

# California Conservation Prioritization Projects

Partial listing of published conservation prioritization projects in California. The list was compiled by David Ackerly (UC Berkeley) together with students in a graduate seminar focused on the scientific foundations of 30x30 (Fall 2021). Thanks also for input from Dick Cameron (TNC) and Stu Weiss (Creekside Conservation Science). The following criteria were used to identify studies for this list:

1. Publicly available, either in peer reviewed literature or on the web.
2. Cover large ecosystems (e.g., rangelands), regions (e.g., Bay Area), the entire state, or larger areas (west/nation/globe) with sufficient resolution to drill down into CA.
3. Provide explicit or implicit spatial prioritization, by:
  - a. Identifying specific areas that should be prioritized, with maps.
  - b. Or, identifying species or resources that should be prioritized (e.g., threatened and endangered species, vernal pools), which can easily be translated to spatial priorities based on range maps, veg maps, etc.

Studies with a linked 'summary' also have a detailed summary (click on the asterisk), prepared by students in the Berkeley graduate seminar. Studies listed here partially overlap with Appendix B of the CNRA 2022 30x30 Pathways document.

CALIFORNIA CONSERVATION PRIORITIZATION PROJECTS				
Topic	Coverage	Title	Author or Affiliation	Year
Biodiversity overall	Statewide	<a href="#">Areas of Conservation Emphasis</a>	California Department of Fish and Wildlife	ongoing
Biodiversity overall	Statewide	<a href="#">Conserving a Global Biodiversity Hotspot</a>	The Nature Conservancy	2021
Plants	Statewide	<a href="#">Range size, taxon age and hotspots of neoendemism in the California flora</a>	University of California, Berkeley	2010

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Plants	Statewide	<a href="#">Facets of phylodiversity: evolutionary diversification, divergence and survival as conservation targets (summary)</a>	University of California, Berkeley	2018
Plants	Statewide	<a href="#">Important Plant Areas</a>	California Native Plant Society	2022
Mammals	Statewide	<a href="#">California Hotspot Project: Identifying Regions of Rapid Diversification of Mammals (summary)</a>	University of California, Berkeley	2007
Birds	National	<a href="#">Audubon Important Bird Areas</a>	National Audubon Society	2004
Birds	Statewide	Conservation Prioritization for California's Landbirds	Point Blue Conservation Science	2011
Birds	Statewide	<a href="#">Shorebird and Waterfowl Prioritization</a>	Point Blue Conservation Science	2011
Birds	Bay Area	<a href="#">Tidal Marsh Bird Conservation Prioritization (summary)</a>	Point Blue Conservation Science	2012
Fish	Eel River Watershed	<a href="#">Salmonid Habitat Restoration Priorities (SHaRP) (summary)</a>	National Oceanic and Atmospheric Administration	2021
Genetic variability	Statewide	<a href="#">CA Conservation Genetics Project</a>	University of California, Los Angeles	in progress

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Ecoregional plans	Forested Watersheds	<a href="#">Forests to Faucets 2.0 (summary)</a>	US Forest Service	2018
Ecoregional plans	Central Valley Rangelands	<a href="#">CA Rangeland Priority Conservation Areas (summary)</a>	The Nature Conservancy	2007
Ecoregional plans	Coastal Habitats	<a href="#">Conserving California's Coastal Habitats</a>	The Nature Conservancy, Coastal Conservancy	2018
Ecoregional plans	Freshwater	<a href="#">A freshwater conservation blueprint for California: prioritizing watersheds for freshwater biodiversity (summary)</a>	The Nature Conservancy	2018
Ecoregional plans	GDEs	<a href="#">Groundwater Dependent Ecosystem planning tool</a>	The Nature Conservancy	2020
Habitat and Landscape Connectivity	Statewide	<a href="#">CA Essential Habitat Connectivity Project (summary)</a>	California Department of Fish and Wildlife and Caltrans	2010
Habitat and Landscape Connectivity	Statewide	<a href="#">California Wildlife Barriers</a>	California Department of Fish and Wildlife and Caltrans	2020
Habitat and Landscape Connectivity	California	<a href="#">"No-regrets" pathways for navigating climate change: planning for connectivity with land use, topography, and climate (summary)</a>	The Nature Conservancy	2021

