PATHWAYS TO 307330 CALIFORNIA

Accelerating Conservation of California's Nature

AADA AA ALANA

Î.

APRIL 22, 2022





Administration of Governor Gavin Newsom

April 22, 2022

With special thanks to the thousands of Californians who helped inform this strategy. A summary of the public input process is found in Appendix G.

Cover Photo:

30x30 in Action: Hikers from Latino Outdoors enjoy durably protected open space on Coyote Ridge in Santa Clara County connected by sustainably managed working lands in Coyote Valley to the Santa Cruz Mountains beyond.

A copy of this document can be found online at CaliforniaNature.ca.gov



Executive Summary

California's lands and coastal waters are home to nature found nowhere else on Earth. These ecosystems sustain our communities, support our economy, provide for our recreation, and anchor our history, culture, and traditions. Yet, California's incredible nature is under threat. Climate change and other stressors destabilize our ecosystems, our communities, and our livelihoods. Conserving our natural areas is essential for the continued growth and success of California's communities. At the same time, protecting our natural areas can both build climate resilience and reduce climate change impacts.

In October 2020, Governor Newsom issued the Nature-Based Solutions Executive Order N-82-20, advancing biodiversity conservation as an administration priority and elevating the role of nature in the fight against climate change. As part of this Executive Order, California committed to the goal of conserving 30% of our lands and coastal waters by 2030 (30x30).

California's 30x30 initiative is part of an international movement to conserve natural areas across our planet, through which scores of countries have established their own 30x30 commitments. California's initiative seeks to protect and restore biodiversity, expand access to nature, and mitigate and build resilience to climate change. This effort drives and aligns with broader state commitments to advance justice, equity, diversity, and inclusion, strengthen tribal partnerships, and sustain our economic prosperity, clean energy resources, and food supply.

For the purposes of California's 30x30 goal, an area is considered a "30x30 Conservation Area" if it meets the following definition:

30x30 CONSERVATION AREAS

Land and coastal water areas that are durably protected and managed to sustain functional ecosystems, both intact and restored, and the diversity of life that they support.

The best available datasets for identifying 30x30 Conservation Area lands in California assign protected areas into GAP codes based on the degree of biodiversity protection for conserved areas.* GAP status codes 1 and 2 are generally consistent with our definition of 30x30 Conservation Areas as they include areas with a high degree of durable protection and management for biodiversity or ecosystem values. For coastal waters, California's statewide network of 124 Marine Protected Areas meet the criteria in the definition.

*Datasets used for identifying 30x30 Conservation Area lands in California include the California Protected Areas Database, California Conservation Easement Database, and U.S. Protected Areas Database and the **<u>Gap Analysis Project</u>** (GAP).

Approximately 24% of California's lands and 16% of its coastal waters are already conserved based on our definition of 30x30 Conservation Areas.

California's strategy to conserve an additional six million acres of land and half a million acres of coastal waters is organized into ten Pathways:

- 1. Accelerate Regionally Led Conservation
- 2. Execute Strategic Land Acquisitions
- Increase Voluntary Conservation Easements
- Enhance Conservation of Existing Public Lands and Coastal Waters
- 5. Institutionalize Advance Mitigation
- 6. Expand and Accelerate Environmental Restoration and Stewardship
- 7. Strengthen Coordination Among Governments
- 8. Align Investments to Maximize Conservation Benefits
- 9. Advance and Promote Complementary Conservation Measures
- Evaluate Conservation Outcomes and Adaptively Manage

Each of these pathways identifies specific state actions that will help us achieve 30x30. But California can't do it alone. Implementing these actions will require collaborative partnerships and voluntary efforts from land managers, community conservationists, scientists, environmental stewards, California Native American tribes, and all Californians who enjoy the state's unique natural resources. Implementation of this strategy will be led by the California Natural Resources Agency in partnership with champions across the state, through the 30x30 Partnership. This collaborative body will serve as an organizing hub for dialogue, shared learning, coordination, and strategic planning.

The CA Nature Geographic Information System is key to advancing California's 30x30 initiative. This suite of visualization and decision support tools is available on a publicly accessible online platform at **californianature.ca.gov**. CA Nature brings together maps of biodiversity, climate change, and access into one system enabling all Californians to collectively view and analyze different features of the landscape. This platform will be used to track progress toward the 30x30 goal and help us identify places across California that best meet our shared objectives.

Public participation and input have been critical to help the state identify strategies for conserving lands and coastal waters that reflect local and regional priorities. Continued meaningful community engagement and collaboration will be necessary to ensure our success in achieving 30x30.



Sand to Snow National Monument, San Bernardino County



TABLE OF CONTENTS

Call To Action
30x30 Framework
Key Objectives
Core Commitments 18
Alignment with Existing Efforts 22
Conservation in California23
30x30 Conservation Areas
Progress to Date
Pathways to Achieve 30x3034
1. Accelerate Regionally Led Conservation36
2. Execute Strategic Land Acquisitions
3. Increase Voluntary Conservation Easements
4. Enhance Conservation of Existing Public Lands and Coastal Waters43
5. Institutionalize Advance Mitigation45
6. Expand and Accelerate Environmental Restoration and Stewardship 47
7. Strengthen Coordination Among Governments
8. Align Investments to Maximize Conservation Benefits
9. Advance and Promote Complementary Conservation Measures
10. Evaluate Conservation Outcomes and Adaptively Manage
Implementation of Pathways to 30x3062
Near Term Strategic Actions
Public Funding
The 30x30 Partnership64
CaliforniaNature.ca.gov65
CA Nature
Onward Together
References



Call To Action

Californians are part of nature. We are connected to our mountains, rivers, deserts, and beaches. We care for and benefit from remote wilderness, regional parks, and wildlife in our own backyards. We spend time in nature to be with other living creatures, to care for our lands and waters, and to provide for our communities. To walk on the sand with plovers and curlews and catch a glimpse of a humpback whale. To breathe the crisp mountain air while fishing in an alpine stream. California's nature is our livelihood and our identity. Our nature is diverse and alive, and part of what makes California such a special place to live.

But nature is under threat. Habitat loss and a changing climate are altering the world we cherish. Increasing temperatures, rising seas, reduced rainfall, and catastrophic fires impact our wild places, just as they threaten our communities and well-being.

Photo: Shorebirds, Point Reyes National Seashore, Marin County



Scientists explain that climate change is "code red" for humanity. At the same time, nearly one million of the earth's species are at risk of extinction.¹ These crises are linked. Nature provides irreplaceable benefits. Plants, animals, soil microbes, and fungi are the building blocks of the ecosystems that sustain us. They sequester carbon, pollinate our crops, and clean our air and water. It is our responsibility to protect nature for the future so our children and grandchildren can live and thrive.

The historical approach to conservation - setting aside lands proximate and welcoming to predominantly white and affluent communities - has been detrimental to ecosystems and the human communities that are part of them. The nature we all cherish is inaccessible or offlimits for underserved populations, including California Native American tribes, people of color, and low-income communities. Historical seizures of land from people of color have had, and continue to have, long-standing, oppressive impacts that extend beyond the loss of the land itself. These impacts include the loss of natural resources of value, lack of access to affordable and reliable governmental services, and forced relocation to areas with fewer or lower quality natural resources. Expanding meaningful access of conserved areas to all Californians will aid community well-being, promote healthy lifestyles, address historic inequities, and open doors for a broader and more inclusive community of conservation champions.

Governor Newsom issued Executive Order N-82-20 in October 2020 to protect California's biodiversity and accelerate the use of naturebased solutions in the fight against climate change. The Executive Order commits to conserving 30% of California's lands and coastal waters by 2030 (30x30). Governor Newsom's clear call to expand environmental conservation helps lead an international movement to protect our planet. California is part of a growing number of countries—including our own—and other subnational governments who have committed to 30x30. It is an ambitious yet achievable target that, when combined with other conservation measures across our state, will protect our biodiversity and help us mitigate and build resilience to climate change.

Approximately 24% of California's lands and 16% of its coastal waters are already conserved based on our definition of 30x30 Conservation Areas. This strategy lays out a vision to conserve an additional six million acres of lands and half million acres of coastal waters needed to reach 30%. This strategy identifies the many complementary pathways we can take to reach 30x30 together.

> Nature is not a place to visit, it is home.

GARY SNYDER California Poet This strategy was formed by the collective wisdom of thousands of Californians who are ready to work together to achieve 30x30. This insight and direction were provided through nine regional workshops, five topical advisory panels, consultations and meetings with over 70 California Native American tribes* and dozens of meetings with myriad community organizations, coalitions, and interest groups. Additional input was received through a 30x30 Advisory Committee and public feedback workshop to improve upon the public draft and tribal consultations and conversations will continue throughout implementation. Throughout the process, input was also gathered through surveys, emails, letters, and through our website: CaliforniaNature.ca.gov.

30x30 can be achieved through collaborative partnerships and a broad range of voluntary actions. It will require a cooperative and inclusive effort among our communities, land managers, California Native American tribes, farmers and ranchers, hunters and anglers, nonprofit organizations, scientists, philanthropists, governments, and more.

Conserving 30% of California's nature is an investment in our collective future that will require long-term commitments to partnership, stewardship, and continuous learning. We envision a future of healthy natural and human communities thriving together. Let's unite to protect the California we love for generations to come.



* California Native American tribes are those included on the contact list maintained by the California Native American Heritage Commission.







30x30 Framework

California's 30x30 is part of an international movement to utilize nature-based solutions to combat climate change, protect biodiversity, and build a more resilient future. Scientists around the world have identified conserving 30% of the planet's land and water habitats by the year 2030 as critically necessary to avoid the effects of a warming planet and safeguard the earth's biodiversity^{2,3} At the same time, maintaining and restoring ecosystems is recognized as a crucial step to improving people's access to nature and its benefits. To date, over 90 countries have committed to 30x30, including the United States.⁴

Photo: Calaveras Big Trees State Park, Calaveras County



Nature-Based Solutions

Actions that work with and enhance nature to help address societal challenges. This term is an umbrella concept being used across the world to describe a range of ecosystemrelated approaches that protect and restore nature to deliver multiple outcomes, including addressing climate change, protecting public health, increasing equity, and protecting biodiversity.

California's 30x30 initiative delineates areas into two categories: lands and coastal waters. While these two categories do not capture the complex connectedness of nature, they are meant to be inclusive of all ecosystems. Lands encompass inland waters such as rivers and wetlands and the integral role they play in connecting and nourishing terrestrial, coastal, and freshwater ecosystems. Coastal waters include most major bays and estuaries, which connect the sea to the land.* All of our ecosystems, including freshwater systems, are vital for biodiversity, the enhancement of drought resilience, and the maintenance of cultural and recreational activities across California.

Conserving large areas of land and coastal waters is critical to maintain and restore the state's biodiversity. Plants, animals, and other life forms need space to survive. Conservation of natural and working lands, including forests, rivers and fisheries, farms, rangelands, and urban greenspaces, can support removal of carbon from the atmosphere needed to stabilize our climate and protect communities from climate impacts. California's 30x30 initiative is a cornerstone of the state's conservation efforts, driving actions to conserve more land and waters. Complementary efforts outside of 30x30 are also important to meet our conservation goals. For example, measures to protect soil health, water quality, and at-risk fish and wildlife are critical to protect biodiversity, combat climate change, and preserve human connection to lands, waters, and natural resources for future generations. These actions, while not quantified within 30x30 as conserved acres, are essential to our longterm conservation success. California's 30x30 initiative is not meant to replace, but rather enhance, our state's existing conservation efforts.

California's 30x30 initiative is based upon a set of key objectives and core commitments that align with the broader national and international efforts to conserve nature.

> Rivers are the arteries of California's landscapes, connecting headwaters to the ocean and providing habitat for an incredible diversity of plants and wildlife.

