

# 4-002 OJAI VALLEY

## Basin Boundaries

### Summary

The Ojai Valley groundwater basin is located in the central-western portion of Ventura County. The basin is bound on the north by consolidated rocks of the Topatopa Mountains. The easternmost portion of the basin is separated from the adjacent Upper Ojai Valley groundwater basin by the San Cayetano fault. The basin is bound on the south by the Santa Ana fault and the consolidated rocks of Black Mountain. A surface water divide and a subsurface bedrock ridge that forms a groundwater divide separates the basin from the adjoining Upper Ventura River subbasin to the west. South of the Santa Ana fault, thin terrace deposits underlain by bedrock and lacking direct subsurface hydraulic connection with the basin are excluded from the basin. These alluvial terrace deposits have little to no significant groundwater storage capacity. The basin is drained by Thacker and San Antonio Creeks -- tributaries to the Ventura River. Average annual precipitation ranges from 20 to 24 inches. The boundary is defined by 13 segments detailed in the descriptions below.

### Segment Descriptions

<u>Segment Label</u>	<u>Segment Type</u>	<u>Description</u>	<u>Ref</u>
1-2	<sup>E</sup> Alluvial	Begins from point (1) and crosses the Quaternary alluvium to point (2).	{a}
2-3	<sup>E</sup> Alluvial	Continues from point (2) and follows the contact of Quaternary alluvium with various Tertiary sedimentary rocks to point (3).	{b}
3-4	<sup>E</sup> Alluvial	Continues from point (3) and crosses Quaternary alluvium to point (4).	{a}
4-5	<sup>E</sup> Alluvial	Continues from point (4) and follows the contact of Quaternary alluvium with Tertiary Cozy Dell Shale to point (5).	{b}
5-6	<sup>E</sup> Alluvial	Continues from point (5) and crosses Quaternary alluvium to point (6).	{a}
6-7	<sup>E</sup> Alluvial	Continues from point (6) and follows the contact of Quaternary alluvium with various Tertiary sedimentary rocks to point (7).	{b}
7-8	<sup>I</sup> Fault	Continues from point (7) and follows the San Cayetano fault to point (8).	{c}
8-9	<sup>E</sup> Alluvial	Continues from point (8) and follows the contact of Quaternary alluvium with various Tertiary sedimentary rocks to point (9).	{b}
9-10	<sup>E</sup> Fault	Continues from point (9) and follows the Santa Ana fault to point (10).	{a}
10-11	<sup>E</sup> Alluvial	Continues from point (10) and follows the contact of Quaternary alluvium with Sespe Formation to point (11).	{d}
11-12	<sup>I</sup> Groundwater Divide	Continues from point (11) and follows a subsurface bedrock ridge and a surface divide to point (12).	{a}
12-1	<sup>E</sup> Alluvial	Continues from point (12) and follows the contact of Quaternary alluvium with various Tertiary sedimentary rocks and ends at point (1).	{d}

