

Watershed Conservation Priorities based on Multicriteria Decision Analysis

In order to prioritize conservation actions for watersheds in southern Santa Barbara County, a multicriteria decision analysis was performed. Each watershed in the region was assigned a score of 1 (low priority) to 5 (high priority) for each of three prioritization criteria, and a weighted sum of the criteria determined the watershed's conservation priority. The conservation priority criteria and weighting for this analysis were: presence of riparian habitat (33%), viewshed priority (17%), and cost of developable privately-held land (50%).

Data sources: 30m Digital Elevation Model (DEM): Source: USGS, 2009. Landsat 7 ETM+: Source: USGS, 2005. Watersheds: Source: CalWater, 2004 via CaSIL. Streams: Source: SBCGIS, 2002. Parcels: Source: SBCGIS, 2009. ROI, Observation points: Source: ESM 263.

Conservation Priorities

- 1.0 - 1.5 (high priority)
- 1.5 - 2.0
- 2.0 - 2.5
- 2.5 - 3.5
- 3.5 - 5.0 (low priority)
- No Data

Rivers
Major Roads
County Border