Environmental Protection Information Center

^{*} To be consistent with previous protected area mapping boundaries, the San Francisco Bay Area beginning directly under the Golden Gate Bridge is included in California's land area calculations for the purposes of counting to 30%, however, we recognize that the San Francisco Bay includes many coastal and marine habitats that are important to California's communities and biodiversity. Coastal waters include all other major bays and estuaries along California's coastline.

Key Objectives

California's 30x30 initiative will expand enduring conservation measures across a broad range of landscapes and seascapes to achieve three key objectives that Governor Newsom set in Executive Order N-82-20:





Sara Orangetip Butterfly, Pinnacles National Park, San Benito County



Protect and Restore Biodiversity

Biodiversity refers to the variety of life, from genes to species to ecosystems.⁵ California is considered a global "biodiversity hotspot," home to an exceptional variety of species and ecosystems.⁶ Thousands of plants and animals found nowhere else on Earth rely on the habitat created by California's diverse landscapes, seascapes, and the freshwater systems that connect them.⁷

Our state's unique biodiversity is under threat. California has the most imperiled biodiversity of any state in the contiguous United States.⁸ Over the last two centuries 75% of the state's native vegetation, including over 90% of California's wetlands, has been altered, impacting ecosystems across California.^{9,10} Blue oak woodlands, riparian zones, and grasslands now occupy a small fraction of their historic range. Meanwhile, climate change has shifted species ranges both on land and in coastal waters. Additionally, pollution, water diversion, and invasive species have severely altered ecosystem dynamics.

Protecting our state's extraordinary biodiversity requires adaptive management in key areas across the state, including within our working landscapes, inland waters, and seascapes. It will also require conserving and actively managing areas that will safeguard biodiversity as the climate changes.

Why do biodiversity hotspots matter?

Despite accounting for only 2.5% of global land area, biodiversity hotspots support more than half of the world's endemic plant species and over 40% of endemic bird, mammal, reptile, and amphibian species.



Conservation Priorities to Protect and Restore Biodiversity		
	Ensure conservation of habitats that represent the full diversity of California's ecosystems, especially rare or remnant habitat types	
44	Protect areas that are adjacent or linked to existing conserved areas to support large, interconnected watersheds and seascapes	
	Restore degraded habitats, especially for rare ecosystems and wetlands	
	Target areas for conservation with high species richness, endemism (species only found in one place), and species rarity	
i i i i i i i i i i i i i i i i i i i	Prioritize places that support exceptional biocultural significance, which account for the interconnected nature of people and places	
	Ensure conservation and restoration of river corridors that are essential to fish and wildlife movement and that serve as climate refugia for native species	



Expand Access to Nature

Access to nature is critical to human health and well-being. People with access to the outdoors experience the health benefits of physical activity, social interaction, and reduced stress¹¹ and decreased exposure to noise,¹² air pollution,¹³ and extreme heat.¹⁴ But this access is not equitably distributed. One out of every four Californians—9.5 million residents—does not have a public park or open space within walking distance of their home. Six out of every ten Californians—24.7 million—live in neighborhoods with fewer than three acres of park and open space per 1,000 residents.¹⁵

Working to achieve 30x30 provides an opportunity to expand outdoor access and recreation for all Californians. Fostering human connections to nature can increase community support for its protection and ensure all Californians have access to its benefits. Careful planning, stewardship, and education can ensure that access and recreation are balanced with biodiversity and habitat protections. Managers must consider a broad range of community needs and priorities, including creating safe and inclusive experiences, enabling tribal cultural and subsistence practices, and fostering active recreation including hunting, fishing, hiking, boating, and more. This will require expanding conservation of lands, rivers, and coastal waters that can be sustainably and equitably managed to reflect the needs and interests of local communities and California Native American tribes.

The state's Outdoors for All initiative is working to foster an expanded definition of access that ensures equity and inclusion by making focused investments in open space infrastructure, outdoor programming, workforce, and improvements to state policies, practices, and systems.







Mitigate and Build Resilience to Climate Change

Healthy natural ecosystems are essential to maintain community health and wellbeing in a warming world. Conserving lands and coastal waters is a critical action to combat climate change and will help to achieve California's commitment to achieve carbon neutrality by 2045.

Intact and restored terrestrial, freshwater, and coastal ecosystems remove and store carbon from the atmosphere, safeguard important resources such as clean water, and can protect people and nature from the impacts of climate change like flooding and extreme heat. Governments around the world have recognized this and are expanding these types of nature-based solutions in their efforts to combat climate change.

Climate change is also one of the greatest threats to biodiversity and ecosystem health in California. Climate change increases temperatures during all seasons, drives higher frequency and intensity of extreme weather events including drought and flooding, and worsens catastrophic wildfire, among other changes. Its effects on natural resources include loss of suitable habitat, introduction of invasive species, and increased exposure to novel diseases and toxins.¹⁶

Additionally, sea-level rise poses an immediate and real threat to coastal ecosystems, livelihoods, and economies, public access to the coast, recreation, and the well-being and safety of nearby communities representing nearly 75% of California's population.

Science-driven, nature-based approaches, both traditional and western, must be expanded across the state to protect California from the effects of climate change. Such approaches must be dynamic and adaptive, and wherever possible, achieve multiple benefits.

We must continue to strengthen our partnerships with local communities, private landowners, and California Native American tribes to share knowledges and learn effective practices for conserving, stewarding, and restoring ecological and cultural systems amidst climate change. The state's Natural and Working Lands Climate Smart Strategy and Scoping Plan serve as guides for managing lands and coastal waters to sequester carbon and build resilience and provide credible, tangible actions that can deliver on our climate goals through nature-based solutions. Implementation of the Natural and Working Lands Climate Smart Strategy will support achievement of the natural and working lands target set in the 2022 Scoping Plan.



Kelp Canopy

Climate Resilience

Resilience is the capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stress, and to adapt to climate impacts.

Carbon Neutrality

Carbon neutrality is achieved when the flux of greenhouse gas sources and sinks are equal.



Conservation Priorities to Mitigate and Build Resilience to Climate Change



Conserve and manage lands and coastal waters to remove and store carbon dioxide from the atmosphere, consistent with the Natural and Working Lands Climate Smart Strategy and Scoping Plan



Conserve land and coastal waters that buffer climate impacts and build resilience to protect climate vulnerable communities¹⁷ and ecosystems



Establish and conserve places that will persist under future climate conditions, will serve as refugia for plants and animals, and accommodate habitat range shifts



Improve habitat connectivity and other actions that build the resilience of species and habitats by facilitating plant and animal migration and gene flow



Core Commitments

California's 30x30 initiative aligns with broader state commitments to equity, tribal partnerships, and economic prosperity and builds upon existing efforts to protect biodiversity, expand access to nature, and drive climate action. California's 30x30 initiative will advance and be shaped by three core commitments:





Land Transfer to the Maidu Summit Consortium, Tasmam Koyom-Humbug Valley, Plumas County

3 CALIFORNIA

Advance Justice, Equity, Diversity, and Inclusion

California's nature is an essential component of healthy and thriving communities. Access to nature and all the benefits it provides enables public health and economic stability. Historically, many communities have lacked access to nature and its benefits, have been made to feel unwelcome, or have been excluded from decisions about the management of lands and waters.

Communities of color experience increased concentrations of environmental pollution, limited access to nature, and loss of sacred lands and species and the ability to steward them.¹⁸ Additionally, climate change threatens to disproportionately affect communities with the least capacity to prepare for, respond to, and recover from climate-driven threats.

Advancing equity within our conservation efforts means not only enabling equal access and opportunities within nature but also working with historically marginalized people and advocating to ensure all communities can help shape conservation efforts. The following principles summarize how California's 30x30 initiative can help advance justice, equity, diversity, and inclusion.

Principles for Advancing Justice, Equity, Diversity, and Inclusion

Foster efforts that benefit all of California, with an emphasis on ensuring historically marginalized communities, communities of color, and California Native American tribes have full and equal access



Promote projects that improve and expand public health, Native American land stewardship, community resilience to climate change, high quality jobs, and meaningful access to nature



Prioritize intersectional strategies and inclusive approaches that are proactive, community-based, localized, and rely on meaningful engagement and capacity building, including workforce development and technical assistance



Implement projects that do no further harm or pose unintended consequences to historically marginalized communities



Amplify diverse perspectives by elevating the voices of historically marginalized communities and creating more representative leadership teams, boards, and staff advancing conservation

Strengthen Tribal Partnerships

California Native American tribes have played a central role in stewarding nature and safeguarding biodiversity since time immemorial. These tribes and tribal communities, having persisted from the state-sanctioned historical wrongs committed against them, have maintained relationships with, and knowledges of, California's lands, coastal waters, and freshwater systems.

Tribal connection, ownership, stewardship, and uses of ancestral and traditional areas including living, fishing, hunting, gathering, and ceremony—are central not only to tribal identity and sovereignty, but also biodiversity protection and ecosystem function. Biocultural significance, which accounts for the interconnected nature of people and places, is a critical component of biodiversity and particularly important for ensuring that conservation initiatives include the needs and priorities of California Native American tribes and traditional cultural practitioners.

Tribes have a sovereign right to their traditional foods, which necessitates accessing and utilizing traditional food sources and expanding tribal access, management, and restoration to enable continuation and revitalization of tribes' cultural lifeways, foods, and ecosystems. The following principles are necessary for effective California Native American tribal partnerships.

Principles for Strengthening Tribal Partnerships



Support shared decision making with California Native American tribes in identifying conservation areas



Engage in early, often, and meaningful government-to-government consultation with California Native American tribes for the protection, care, access, and stewardship of cultural landscapes, celestial-scapes, and seascapes, as well as other sacred sites and ceremonial places, within their traditional and culturally affiliated territory



Support the return and ownership of ancestral lands to California Native American tribes with traditional and cultural affiliation with such lands for conservation purposes



Respect, acknowledge, and support culturally appropriate use of tribal expertise, traditional and tribal knowledges, and intellectual property, with consent of and in consultation with tribes



Identify opportunities for California Native American tribes to utilize tribal expertise, traditional knowledges, and intellectual property to further conservation efforts



Develop opportunities for meaningful and mutually beneficial tribal management and tribal co-management within new and existing state lands, marine waters, and private lands, through formal agreements and other means

Sustain Our Economic Prosperity, Clean Energy Resources, and Food Supply

California demonstrates that economic prosperity and environmental protections for air, water, and biodiversity can go hand in hand. California's economy has grown into the fifth largest economy in the world while maintaining world-leading environmental standards that keep our state healthy.

California's working lands and waters, including our forests, rivers and fisheries, farms, rangelands, and urban greenspaces, help to sustain our economy. These landscapes, waterways, and seascapes support a range of resourcebased industries, including farming, ranching, forestry, fisheries, and aquaculture. Our lands and waters also stimulate tourism, support a robust recreation economy, and create jobs in land management and scientific research and monitoring. Maintaining the health of our lands and waters benefits all these economic sectors.

California's long-term prosperity also depends on reducing carbon pollution and shifting to clean energy, building more housing, modernizing our transportation, and maintaining our food supply. Effective planning can and will ensure we conserve the health of our lands and waters and advance 30x30 while meeting these other important needs. This planning will be critical, for example, to identify important locations for conservation and those appropriate for other development.

The 30x30 initiative will incentivize voluntary, collaborative partnerships to identify and deliver conservation outcomes while supporting the state's broader economic and climate change priorities. 30x30 will protect our economic prosperity, clean energy resources, and food supply through the following principles.

