

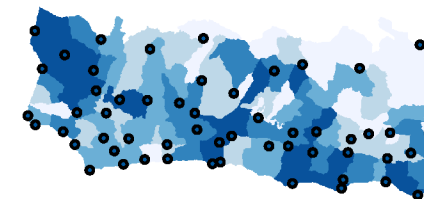
Conservation Priorities for Watershed in South Santa Barbara County

To give recommendation on watersheds conservation potential, I conducted multicriteria decision analysis to assign conservation priorities to watersheds in the southern region of Santa Barbara County. Priority is given to regions where (1) watershed is visible from at least 2 observation points, (2) riparian habitat is within 1,000 ft of a stream with NDVI between 0.2 and 0.5, (3) low cost non-public land with slope less than 20 percent. Standardized scores (1-5) are given to each criterion with results shown on the three submaps. Given the weights of 0.33 for watershed, 0.5 for riparian, and 0.17 for developable, the conservation priority for each watershed is mapped below.

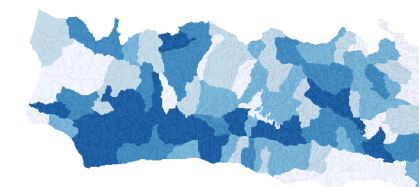
Criterion Score

1 (Highest) 2 3 4 5

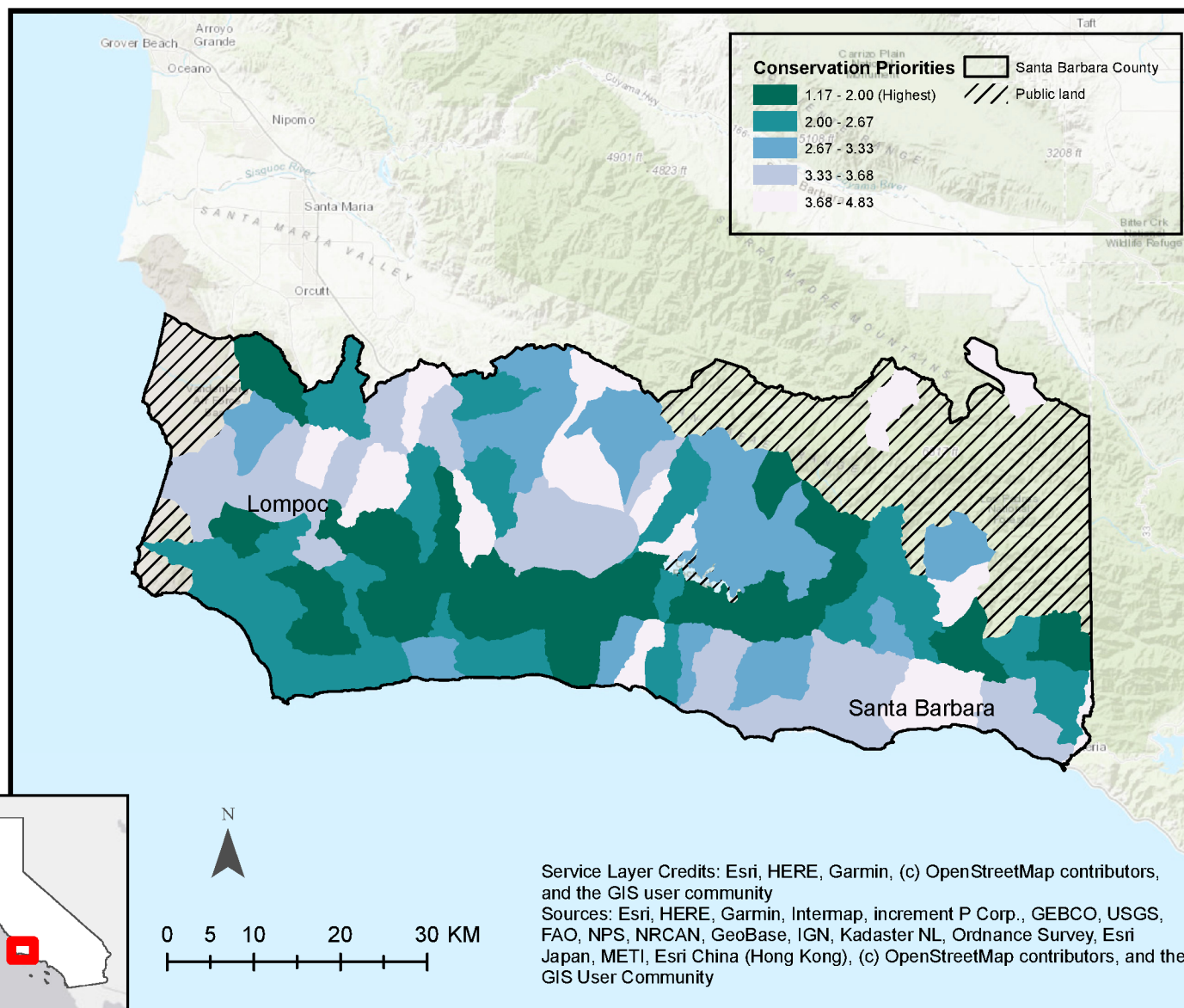
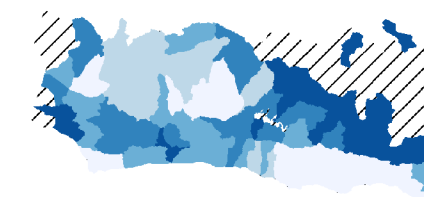
Viewshed Score



Riparian Score



Developable Score



Map created by Shuhan Song March 12, 2020
 Data Source: Digital Elevation Model from 1 arc second National Elevation Dataset USGS 2009. Watersheds from CalWater 2004 via MLML. Streams from SBCGIS 2002. Parcels from SBCGIS 2009. Observation points and county boundary from Bren School ESM 263. ESRI 2011. ArcGIS Desktop: Release 10. Redlands, CA: Environmental Systems