TAHOE CLIMATE RESILIENCE ACTION STRATEGY

THE LAKE TAHOE CLIMATE RESILIENCE ACTION STRATEGY builds on existing Tahoe Basin climate and environmental improvement plans to identify five focus areas that will advance equity, create jobs, and build resilience for the Basin's extraordinary natural resources, 57,000 residents, and an economy that supports 15 million annual visitors. We must act now to preserve and protect Lake Tahoe for this and future generations.

1. Build Sustainable Recreation and Transportation Systems: Upgrade recreation and transportation facilities to prepare for longer summers, shorter winters, fluctuating lake levels, and changes in visitor patterns. Invest in projects that expand equitable access like bike paths, accessibility improvements, and tribal interpretive sites.

2. Reduce Wildfire Risk and Build Forest Resilience: Implement unfunded thinning and forest restoration projects to protect communities from wildfire and improve forest health. Restore burned forests. Continue implementing the Lake Tahoe Forest Action Plan.

3. Increase Watershed Resilience and Biodiversity: Restore wetlands, streams, and meadows. Prevent and control aquatic invasive species. Help wildlife, natural infrastructure, and culturally significant places withstand droughts, fire, and warming temperatures, while storing more carbon in meadows and forests.

4. Upgrade Infrastructure and Protect Vulnerable Communities: Prepare for wildfire and extreme weather by upgrading water, sewer, broadband, and power infrastructure; building community resilience centers; planning for emergencies; and expanding electric vehicle charging and solar energy adoption.

5. Advance Science, Stewardship, and Accountability: Guide and protect Tahoe climate investments through cutting-edge research, monitoring, and adaptive management.

Retrofitting recreation infrastructure to handle fluctuating lake levels safeguards the region's economy and protects public access. Photo: Pier at Kings Beach State Recreation Area

Retrofitting roads to withstand extreme weather protects people and infrastructure investments. (Photo: Construction along NV State Route 28, Nevada Department of Transportation)

Photo by Lake Tahoe Water Trail

TAKING AN INTEGRATED APPROACH TO BUILDING RESILIENCE

LAKE TAHOE
including its chemistry, hydrology, water quality, and native fish.

FORESTED UPLANDS
including vegetation, wildlife, and groundwater.

COMMUNITIES
including cultural landscapes, public health and safety, recreation, and water, power, communication, and transportation infrastructure.

Building resilience at Tahoe focuses on three main systems: **Lake Tahoe, Forested Uplands,** and **Communities**. Projects within each system yield multiple benefits and advance California and Nevada priorities, such as:

Expanding public access for people of all races, cultures, incomes, and abilities.

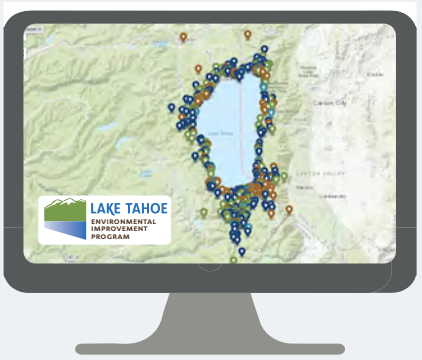
Elevating the role of natural lands in fighting climate change and advancing biodiversity conservation through land conservation.

Restoring and using natural infrastructure like wetlands, beaches, and forests to boost resilience to drought, flood, extreme heat, and changing visitor patterns.

Safeguarding jobs, rural economies, and vulnerable communities, and advancing equity.

TAHOE HAS SHOVEL-READY CLIMATE RESILIENCE PROJECTS

The Lake Tahoe Environmental Improvement Program (EIP) is an unparalleled partnership working to achieve the region's environmental goals. The EIP Project Tracker serves as a clearinghouse of information on past accomplishments as well as proposed, shovel-ready projects at Tahoe: **eip.laketahoeinfo.org**.