Principles for Sustaining our Economic Prosperity, Clean Energy Resources, and Food Supply



Use voluntary and collaborative approaches to identify and conserve lands and coastal waters



Coordinate across state government to strategically plan for other economic needs including affordable housing, transportation, and clean energy to ensure these are mutually supportive with conservation goals



Support programs that enhance the sustainability of our food systems, including improvements to soil health, water quality, and protections for pollinators



Provide training and workforce development opportunities for jobs in resource protection, conservation, and outdoor access related fields



Promote climate smart land management actions across natural and working lands and coastal waters

Alignment with Existing Efforts

The 30x30 initiative is just one part of Governor Newsom's Nature-based Solutions Executive Order, N-82-20. Overall, this Executive Order prioritizes the role of natural and working lands to combat climate change and establishes biodiversity protection as an administration priority. Given this broad vision, 30x30 complements and supports two related efforts at the California Natural Resources Agency:

- The <u>Natural and Working Lands Climate</u> <u>Smart Strategy</u>: California's roadmap to guide and accelerate climate action across key California landscapes utilizing naturebased solutions.
- 2. The <u>Outdoors for All</u> Initiative: California's strategy to equitably expand outdoor access to all Californians through improvements to state policies, practices, and systems, and strategic investments in parks and open spaces, workforce, outdoor programming, and new partnerships.

30x30 will conserve lands and coastal waters in ways that will support these two important initiatives and will coordinate closely with leaders of these efforts to ensure investments, policies and programs are mutually supportive and align with one another.

The 30x30 initiative will utilize information and findings from several other state government reports and strategies and advance complementary priorities from these efforts. Other reports and strategies that 30x30 will reference and utilize include:

Enhancing Biodiversity 2021 California Biodiversity Atlas 2020 California Wildlife Barriers 2018 California Biodiversity Initiative: A Roadmap for Protecting the State's Natural Heritage 2015 State Wildlife Action Plan

Ocean And Coastal Protection

Strategic Plan to Protect California's Coast and Ocean 2020–2025 Master Plan for Marine Protected Areas Marine Protected Area Monitoring Action Plan Scientific Guidance for Evaluating California's Marine Protected Area Network Climate Resilience and California's Marine Protected Areas Network State of California Ocean Acidification Action Plan State Agency Sea-Level Rise Action Plan for California Interim Action Plan for Protecting and Restoring California's Kelp Forests Statewide Microplastics Strategy Marine Life Management Act Master Plan

Addressing Climate Change California's Scoping Plan California Climate Adaptation Strategy

Maintaining And Diversifying Water Supply

2020 Water Resilience Portfolio

Wildfire And Forest Resilience 2021 Wildfire and Forest Resilience Action Plan



Andrew Molera State Park, Monterey County







Conservation in California

Environmental conservation in California occurs across a wide variety of lands and waters including remote wilderness and marine protected areas, wild and scenic rivers, lands and seas used for multiple purposes, state and regional parks, and on working farms and ranches.

Photo: Kirk Creek, Los Padres National Forest, Monterey County



From establishing our nation's first state park in 1864 to this 30x30 initiative, California has led the world in strategies to protect natural, cultural, and historical treasures. The Newsom Administration's executive order advancing nature-based solutions continues this tradition. At the same time, it recognizes that we must better engage and support marginalized groups in conservation decision making and strengthen relationships and collaboration with California Native American tribes and traditional cultural practitioners.

The 30x30 initiative is part of California's broader environmental commitments which includes strong protections for air, water, species, and habitats. The 30x30 approach is area-based and biodiversity driven. Areas that contribute to 30x30 must have highly durable ecological protection. To track progress toward this 30x30 goal, conserved areas must be cataloged and counted. This section:

- Defines what is considered a 30x30 Conservation Area.
- Highlights the breadth of conservation approaches that are consistent with this definition.
- Presents data sets and maps that will help track progress toward 30%.
- > Discusses supporting conservation measures.
- Identifies the current portion of California's lands and coastal waters that are 30x30 Conservation Areas.



30x30 Conservation Areas

For the purposes of California's 30x30 goal, an area is considered a "30x30 Conservation Area" if it meets the following definition:

Land and coastal water areas that are durably protected and managed to sustain functional ecosystems, both intact and restored, and the diversity of life that they support.

"Durably protected and managed areas" within California's 30x30 initiative encompass:

- Areas under government ownership or control, primarily designated to protect species and their habitats.
- Areas under perpetual easements that protect species and their habitats.
- Areas with species and habitat protection designations that have gone through a formal rulemaking or other enforceable decision-making process not subject to simple reversal.

This definition of 30x30 Conservation Areas utilizes existing classifications and designations made by federal, state, and local governments. Examples of these designations include state ecological reserves, federal wildlife refuges, and conservation easements. Each classification or designation uses program-specific criteria and metrics to determine species, habitat, or ecosystem benefits, and to set requirements for long-term stewardship and adaptive management.

To date, designations for conserved land and coastal waters center around protecting natural conditions and sustaining ecosystem health. These designations have not yet emphasized climate benefits such as sequestering carbon or buffering climate impacts. Nor have they emphasized equitable access. While the definition of 30x30 Conservation Areas builds upon existing designations, climate and equitable access criteria will be integrated into selection of additional 30x30 Conservation Areas and implemented into currently conserved areas whenever possible and appropriate. Conservation is best achieved when areas can meet all three 30x30 key objectives.

It should be noted that designating an area as conserved is only the beginning of effective conservation. Protected areas require ongoing stewardship and monitoring. Sufficient funding and personnel are needed to ensure conservation objectives are met. The 30x30 initiative provides a pivotal opportunity to improve current restoration practices and strengthen long-term stewardship to ensure effective conservation into the future.



Tule Lake National Wildlife Refuge, Siskiyou County

Examples of 30x30 Conservation Areas

30x30 Conservation Areas can take many forms across a broad spectrum of intact and restored ecosystems. Conserved areas within the 30x30 initiative include:

- > Lands and coastal waters dedicated to habitat protection: Areas with monitoring and appropriate adaptive management to support biodiversity, habitat, and natural processes, and allowing for public recreation that has only minimal impact to ecosystem health. (Note: Tribal implementation of expertise and traditional knowledges, hunting and gathering practices, and ceremonies are not considered public recreation and should be strongly encouraged for the traditional, cultural, and ecological benefits of tribal management and use of lands). Examples include state ecological reserves, federal wilderness areas, and wild and scenic rivers.
- > Recreational lands and coastal waters: Parks and open spaces with multi-benefit management to support both recreational use and habitat protection. This includes areas that allow sustainably managed recreational activities (such as hiking, hunting, fishing, boating, and wildlife viewing), where biodiversity conflicts are minimized. Careful resource planning in these areas helps determine reasonable limits for recreation to avoid significant negative impacts to natural resources from human overuse (for example biodiversity loss and soil erosion). Examples include national parks, state parks, regional open spaces, and recreational hunting and fishing areas subject to resource planning criteria and management to prevent biodiversity loss.
- Working landscapes under conservation easements:* Lands managed for biodiversity conservation and resilience to climate change where humans work as responsible members



Coyote Ridge, Santa Clara County

* Conservation easements are described and governed by California Civil Code 815

of the natural ecosystem. Management of these lands for conservation typically includes providing habitat for wildlife (including pollinators and other invertebrates as critical food sources for birds and other species), practicing wise water use, avoiding use of pesticides and toxic chemicals, encouraging native plant diversity, enabling carbon sequestration, building resilience to climatedriven extreme weather, and/or incorporating adaptive management practices to build soil health while supporting ecosystem function. Examples include sustainably managed private grazing lands, ranches, and working forests with formal durable protections for biodiversity such as conservation or mitigation easements.

Sustainably managed seascapes: Coastal waters where the interactions between nature and humans are balanced to protect biodiversity, promote resilience to climate change, and sustain ecosystem health. Examples include California's statewide network of 124 Marine Protected Areas (MPAs), which includes both no-take state marine reserves and limited-take state marine conservation areas. California's MPAs were designed and are adaptively managed as an ecologically cohesive network that is durably protected and has already been shown to provide positive outcomes for biodiversity and ecosystem health. Dynamic management of MPAs and other 30x30 Conservation Areas in coastal waters will require regular monitoring of a broad range of ecosystems and the timely application of monitoring results to management decisions.

Inextricably tied to all 30x30 Conserved Areas are the waters that sustain them. Freshwater systems, including riparian areas, lakes, wetlands, and marshes, are intrinsic parts of our lands, and form vital connections between our lands and coastal waters.



Datasets and Maps

Maps are simplified models of the world, and all maps are imperfect. No single dataset or map can capture the full range and variability of conservation efforts across California. Yet, mapping is essential to determining the state's baseline level of conservation and tracking progress toward 30%. Equally important, maps will provide a common starting point and language for collaboration. Refining and updating maps and their underlying data is and will be an ongoing effort throughout the 30x30 initiative and beyond.

Maps are like campfires – everyone gathers around them, because they allow people to understand complex issues at a glance, and find agreement about how to help the land.

Sonoma Ecology Center

30x30 Conserved Lands

The best available datasets for identifying 30x30 Conservation Area lands in California are the California Protected Areas Database (CPAD), the California Conservation Easements Database (CCED), and the Protected Areas Database of the U.S. (PAD-US). CPAD and CCED contain the most up-to-date information on public and private protected lands in California, including size, location, and conservation status. Conservation status is also informed by the USGS GAP Analysis Program (GAP) that uses a classification system (1–4) to indicate the degree of biodiversity protection a particular area receives. GAP code 1 signifies the strongest protection measures on conserved lands, while GAP 4 indicates an area with no known directives to maintain natural conditions. The USGS maintains the PAD-US database of areas by GAP code across the United States and works closely with each state to maintain coordinated records of conserved areas.

Like any classification system, CPAD, CCED and their associated GAP codes are imperfect. Many lands cannot be easily classified, and lands of similar type may be managed for different purposes. Easements, for example, are especially challenging to classify. Additionally, not all conserved lands are reported to these databases so some protected areas may be missing altogether. Finally, these databases are limited in their capacity to monitor land stewardship. Generally, ongoing compliance with management plans is monitored by the implementing agency or organization that owns the land or holds the easement. CPAD and CCED are continually updated, refined, and corrected but errors remain.



California Conservation Easements Database (CCED)

CCED contains data about easements and deed-based restrictions on private land. Lands under easement may be actively farmed, grazed, forested, or held as nature reserves. Easements are typically held on private lands with no public access.



California Protected Areas Database (CPAD)

CPAD contains data about lands that are owned outright ("in fee") and protected for open space purposes by over 1,000 public agencies or non-profit organizations. CPAD lands range from the smallest urban pocket parks to the largest wilderness areas.

GAP status codes 1 and 2 are generally consistent with our definition of 30x30 Conservation Areas as they include areas with a high degree of durable protection and management for biodiversity or ecosystem values. Examples of lands and waters that are often coded as Gap 1 in California include most national parks, wilderness areas, ecological reserves, and wild and scenic rivers (excluding the "recreational" segments that more closely correspond to GAP 3). Areas coded as Gap 2 in California include most national wildlife refuges, state parks, state conservation areas, national seashores, as well as some local and regional open space, private conservation lands and easements (including mitigation lands). Exact coding can vary on a case-by-case basis and depend on management plans and intent.

GAP Status Codes – Descriptions		
GAP CODE	DESCRIPTION	
1	An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a natural state within which disturbance events (of natural type, frequency, intensity, and legacy) are allowed to proceed without interference or are mimicked through management.	
2	An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a primarily natural state, but which may receive uses or management practices that degrade the quality of existing natural communities, including suppression of natural disturbance (for example, wildland fire or native insect outbreaks).	
3	An area having permanent protection from conversion of natural land cover for the majority of the area, but subject to extractive uses of either a broad, low intensity type (for example, logging, OHV recreation) or localized intense type (for example, mining). It also confers protection to federally listed endangered and threatened species throughout the area.	
4	There are no known public or private institutional mandates or legally recognized easements or deed restrictions held by the managing entity to prevent conversion of natural habitat types to anthropogenic habitat types. The area generally allows conversion to unnatural land cover throughout or management intent is unknown.	
	GAP Status codes from the Protected Areas Database of the U.S. (PAD-US).	

