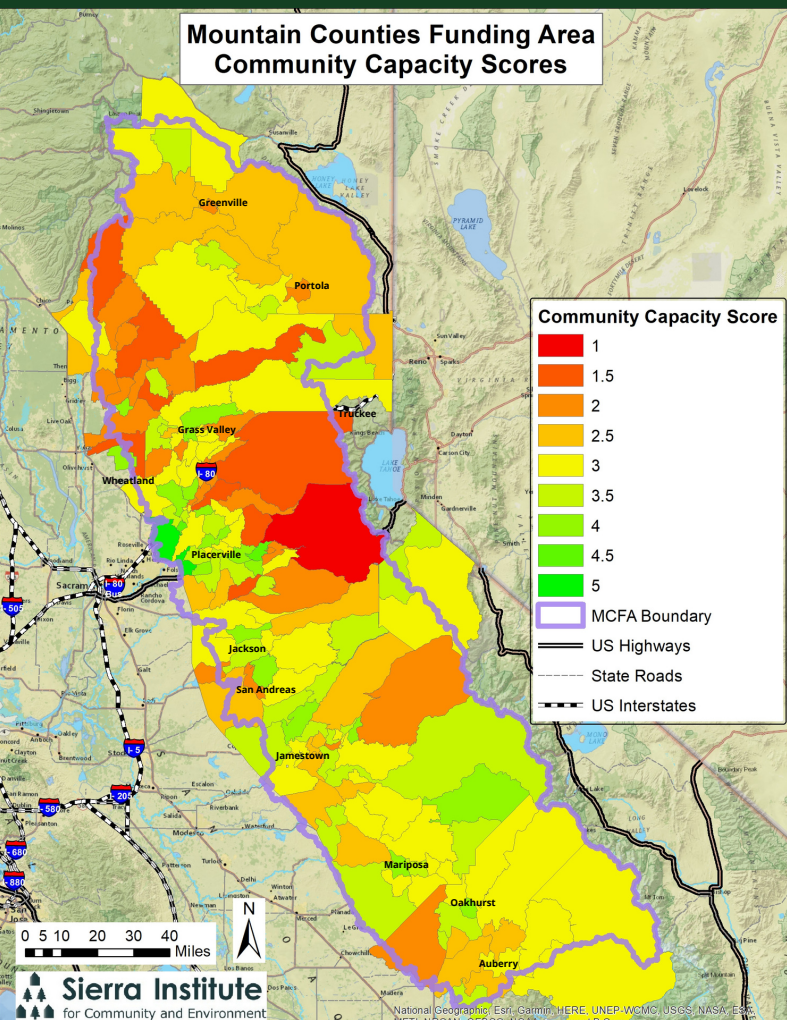




Assessing Community Well-Being in the Sierra Nevada

Under the Disadvantaged Community and Tribal Involvement Program, and as a part of California's Proposition 1 funding for water supply, distribution, and infrastructure, the Sierra Institute for Community and Environment is working to promote the inclusion of underserved, underrepresented, and low-capacity communities into Integrated Regional Water Management (IRWM) planning across the Sierra Nevada region of California. Standard methods to identify and characterize disadvantaged communities often fail to fully account for all of the unique burdens faced by rural mountainous communities, such as episodic smoke from wildfires or prescribed burns, poverty and unemployment, failing infrastructure, low organizational capacity, and more. Using a variety of socioeconomic and community capacity indicators, we have worked to assess community well-being in these areas using indicators that are better suited to the context of low-population and rural communities.



COMMUNITY CAPACITY:

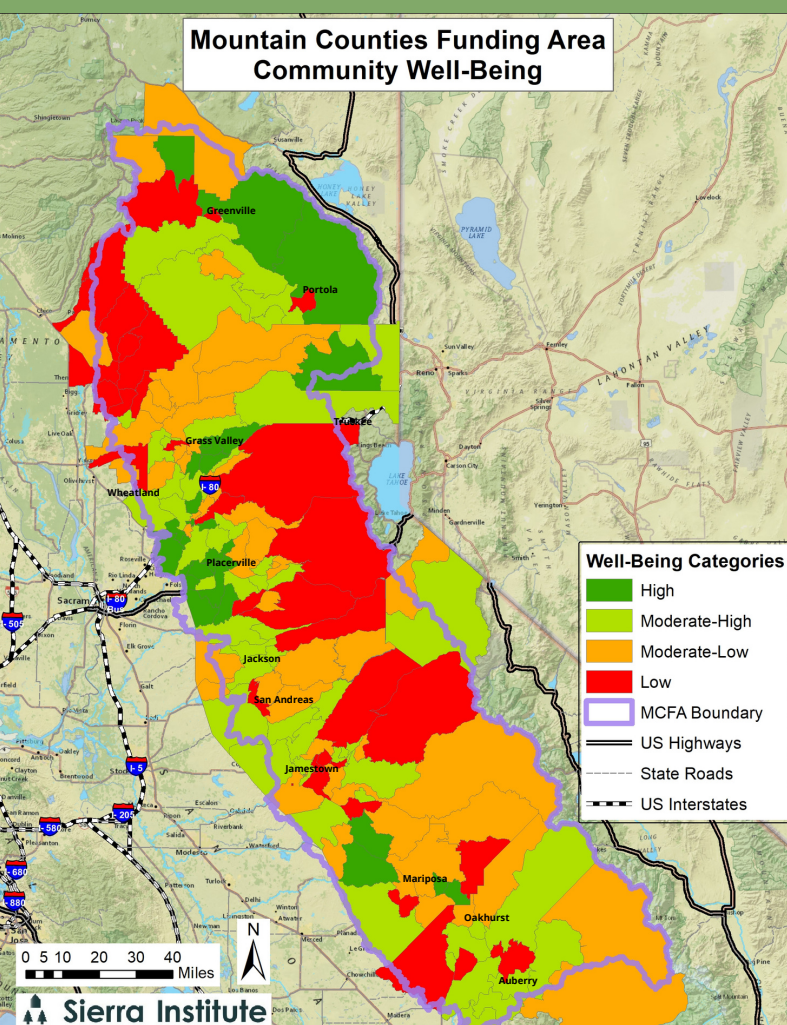
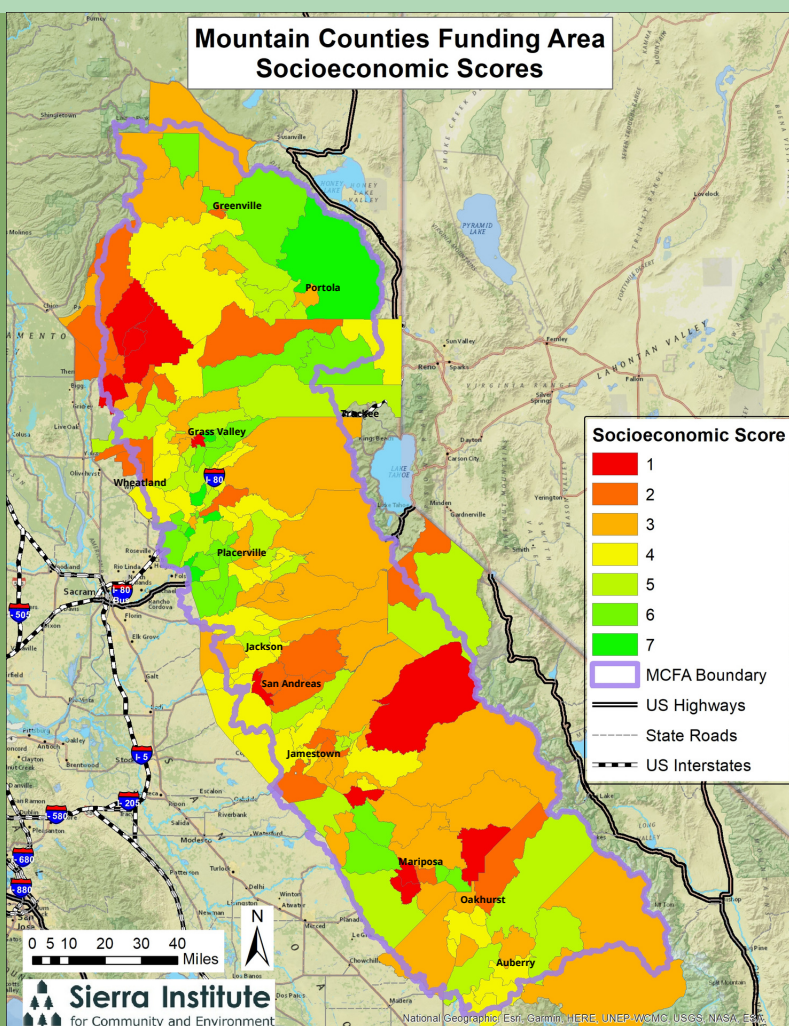
Public workshops were used to both identify local communities, as well as to subsequently assess their capacity relating to financial, social, cultural, human, and physical capital. The map to the left displays the results, with low scores correlating to lower levels of overall community capacity.

