

8-002.03 UPPER SANTA ANA VALLEY - RIVERSIDE-ARLINGTON

Basin Boundaries

Summary

The Riverside-Arlington groundwater subbasin underlies a portion of the Santa Ana River Valley in northwestern Riverside County and southwestern San Bernardino County. The subbasin is bound on the northwest by impermeable plutonic rocks of the Pedley Hills and Jurupa Hills and by the Chino Basin (1978) groundwater adjudication boundary. The northeast boundary of the subbasin is the Rialto-Colton fault. The subbasin is bound on the southeast by impermeable rocks of the Box Springs Mountains and on the south by Arlington Mountain. The subbasin is bound on the west by the La Sierra Hills and by the adjoining Temescal subbasin, which is separated from the Riverside-Arlington subbasin by a narrow bedrock constriction. The Santa Ana River flows over the northern portion of the subbasin. Average annual precipitation ranges from about 10 to 14 inches. The subbasin boundary is defined by sixty-eight (68) 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 approximately follows the Rialto-Colton fault to point (2).	{a}
2-3	I Unknown	Continues from point (2) and follows an unknown feature to point (3).	{b}
3-4	E Alluvial	Continues from point (3) and generally follows the contact of Quaternary alluvium with various Cretaceous plutonic rocks and Paleozoic to Mesozoic metasedimentary rocks to point (4).	{a}
4-5	I Management Area	Continues from point (4) and follows the boundary of the City of Corona AB3030 Groundwater Management Plan to point (5).	{c}
5-6	I Non-Alluvial	Continues from point (5) and crosses the Quaternary alluvium at a narrow bedrock constriction, referred to as Arlington Gap, to point (6).	{a}
6-7	E Alluvial	Continues from point (6) and generally follows the contact of Quaternary alluvium with various Cretaceous plutonic rocks of the La Sierra Hills to point (7).	{a}
7-8	I Non-Alluvial	Continues from point (7) and crosses the Quaternary alluvium following a groundwater barrier resulting from impermeable granitic rocks of the La Sierra Hills to point (8).	{d}
8-9	E Alluvial	Continues from point (8) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and various Paleozoic to Mesozoic metasedimentary and metavolcanic rocks that form the Pedley Hills to point (9).	{a}
9-10	I	Continues from point (9) and follows the Chino Basin judgment (1978) boundary to point (10).	{e}

	Management Area		
10-11	^E Alluvial	Continues from point (10) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and various Paleozoic to Mesozoic metasedimentary rocks that form the Jurupa Hills to point (11).	{a}
11-1	^I Groundwater Divide	Continues from point (11) and follows a groundwater divide and the Chino Basin judgment (1978) boundary and ends at point (1).	{f}
12-12	^E Alluvial	Island within the basin boundary: begins from point (12) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (12).	{a}
13-13	^E Alluvial	Island within the basin boundary: begins from point (13) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (13).	{a}
14-14	^E Alluvial	Island within the basin boundary: begins from point (14) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (14).	{a}
15-15	^E Alluvial	Island within the basin boundary: begins from point (15) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (15).	{a}
16-16	^E Alluvial	Island within the basin boundary: begins from point (16) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (16).	{a}
17-17	^E Alluvial	Island within the basin boundary: begins from point (17) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (17).	{a}
18-18	^E Alluvial	Island within the basin boundary: begins from point (18) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and Paleozoic to Mesozoic metasedimentary rocks and ends at point (18).	{a}
19-19	^E Alluvial	Island within the basin boundary: begins from point (19) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and Paleozoic to Mesozoic metasedimentary rocks and ends at point (19).	{a}
20-20	^E Alluvial	Island within the basin boundary: begins from point (20) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and Paleozoic to Mesozoic metasedimentary rocks and ends at point (20).	{a}
21-21	^E Alluvial	Island within the basin boundary: begins from point (21) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and Paleozoic to Mesozoic metasedimentary rocks and ends at point (21).	{a}
22-22	^E Alluvial	Island within the basin boundary: begins from point (22) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (22).	{a}
23-23	^E Alluvial	Island within the basin boundary: begins from point (23) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (23).	{a}
	^E		

24-24	Alluvial	Island within the basin boundary: begins from point (24) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and Paleozoic to Mesozoic metasedimentary rocks and ends at point (24).	{a}
25-25	^E Alluvial	Island within the basin boundary: begins from point (25) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (25).	{a}
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).	{g}
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).	{a}
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).	{a}
29-29	^E Alluvial	Island within the basin boundary: begins from point (29) and generally follows the contact of Quaternary alluvium with Paleozoic to Mesozoic metasedimentary rocks and ends at point (29).	{a}
30-30	^E Alluvial	Island within the basin boundary: begins from point (30) and generally follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and Paleozoic to Mesozoic metasedimentary rocks and ends at point (30).	{a}
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).	{a}
32-32	^E Alluvial	Island within the basin boundary: begins from point (32) and generally follows the contact of Quaternary alluvium with Paleozoic to Mesozoic metasedimentary rocks and ends at point (32).	{a}
33-33	^E Alluvial	Island within the basin boundary: begins from point (33) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (33).	{a}
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 ends at point (34).	{a}
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).	{a}
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).	{a}
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).	{a}
38-38	^E Alluvial	Island within the basin boundary: begins from point (38) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (38).	{a}

