WATER, PARKS, AND WILDLIFE COMMITTEE and

SELECT COMMITTEE ON STATE PARKS

PAPAN AND REYES, CHAIRS

INFORMATIONAL HEARING
Tuesday, August 13, 2024
1:30 p.m. – State Capitol, Room 437

Leveraging State Parks for a Climate Resilient Future

California Department of Parks and Recreation (State Parks). The mission of California State Parks is "to provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation." California's state parks system include beaches, underwater refuges, native Californian cultural preserves, museums, lighthouses, ghost towns, recreation areas, and wilderness areas. The system of 280 state park units encompasses nearly 1.6 million acres of land, more than 340 miles of coastline, 970 miles of lake and river frontage, 15,000 campsites, 5,200 miles of trails, 3,195 historic buildings, and more than 11,000 known prehistoric and historic archaeological sites. State Parks recognizes that California's population is expected to grow by nearly 30% in the next quarter century, which will put ever-increasing pressure on the state's remaining wild lands.

Climate Resiliency. California is one of the most "climate-challenged" regions in North America and is already facing numerous threats such as extreme heat, severe drought, flood, mega-wildfires, and sea-level rise (SLR). California's Fourth Climate Assessment notes that there will be negative impacts to California's ecosystems, both on land and in the ocean, leading to local extinctions, migrations, and management challenges. The actions taken to prepare for, recover from, and generally manage the impacts of climate change are termed *climate resilience*. These actions can generally be categorized as adaptation (actions to cope with current threats and prepare for future extremes) and mitigation (actions to reduce the numerous factors that contribute to climate change).

Like the state as a whole, State Parks faces unprecedented threats as a result of the changing climate. The parks system will need to take a range of management actions to adapt to these challenges. At the same time, the State Parks system also provides diverse mitigation opportunities to make California more resilient to climate change.

Biodiversity. California boasts incredible biological diversity. Approximately 40 of the state's 770 native wildlife species and about 2,100 of its 6,300 plant species are found nowhere else in the world. State parks provide a refuge for many of these species across the state including some of the 450 species of plants and animals that are currently listed under the federal or state Endangered Species Acts. However, these native species are under threat from many angles. Not only do they face pressure from weather whiplash and wildfire, the state's climate provides suitable conditions for non-native and invasive plants and animals that compete for resources with the native wildlife. Additionally, recovery from natural disasters like wildfire, often favor

faster-growing non-native plants, choking out native landscapes. Drought-stressed trees are also more susceptible to the pests and disease that increase tree mortality.

State Parks' goal is to focus future land acquisitions on the preservation of under-protected, under-represented, and rarely found resources in California according to the State Park Acquisition Guidelines. Specifically, the guidelines require State Parks to prioritize new lands for the park system that create linkages between existing units of the parks system to other large blocks of protected habitat, protect under-protected habitats, protect under-protected ecological regions, protect evolutionary hotspots, and other criterion that are consistent with the foundation of the state's 30x30 goal. According to the *Pathways to 30x30 Report* (2022), California's state park properties are generally consistent with the definition of a 30x30 Conserved Area.

Wildfires. State Parks protects some of the state's most unique natural resources. For example, California has 49 state parks (144,000 acres) that provide habitat for redwoods (only 5% of the original 2.2 million acres of old growth coastal redwood forests remain since European settlement). As noted in the California State Parks Foundation report, *Building a Climate-Resilient California State Park System*, California State Parks are also under wildfire threat because of over 150 years of fire suppression, exacerbated by climate change. *California's Wildfire and Forest Resilience Action Plan* (2021), calls for State Parks and other state agencies to increase the use of prescribed fire on high-risk state lands, which will help achieve the state's 500,000-acre fuels reduction goal, and implement a monitoring program to gather information about the ecological benefits of the forest management practices. In 2021, the Wildfire and Forest Resilience Program was created in State Parks to carry out ecosystem resilience treatments (e.g., prescribed burns, forest thinning, monitoring), post-fire recovery and restoration, planning, and education and outreach. State Parks maintains a burn team to decrease fuel loads, improve habitat for native species, and increase forest diversity.

The 2020 CZU wildfire burned over 86,000 acres, including 97% of California's first state park, Big Basin. State Parks initiated the Reimagining Big Basin project in summer 2021 to begin the planning process for permanent park facilities in response to the CZU fire. This process has included public events and activities to hear from partners, stakeholders, and the community to assess the priorities for rebuilding. The Reimagining Big Basin Vision (Vision) highlights themes that emerged from the public process, including forest resiliency and how to be inclusive to California's diverse population as park facilities are re-established. According to the Vision, "The CZU Lightning Complex Fire demonstrated the importance of planning at the landscape scale. […] Coordination with adjacent landowners and managers and strategic acquisitions will strengthen wildlife corridors and habitat connectivity, trail connectivity, and the diversity of recreational experiences in the region."

