

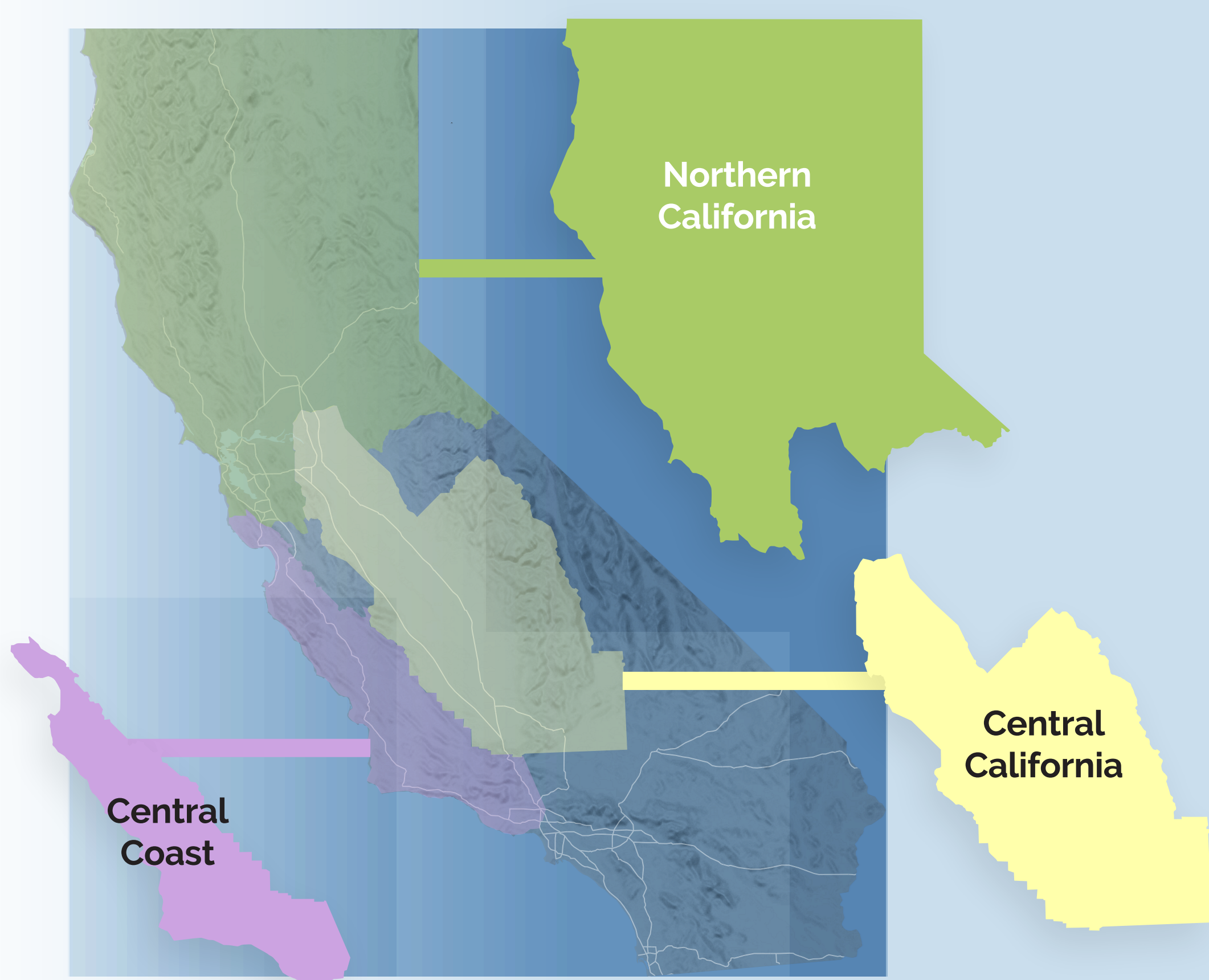


# Mapping Water Supply Issues

The Technical Assistance Program will identify communities throughout California with water supply problems such as dry groundwater wells, water shortages, or poor water quality. Below is a step-by-step look at how DWR and Dudek used Geographic Information System\* (GIS) technology to find, rank, and map the Communities of greatest need.

