

Fillmore Subbasin (4-004.05) Proposed Boundary Edits

Scale digitized = 1:10,000.

Western Boundary

1. Snap boundary to Santa Paula Basin Settlement Boundary (stipulated judgment boundary). This existing boundary is near the peak of rising groundwater, where the valley of the Santa Clara River is narrow and constricted in the area east of Santa Paula Creek.

Eastern Boundary

1. Boundary is located to correspond with the peak of rising groundwater (groundwater discharge from the Piru basin), 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.

Northern Boundary

Northern boundary of the Fillmore basin is edited to more accurately trace the geologic contacts that were used by DWR to define the northern extent of the basin. In a number of locations the northern boundary of the basin is extended to include alluvial deposits along the edges of the basin. Recent surficial sediments and older surficial sediments and terrace deposits are generally included as basin material, but landslide deposits are generally excluded.

1. Northwest Boundary: Follows the QTlp/QTlc (Los Posas Sand) and Tp/QTpm (Pico Formation) contact with surficial sediments and landslide debris. QTs (Saugus Formation) was included as part of the subbasin. The digitized contact boundaries were confirmed by checking against recent aerial imagery, as some inaccuracies are apparent in the geologic base maps, most commonly where older formation forming the hillsides is mapped out onto the alluvial valley floor. 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.

2. Northeast Boundary: Follows Tsp (Sespe Formation), Tr (Rincon Shale) and Tm/Tml/Tmsu (Monterey Formation) contact with surficial sediments and landslide debris. The digitized contact boundaries were checked against recent available aerial imagery and minor adjustments were made where the hillside formations appear to extend onto the alluvial valley floor. Alluvial material is mapped to effectively extend the proposed basin boundaries beyond the existing DWR boundaries in some 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. In this NE portion of the basin the existing DWR boundary generally is not in alignment with the geologic contact it presumably intended to follow, and some landslide deposits were mapped as part of the basin. The proposed modified boundary generally shifts west from the existing boundary in this vicinity.

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

Southern Boundary

The southern boundary of the Fillmore basin is largely defined by the Oak Ridge Fault. The boundary follows the Tsp (Sespe Formation), Tcva? (Conejo Volcanics), Tts (Topanga Sandstone), Tm (Monterey Formation) and Tsq (Sisquoc Formation) contacts with surficial sediments and landslide debris. The digitized contact boundaries were checked against recent aerial imagery and minor adjustments were made to correct for apparent inaccuracies in the geologic mapping. Alluvial material is mapped to effectively extend the proposed basin boundaries beyond the existing DWR boundaries in many 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. In the Bardsdale area the mapped trace of the Oak Ridge anticline is used to truncate the extent of alluvium mapped as basin fill. 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.

Sources: Geologic Map of the Fillmore Quadrangle, VC, CA (Dibblee, 1990) (1:24:000).
Geologic Map of the Santa Paula Quadrangle, VC, CA (Dibblee, 1992) (1:24:000).
Geologic Map of the Moorpark Quadrangle, VC, CA (Dibblee, 1992) (1:24:000).
Channel Island Regional GIS Collaborative (CIRGIS) Aerial Imagery (6"), 2015; and other
aerial imagery.