GAP Status codes from the Protected Areas Database of the U.S. (PAD-US). Note: Areas lacking information are listed as Gap 4 and may change with additional information. Please submit changes to the California Protected Area Database. (<u>https://www.calands.org/</u>)

Gap 3 and 4 protected areas also play an important role in meeting California's 30x30 objectives since 30x30 Conservation Areas exist within a matrix of other protected lands. Many public and private lands are managed in ways that protect biodiversity and habitat, increase connectivity, or enhance ecosystem values while supporting economic activity or other necessary functions. Examples of high value Gap 3 lands include working lands that sequester carbon and protect threatened and endangered species while meeting their multiple use mandates, and parks or greenways that provide access to the outdoors and protect open spaces. Similarly, Department of Defense lands, usually classified as Gap 4, are subject to Integrated Natural Resources Management Plans that balance protections for native habitats and species while supporting military training, testing, and readiness. The effectiveness of 30x30 Conservation Areas is greatly enhanced when adjacent lands are managed for biodiversity and ecosystem values.

30x30 Conserved Coastal Waters

California's coastal waters are defined as state waters extending from the mean high tide line to three nautical miles offshore, including estuaries, bays, and offshore islands. Coastal waters encompass a complex mosaic of overlapping marine managed areas that vary widely in purpose, level of protection, managing agency, and potential biodiversity benefits. Currently only one type of marine managed area in California's coastal waters clearly meets all elements of the definition of conservation: California's statewide network of 124 MPAs. These state-managed MPAs regulate fishing; approximately half of the MPAs are "no take" and half are open to limited fishing. Although research on MPAs globally has shown that highly and fully protected MPAs are more likely to achieve biodiversity protections than limited take MPAs,¹⁹ it should be noted that limited take State MPAs provide an excellent model for other jurisdictions looking to balance



Marine Protected Areas Network 2022 Decadal Review

The first decadal management review of the MPA network in December 2022 will help the state understand the extent to which MPAs are making progress toward the goals listed in their founding legislation–protecting the state's natural marine biodiversity, rebuilding depleted populations, and improving ocean health. The results of the decadal management review may be used to develop recommendations for improved management of the MPA network. However, prior to the completion of the Review, MPA Network expansion will not be a component of meeting the state's 30x30 marine conservation goals.

biodiversity conservation with sustainable, wellmanaged commercial and recreational fishing. The state's MPA monitoring and evaluation program is currently assessing the extent to which MPAs of varying protection levels achieve positive outcomes for biodiversity.

National Marine Sanctuaries, which currently cover 40.6% of coastal waters, offer durable protection, but generally only regulate alteration of the seafloor (including bans on oil and gas development and mineral extraction). Despite being classified as GAP 2 protected areas, individual sanctuaries have different levels of protection for biodiversity, and the extent to which these restrictions meet the definition of 30x30 Conservation Areas is not well studied and remains unclear. As a result, National Marine Sanctuaries will need to be individually assessed for consistency with the 30x30 conserved areas definition.

Given these considerations and the fact that Sanctuaries include many areas of exceptionally high biodiversity within their boundaries, these areas offer a natural place to focus conservation efforts and provide a pathway for the state to meet or exceed the 30x30 target while ensuring that access and sustainable use is maintained. Additionally, partnership with National Marine Sanctuaries provides an opportunity to leverage the federal government's America the Beautiful initiative to conserve 30% of U.S. lands and coastal waters by 2030.

Complementary Conservation Measures

In addition to the protected areas described above, many other places are managed in a way that protects biodiversity and natural processes. For example, other effective areabased conservation measures (OECMs) enhance the value of 30x30 Conservation Areas and support California's 30x30 objectives. Complementary measures like OECMs are generally not included in CPAD or CCED because protection is temporary, management does not protect natural conditions as a primary goal, or they are too small to be mapped. Examples include organic farms, community gardens, Williamson Act lands, riparian buffers, and wildlife crossings.

OECMs and other complementary conservation measures have enormous value to humans and wildlife. Benefits include connecting people to nature, providing stopover habitat during migration, filtering pollutants, ameliorating heat effects, enhancing habitat connectivity, supporting locally important biodiversity, and so much more. Complementary conservation measures are essential components to large landscape connectivity, creating corridors between 30x30 Conservation Areas for migrating species, and mitigating and building resilience to climate change.

Other Effective Area-Based Conservation Measures (OECMs)

A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained longterm outcomes for the in-situ conservation of biodiversity with associated ecosystem functions and services and, where applicable, cultural, spiritual, socio–economic, and other locally relevant values.²⁰

Examples of OECMs

- Small native plant gardens (including <u>Homegrown National Parks²¹</u>)
- Hedgerows
- Riparian buffers
- Urban tree canopy
- Organic farms
- Areas of Special Biological Significance
- De facto Marine Protected Areas
- Closures and restricted areas established for the purposes of fisheries management



Sonoma Coast State Park, Sonoma County



A Spectrum of Conservation Areas

California's vast array of landscapes, waterways and seascapes across all categories work together to protect and restore biodiversity, enhance access to nature, and mitigate and build resilience to climate change. They create a mosaic of conserved areas working synergistically to build connectivity and redundancy—two key components of resilience.²² Connected protected lands and coastal waters allow for species movement and will be essential to allow species to track habitats with amenable conditions as the climate changes. Redundancy, or the presence of habitat types or species populations across multiple locations, increases the likelihood that a habitat or species will survive disturbances, such as extreme weather, even if a portion of that species or habitat does not.

A network of connected 30x30 conservation areas interspersed with mixed-used protected areas (for example GAP 3 and 4), fosters a resilient California. This spectrum of conservation areas and approaches is essential to ensure nature and the people within it to thrive long into the future.



Progress to Date

Lands and coastal waters that are considered 30x30 Conservation Areas are estimated to account for 24% of California's total land area and 16% of total coastal water area. California's conserved lands are primarily managed by federal (84.6%) and state (9.9%) agencies with over 95% offering public access. Coastal waters represented within the state's 30x30 calculations extend from county borders at the coast to three nautical miles offshore and include all protected areas within California's MPA Network. To be consistent with previous protected area mapping boundaries, the San Francisco Bay Area beginning directly under the Golden Gate Bridge is included in California's land area calculations for the purposes of counting to 30%. The San Francisco Bay includes many coastal and marine habitats that are important to California's communities and biodiversity. Regardless of mapping designation, conservation of San Francisco Bay and its estuaries is a critically important state priority and essential to meeting the objectives of 30x30.





Pathways to Achieve 30x30

California's 30x30 initiative is bold, ambitious, and ultimately achievable. Conserving an additional six million acres of land and half a million acres of coastal waters requires a multi-faceted approach to strategy that uses a range of tools and approaches and takes place across all the state's ecosystems and jurisdictions.

Photo: Arcata Marsh and Wildlife Sanctuary, Humboldt County



Californians have developed many successful strategies to protect biodiversity, connect people with nature, and mitigate and adapt to climate change. Recognizing this, a wide array of partners, experts, and stakeholders have been engaged in the development of this initiative to help identify approaches that will accelerate and expand conservation. These leaders were asked "What is working, and how can we build on this success to deliver 30x30?" Appendix A compiles insights gained from across the state about the opportunities and challenges for conservation in different regions.

The most effective actions to reach 30x30 are categorized into the following Pathways.*

- **1.** Accelerate Regionally Led Conservation
- 2. Execute Strategic Land Acquisitions
- 3. Increase Voluntary Conservation Easements
- 4. Enhance Conservation of Existing Public Lands and Coastal Waters
- 5. Institutionalize Advance Mitigation
- 6. Expand and Accelerate Environmental Restoration and Stewardship
- 7. Strengthen Coordination Among Governments
- 8. Align Investments to Maximize Conservation Benefits
- 9. Advance and Promote Complementary Conservation Measures
- **10.** Evaluate Conservation Outcomes and Adaptively Manage

It will require time, effort, and funding to carry out each of these Pathways. Implementation will rely on partnership and guidance from local communities and California Native American tribes, and must include a process that is transparent, inclusive, and equitable at every step and level of engagement. The pace of implementation will depend upon our collective effort and the availability of resources. Where and which strategies are deployed will rely largely on local and regional vision and priorities. An overview of each pathway to achieve California's 30x30 are presented below, including specific actions that state agencies will take to advance these pathways.



Carrizo Plain National Monument, San Luis Obispo County

* This strategy describes California's policy approach to achieve conservation of 30% of the state's lands and coastal waters by 2030. Nothing in this strategy is intended to be a commitment to any particular project or program. Further, all actions described in this document must be consistent with the relevant agency's existing authorities and follow all applicable legal requirements, including, but not limited to budget appropriation, the California Environmental Quality Act, the Administrative Procedures Act, etc. Nothing in this strategy creates any legally enforceable rights or remedies.

Regionally led conservation is critical to achieve 30x30. Local and regional leaders and groups best understand where opportunities exist to conserve land and coastal waters while meeting other priorities. While state leadership and vision are important to drive 30x30, its progress will be made through collaboration in specific regions across the state.

Across California, conservation plans and strategies have been developed using a variety of prioritization metrics, including species diversity, habitat connectivity, and climate action. This planning engages communities in purposeful dialogue about their goals and priorities. Regional plans such as Natural Community Conservation Plans and Regional Investment Strategies consider environmental conservation and development needs in one coherent strategy. Such plans typically take into account existing and projected climate threats, growth projections, and community needs for open space and access.

Regional conservation planning efforts are not equitably distributed across the state. Some

areas have dozens of plans, others none. At the same time, neighborhoods most likely to benefit from increased access or be affected by adverse planning decisions are often poorly represented in what can be decades long, highly technical processes. Tribal interests are often an after-thought or go entirely unaddressed. This pattern cannot continue. Regional planning should prioritize inclusive partnerships that increase capacity in local and underrepresented communities and California Native American tribes to ensure the costs and benefits of conservation are equitably distributed and shared. Appendix F provides a list of regional and systemwide existing conservation plans shared through public engagement.

The California Natural Resources Agency, Department of Fish and Wildlife, State Conservancies, Wildlife Conservation Board, Department of Conservation, and Department of Parks and Recreation will work with other state agencies and federal and local partners to accelerate regional conservation planning and implementation.


The following priority actions by state agencies will help accelerate regionally led conservation:

Invest in regional conservation planning and implementation

- Strategically deploy resources to implement completed conservation plans, including Natural Conservation Plans (NCCPs) and companion Habitat Conservation Plans (HCPs).
- **1.2.** Provide resources that enable California Native American tribes to participate in planning processes.
- **1.3.** Provide capacity building and technical support to enable community engagement in conservation planning, especially for tribes and historically marginalized communities, to ensure meaningful consultation, engagement, and partnership.
- 1.4. Finalize Regional Conservation Investment Strategy (RCIS) guidelines and enhance incentives for developing plans, including demonstrating successful use of mitigation crediting.
- **1.5.** Provide technical assistance for locally driven efforts to expand conservation through updates to sustainable community strategies, climate action and adaptation plans, general plans, zoning, and other land use planning tools.

Regional Conservation Plans

- Natural Community Conservation Plan (NCCP) identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. An approved NCCP leads to state issued "incidental" take authorization for species identified in the plan. A Habitat Conservation Plan (HCP) is the federal analog to an NCCP and provides for federal take authorization.
- Regional Conservation Investment Strategies (RCIS) voluntary, nonregulatory regional planning process intended to result in higher-quality conservation outcomes, including advance mitigation



East Contra Costa Habitat Conservation Plan Upper Hess Creek Restoration, Contra Costa County

Advance equitable access through meaningful and inclusive local planning processes

- 1.6. In partnership with California Native American tribes, develop a process to protect cultural resources, sacred sites, and other important locations with expanded conservation, as well as address trade-offs between recreational access and tribal rights to access lands for cultural, subsistence, or ceremonial purposes.
- 1.7. Utilize regional workshops and working groups to identify and prioritize conservation projects that serve historically marginalized communities and California Native American tribes.
- 1.8. Where possible, improve public access on state-owned conserved lands, including the state's approximately one million acres of Ecological Preserves.
- **1.9.** Develop long-term, stable capacity building for conservation and restoration efforts in local communities to enable them to identify, conserve, and manage areas that increase access.
- 1.10. Deepen participation by local communities and consultation with California Native American tribes to ensure community and tribal needs are met as appropriate in conserved areas, including adequate facilities, operations and maintenance, language access, safety, programming, and transportation options.