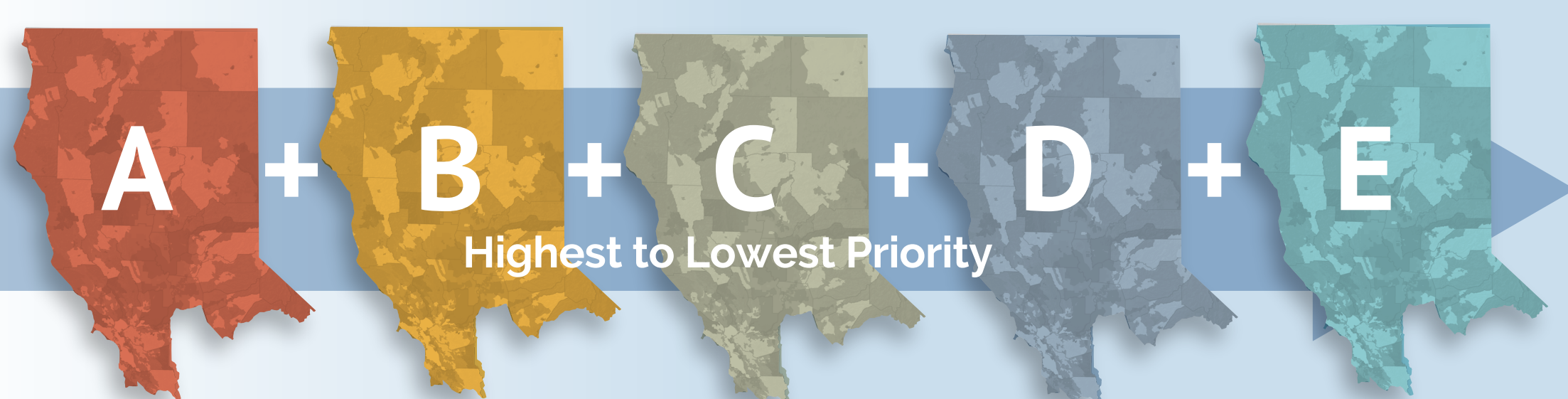
## 1 Collect data

Using publicly available data (listed below), DWR prepared a community identification tool (CIT) that collects relevant information for each census block within the State of California. The data includes, but is not limited to, Median Household Income (MHI), threats to groundwater, access to drinking water, and surface water quality. The information is stored in a database that is used to quantify areas of greatest water-related need and applied statewide for Tribal Communities and hydrologic regions including Northern California, Central California, and California's Central Coast.