SOCIOECONOMIC SCORES:

A quantitative socioeconomic assessment was also conducted using six metrics drawn from US Census Bureau statistics:

- Housing Tenure
- Poverty Status
- Education Level
- Employment
- Public Assistance

The results are displayed in the map to the right, with lower scores correlating to lower socioeconomic status

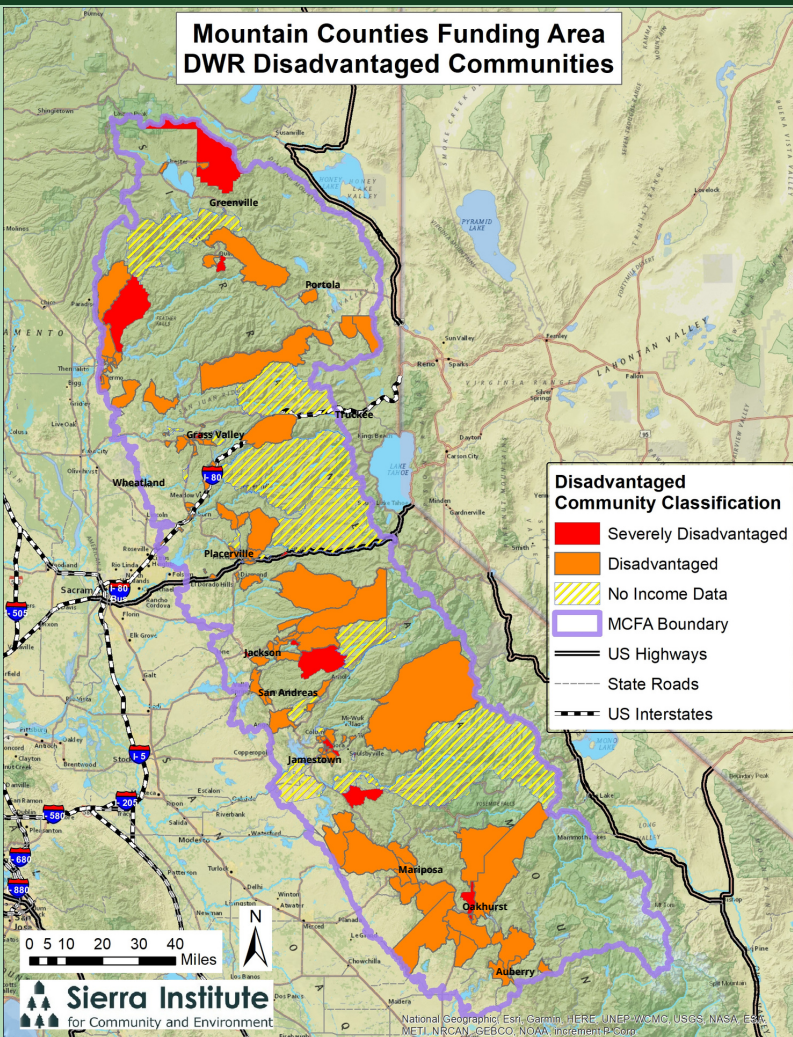


COMMUNITY WELL-BEING:

Finally, results from the community capacity and socioeconomic assessments were combined to create an overall score of community well-being. Results are displayed on the map to the left.

