

4-004.02 SANTA CLARA RIVER VALLEY - OXNARD

Basin Boundaries

Summary

The Oxnard subbasin underlies the City of Oxnard and the Point Mugu Naval Air Station in southern Ventura County. The northern boundary of the subbasin adjoins the Mound and Santa Paula Subbasins and is defined by the Oak Ridge fault. The northeastern boundary adjoins the Las Posas Valley Basin and follows parcel lines in a transitional groundwater zone. The Pleasant Valley Basin and the absence of the Mugu and Oxnard aquifers to the east, define the southeastern portion of the subbasin. The surface expression of the subbasin boundary is defined on the south by the contact of Quaternary alluvium with semi-permeable rocks of the Santa Monica Mountains (CSWRB, 1956). The Pacific Ocean is the western extent of the subbasin. Ground surface elevations range from sea level to about 150 feet above sea level (CSWRB 1956). Calleguas Creek and other tributary creeks drain the surface waters of the area westward into the Pacific Ocean. The Santa Clara River provides recharge along the northern border of the subbasin (CSWRB 1956). Average precipitation ranges from 14 to 16 inches per year. The boundary is defined by six (6) 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 Oak Ridge Fault to point (2).	{a}
2-3	^E Alluvial	Continues from point (2) and follows the geologic contact of Quaternary alluvium with consolidated Plio-Pleistocene non-marine and marine sediments to point (3).	{a}
3-4	^I Property	Continues from point (3) and follows parcel lines to point (4).	{b}
4-5	^I Non-Alluvial	Continues from point (4) and crosses the Quaternary alluvium, where the Oxnard and Mugu aquifer zones are not present to the east, to point (5).	{c}
5-6	^E Alluvial	Continues from point (5) and generally follows the geologic contact of Quaternary alluvium with Miocene volcanic and plutonic rocks and the Lower Topanga Formation to point (6).	{a}
6-1	^E Ocean	Continues from point (6) and follows the Pacific Ocean to end at point (1).	{d}

Significant Coordinates

<u>Point</u>	<u>Latitude</u>	<u>Longitude</u>	
1	34.229916148	-119.263912428	
2	34.291301958	-119.120196874	
3	34.28088987	-119.109830326	
4	34.224098168	-119.103710203	
5	34.14816428	-119.048955984	
6	34.086988051	-119.063411112	

Map

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<https://sgma.water.ca.gov/webgis/?appid=160718113212&subbasinid=4-004.02>

References

Ref	Citation
{a}	California Geological Survey (CGS), Geologic Atlas of California Map No. 008, Los Angeles Sheet, , 1:250,000 http://www.quake.ca.gov/gmaps/GAM/losangeles/losangeles.html
{b}	BBMRS
{c}	Ventura County Public Works, Compilation of Technical Information Records for the Ventura County Coopera Turner. http://www.unitedwater.org/images/stories/Resource-Conservation/GW-Management/Groundwater-Hear
{d}	California Department of Forestry and Fire Protection (Cal Fire), California Counties and Paired Dataset (cnty15

Footnotes

- I: Internal
- E: External