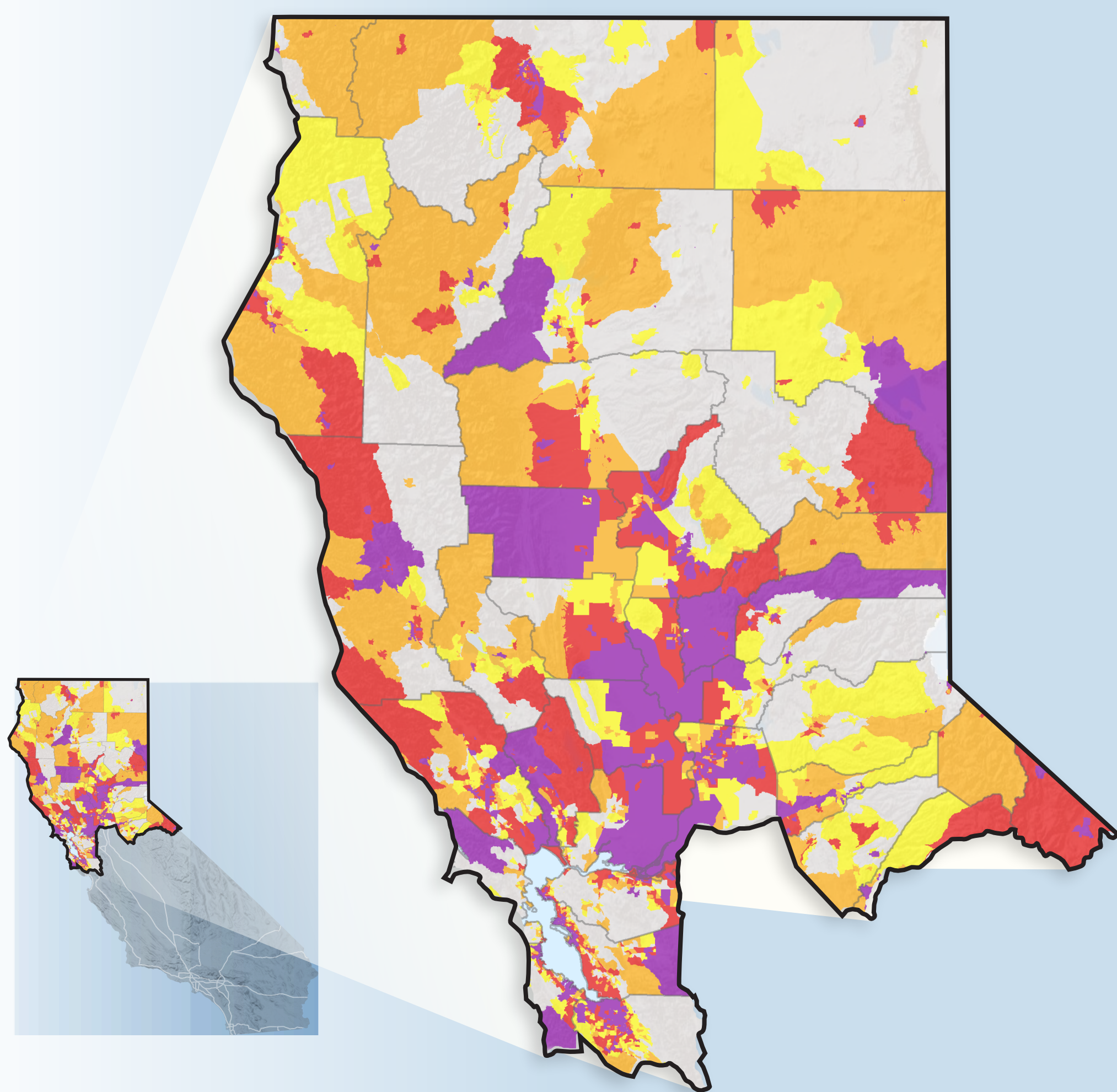
## 2 Prioritize and Analyze Data

DWR ranked several criteria as being the most important for understanding a community's needs. These criteria are water system compliance, threats to drinking water, threats to groundwater, DWR groundwater basin prioritization, and median household income. The criteria are filtered to remove some categories, such as areas within "low priority" groundwater basins, from further consideration.



## 3 Visualize data

Maps that illustrate prioritized areas within California have been prepared and included in the Underrepresented Communities section of the Sustainable Groundwater Management Grant Program website (<https://water.ca.gov/sgmgrants>). These "heat maps" show regions of the state from lowest to highest priority represented by a color scale that ranges from gray to purple. Additional maps that illustrate various information collected for the Program have also been prepared.



### Data sources

- United States Census Bureau
- California Department of Water Resources Disadvantaged Communities Mapping Tool
- California Office of Environmental Health Hazard Assessment
- California Water Resources Control Board Human Right to Water Portal
- California Governor's Office of Emergency Services GIS Data Hub
- California Department of Water Resources SGMA Data Viewer
- California Department of Water Resources Critically Overdrafted Basins
- California Department of Water Resources Household Water Supply Shortage Reporting System

\* Geographic information systems (GIS) create, manage, analyzes, and map all types of data.