

## Santa Ynez River Documentation

Hydrologic features, such as rivers, streams, creeks, etc. (hereafter referred to as streams) included in the distance calculations for the Santa Ynez River watershed were based on those streams specifically requested by the Protected Resources Division. Selection sets that included the Santa Ynez River and some of its tributaries were generated for both above and below Bradbury Dam. The following tributaries were requested:  
Below Bradbury Dam – San Miguelito Creek, Salsipuedes Creek, El Jaro Creek, Nojoqui Creek, Alisal Creek, Quiota Creek, Calabazal Creek, San Lucas Creek, Hilton Creek, Birabent Creek, Zaca Creek, Santa Agueda Creek.

Above Bradbury Dam – Cachuma Creek, Santa Cruz Creek, Tequepis Creek, Los Laureles Canyon Creek, Redrock Canyon Creek, Camuesa Creek, Buckhorn Creek, Indian Creek, Mono Creek, Agua Caliente Creek, Blue Canyon Creek, North Fork Juncal Creek, Alder Creek, Juncal Creek, Horse Canyon, Hot Springs Creek, Bear Creek, Cold Springs Creek, Lewis Canyon, Arroyo Burro Creek, Devil's Creek, Gidney Creek, Alamar Creek, Lacosca Creek, Roblar Canyon Creek, Don Victor, Horse Canyon, Morse Creek, Unnamed Creek (Whiskey Creek?).

The selection set was performed using the LLID dataset (cdfg\_100k\_2003\_2.shp) based on the "Name" field. Any streams not located using this selection procedure were identified with the aid of topographic images generated using Sure!MAPS RASTER. The LLID dataset was overlaid onto the topographic image in ArcMap 8.3, and the remaining streams were identified according to the topographic labels. Additional tributaries to these streams were also included in the selection set based on the USGS National Hydrography Dataset classification of "perennial". The NHD layer was overlaid on the LLID dataset. Any streams listed as "perennial" in the NHD FCODE table that were tributary to those streams requested by the Protected Resources Division (listed above) were also included in the LLID selection sets. The selection sets were then exported as shapefiles using ArcMap, and included in a project in ArcView 3.2.

The distance calculations were performed using the Route Tools Extension and the Trace Upstream Tool in ArcView. For the layer above Bradbury Dam, the portion of the Santa Ynez River extending below the dam had to be subtracted from the total to accurately compute stream length. Conversely, for the layer below Bradbury Dam, the portion of the Santa Ynez River upstream of the dam was subtracted. The resulting distances (in feet) were converted to miles.

### Notes:

- There will be discrepancies between distances of certain streams considered perennial in the NHD layer and the corresponding LLID streams. These discrepancies are due to the fact that streams in the NHD layer are divided into many different segments while the LLID streams are represented as one continuous line. Therefore, although only portions of streams may be considered perennial in the NHD layer, the entire stream was selected in the LLID layer.

- Some streams in the LLID dataset follow slightly different paths than the corresponding streams in the NHD. Therefore, there may be some instances in which a portion of a stream in the LLID dataset bears a different name than the same stream in the NHD. This could result in a difference in stream distance calculations along that route.
- The HUC boundary was created by dissolving the CalWater 2.2. dataset based on the "CU" field. The CalWater 2.2 dataset was used instead of the USGS dataset to ensure the proper alignment with the Planning Watershed boundaries in the project. These Planning Watersheds were necessary to display small watershed units, and to calculate acreages.