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Habitat and Landscape Connectivity	North Coast	<a href="#">Mayacamas to Berryessa Connectivity Project</a>	Pepperwood Preserve	2018
Habitat and Landscape Connectivity	Bay Area	<a href="#">Bay Area Critical Linkages Project (summary)</a>	South Coast Wildlands, Bay Area Open Space Council's Conservation Lands Network	2013
Habitat and Landscape Connectivity	SN Foothills	<a href="#">Sierra Nevada Foothills Wildlife Connectivity Project</a>	California Department of Fish and Wildlife	2015
Habitat and Landscape Connectivity	San Joaquin Valley	<a href="#">Safe Passages Project – San Joaquin Valley</a>	California Department of Fish and Wildlife	2014
Habitat and Landscape Connectivity	South Coast	<a href="#">South Coast Missing Linkages Project</a>	South Coast Wildlands	2003-2008
Habitat and Landscape Connectivity	South Coast	<a href="#">Climate Resilient Connectivity</a>	Climate Science Alliance	2020
Habitat and Landscape Connectivity	Deserts	<a href="#">A Linkage Network for California Deserts</a>	Wildlands Conservancy	2012

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Habitat and Landscape Connectivity	Modoc, Sac Valley, West Mojave	<a href="#">Mapping Habitat Connectivity Priority Areas that are Climate-wise and Multi-scale, for Three Regions of California</a>	Conservation Biology Institute	2019
Habitat and Landscape Connectivity		<a href="#">Additional connectivity projects listed at SC Wildlands website</a>	South Coast Wildlands	
Integrated county and regional planning	North Coast	<a href="#">Northcoast Regional Land Trust - Six Rivers to the Sea</a>	North Coast Land Trust	2000-ongoing
Integrated county and regional planning	Bay Area	<a href="#">Vital Lands Initiative (Sonoma County)</a>	Sonoma Ag & Open Space	2019-2021
Integrated county and regional planning	Bay Area	<a href="#">Bay Area Conservation Lands Network 2.0 (summary)</a>	Together Bay Area	2019
Integrated county and regional planning	Bay Area	<a href="#">Targeting climate diversity in conservation planning to build resilience to climate change</a>	University of California, Berkeley, Pepperwood	2015
Integrated county and regional planning	Bay Area	<a href="#">Bay Area Greenprint</a>	The Nature Conservancy and multiple partners	ongoing

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Integrated county and regional planning	Bay Area	<a href="#">Baylands Ecosystem Habitat Goals Project</a>	Coastal Conservancy	ongoing
Integrated county and regional planning	Bay Area	<a href="#">San Francisco Bay Subtidal Habitat Goals Project</a>	Coastal Conservancy	2011
Integrated county and regional planning	Bay Area	<a href="#">Making Nature's City (Silicon Valley)</a>	San Francisco Estuary Institute	2019
Integrated county and regional planning	Bay Area	<a href="#">Santa Clara Valley Greenprint</a>	Open Space Authority Santa Clara Valley	2014
Integrated county and regional planning	Central Coast	<a href="#">Santa Cruz County Conservation Blueprint</a>	Land Trust of Santa Cruz County	2011
Integrated county and regional planning	Central Coast	<a href="#">Pajaro Compass</a>	Pajaro Compass Steering Committee	2016
Integrated county and regional planning	Central Coast	<a href="#">Santa Barbara County Conservation Blueprint</a>	Land Trust of Santa Barbara County	2018