- 1.11. Include historically marginalized communities and California Native American tribes in regional conservation planning processes to ensure such plans do not transfer the ecological burden onto underserved and tribal communities.
- **1.12.** Support implementation of antidisplacement measures²³ to ensure access to open space does not lead to gentrification.



Coyote Valley Open Space Preserve, Santa Clara County

Acquiring appropriate lands for conservation is a critical pathway to meet our 30x30 goal. California's approach to identifying areas to conserve should be purposeful, strategic, science-based, and most importantly, aligned with local conditions, communities, and economies. Many statewide, regional, and local strategies exist that can help inform priority conservation areas (Appendix F).

Conservation is best achieved when acquired areas can meet all three 30x30 key objectives: to protect biodiversity, advance climate action, and expand equitable access. However, not every strategic acquisition can achieve all objectives and a portfolio approach is needed to ensure that 30x30 acquisitions considered together achieve these three objectives.

State agencies that will work together and with regional partners to acquire lands for conservation include California's Wildlife Conservation Board, Department of Parks and Recreation, Natural Resources Agency, and California's ten regional conservancies. At the same time, a range of non-governmental groups including land trusts and environmental conservation organizations will acquire lands for conservation to help advance 30x30.



The following priority actions by state agencies will help support strategic acquisitions:

Acquire lands for conservation from willing sellers

- 2.1. Coordinate state funded land acquisitions to meet 30x30 objectives and maximize conservation across the state.
- 2.2. Mobilize a state-federal interagency team to identify and secure emerging federal funding for new conservation acquisitions, including the recently approved federal infrastructure bill and expansion of the Land and Water Conservation Fund.
- 2.3. Prioritize additional lands for acquisition that provide habitats that are underrepresented in currently conserved areas, enable expanded public access, sequester carbon, and buffer climate impacts.
- 2.4. Prioritize acquisition of unprotected lands adjacent to or surrounded by currently established public lands (for example, lands owned in checkerboard format or areas where wetlands will likely migrate over time) to expand and improve habitat and achieve climate benefits.
- 2.5. Strategically coordinate acquisitions to increase connectivity between conserved or restored habitats to provide wildlife corridors.
- 2.6. Identify and prioritize acquisition of degraded landscapes and waterways most important to protecting biodiversity.

- 2.7. Work with local communities, conservation networks, and open space districts to prioritize acquisition of public-access lands and waterways in and around communities to improve conservation and expand public access.
- 2.8. Work with California Native American tribes to prioritize acquisition of unprotected lands within and near tribal reservations and landholdings to address historical wrongs associated with policies and state-sanctioned actions promoting the disposition of lands and creation of checkerboard ownership within tribal lands (for example unratified treaties and allotment processes).
- 2.9. Seek restoration and ongoing management of acquired lands by building restoration and stewardship funding into acquisition grants where possible.



Canebrake Ecological Reserve, Kern County

Conserving private lands through conservation easements is a well-established and highly effective way to achieve environmental conservation. Across California, easements help to maintain lands for open space, wildlife, ecological function, responsible resource production, and scenic enjoyment.

Conservation easements provide financial incentives to private landowners aiming to conserve wetlands, agricultural lands, grasslands, forests, and other critical ecosystems throughout California. Currently, demand for conservation easements outstrips available funding and the technical review process needed for recording easements can be complex and time consuming. Addressing these challenges is important to expand and accelerate private land conservation.

State agencies that will work together and with non-government partners to increase conservation easements include California's Wildlife Conservation Board, Department of Food and Agriculture, Department of Conservation, Strategic Growth Council, State Conservancies and Natural Resources Agency.





The following priority actions by state agencies will help support conservation easement programs:

Grow voluntary private land conservation programs

- 3.1. Work with and help build capacity for land trusts, Resource Conservation Districts, and other community coalitions and organizations to invest state conservation easement program funds strategically and efficiently.
- **3.2.** Integrate complementary climate change benefits into publicly funded conservation easement programs where possible to enable expanded carbon sequestration and storage and to strengthen natural resilience to climate change impacts.
- **3.3.** Improve access on lands conserved through publicly funded conservation easement programs where possible by improving voluntary incentives and grant program guidelines and policies.
- 3.4. Encourage and support the creation of tribally owned conservation easement programs and land trusts.
- **3.5.** Work with state and federal partners to improve and standardize easement review and recordation processes for conserved lands.
- **3.6.** Develop criteria for balancing geographical distribution, ecosystem representation, and habitat connectivity for future public investments in conservation easements.

- **3.7.** Partner with land trusts, Resource Conservation Districts, and other interested partners on re-granting or block grant programs that allow smaller groups to utilize funding opportunities.
- **3.8.** Support and utilize publicly funded programs that provide landowners incentives to conserve and effectively repurpose working lands that are voluntarily being fallowed through conservation easements and other voluntary incentives.
- **3.9.** Through the development and promotion of best management practices, encourage improvements of working lands to foster sustainability.



Attiyeh Ranch Nacimiento River, San Luis Obispo County

Public lands and coastal waters, which are primarily managed by state, federal, and local agencies, include habitats with exceptionally high biodiversity within their boundaries and are often durably protected. Examples include national, state, and regional parks, wilderness areas, wildlife refuges, state MPAs, and national marine sanctuaries.

Overall, approximately half of California's land is managed by public agencies, approximately 53 million acres. Federal agencies own and manage approximately 49 million acres, and state agencies own and manage approximately 2.8 million acres. Additionally, California's 3.4 million acres of state waters include over 1.4 million acres in National Marine Sanctuaries and over 0.5 million acres in California's Marine Protected Areas network. These publicly managed lands and coastal waters provide significant opportunities to enhance conservation toward the 30x30 goal.

Strengthening environmental protections and management capacity on appropriate public lands and coastal waters can increase the amount of durably protected areas that meet the definition of 30x30 Conservation Areas. Any exploration of opportunities to enhance conservation on public lands should assess how such actions would impact ecosystem function of the lands and other important uses such as access and recreation. The Biden Administration's 30x30 America the Beautiful initiative provides a valuable opportunity to coordinate between state and federal agencies to enhance conservation on our public lands where possible and appropriate. California's coastal waters contain three federally managed National Marine Sanctuaries. While some sanctuaries contain specific areas of strengthened environmental protections, they generally only regulate alteration of the seafloor (including bans on oil and gas development and mineral extraction) and, in some cases, waste discharge. National Marine Sanctuaries partially meet the definition of 30x30 Conserved Areas, and with strengthened protections could achieve durable conservation protections that move California towards its 30x30 goal for coastal waters.

State agencies that will work together with federal, tribal, and non-government partners to enhance conservation on public lands and in protected coastal waters include the California Natural Resources Agency, Ocean Protection Council, and Coastal Conservancy.



Big Pine Lakes, John Muir Wilderness Area, Inyo County



The following priority actions by state agencies will strengthen biodiversity protections on public lands and in protected coastal waters:

Enhance conservation on public lands

- **4.1.** Monitor state and federal legislation to support, where appropriate, enhanced conservation on public lands, including new designations and expansion of wilderness areas, wild and scenic rivers, and national monuments.
- **4.2.** Partner with federal agencies to explore where on public lands enhanced environmental conservation is beneficial and appropriate, and constructively engage in federal land management planning to identify and implement appropriate improvements.
- **4.3.** Create a statewide, standardized process to designate appropriate waterways as "Outstanding National Resource Waters" where possible and appropriate to improve environmental conservation.



Channel Islands National Marine Sanctuary, Santa Barbara County

4.4. Expand capacity within land management agencies to monitor and implement management strategies that support biodiversity and ecosystem function.

Strengthen partnerships with federal resource managers and California Native American tribes to improve conservation within coastal waters

- **4.5.** Explore possible new measures and initiatives to address threats to biodiversity within National Marine Sanctuaries in partnership with California Native American tribes, scientists, federal resource managers, and key stakeholder groups, such as strengthening water quality and invasive species protections, exploring mandatory vessel speed reductions to protect whales, and enhancing the durability of existing restrictions on fishing gear and methods.
- **4.6.** Identify high priority science needs related to strengthening conservation within National Marine Sanctuaries.
- **4.7.** Develop a pathway through which California Native American tribes and key stakeholder groups (including but not limited to fishermen and environmental NGOs) can share information and input with state and federal resource managers to benefit coastal environmental conservation and management.
- **4.8.** Strengthen monitoring and evaluation of coastal and ocean health to improve conservation outcomes of federal and state management.

Transportation projects, new construction, and other types of development often protect habitat or fund conservation focused improvements to mitigate their environmental impacts. Typically, this environmental mitigation occurs on a project-by-project basis on small parcels, close to the project site.

Advance mitigation is an increasingly popular choice for project proponents that takes a more programmatic approach by durably protecting large areas for mitigation that can then be applied to specific projects in the future. Smaller projects are mitigated by using a "credit" or portion of the larger parcel. Advance mitigation properties are required to be durably protected (either in fee or through an easement) and endowed to support long term management and monitoring. Advance mitigation also ensures that the required mitigation is in place before effects on the environment occur. This generally leads to high quality conservation that can meet broad environmental goals for species and habitat.

Advance mitigation may be implemented through a public agency (for example <u>Caltrans'</u> <u>Advance Mitigation Program</u>) or private efforts such as conservation and mitigation banking.

Interagency groups are in place to help coordinate advance mitigation in California including the Project Delivery Team (PDT) and the Banking Agency Management Team (BAMT). These interagency groups include representatives from the agencies involved in mitigation and conservation banking.* With oversight from the BAMT, the PDT develops templates and guidance for use in the evaluating and developingadvance mitigation projects. In 2021, the PDT finalized an updated multi-agency template for bank-enabling instruments that allows the purchase of credits in advance of obtaining a permit. The PDT has also developed several other templates to facilitate streamlined approvals, including a conservation easement template. Such successful coordination helps contribute to California's 30x30 goals.

The California Department of Fish and Wildlife and California Natural Resources Agency will work with other state agencies and federal partners to spearhead and institutionalize advance mitigation.

Conservation and Mitigation Banks

In exchange for permanently protecting, managing, and monitoring land and wetlands, the bank sponsor is allowed to sell or transfer habitat credits to permitees who need to satisfy legal requirements and compensate for the environmental impacts of developmental projects.



Grasslands Mitigation Bank, Merced County

* Representative agencies include California Department of Fish and Wildlife, State Water Resources Control Board, U.S. Army Corp of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, U.S. Environmental Protection Agency, and Natural Resources Conservation Service.

The following priority actions by state agencies will help support and institutionalize advance mitigation.

Support strategic advance mitigation planning and investments

- 5.1. Execute regional advance mitigation projects between Caltrans, CDFW, and others for transportation modernization projects that create co-benefits for wildlife connectivity and species climate resiliency.
- 5.2. Work with Caltrans to complete Regional Advance Mitigation Needs Assessments (RAMNAs), for all 12 districts to accelerate mitigation investments and projects.
- 5.3. Incorporate important mitigation projects from strategically designed conservation plans (such as NCCP, HCPs, RCISs) and other resource protection and recovery plans into mitigation programs for state-funded development projects.
- 5.4. Continue to improve and streamline mitigation banking processes for approving banks and releasing credits with the Banking Agency Management Team and California Project Delivery Team.
- 5.5. Support the creation, successful operation, and management of tribally owned mitigation banks through capacity building and technical support.
- **5.6.** Strengthen interagency coordination to improve advance mitigation processes including providing clear and consistent guidelines and requirements to permittees.

5.7. Prioritize advance mitigation projects that achieve multiple benefits, improving environmental and biodiversity outcomes often required in mitigation while achieving climate benefits and access goals.