CLIMATE PLANNING AT LAKE TAHOE

Tahoe Climate Resilience Action Strategy:
Strategies and resources needed to adapt

Tahoe Climate Adaptation Primer + Tahoe Climate Adaptation Action Portfolio:
Ongoing and planned actions to accelerate adaptation

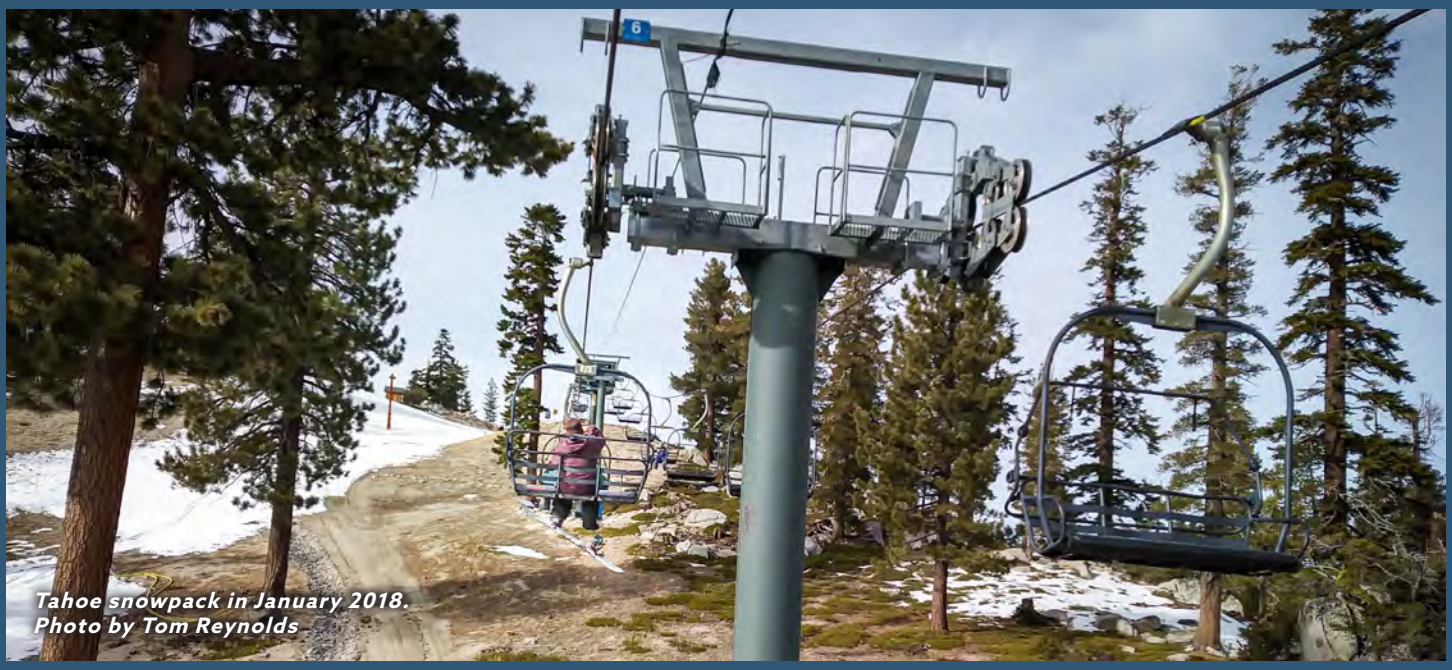
Integrated Vulnerability Assessment:
Scientific assessment of climate threats at Tahoe

Foundational Plans: Nevada State Climate Strategy, California Climate Adaptation Strategy, Lake Tahoe Regional Plan, and Sustainability Action Plan, alongside local plans provide frameworks for climate resilience at Tahoe.

Find these and other climate resilience planning documents at trpa.gov/climate-resilience.

Photo by Tahoe Regional Planning Agency

COST OF CLIMATE IMPACTS ON PEOPLE



Tahoe snowpack in January 2018. Photo by Tom Reynolds

Wildfire, landslides, avalanches, and floods threaten the safety of Tahoe's residents and visitors and the infrastructure they rely on.

Annual road damages are increasing and could exceed $75 million by 2100. It would cost three times less to protect infrastructure from floods than to pay for damages from a major flood.

Each year, 15 million people visit Tahoe, including hundreds of thousands on busy summer weekends. Wildfire, smoke, and extreme weather events threaten public health and safety.

Winter recreation seasons are already shorter and will be cut in half by 2100, causing the ski industry $268 million in annual losses.

Loss of lake clarity due to warming water temperatures will impact the region's $5 billion tourism-based economy.

Housing costs will rise because people move from hotter cities to Tahoe. Higher costs displace Tahoe's workforce and underserved populations.

Wildfire threatens $26.9 billion in property value. Each $1 million invested in climate adaptation projects will reduce property damage by $10 million.