STANDARDIZED CALIFORNIA METRICS LEAVE OUT RURAL MOUNTAINOUS COMMUNITIES

Standard methods used to identify disadvantaged communities often fail to fully account for burdens faced by rural and low-population areas. For example, for the purposes of Proposition 1 funding, the Department of Water resources defines a "disadvantaged community" as an entity with a median household income of less than 80% of California's overall median income. This reliance on a single indicator can skew results in low or heterogeneous population areas, excluding rural areas from funding opportunities designated for disadvantaged communities. CalEnviroScreen is an alternative tool used by other state agencies as a means to determine community needs, and combines public health and socioeconomic indicators with environmental metrics. Under this tool, there are no high-scoring or disadvantaged communities in rural mountainous areas. Lack of measures for constituent air, water, and soil pollution are treated as if there were no pollution burden, despite the fact that lower-capacity areas often lack the ability to collect this data. This, among other deficiencies, is another example of failures to account for rural mountainous areas in standard methods of community needs assessments.

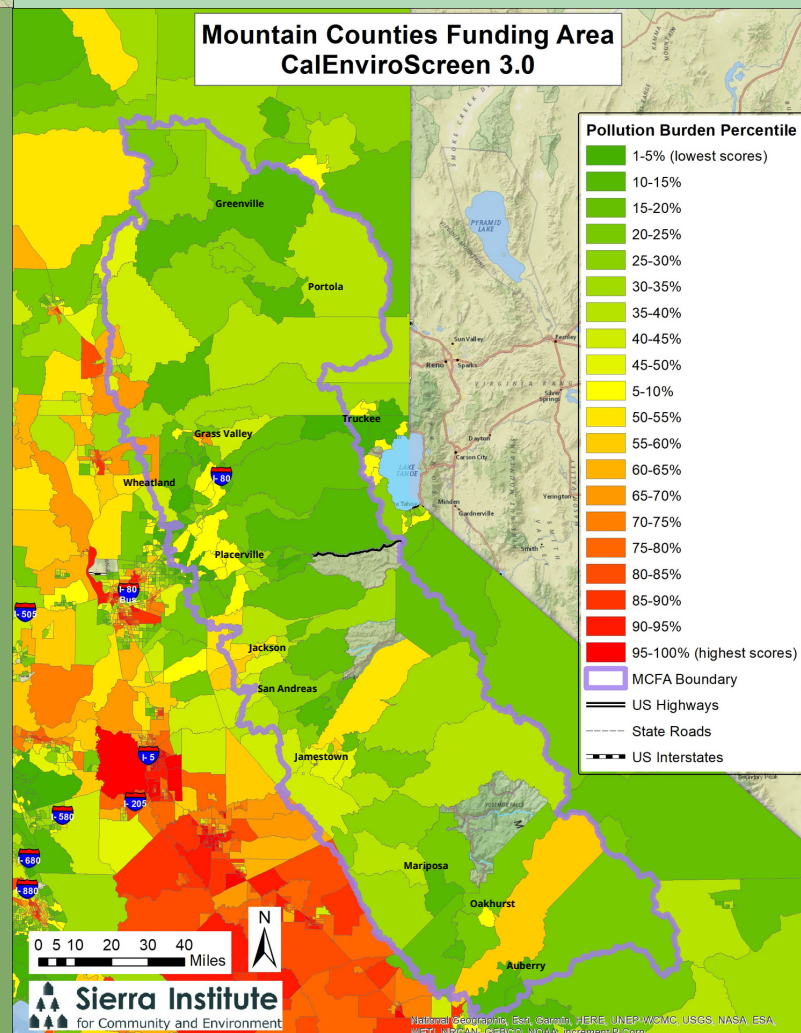


DWR DISADVANTAGED STATUS:

The Department of Water Resources uses Census data from three different geographic scales (Census blocks, Census block groups, and Census places) to determine "disadvantaged" status for the purpose of Proposition 1 funding. To qualify, a community only needs to be listed as "disadvantaged" (meaning they have a median household income of less than 80% of California's overall median income) under one scale.

CALENVIROSCREEN:

CalEnviroScreen was designed to identify California communities disproportionately burdened by various sources of pollution, and assess 20 statewide indicators of both pollution burden and population characteristics to do so. As seen in the map to the right, very few rural areas are considered to suffer from significant pollution burden under this tool.



CONCLUSION

Overall, for a variety of reasons, current methodologies used to identify and assess community needs often fail to fully account for unique burdens faced by rural, low-population, and low-capacity communities, such as those in the Sierra Nevada. Through our efforts to comprehensively assess community well-being, the Sierra Institute is helping to more accurately represent conditions in rural California, while bringing attention to the challenges faced by these communities