East Bay Municipal Utility District Kaiser Creek, Alameda County

Expand and Accelerate Environmental Restoration and Stewardship

Safeguarding California's biodiversity for decades to come will not be achieved simply by protecting intact habitats. Restoring and stewarding ecosystem function across a broad array of landscapes, waterways, and seascapes, both publicly and privately managed, will be essential to ensure the long-term viability of natural communities. Efficient and strategic restoration and stewardship can help imperiled species recover and enable ecosystems to thrive even amidst climate change.

Restoration projects and ongoing stewardship activities that provide multiple benefits should be prioritized, including opportunities to create and support functional ecosystems in urban areas where biodiversity has been lost and to increase connectivity across regions and or watersheds. Regulatory rules, policies, and processes should be improved so that ecological restoration and stewardship can occur more quickly, simply, and cost-effectively.

This will require ensuring effective communication around stewardship and restoration planning, permitting, funding, and monitoring while also streamlining these processes through initiatives such as California's <u>Cutting Green Tape</u>.

State agencies that will work together and with California Native American tribes and nongovernment partners to restore and steward priority habitats include California's Wildlife Conservation Board, Department of Parks and Recreation, State Water Resources Control Board, California Department of Food and Agriculture, Ocean Protection Council, Natural Resources Agency, and California's ten regional conservancies.



Cutting Green Tape

Cutting Green Tape is a signature initiative of the Newsom Administration to increase the pace and scale of environmental restoration through: improved planning and permitting; programmatic or expedited project review and approval; and enhanced crossjurisdictional collaboration.

The following are actions that state agencies will take to help transition degraded lands and coastal waters towards restored and regenerative ecosystems:

Restore degraded landscapes, waterways, and priority habitats

- 6.1. Identify and prioritize restoration projects on degraded landscapes and waterways most important to protecting biodiversity or restoring natural systems.
- 6.2. In coordination with implementation of the Natural and Working Lands Climate Smart Strategy and other relevant state climate change initiatives, identify areas where environmental restoration will achieve the most significant climate benefits, including protecting carbon stores, sequestering carbon, and buffering human and natural communities from the impacts of climate change.
- 6.3. Explore land repurposing and remediation to address historical land use incompatibility such as fossil fuel extraction and polluting industries near low-income communities, particularly in degraded urban landscapes.
- 6.4. Partner with California Native American tribes to apply tribal expertise and traditional and tribal knowledges to restoration efforts.
- **6.5.** Work with local and regional stakeholders to identify and ensure the use of appropriate local native plants and seed sources in restoration projects.

- 6.6. Implement watershed-scale restoration projects that connect land and coastal water habitats; fish and wildlife corridors to connect already conserved landscapes and waterways.
- 6.7. Utilize natural flood protection tools and remove unnecessary or obsolete barriers from waterways to restore connectivity and fish passage of impaired waterways, meadows, riparian areas, floodplains and wetlands.
- 6.8. Incentivize restoration of upper watersheds and natural groundwatersurface interactions which protect California's water security through watershed, meadow, and floodplain restoration and ecological forestry to enhance snowpack retention.



Lower Klamath River Restoration Project, Del Norte County

- **6.9.** Manage invasive species in terrestrial and freshwater habitats to restore functional ecosystems, including monitoring and mapping to identify current distributions and prevent spread.
- 6.10. Restore ecologically and culturally appropriate fire regimes (frequency and intensity) to conserved areas and support post-fire restoration to promote natural ecosystem function and prevent habitat type-conversion following catastrophic fires.
- 6.11. Incentivize restoration and enhancement of working lands that improve drought resilience and protect California's food security through conservation easements and improved management.

Restore degraded seascapes and priority coastal habitats

- **6.12.** Prioritize coastal habitats and degraded seascapes for restoration through science-based assessment.
- 6.13. Partner with California Native American tribes to apply tribal expertise and traditional and tribal knowledges to restoration efforts for the coast and ocean and co-develop restoration projects with tribes in support of shared priorities.
- **6.14.** Work with state and federal agencies to restore coastal wetlands, seagrass beds, and kelp forests to improve biodiversity, protect blue carbon stores²⁴, and build resilience to sea level rise, storm surge, and ocean acidification.

- 6.15. Reconnect wetlands to ocean tides by removing human-made barriers to deliver successful outcomes for biodiversity, blue carbon sequestration, and ecosystem health.
- **6.16.** Restore essential habitats near coastal upwelling zones that are important for salmon, seabirds, and other species.
- **6.17.** Implement restoration that allows for habitats to transgress inland as sea levels rise and protect near-shore areas from storm surge or sea level rise.
- **6.18.** Manage invasive marine species in coastal waters.



Sandhill Cranes at Stone Lakes National Wildlife Refuge, Sacramento County

Accelerate restoration by improving processes

- 6.19. Identify specific ways to simplify and streamline governmental funding opportunities and processes across agencies, such as through developing standard templates for grant guidelines, application materials, and project scoring and review procedures.
- 6.20. Scale the success of CDFW's Restoration Leaders Committee by establishing additional regionally focused agency-stakeholder partnerships that expedite a set of prioritized projects by streamlining grant administration and permitting.
- **6.21.** Explore insurance incentives for landowners implementing management practices that restore land and mitigate climate change related disasters to reduce the risk for undertaking restoration projects.
- **6.22.** Institutionalize outreach and engagement with marginalized communities in planning and designing restoration projects to avoid impacts on these communities and explore potential benefits of restoration that can be added such as public access.
- **6.23.** Expand the development and use of programmatic environmental review permitting such as those intended to authorize activities described in the proposed General Order for large restoration projects and Programmatic Environmental Impact Report being developed by the State Water Resources Control Board.



Mission Bay Wetlands, San Diego County

Strengthen Coordination Among Governments

Effective coordination and partnerships between state, federal, and tribal governments and agencies can lead to larger, more functional 30x30 Conserved Areas, as well as cooperative and compatible management in adjacent areas. Strengthened partnerships which focus on how to optimize public agency driven conservation is critical to meet 30x30.

It is essential to strengthen government-togovernmental partnerships with tribal nations and collaboration with all tribal communities and acknowledge that California Native American tribes have deep connection and claims to their traditional foods, natural resources, cultural practices, and ceremonial traditions. Tribal access, management, and restoration enables the continuation and revitalization of tribes' cultural lifeways, foods, and ecosystems. Tribes and tribal communities have sustainably managed their lands since time immemorial through deep connection to nature that is informed by extensive tribal expertise and traditional and tribal knowledges. Respect for tribal lifeways and knowledges must be central to any conservation effort.

The California Natural Resources Agency will work with its departments and conservancies, along with other state agencies including the California Department of Food and Agriculture and California Environmental Protection Agency, to strengthen coordination among governments.



Collaborative partnerships can be built and enhanced through the following priority actions by state agencies:

Leverage federal partnerships to advance conservation

- 7.1. Reshape and revitalize the California Biodiversity Council to be a focused, effective, and durable hub for coordination between state and federal agencies to implement 30x30 and ensure alignment between the state and the federal 30x30 America the Beautiful initiative.
- 7.2. Engage California's Congressional delegation to advance 30x30 and secure support for federal funding and policies that advance important conservation projects across California.
- 7.3. Through state-federal interagency coordination, seek opportunities to align and leverage state and federal conservation programs to deliver projects that meet both state and federal 30x30 priorities.
- 7.4. Increase joint investments in multibenefit projects to conserve lands and support ongoing management stewardship and restoration efforts, including monitoring, enforcement, and coordination of invasive species removal to maximize effectiveness.
- 7.5. Establish, when appropriate, joint power agreements between agencies and/ or California Native American tribes to provide sufficient funding and personnel to manage for biodiversity, climate, and access.

Prioritize and invest in tribal conservation

- **7.6.** Establish a tribal advisory body to plan and inform implementation and consultation strategies related to 30x30.
- 7.7. Develop programs that provide stable, long-term support for tribal establishment and administration of tribally protected landscapes and other tribally managed or co-managed areas, terrestrial and marine, including support for a set-aside for tribal conservation and related research.
- **7.8.** Work with California Native American tribes to develop a definition and appropriate counting mechanisms for tribal areas to fit within California's 30x30 Conserved Areas.



Rainbow Falls, Devils Postpile National Monument, Madera County

Indigenous Marine Stewardship Areas (IMSA)

IMSAs would establish geographic coastal areas within State waters that include specific conservation parameters (e.g., protection types by habitats, species, season adjustments, gear types, human uses), as well as other factors (research and monitoring, outreach and education, enforcement) being requested for stewardship. California Native American tribes would present IMSA proposals to the California Natural Resources Agency, initiate a governmentto-government process with relevant agencies, and come to an agreement on proposal scopes. Tribes have inherent rights and responsibilities to take care of their land and sea resources. California Native American tribes have never ceded these rights and continue to assert the existence of these rights in State and Federal forums. Tribally led conservation is key to the success of the 30x30 initiative and Indigenous people must be given the space and the funding to spearhead stewardship actions and drive traditional management toward biodiversity goals for the State.



Sue-meg State Park, Humboldt County

- **7.9.** Explore administrative or regulatory mechanisms for California Native American tribes' ancestral land return programs for conservation and fee to trust land acquisition.
- 7.10. Explore administrative or regulatory mechanisms for California Native American tribes to establish Indigenous Marine Stewardship Areas (IMSA) focused on enhancing biodiversity and resilience.
- 7.11. Prioritize tribal governments, tribal government owned corporations and nonprofits, tribal members, and cultural practitioners in contracting for land management, restoration, environment, cultural heritage, and related services provided for the state with priority to those with a traditional and cultural affiliation with the resources first.
- 7.12. Create legal mechanisms to support the confidential sharing of information where appropriate with tribal partners and the state to protect intellectual property of California Native American tribes.
- 7.13. In consultation and partnership with and as approved by California Native American tribes, include tribal histories, cultures, and/or traditions as essential to all educational programming related to new and existing conserved areas.
- 7.14. Value and support the traditional and tribal knowledges and expertise provided by tribal governments, staff, and cultural practitioners.

Align Investments to Maximize Conservation Benefits

Financial resources are essential to acquire, restore, and steward land. This funding comes in a broad array of forms from a range of sources, including government agencies, nonprofit organizations, philanthropy groups, and commercial industry. These investments must be better coordinated as California moves toward 30x30 to ensure resources are spent most effectively and efficiently.

One aspect of improved coordination involves strengthening communication, coordination, and priority-setting among state agencies advancing conservation, as well as among state, federal and local agencies. This improved coordination will help to capture synergies among various governmental funding programs and help conservation investment to be maximally effective.

Public-private partnerships can provide new and innovative solutions to finance the 30x30

initiative. Philanthropic organizations have been integral partners in leveraging funding through donors that contribute to public initiatives. This funding has provided important services to public efforts in building support for initiatives, convening and increasing capacity of partnerships, carrying out scientific research, and efficiently implementing and tracking progress. Working with philanthropic organizations will help amplify the 30x30 initiative to strategically prioritize and implement investments.

The California Natural Resources Agency will work with its departments, boards, and conservancies, including the Departments of Fish and Wildlife, Water Resources, Parks and Recreation, Department of Conservation, and Wildlife Conservation Board to maximize the benefits of private and philanthropic investments in conservation.



The following priority actions by state agencies will improve communication and coordination of investments among all funders:

Align investments and priorities, and coordinate sustained engagement, to drive strategic conservation and amplify impact through partnerships

- **8.1.** Coordinate across state agencies and departments to align state funding for conservation activities to optimize investments and avoid duplication.
- 8.2. Strengthen state government coordination with and support of California's land trusts, Resource Conservation Districts, regional partnerships, and other communitybased organizations to build technical and financial capacity, leverage resources, share expertise, conduct landowner outreach, identify multibenefit land conservation projects, and coordinate project implementation.
- 8.3. Establish a network of philanthropic and business organizations and public agencies to develop partnerships that develop shared priorities, build public support for implementation, and coordinate funding, projects, and programs to meet 30x30 key objectives.
- 8.4. Work with philanthropy and business groups to explore innovative financing mechanisms for multi-benefit conservation and restoration projects, including program-related investments, New Market Tax Credits, revenue-raising techniques, and other impact investing vehicles.

