: Begins from point (53) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (53).	{c}
54-54	E Alluvial	Island within the basin boundary: Begins from point (54) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (54).	{c}
55-55	E Alluvial	Island within the basin boundary: Begins from point (55) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (55).	{c}
56-56	E Alluvial	Island within the basin boundary: Begins from point (56) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (56).	{c}
57-57	E Alluvial	Island within the basin boundary: Begins from point (57) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic	{c}

		rocks and ends at point (57).	
58-58	^E Alluvial	Island within the basin boundary: Begins from point (58) and follows the contact of Quaternary alluvium with Proterozoic to Cretaceous metamorphic rocks and ends at point (58).	{c}
59-59	^E Alluvial	Island within the basin boundary: Begins from point (59) and follows the contact of Quaternary alluvium with Miocene Puente Formation and ends at point (59).	{c}

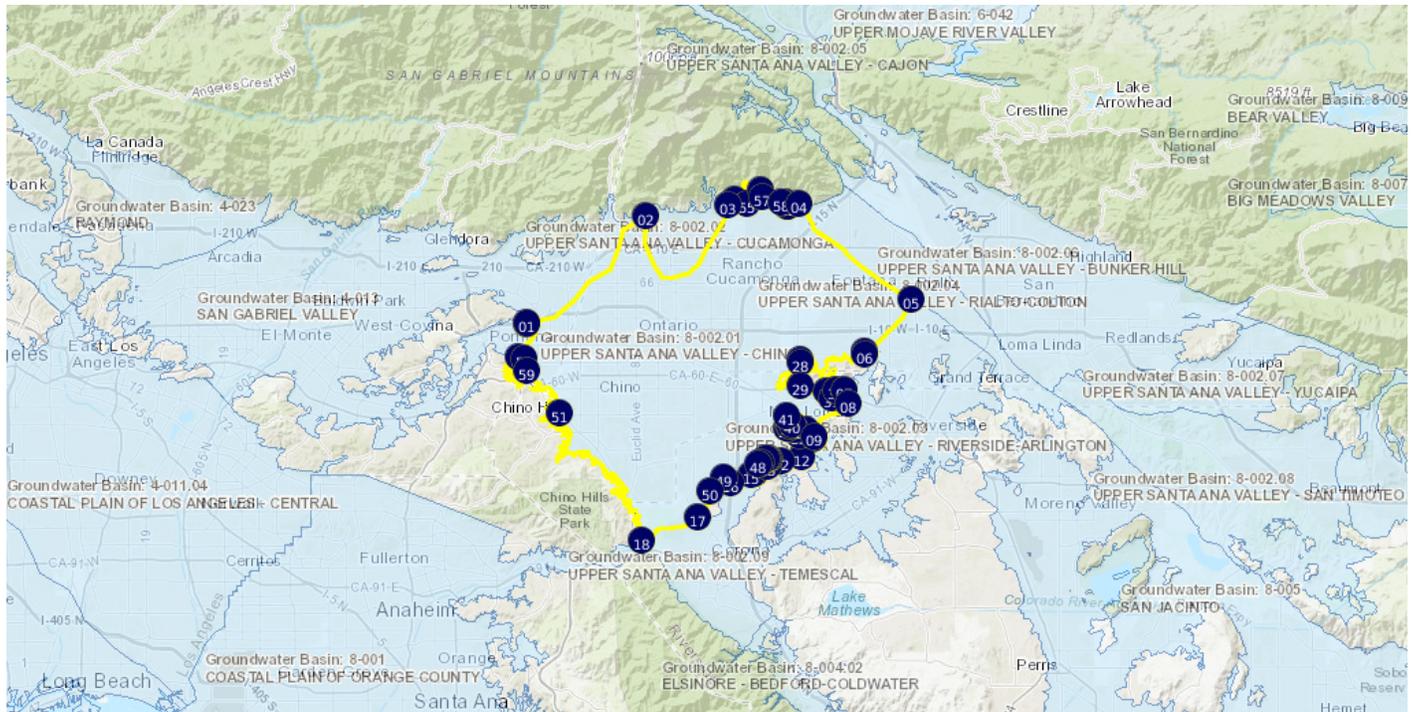
Significant Coordinates

<u>Point</u>	<u>Latitude</u>	<u>Longitude</u>
1	34.073000427	-117.759908163
2	34.161453772	-117.640818457
3	34.170913671	-117.558357888
4	34.172011693	-117.487013666
5	34.092431516	-117.374750137
6	34.047335155	-117.420322858
7	34.017682693	-117.441266283
8	34.005506228	-117.436698455
9	33.978308188	-117.471790931
10	33.977838781	-117.472171314
11	33.976700957	-117.473028527
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13	33.948274916	-117.530679268
14	33.947980987	-117.531899728
15	33.947278827	-117.53481502
16	33.94050257	-117.554800191
17	33.911910986	-117.587941787
18	33.892460865	-117.644691379
19	34.045271681	-117.767829938
20	34.071906985	-117.76019681
21	34.173476309	-117.50077121
22	34.173427795	-117.500169834
23	34.171097027	-117.49897134
24	34.170178041	-117.49896262
25	34.169978511	-117.497978139
26	34.04958125	-117.420706778
27	34.04192262	-117.485893924
28	34.040522468	-117.484981798
29	34.020511898	-117.485230509
30	34.01647858	-117.458661698

31	34.010501814	-117.45390172
32	34.017515124	-117.44924887
33	33.980478731	-117.475379735
34	33.983941726	-117.479514146
