

Piru Subbasin (4-004.06) Proposed Boundary Edits

Scale digitized = 1:10,000.

Western Boundary

1. Boundary approximated from peak of rising groundwater, near the western end of the "Piru narrows," where the Valley of the Santa Clara River is restricted in the areas east of the City of Fillmore.

Eastern Boundary

1. No proposed change to the existing DWR basin boundary.

Northern Boundary

1. Follows the Tm (Monterey Formation), Tsq? (Sisquoc Formation) and Tp/Tps/Tpsg (Pico Formation) contact with surficial sediments and landslide debris. QTs (Saugus Formation) was included as part of the subbasin. The digitized contact boundaries were checked against recent available aerial imagery and minor adjustments were made to correct apparent inaccuracies in the geologic base maps. Alluvial material is mapped to effectively extend the proposed basin boundaries beyond the existing DWR boundaries in a number of locations. The mapped extent of certain alluvial stringers is truncated at breaks in slope, mapped structural features, or at points where the limited mapped width suggests alluvium will be less than 25 feet thick, unsaturated, or both. Areas upslope of these alluvial features generally include shales and other fine-grained materials, suggesting these alluvial stringers are not likely to yield significant quantities of water. The San Cayetano Fault is a major structural feature that generally delineates the northern boundary of the basin, and a number of the smaller alluvial side canyons are mapped up to this feature.

The proposed basin boundaries extend farther into two tributary canyons than the existing DWR boundaries. Hopper Canyon is mapped farther north than currently mapped by DWR due to a well log that indicates the alluvial deposits are greater than 25 feet thick within the proposed boundary. Holser Canyon, a tributary to lower Piru Creek, is included in the basin. A well log from the western portion of Holser Canyon indicates there are relatively thick (approximately 100 feet) alluvial deposits and is mapped to where width suggests alluvium will be less than 25 feet thick.

Sources: Geologic Map of the Fillmore Quadrangle, VC, CA (Dibblee, 1990) (1:24:000).
 Geologic Map of the Piru Quadrangle, VC, CA (Dibblee, 1991) (1:24:000).
 Geologic Map of the Val Verde Quadrangle, VC, CA (Dibblee, 1993) (1:24:000).
 Channel Island Regional GIS Collaborative (CIRGIS) Aerial Imagery (6"), 2015; and other
 aerial imagery.

Southern Boundary

Follows the Tts (Topanga Sandstone), Tr (Rincon Shale), QTlp (Las Posas Sand), Ttos (Towsley Formation), Tp/Tpc (Pico Formation) contact with surficial sediments and landslide debris. QTs (Saugus Formation) was included as part of the subbasin. The digitized contact boundaries were checked with recent available aerial imagery and minor adjustments were made. The mapped extent of certain alluvial stringers is truncated at breaks in slope, mapped structural features, or at points where the limited mapped width suggests alluvium will be less than 25 feet thick,

unsaturated, or both. Areas upslope of these alluvial features are generally include shales and other fine-grained materials, suggesting these alluvial stringers are not likely to yield significant quantities of water. The Oak Ridge Fault is a major structural feature that largely defines the southern boundary of the Piru basin.

The proposed edits to the southern boundary of the Piru basin generally extends the boundary south from the existing DWR boundary. Much of the alluvium of Pico canyon, a large tributary canyon located near the eastern extent of the Piru basin, is proposed to be included as part of the basin.

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 Geologic Map of the Piru Quadrangle, VC, CA (Dibblee, 1991) (1:24:000).
 Geologic Map of the Val Verde Quadrangle, VC, CA (Dibblee, 1993) (1:24:000).
 Channel Island Regional GIS Collaborative (CIRGIS) Aerial Imagery (6"), 2015; and other
 aerial imagery.