8.5. Strengthen understanding of how environmental conservation on both natural and working lands helps us to achieve California's climate goals among policy makers, scientists, and academia, as well as philanthropic, civil society, and industry groups.



Salton Sea State Recreation Area, Riverside County

Advance and Promote Complementary Conservation Measures

30x30 Conservation Areas exist within a matrix of other land and coastal water uses. 30x30 Conservation Areas' value and effectiveness improve when adjacent and nearby areas are managed in ways that provide additional habitat benefits, protect species, increase connectivity, or enhance ecosystem function. Such management may include using environmentally beneficial practices on farms and ranches, planting trees in cities, and growing native plants in residential gardens. Such complementary conservation measures offer unique opportunities for partnership and innovation to meet our environmental goals.

More work is needed to better understand and measure how complementary conservation measures support and contribute to 30x30 Conservation Areas support. More nuanced conservation measures that are too small to map or only provide temporary conservation benefits are important toward state goals but not currently accounted for within 30x30 measurements. These complementary conservation measures should be evaluated and tracked over time to better understand how they can most effectively support our conservation goals and whether they can directly contribute toward 30x30 targets.

The California Natural Resources Agency, Wildlife Conservation Board, Ocean Protection Council, Department of Fish and Wildlife, and State Conservancies will work together with other state agencies, including the Department of Food and Agriculture to ensure the state's 30x30 strategy supports complementary conservation measures and the benefits they provide California.



The following priority actions by state agencies will support and enhance complementary conservation measures:

Invest in and evaluate the effectiveness of complementary conservation measures that support 30x30 objectives

- 9.1. Encourage utilization of existing voluntary climate-smart management programs offered through federal Natural Resources Conservation Service Farm Bill programs such as the Environmental Quality Incentives Program (EQIP), CAL FIRE California Forest Improvement Program, and U.S. Fish and Wildlife Service's Partners for Wildlife programs for conservation.
- **9.2.** Explore how state agencies can potentially aggregate small conservation projects to be measurable under 30x30.
- **9.3.** Evaluate potential biodiversity benefits of complementary conservation measures in our coast and ocean environments, including restrictions and closures established for the purposes of conservation-based fisheries management in California's coastal waters.
- **9.4.** Consider the development of a state water quality protected areas designation process to protect the MPA network from land-based pollution.
- **9.5.** Support and further assess existing incentive-based temporary conservation agreements and commitments to foster biodiversity, increase productivity, and improve habitat without purchase rights.

- **9.6.** Expand and accelerate the use of Safe Harbor Agreements that provide and support habitat for at-risk species through technical support for landowners (and neighboring landowner agreements).
- **9.7.** Support research to improve scientific understanding of environmental benefits from conservation practices that currently fall outside of 30x30 Conservation Areas. Determine if and how these conservation measures can be counted toward 30x30 targets in the future.



Schoolyard Habitat Program at Will Rogers Elementary, Ventura County

Evaluate Conservation Outcomes and Adaptively Manage

Our world is changing. What we know today about nature and how it is impacted by climate change and other stressors will likely change in the future. Recognizing this, key assumptions, priorities, and practices must be continually evaluated and updated when necessary. Ultimately, 30x30 will not be measured in acres, but by how well conservation efforts support the key objectives of protecting biodiversity, increasing access to nature, and mitigating and building resilience to climate change.

Effective conservation requires adaptive management that utilizes up-to-date science, as well as integrated and consistent data collection and long-term monitoring. Stewarding lands and waters across California requires cross-jurisdictional information sharing and coordination among all managers and users of our land and waters. California's conservation strategies must respectfully incorporate traditional and tribal ecological knowledges from throughout California and around the world to combat the climate and biodiversity crises. Knowledge systems must be inclusive of tribal expertise and traditional and tribal knowledges, and California Native American tribes must be involved in management decision-making processes where they have historically stewarded these ecosystems.

The California Natural Resources Agency, Wildlife Conservation Board, Ocean Protection Council, State Conservancies, and Department of Fish and Wildlife will work together with other state agencies, including the Department of Food and Agriculture, to ensure the state's 30x30 strategy is refined and updated over time.



Effective monitoring and adaptive management of California's land and coastal waters will benefit from the following priority actions by state agencies:

Invest in long-term monitoring, adaptive management, and stewardship

- 10.1. Inventory and verify current conservation areas and easements to ensure ownership and conservation data is included in the protected areas database and is accurate and usable for planning, management, and other conservation purposes.
- **10.2.** Establish standardized protocols and systems for tracking additional 30x30 Conservation Areas, including future acquisition and easement purchases and ownership transfers involving state and federal agencies, tribal governments, non-profit organizations, and private owners.
- **10.3.** Maintain and regularly update state geospatial information systems to support conservation decision making, and its underlying data to ensure it is fully reflective of conservation progress.
- 10.4. Establish mechanisms for tribes to protect and share tribal expertise and traditional knowledges such that the development, use, and incorporation into conservation and land and water management is driven, completed, and cared for by California Native American tribes.



Lower Deer Creek Falls Fish Passage Improvement Project, Tehama County

- **10.5.** Include and leverage community science, which generates scientific data and understanding through actions of community members, in environmental monitoring and build capacity for community science monitoring in historically marginalized and tribal communities.
- **10.6.** Support long-term monitoring and adaptive management by building statewide climate and biodiversity monitoring networks for restoration and stewardship actions.
- 10.7. Partner with local recreation, hunting, and fishing groups to expand environmental monitoring in protected areas. Improved ecosystem-scale monitoring will enhance data collection and help support effective management and recreational use.
- **10.8.** Continue to improve understanding of how environmental conservation achieves climate benefits, including improved precision of measuring carbon sequestration and storage on natural and working lands and specific resilience benefits of conservation or restoration projects.
- 10.9. Support regional programs that provide solutions and support for long-term adaptive management, monitoring, and stewardship.
 Monitoring should evaluate the efficacy of management practices and enforcement.
- **10.10.** Further explore the role of California's MPA network in building climate resilience for coastal and marine ecosystems.



Agencies work together at SR-76 Restoration Site, San Diego County

- **10.11.** Implement targeted water quality monitoring with a focus on impacts to sensitive marine habitats such as eelgrass and kelp, including research to develop appropriate thresholds and reference points for those habitats.
- **10.12.** Develop terrestrial-freshwater management plans at the watershed scale to increase complementary management of upper and lower watersheds.

Invest in actionable science to inform decision making

- **10.13.** Use CA Nature and other tools to assess gaps in biodiversity protection and identify habitats or ecosystem types that should be prioritized in future conservation.
- 10.14. Identify monitoring gaps and explore the development of ongoing monitoring and data analysis programs with long-term funding to support adaptive management of lands and coastal waters for biodiversity protection and climate benefits.
- 10.15. Support research and monitoring projects that will help fill important 30x30-related knowledge gaps identified by the California Biodiversity Network (Appendix D).
- 10.16. Support research to determine areas that may serve as climate refugia for terrestrial, freshwater, and marine species.

- **10.17.** Collaboratively evaluate and update objectives and conservation priorities to reflect new science and increased understanding.
- **10.18.** Evaluate success of strategic actions and revise to ensure efforts are meeting objectives.



Wild Trout Project, East Walker River, Mono County



Implementation of Pathways to 30x30

California's 30x30 initiative is "open-source" and designed to be inclusive and transparent. All who are committed to its principles and objectives are invited to work together to achieve its goals. Environmental conservation happens locally, planned and championed by people working on the ground who are united around common interests. State agencies recognize these local and regional partners as essential to the success of 30x30. Accordingly, this strategy will be implemented through collaborative actions among a broad range of partners.

Achieving the 30x30 conservation targets in less than a decade requires that a focused set of initiatives, programs, and projects happen concurrently across California in coming years. Action is needed quickly to build off existing efforts to accelerate the pace of conservation activities. While these efforts are inherently local and regional in scale, they will benefit from state and federal resources, policies, and coordination.

Photo: Elkhorn Slough, Monterey County





The California Natural Resources Agency

will oversee implementation of the Pathways to 30x30 Strategy and the 30x30 Partnership, described below. It will also continue its policy and practice of early, often, and meaningful government-to-government tribal consultations, and will ensure coordination between and among related initiatives such as Outdoors for All and implementation of the Natural and Working Lands Climate Smart Strategy.

To support implementation of the 30x30 strategy, state agencies, led by the CNRA, will:

- Drive near-term strategic actions to advance tangible local and regional progress on 30x30.
- > Leverage public funding to advance 30x30
- > Establish the 30x30 Partnership
- Employ <u>californianature.ca.gov</u> to inform, empower and connect 30x30 champions and
- Use CA Nature and other tools for conservation planning and tracking progress toward the 30x30 goal.

Each of these areas of implementation is discussed below.

Near-Term Strategic Actions

The ten pathways to 30x30 detailed in this strategy will guide state actions to achieve 30x30 objectives. Appendix B identifies a set of nearterm priority actions to jumpstart our efforts to meet the 30x30 goal, together with responsible parties and key partners.

Public Funding

California's 2021 budget included significant funding to jumpstart progress on 30x30. Work is also underway in partnership with federal agencies to leverage recently allocated federal funding to support 30x30. The 2021–2022 California Budget Act included \$768 million set aside for nature-based solutions, \$600 million for coastal resilience projects, \$645 million in habitat restoration, and \$105 million for wildlife corridors and fish passage projects. These funds have great potential to advance 30x30.

Federal funding will be critical to advance 30x30 and recent actions in Washington DC will aid our efforts. Significant opportunities exist due to full funding of the Land and Water Conservation Act, significant investments in wildfire resilience, and the recently-passed federal infrastructure bill. CNRA is actively collaborating with federal partners to leverage and align investments to promote biodiversity protection, expanded outdoor access, and climate action.



Yosemite National Park, Mariposa County



The 30x30 Partnership

The CNRA will launch the 30x30 Partnership to support implementation of 30x30 and to engage and empower all partners working toward its objectives. The 30x30 Partnership will take form as an alliance of groups and leaders advancing 30x30 and is open to all who are interested in participating. The Partnership will provide an organizational hub for dialogue, shared learning, coordination, and strategic planning. The 30x30 Partnership will convene regular meetings of participants to communicate progress, highlight best practices, address challenges, and identify ongoing opportunities to meet our shared 30x30 goals.

The 30x30 Partnership will be supported by other specific groups:

30x30 Coordinating Committee

The Committee will be composed of 30x30 champions, appointed by the California Natural Resources Secretary, who will dedicate time and focus to organizing the 30x30 Partnership and collaborations necessary to achieve 30x30. Responsibilities of the Coordinating Committee include:

- Meet at least quarterly to discuss, explore, and elevate opportunities, challenges, and suggestions for the entire 30x30 Partnership.
- Identify, organize, and coordinate working groups to address priority areas of 30x30 implementation, which can report back to the 30x30 Partnership.
- Convene workshops and other gatherings to engage and empower 30x30 partners.
- Schedule and coordinate regular convenings of all participants in the 30x30 Partnership
- Generate an annual report on 30x30 progress with support from CNRA

California Biodiversity Council

The Council was established in 1991 to improve coordination and cooperation among state, federal and local resource management and environmental protection agencies. It has coordinated public agencies' efforts to protect biological diversity and enable economic viability across California. The California Biodiversity Council has identified 30x30 implementation as the current central focus of its efforts and developed "California Biodiversity Council Shared Opportunities for Achieving California 30x30," a resource of agency programs best positioned to advance 30x30 (Appendix C).