35	33.97966322	-117.487294995
36	33.983933652	-117.491267366
37	33.985570342	-117.49860719
38	33.989450295	-117.498156518
39	33.988153457	-117.496018038
40	33.989543559	-117.494041683
41	33.995449451	-117.498874748
42	33.957998141	-117.504478401
43	33.954037552	-117.517833551
44	33.960279966	-117.517519646
45	33.960504883	-117.518188006
46	33.959967295	-117.519486257
47	33.957637746	-117.525434625
48	33.955768877	-117.527474409
49	33.944914649	-117.562144475
50	33.932637392	-117.576355518
51	33.99803491	-117.726848942
52	34.043545409	-117.76292976
53	34.173878962	-117.551541795
54	34.175178024	-117.551383283
55	34.171894429	-117.538871973
56	34.183971284	-117.525170046
57	34.177790141	-117.523282812
58	34.172790537	-117.504338547
59	34.033265368	-117.760008573

Map

8-002.01 UPPER SANTA ANA VALLEY - CHINO



<https://sgma.water.ca.gov/webgis/?appid=160718113212&subbasinid=8-002.01>

References

Ref	Citation	Pub Date	Global ID
{a}	California Geological Survey (CGS), Geologic Atlas of California Map No. XX, San Bernardino Sheet, 1:250,000.	1967	20
{b}	California Department of Water Resources (DWR), California's Groundwater, Bulletin 118 - Update 2003. http://water.ca.gov/groundwater/bulletin118/update_2003.cfm	2003	73
{c}	California Geological Survey (CGS), Geologic Compilation of Quaternary Surficial Deposits in Southern California, T.L. Bedrossian, P. Roffers, C.A. Hayhurst, J.T. Lancaster, and W.R. Short.URL: http://www.conservation.ca.gov/cgs/fwgp/Pages/sr217.aspx	2012	50
{d}	California Geological Survey (CGS), Regional Geologic Map No. 3A, San Bernardino Quadrangle, 1:250,000, E.J. Bortungno and T.E. Spittler.URL: http://www.quake.ca.gov/gmaps/RGM/sanbernardino/sanbernardino.html	1986	6
{e}	United States Geological Survey (USGS), National Hydrography Dataset, Watershed Boundary Dataset for California, note: Coordinated effort among the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), the United States Geological Survey (USGS), and the Environmental Protection Agency (EPA).URL: http://datagateway.nrcs.usda.gov	2016	49
{f}	City of Corona, AB3030 Groundwater Management Plan, June 2008	06/01/2008	104

Footnotes

- I: Internal
- E: External