39-39	E Alluvial	Island within the basin boundary: begins from point (39) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (39).	{a}
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 ends at point (40).	{a}
41-41	E Alluvial	Island within the basin boundary: begins from point (41) and follows the contact of Quaternary alluvium and unnamed Pliocene sedimentary rocks with Cretaceous plutonic rocks and ends at point (41).	{a}
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).	{a}
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).	{a}
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).	{a}
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).	{a}
46-46	E Alluvial	Island within the basin boundary: begins from point (46) and approximately follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (46).	{a}
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).	{a}
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).	{a}
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).	{a}
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).	{a}
51-51	E Alluvial	Island within the basin boundary: begins from point (51) and follows the contact of Quaternary alluvium and unnamed Pliocene sedimentary rocks with Cretaceous plutonic rocks and ends at point (51).	{a}
52-52	E Alluvial	Island within the basin boundary: begins from point (52) and follows the contact of Quaternary alluvium and unnamed Pliocene sedimentary rocks with Cretaceous plutonic rocks and ends at point (52).	{a}
53-53	E Alluvial	Island within the basin boundary: begins from point (53) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at	{a}

		point (53).	
54-54	^E Alluvial	Island within the basin boundary: begins from point (54) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (54).	{a}
55-55	^E Alluvial	Island within the basin boundary: begins from point (55) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (55).	{a}
56-56	^E Alluvial	Island within the basin boundary: begins from point (56) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (56).	{a}
57-57	^E Alluvial	Island within the basin boundary: begins from point (57) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (57).	{a}
58-58	^E Alluvial	Island within the basin boundary: begins from point (58) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (58).	{a}
59-59	^E Alluvial	Island within the basin boundary: begins from point (59) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (59).	{a}
60-60	^E Alluvial	Island within the basin boundary: begins from point (60) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (60).	{a}
61-61	^E Alluvial	Island within the basin boundary: begins from point (61) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (61).	{a}
62-62	^E Alluvial	Island within the basin boundary: begins from point (62) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (62).	{a}
63-63	^E Alluvial	Island within the basin boundary: begins from point (63) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (63).	{a}
64-64	^E Alluvial	Island within the basin boundary: begins from point (64) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (64).	{a}
65-65	^E Alluvial	Island within the basin boundary: begins from point (65) and follows the contact of Quaternary alluvium with Cretaceous plutonic rocks and ends at point (65).	{a}
66-66	^E Alluvial	Island within the basin boundary: begins from point (66) and follows the contact of Quaternary alluvium and unnamed Pliocene sedimentary rocks with Cretaceous plutonic rocks and ends at point (66).	{a}
67-67	^E Alluvial	Island within the basin boundary: begins from point (67) and follows the contact of Quaternary alluvium and unnamed Pliocene sedimentary rocks with Cretaceous plutonic rocks and ends at point (67).	{a}
68-68	^E	Island within the basin boundary: begins from point (68) and generally	{a}

	Alluvial	follows the contact of Quaternary alluvium with Paleozoic to Mesozoic metasedimentary rocks and ends at point (68).	
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Significant Coordinates