California Biodiversity Network

The Network is a collaborative forum for California's diverse conservation organizations and scientific institutions prioritizing biodiversity protection, stewardship, environmental education, and scientific inquiry. The California Biodiversity Network currently operates as four roundtables that include: (1) Systematic Conservation Planning, (2) Biodiversity Informatics and Community Science, (3) Climate-



Gorgonians off Catalina Island, Los Angeles County

Biodiversity Sentinel Sites, and (4) Stewardship. The California Biodiversity Network developed "Advancing Science in Support of 30x30" (Appendix D) outlining the highest priority research and information gaps for achieving 30x30. Ongoing roundtable discussions will inform and support 30x30 science and practice needs moving forward.

Ocean Protection Council (OPC)

The OPC is a state policy body nested within the CNRA that works to advance the Governor's priorities for coastal and ocean conservation. Implementing 30x30 for coastal waters will be guided in part by OPC working closely with its state and federal partners, California Native American tribes, and key stakeholder groups including, but not limited to fishing communities and environmental organizations. OPC developed a report (Appendix E) outlining the highest priority research and information gaps for achieving 30x30 specifically in coastal waters.

California Natural Resources Agency Tribal Committee

The Newsom Administration has proposed a \$100 million tribal nature-based solutions program. This program will provide funding for tribal priorities, technical assistance, and capacity support to foster tribal partnership and collaboration in California's conservation and climate goals. This proposal includes the establishment of a tribal committee to help the administration implement the program. Linkages between this committee and the 30x30 partnership will be forged through the coordinating committee and the CNRA executive team.

Regional Working Groups and Coalitions

CNRA will continue to support and empower regionally led efforts to implement 30x30. Sustained engagement between regional and local partners and state and federal agencies will be essential to achieve 30x30. Existing working groups and coalitions at the local and regional level are encouraged to join



the 30x30 Partnership to share information, identify challenges and needs, and hear about opportunities for collaboration.

CaliforniaNature.ca.gov

The <u>calinfornianature.ca.gov</u> website will serve as a connection portal to provide information, track progress, and build connections among leaders and groups advancing 30x30. This website hosts CA Nature (below), workshop recordings, discussion papers, and information gathered during development of this document. It serves as a platform for ongoing communications and dialogue.

CA Nature

CA Nature is a web-based, publicly available geographic information system (GIS) that has been developed to support statewide, regional, and local implementation of 30x30 and related efforts. It serves as a central repository for information, planning, and tracking progress toward 30x30.

California is a hub for scientific and technological innovation and has access to a wealth of data on species, ecosystems, and current management practices. CA Nature leverages this innovation and consolidates biodiversity, access, and climate change information into a single repository, presenting various layers of data in a single system to help identify multi-benefit conservation opportunities and advance strategic actions.

By centralizing and improving access to environmental data on California's lands and coastal waters, CA Nature supports decision making within 30x30 and conservation efforts well beyond this initiative.

CA Nature will be regularly updated to show progress toward 30% and incorporate new data and evolving science. It can be accessed through CaliforniaNature.ca.gov.

How It Works

CA Nature presents data on conserved areas, biodiversity, public access, and climate change onto a common platform to identify opportunities across California to advance California's 30x30 goal. This system is publicly accessible as a suite of interactive mapping and visualization applications.

CA Nature is designed with three levels of interaction to support a full range of users.

1. Story Maps

These interactive applications serve as a guide to walk users through the suite of tools in CA Nature.

2. Data Explorers

Designed for the public as well as community conservation practitioners who want to better understand core issues, these interactive, data-driven exploration tools build awareness of both challenges and opportunities. **Data exploration apps include:**

 Conserved Areas Explorer: Identifies areas currently considered 30x30 Conserved Areas using the California Protected Areas Database. California Conservation Easement Database, and the California Marine Protected Areas network. Users can view information about how the lands and coastal waters are managed, and visualize what areas and designations are currently counted towards 30x30.



(Top) The Conserved Areas Explorer allows users to to see the current status of lands and coastal waters that meet the definition of 30x30 Conservation Areas.

(Bottom) The Biodiversity Explorer allows users to view summaries of different aspects of biodiversity.

Biodiversity Explorer:

Utilizes the California Department of Fish and Wildlife's Areas of Conservation Emphasis (ACE) dataset and allows users to view summaries of different aspects of biodiversity, such as species counts and rarity, and builds a deeper understanding of the complex relationships within biodiversity.

• Access Explorer:

Uses the California Protected Areas Database to show which conserved areas are accessible to the public and provides insights into the communities served by them. Expands on existing parks-oriented technology tools to encompass open spaces, regardless of ownership. This app can be used to identify communities with limited access to nature where public access and conservation can be prioritized.

Climate Explorer:

Provides a simple way to interact with climate change data such as extreme heat, sea level rise, and drought projections. This app can be used to understand where conservation can contribute to natural carbon removal and/ or build climate resilience.

3. Conservation Opportunities Modeler

Designed for advanced data users, additional applications integrate multiple data layers to allow for interactive modeling and analysis. These applications illustrate opportunities to achieve multiple benefits through conservation action by allowing decision makers to explore, integrate, and prioritize multiple factors for biodiversity, access, and climate change. This app will aid users in locating areas to meet key objectives and support multiple priorities at the same time. These applications also allow users to download underlying data through the open data portal and export maps for use in conservation planning efforts.



(Top) The Access Explorer allows users to compare population demographics near publicly accessible open spaces.

(Bottom) The Climate Change Explorer provides a simple way to interact with climate change data.





<image>

Onward Together

Our pathway to 30x30 is clear. We must work together to protect, restore, and steward our precious natural world. Humans are an integral part of nature and depend on the successful conservation of our lands and waters. It will take focus, collaboration, and commitment to effectively sustain conservation in California through 2030 and beyond.

30x30 in California can show the world that expanding ambitious environmental conservation that achieves multiple benefits is possible and beneficial. Working together, we can leverage interest and excitement generated by 30x30 into lasting environmental improvements that will benefit California for generations to come.

Photo: Feather River Restoration Project, Yuba County



In short, we need you. Whether you are a parks and recreation manager, a California Native American tribal member, natural lands caretaker, landowner, community advocate, farmer, rancher, hunter, angler, scientist, philanthropist, or someone who values natural lands for recreation and health—we need you. With your participation, we can come together under the global movement pushing towards, and beyond, 30x30.

Let us envision a California with healthy and balanced ecosystems and communities, sustained in perpetuity. Envision 30% of our natural lands and waters, equitably conserved across regions and habitat types, with connected corridors between them and with expanded and equitable recreational access. Envision these areas effectively stewarded for ecosystem health, biodiversity, and climate change action. This is our future. We can achieve this together. Our success now will be our legacy for generations to come.

Thirty percent is not just a number; it is a call to action. This goal to effectively conserve our lands and waters is an opportunity to accelerate conservation in partnerships that are innovative, knowledge-based, action-oriented, and equitydriven. Our movement looks beyond 2030 toward an enduring effort to manage and connect our landscapes in ways that benefit our biodiversity, increase climate action, and promote access for all the people of California long after 30% is reached.

Together we can achieve these goals. Start wherever you are—build on existing progress, strengthen and expand partnerships, set ambitious goals, and build lasting measures to protect biodiversity, advance climate action and expand equitable access. Together we can establish enduring conservation in California.



Long-billed curlew, Point Reyes National Seashore, Marin County

REFERENCES

- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. 2019. Summary for Policymakers of the Global Assessment Report on Biodiversity and Ecosystem Services. <u>https://doi.org/10.5281/</u> <u>zenodo.3553579</u>
- 2. Dinerstein, Eric, et al. 2019. A global deal for nature: guiding principles, milestones, and targets. Science Advances 5.4: eaaw2869.
- 3. Convention on Biological Diversity. 2021. First Draft of the Post-2020 Global Biodiversity Framework. <u>https://www.cbd.int/doc/c/abb5/591f/2e46096d3f0330b08ce87a45/wg2020-03-03-en.pdf</u>
- 4. U.S. Department of Interior, U.S. Department of Agriculture, U.S. Department of Commerce, and Council on Environmental Quality. 2021. Conserving and Restoring America the Beautiful. <u>https://www.doi.gov/ sites/doi.gov/files/report-conserving-andrestoring-america-the-beautiful-2021.pdf</u>
- Gaston, Kevin J., and John I. Spicer. 2013. Biodiversity: an introduction. John Wiley & Sons.
- Myers, N., Mittermeier, R., Mittermeier, C. et al. 2000. Biodiversity hotspots for conservation priorities. Nature 403: 853–858. <u>https://doi.org/10.1038/35002501.</u>
- Tershy, B. et al. 2015. Ecosystems of California. <u>https://ccal.ucsc.edu/wp-content/</u> <u>uploads/2017/03/Tershy_2015b.pdf</u>
- Hamilton, Healy, Regan L. Smyth, Bruce
 E. Young, Timothy G. Howard, Christopher
 Tracey, Sean Breyer, D. Richard Cameron
 et al. 2022. Increasing taxonomic diversity
 and spatial resolution clarifies opportunities
 for protecting imperiled species in the US.
 Ecological Applications e2534.

- 9. US Department of the Interior. 1994. The impact of federal programs on wetlands, vol.
 II, a report to Congress by the Secretary of the Interior, Washington DC, March 1994.
- Dahl, T. E. 1990. Wetland losses in the United States 1780's to 1980's. Washington, D.C.: U.S. Department of the Interior, Fish and Wildlife Service.
- Bratman, Gregory N., J. Paul Hamilton, and Gretchen C. Daily. 2012. "The impacts of nature experience on human cognitive function and mental health." Annals of the New York academy of sciences 1249.1: 118-136.
- Samara, Theano, and Thekla Tsitsoni. 2011. The effects of vegetation on reducing traffic noise from a city ring road. Noise Control Engineering Journal 59.1: 68-74.
- Nowak, David J., Daniel E. Crane, and Jack C. Stevens. 2006. Air pollution removal by urban trees and shrubs in the United States. Urban forestry & urban greening 4.3-4: 115-123.
- 14. Lafortezza, Raffaele, et al. 2009. Benefits and well-being perceived by people visiting green spaces in periods of heat stress. Urban forestry & urban greening 8.2: 97-108.
- 15. California State Parks. Parks for All Californians: Local Park Access Planning and Grants Parks Access Tool. <u>https://www. parksforcalifornia.org/parkaccess</u> [Accessed October 6, 2021].
- Climate Topical Advisory Panel. 2021.
 Expanding Climate Action Through Nature-Based Solutions. <u>www.californianature.ca.gov</u>
- 17. Governor's Office of Planning and Research.
 2018. Defining Vulnerable Communities in the Context of Climate Adaptation. <u>https://opr.ca.gov/docs/20200720-Vulnerable_Communities.pdf</u>



- Equity Topical Advisory Panel. 2021. Using Nature-Based Solutions to Advance Equity. <u>www.californianature.ca.gov</u>
- **19.** Grorud-Colvert, Kirsten, et al. 2021. The MPA Guide: A framework to achieve global goals for the ocean. Science 373.6560: eabf0861.
- IUCN-WCPA Task Force on OECMs. 2019. Recognising and reporting other effective area-based conservation measures. Gland, Switzerland: IUCN.
- 21. https://homegrownnationalpark.org/
- 22. Beller, Erin E., Erica N Spotswood, April H Robinson, Mark G Anderson, Eric S Higgs, Richard J Hobbs, Katharine N Suding,

Erika S Zavaleta, J Letitia Grenier, Robin M Grossinger. 2019. Building Ecological Resilience in Highly Modified Landscapes. BioScience 69:80–92.

- 23. Rigolon, A. and J. Christensen. Greening without Gentrification: Learning form Parks Related Anti-Displacement Strategies Nationwide. <u>https://www.ioes.ucla.edu/</u> <u>wp-content/uploads/Greening-without-</u> <u>Gentrification-report-2019.pdf</u>
- 24. C.M. Duarte, J.J. Middelburg, and N. Caraco.
 2005. Major Role of Marine Vegetation on the Oceanic Carbon Cycle. Biogeosciences 2, no.
 1:1-8.







CaliforniaNature.ca.gov