Meadow degradation threatens sites that are culturally significant to the Washoe Tribe of Nevada and California (Washoe Tribe).

The 2021 Caldor Fire demonstrated the urgent need to reduce wildfire risk and improve forest resilience.

Extreme weather increases the risk of landslides damaging roads. Photo: Nevada Department of Transportation

SHARED FUNDING NEEDS 2022-2031

Now is the time to confront the climate crisis. Tahoe partners have identified shovel-ready projects within the five focus areas below to make our communities and natural resources more resilient to climate change. Partners determined funding needs for each strategy based on Lake Tahoe Basin plans and project lists such as the Lake Tahoe Environmental Improvement Program, Tahoe Climate Adaptation Action Portfolio, the Lake Tahoe Forest Action Plan, and Lake Tahoe Aquatic Invasive Species Action Agenda.

Improving Resilience at Lake Tahoe	Total Needed	Annually 2022-26	Annually 2027-31
Build Sustainable Recreation and Transportation Systems	**$125 M**	**$16 M**	**$9 M**
Reduce Wildfire Risk and Build Forest Resilience	**$65 M** *Reflects unfunded need considering 2021 state and federal investments in this category*	**$4 M**	**$9 M**
Increase Watershed Resilience and Biodiversity	**$90 M**	**$12 M**	**$6 M**
Upgrade Infrastructure and Protect Vulnerable Communities	**$102 M**	**$13 M**	**$7.4 M**
Advance Science, Stewardship, and Accountability	**$16 M**	**$1.6 M**	**$1.6 M**
TOTAL:	**$398 M**	**$46.6 M**	**$33 M**

REGIONAL COORDINATION IS IN TAHOE'S DNA

The EIP serves as the backbone for regional climate adaptation coordination. Federal, tribal, state, local, and private partners have collaborated since 1997 to restore the environmental health of Lake Tahoe. Together, EIP partners have made progress—the Lake's clarity loss has stabilized, mountain streams are clearer, and forest management is underway. Continued investment will help build on the EIP's progress and create a more resilient landscape at Tahoe. Learn more at **LakeTahoeInfo.org.**

LAKE TAHOE
ENVIRONMENTAL
IMPROVEMENT
PROGRAM

Lake Tahoe EIP Partner Organizations Include:

FEDERAL AGENCIES
U.S. Army Corps of Engineers
Bureau of Land Management
Bureau of Reclamation
Federal Highway Administration
Federal Transit Administration
Natural Resources Conservation Service
National Aeronautics and Space Administration (NASA)
USDA Forest Service
U.S. Environmental Protection Agency
U.S. Geological Survey
U.S. Fish and Wildlife Service

