

Range and Distribution Mapping and Analysis Project (RADMAP) Covariate Library References

Updated: 5/20/2025

Cal Fire FRAP 2025:

<https://www.fire.ca.gov/Home/What-We-Do/Fire-Resource-Assessment-Program/GIS-Mapping-and-Data-Analytics>

Cal Fire FVEG 2022:

<https://hub-calfire-forestry.hub.arcgis.com/maps/b7ec5d68d8114b1fb2bfbf4665989eb3/about>

California Forest Observatory:

<https://forestobservatory.com/download>

CalTrans Traffic Census Program:

Caltrans (2022) Traffic Volumes - Annual Average Daily Traffic (AADT):

<https://dot.ca.gov/programs/traffic-operations/census>

CARI 2024:

California Aquatic Resources Inventory (2024): <http://www.EcoAtlas.org>

CDFW:

California Department of Fish and Wildlife BIOS viewer: <https://apps.wildlife.ca.gov/bios6/>

Center for Ecosystem Climate Solutions:

<https://california-ecosystem-climate.solutions/>

CropScape 2022:

Han, W., Yang, Z., Di, L., and Mueller, R., 2012, CropScape: A Web service based application for exploring and disseminating US conterminous geospatial cropland data products for decision support. *Comp Electr Agric*, 84, 111–123.

USGS Basin Characterization Model:

Flint, L.E., Flint, A.L., and Stern, M.A., 2021, The Basin Characterization Model - A monthly regional water balance software package (BCMv8) data release and model archive for hydrologic California (ver. 4.0, May 2024): U.S. Geological Survey data release, <https://doi.org/10.5066/P9PT36UI>

USGS Earth Explorer:

<https://earthexplorer.usgs.gov/>

NLCD-MRLC:

National Land Cover Dataset, Multi-Resolution Land Characteristics Consortium (2024):

<https://www.mrlc.gov/data>

NRCS SSURGO:

National Resources Conservation Service Soil Survey Geographic Database:

<https://www.nrcs.usda.gov/resources/data-and-reports/soil-survey-geographic-database-ssurgo>

Sentinel 2 2017:

Sentinel-2 Land Cover Explorer: <https://livingatlas.arcgis.com/landcoverexplorer/>

Theobald et al. 2020:

Theobald, D.M., Kennedy, C., Chen, B., Oakleaf, J., Baruch-Mordo, S., and Kiesecker, J., 2020, Earth transformed: detailed mapping of global human modification from 1990 to 2017. *Earth System Science Data*, 12(3), 1953-1972.

US Census TIGER/Line data:

US Census Bureau (2024), TIGER/Line Shapefiles: <https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html>

USFWS National Wetlands Inventory 2024:

<https://www.fws.gov/program/national-wetlands-inventory>

USGS National Hydrography Dataset Plus Version 2:

<https://www.usgs.gov/national-hydrography/nhdplus-high-resolution>

30x30 Conserved Areas 2022:

California Protected Area Database, GreenInfo Network, The California Conservation Easements Database, Protected Areas Database of the United States, California Natural Resource Agency, US Geological Survey:

<https://canature.maps.arcgis.com/home/item.html?id=bab1a4b4b5724ea38aa88b6673b65fb3>