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Integrated county and regional planning	LA and South Coast	<a href="#">Orange County Green Vision</a>	Friends of Harbors, Beaches, and Parks	2021 and ongoing
Integrated county and regional planning	Southern California	<a href="#">Southern California Greenprint</a>	Southern California Association of Governments	in development
Integrated county and regional planning	San Joaquin Valley	<a href="#">Advancing Strategic Land Repurposing and Groundwater Sustainability in California</a>	Environmental Defense Fund	2021
Integrated county and regional planning	San Joaquin Valley	<a href="#">Resilient Merced</a>	Cascadia Partners	2019
Integrated county and regional planning	San Joaquin Valley	<a href="#">San Joaquin Valley Greenprint</a>	Fresno Council of Governments	2014
Integrated county and regional planning	San Joaquin	<a href="#">A Path Forward: Identifying Least-Conflict Solar PV Development in California's San Joaquin Valley</a>	Conservation Biology Institute, et al.	2016
Integrated county and regional planning	Deserts	<a href="#">California Desert Biological Conservation Framework</a>	California Energy Commission	2016

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Integrated county and regional planning	Deserts	<a href="#">Desert Renewable Energy Conservation Plan</a>	Bureau of Land Management	2016
Integrated county and regional planning	Sierra Nevada	<a href="#">Framework for Cooperative Conservation and Climate Adaptation for the Southern Sierra Nevada and Tehachapi Mountains</a>	Southern Sierra Partnership	2010
Integrated county and regional planning	Sierra Nevada	<a href="#">Sierra Nevada Adaptive Management Project</a>	University of California	2015
Integrated county and regional planning	Sierra Nevada	<a href="#">Strategic Conservation Action Plan for the Sierra Cascade Land Trust Council</a>	Sierra Cascade Land Trust Council	2021
Integrated county and regional planning	Sierra Nevada	<a href="#">Regional Prioritization of Forest Restoration across CA's Sierra Nevada (summary)</a>	The Nature Conservancy	2017
Climate change impacts on biodiversity and landscape resilience	Statewide	<a href="#">Landscape-scale indicators of biodiversity's vulnerability to climate change (summary)</a>	The Nature Conservancy	2011



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Climate change impacts on biodiversity and landscape resilience	Statewide	<a href="#">Climate Change and the Future of California's Endemic Flora</a>	University of California, Berkeley	2008
Climate change impacts on biodiversity and landscape resilience	Statewide	<a href="#">A climate change vulnerability assessment of California's terrestrial vegetation</a>	University of California, Davis	2016
Climate change impacts on biodiversity and landscape resilience	Statewide	<a href="#">Climate Change Vulnerability Assessment of Rare Plants in California</a>	California Department of Fish and Wildlife	2012
Climate change impacts on biodiversity and landscape resilience	Statewide	<a href="#">A Climate Change Vulnerability Assessment for Twenty California Mammal Taxa</a>	California Department of Fish and Wildlife	2016
Climate change impacts on biodiversity and landscape resilience	Statewide	<a href="#">A Climate Change Vulnerability Assessment of California's At-Risk Birds</a>	Point Blue Conservation Science	2011

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Climate change impacts on biodiversity and landscape resilience	Statewide	<a href="#">Re-Shuffling of Species with Climate Disruption: A No- Analog Future for California Birds?</a>	Point Blue Conservation Science	2009
Climate change impacts on biodiversity and landscape resilience	Statewide	<a href="#">California Amphibian and Reptile Species of Future Concern: Conservation and Climate Change</a>	University of California, Davis	2013
Climate change impacts on biodiversity and landscape resilience	Statewide	<a href="#">Projected Effects of Future Climates on Freshwater Fishes of California</a>	University of California, Davis	2012
Climate change impacts on biodiversity and landscape resilience	National	<a href="#">Ecologically-Relevant Maps of Landforms and Physiographic Diversity for Climate Adaptation Planning</a>	Conservation Science Partners and others	2015
Climate change impacts on biodiversity and landscape resilience	National	<a href="#">Resilient Land Mapping Tool</a>	The Nature Conservancy	ongoing