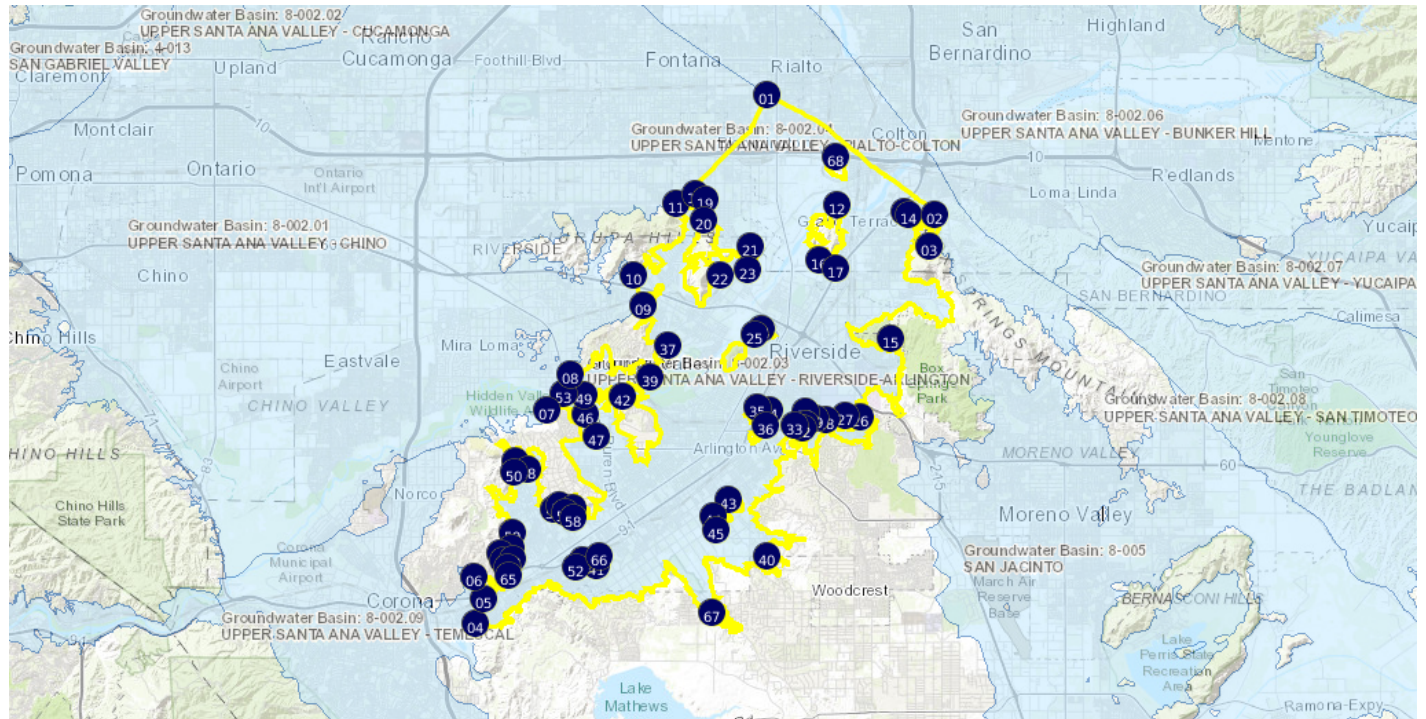
<u>Point</u>	<u>Latitude</u>	<u>Longitude</u>
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5	33.883977615	-117.516509552
6	33.893090865	-117.521384067
7	33.961766484	-117.484552256
8	33.976700957	-117.473028527
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11	34.047335155	-117.420322858
12	34.046632491	-117.339557508
13	34.043734686	-117.306049055
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15	33.99153552	-117.313149347
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17	34.020805781	-117.340161229
18	34.051141349	-117.410428202
19	34.048939313	-117.405467701
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22	34.017906515	-117.398453531
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25	33.993500122	-117.380892292
26	33.958900842	-117.328454066
27	33.959723307	-117.335655512
28	33.95770546	-117.345052786
29	33.958819538	-117.350552229
30	33.961649895	-117.355351613

31	33.956272634	-117.355709818
32	33.954387871	-117.357192481
33	33.955475163	-117.360881601
34	33.961706026	-117.373686391
35	33.963152554	-117.379447745
36	33.95592202	-117.375351836
37	33.988536834	-117.42432407
38	33.940612406	-117.500475437
39	33.975489795	-117.433053914
40	33.901732994	-117.374708913
41	33.89772038	-117.460236416
42	33.967699892	-117.446855591
43	33.924878716	-117.394039686
44	33.917978545	-117.401891018
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46	33.960349473	-117.465687393
47	33.951334231	-117.459902673
48	33.937343094	-117.494325029
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50	33.936521649	-117.500840385
51	33.899722501	-117.466852328
52	33.897125006	-117.47041001
53	33.968676937	-117.476679584
54	33.921028746	-117.481560415
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57	33.919789952	-117.47542141
58	33.917628542	-117.471672382
59	33.911172948	-117.502176016
60	33.905160331	-117.502532151
61	33.90279025	-117.508116638
62	33.899753699	-117.506874391
63	33.90047171	-117.50166571

64	33.897270332	-117.504338318	
65	33.893399102	-117.503741289	
66	33.901422832	-117.458386485	
67	33.878213048	-117.401995598	
68	34.066422354	-117.340508899	

Map

8-002.03 UPPER SANTA ANA VALLEY - RIVERSIDE-ARLINGTON



<https://sgma.water.ca.gov/webgis/?appid=160718113212&subbasinid=8-002.03>

References

<u>Ref</u>	<u>Citation</u>	<u>Pub Date</u>	<u>Global ID</u>
{a}	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
{b}	Unknown/other/new	varies	46
{c}	City of Corona, AB3030 Groundwater Management Plan, June 2008	06/01/2008	104
{d}	BBMRS	varies	45
{e}	California Department of Water Resources (DWR), Adjudicated Basins GIS layer, .URL: https://gis.water.ca.gov/app/bbat/	2016	44
{f}	California Department of Water Resources (DWR), California's Groundwater, Bulletin 118 - Update 2003. http://water.ca.gov/groundwater/bulletin118/update_2003.cfm	2003	73
{g}	Diblee Geological Foundation, Geologic map of the Riverside East / South 1/2 of San Bernardino South quadrangles, 1:24,000, T.W Dibblee and J.A. Minch.	2003	53

Footnotes

- I: Internal
- E: External