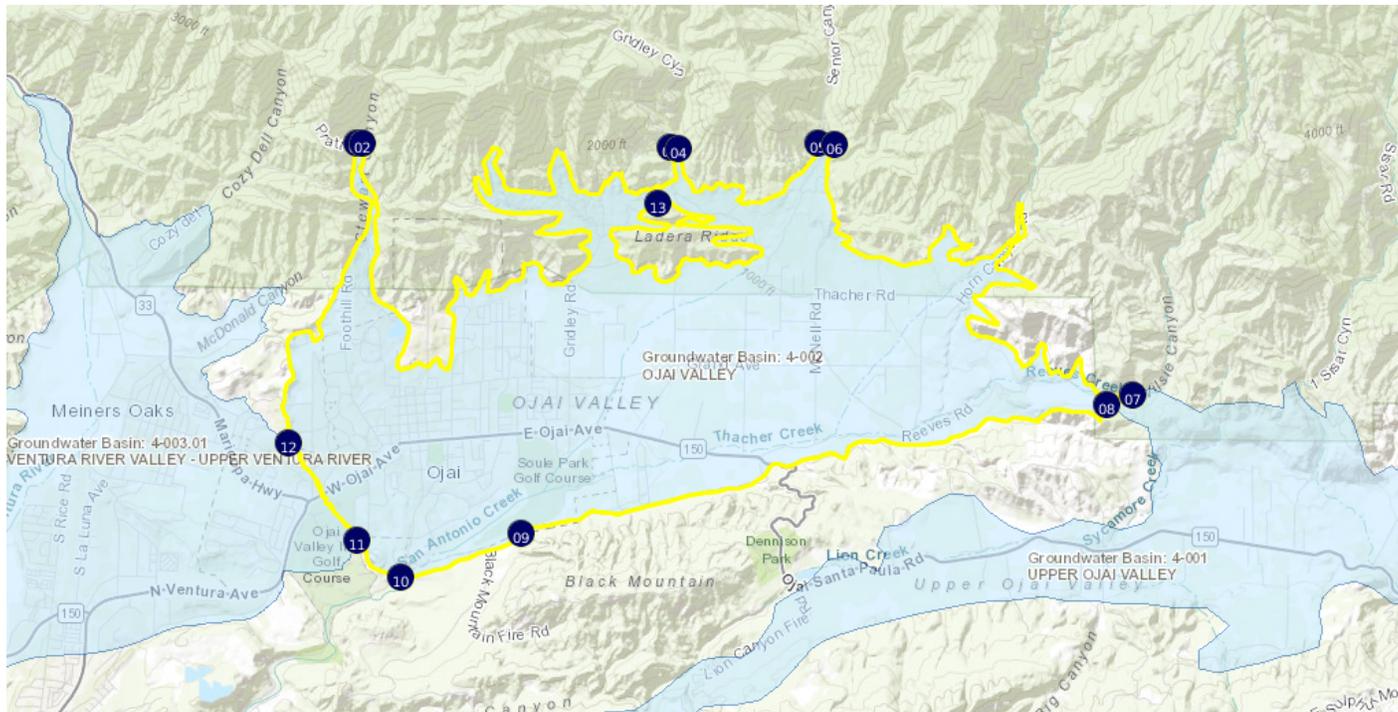
13-13	E Alluvial	Island within the basin boundary: begins from point (13) and follows the contact of the Quaternary alluvium with Coldwater Sandstone and Cozy Dell Shale and ends at point (13).	{b}
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***Significant Coordinates***

<b><u>Point</u></b>	<b><u>Latitude</u></b>	<b><u>Longitude</u></b>	
1	34.478450793	-119.254761878	
2	34.478452261	-119.253960199	
3	34.478005123	-119.215409106	
4	34.477954846	-119.214341855	
5	34.478460727	-119.196917412	
6	34.478300258	-119.19480887	
7	34.452385212	-119.157425748	
8	34.451419976	-119.160576289	
9	34.438199307	-119.234069884	
10	34.433549061	-119.249251927	
11	34.437432018	-119.254670854	
12	34.44740611	-119.263274675	
13	34.472303032	-119.216908514	

**Map**

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<https://sgma.water.ca.gov/webgis/?appid=160718113212&subbasinid=4-002>

**References**

<u>Ref</u>	<u>Citation</u>	<u>Pub Date</u>	<u>Global ID</u>
{a}	BBMRS	varies	45
{b}	California Department of Conservation, California Geologic Society (CGS), Geologic Map of the Ojai 7.5' Quadrangle, Ventura County, California: A Digital Database, Version 1.0, 1:24,000, S.S. Tan, P.J. Irvine, C.I. Gutierrez. <a href="ftp://ftp.consrv.ca.gov/pub/dmg/rgmp/Prelim_geo_pdf/Ojai_prelim.pdf">ftp://ftp.consrv.ca.gov/pub/dmg/rgmp/Prelim_geo_pdf/Ojai_prelim.pdf</a>	2005	78
{c}	California Geological Survey (CGS), Geologic Atlas of California Map No. 008, Los Angeles Sheet, , 1:250,000, Charles W. Jennings and Rudolph G. Strand. <a href="http://www.quake.ca.gov/gmaps/GAM/losangeles/losangeles.html">URL: http://www.quake.ca.gov/gmaps/GAM/losangeles/losangeles.html</a>	1969	33
{d}	California Geological Survey (CGS), Geologic Map of the Matilija Quadrangle, 1:24,000, S.S. Tan and T.A. Jones. <a href="http://www.conservation.ca.gov/cgs/rghm/rgm/Pages/preliminary_geologic_maps.aspx">URL: http://www.conservation.ca.gov/cgs/rghm/rgm/Pages/preliminary_geologic_maps.aspx</a>	2006	51

Footnotes

- I: Internal
- E: External