Sea Level Rise. State Parks manages nearly one quarter of the California coastline. State Parks has 128 coastal park units (111 oceanfront units and an addition 17 units within the coastal zone)—this is nearly one-half of State Parks units. More than 50 million people visit these coastal units annually. By 2100, California is projected to experience 1–7 feet of SLR. State Parks modeling suggest that 5 feet of SLR and a 100-year storm would result in the inundation of 593 structures, 150 acres of parking lots, 93 campgrounds and day-use areas, and 65 miles of access roads—without considering underground infrastructure, bluff erosions, and archaeological losses.

State Parks has a goal of preparing for 3.5 feet of SLR by 2050. Some examples of projects that are already underway including shoreline stabilization, native plantings, habitat restoration, infrastructure redesign, and building managed retreat into hazard management plans. The State Parks *Sea Level Rise Adaptation* Strategy (2020) includes six principles:

1) Integrate SLR adaptation into projects, plans, and funding decisions.
2) Translate best available science into practicable, long-term solutions.
3) Work with partners.
4) Balance access with resource protection.
5) Align its approach with the Coastal Act to improve permitting and compliance.
6) Increase public awareness.

The unprecedented winter storms of January 2023 inflicted over $190 million of damage to coastal state parks and devastated Seacliff and New Brighton State Beaches. State Parks is currently undertaking a Recovery and Resilience Study of the beaches to understand the impacts of SLR and develop recommendations to build beaches that are more resilient. This study includes a public survey to understand visitor values.

Extreme Heat. Extreme heat threatens both public health and the natural resource in state parks. Mitigating climate impacts by protecting landscapes that offer sanctuary from the heat will be particularly appreciated by those in urban areas. It is possible that park visitation will increase in response, so State Parks will need to respond to increased park usage as the natural resource becomes increasingly valuable and stressed. Recently, State Parks closed the Skyline Trail at Mount San Jacinto State Park due to dangerously high temperatures, which had led to an increase in rescue operations for hikers suffering from heat exhaustion and dehydration on the trail.

Forest and riparian restoration efforts create cooler microclimates that provide ecosystem benefits as well as places to recreate safely in the heat. State Parks recently celebrated the newest park unit in over a decade—the Dos Rios property eight miles west of Modesto. The 1,600-acre Dos Rios property is the largest floodplain restoration project in California and has restored habitat for imperiled wildlife at the convergence of the Tuolumne and San Joaquin Rivers, including the riparian brush rabbit, Swainson's hawk, Central Valley Chinook salmon, and steelhead trout. This property will also provide on-going community benefits by mitigating flood risk, replenishing groundwater, sequestering carbon, and providing green space for public recreation.

Traditional Ecological Knowledge (TEK). Before Euro-American contact, Native American tribes managed and stewarded California's terrestrial and marine resources for thousands of years. TEK, also known as indigenous knowledge, traditional knowledge, or native science, refers to the evolving knowledge acquired by indigenous peoples in the process of caring for the landscape and promoting the health of human, plant, and animal populations. There are currently 12 memorandums of understanding (MOUs) between State Parks and California tribes. The most recent MOU was signed on June 21, 2024, with the Big Valley Band of Pomo Indians of the Big Valley Rancheria (Big Valley) for stewardship of Clear Lake State Park, which is in the Tribe's traditional territory. The MOU includes opportunities for State Parks and Big Valley to cooperate

on including TEK into natural resource management and collaborating on the interpretation of the natural and cultural heritage within Clear Lake State Park.

State Parks Partnerships. Partnership is not new to State Parks. From their inception, California's state parks were forged in partnership with community leaders and organizations. Among a collection of concession businesses, volunteers, and others supporting State Parks, nonprofits are invaluable partners that amplify the reach of State Parks' own community engagement efforts, foster ongoing connection to parks with added programming and events, leverage public investments with additional sources of funding, and build onramps that increase park access to ever more Californians. Parks California, the statutory nonprofit partner to State Parks released *A Study of Nonprofit Partnership in California State Parks* that notes that one-third of State Parks partners support natural resource management. Nonprofits and conservation organizations support State Parks by conducting damage and hazard assessments, habitat restoration efforts, and property acquisition. Parks California reported that 30% of its revenues are directed to climate and stewardship programs, such as providing technical assistance for climate planning and invasive plant eradication.