TRIBAL
Washoe Tribe of Nevada and California

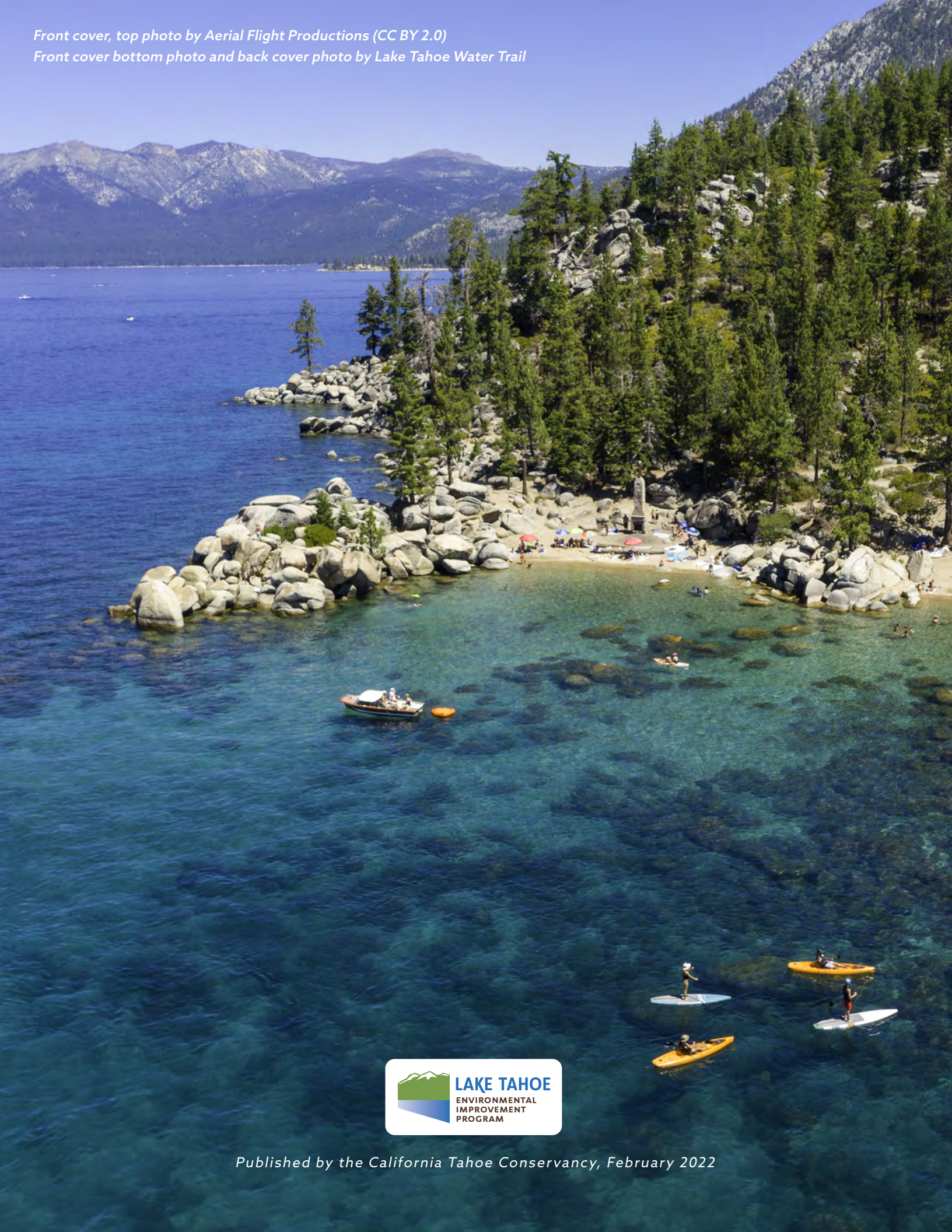
STATES OF CALIFORNIA AND NEVADA
CAL FIRE
California Air Resources Board
California Conservation Corps
California Department of Fish and Wildlife
California Department of Water Resources
California Environmental Protection Agency
California Natural Resources Agency
California State Lands Commission
California State Parks
California Tahoe Conservancy
California Wildlife Conservation Board
Caltrans
State of California Lahontan Regional Water Quality Control Board
University of California, Davis Tahoe Environmental Research Center

Nevada Department of Conservation and Natural Resources
Nevada Division of Forestry
Nevada Division of State Lands
Nevada Division of State Parks
Nevada Department of Wildlife
Nevada Department of Transportation
Nevada Division of Environmental Protection
Nevada Public Utilities Commission
University of Nevada, Reno
Desert Research Institute

REGIONAL AGENCIES
Tahoe Regional Planning Agency
Tahoe Transportation District

LOCAL GOVERNMENTS/ ORGANIZATIONS
Carson City
Carson City Fire Department
Cave Rock Estates General Improvement District
City of South Lake Tahoe
Douglas County
El Dorado County
Fallen Leaf Fire Department
Incline Village General Improvement District
Kingsbury General Improvement District
Lake Valley Fire Protection District
Lakeridge General Improvement District
Meeks Bay Fire Protection District
Nevada Tahoe Conservation District
North Lake Tahoe Fire Protection District
North Lake Tahoe Resort Association
North Tahoe Fire Protection District
North Tahoe Public Utility District
Placer County
Round Hill General Improvement District
South Tahoe Public Utility District
Tahoe Science Advisory Council
Tahoe City Public Utility District
Tahoe Douglas Fire Protection District
Tahoe Resource Conservation District
Town of Truckee
Washoe County

PRIVATE ENTITIES
Edgewood Companies
Heavenly Mountain Resort
Lake Tahoe Marina Association
Lake Tahoe South Shore Chamber of Commerce
League To Save Lake Tahoe
Liberty Utilities
NV Energy
Sugar Pine Foundation
Tahoe Fund
Tahoe Institute for Natural Science
Tahoe Keys Property Owners Association
Tahoe Lakefront Owners' Association
Tahoe Partnership
Tahoe Rim Trail Association



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LAKE TAHOE
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