



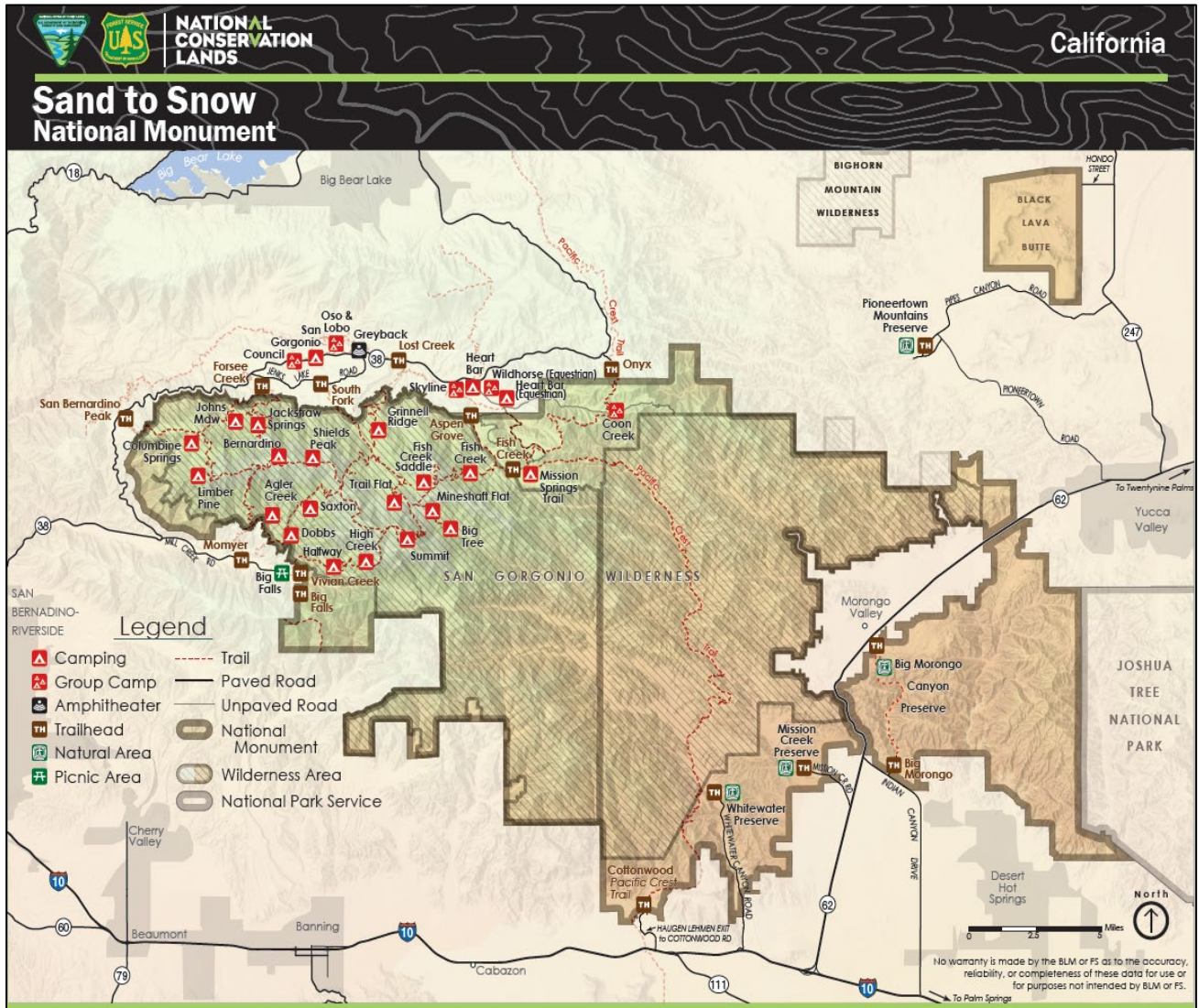
# NATIONAL CONSERVATION LANDS

California  
2022: Annual Manager's Report

## Sand to Snow National Monument



# Map





# Accomplishments

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The Sand to Snow National Monument (Monument) celebrated its 6<sup>th</sup> anniversary in 2022. The day was marked by activities, guided hikes, and a very special presentation of the traditional Bird Singers of the Cahuilla Nation. Planning efforts continued for the Whitewater River Wild and Scenic River Comprehensive River Management Plan as well as the Monument Plan.

Disaster funding was secured to provide support removing hundreds of dead standing trees, a result of the El Dorado and Apple fires of 2020.

The Monument friend's group, San Geronio Wilderness Association, added the crowdsourced app Switchback to its educational toolbox. The app allows users to upload information about weather, trail conditions, water sources and other hazards. This addition has been very popular with an average of 50 users using the app daily during the busy season, late spring through early fall.





# Challenges

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Extreme fire weather conditions persisted in 2022. Early and fast-moving fires prompted closures of several roads and trails to the public to mitigate fire ignition including the Pipes Canyon Road within the Monument. In addition, the San Bernardino National Forest raised fire danger rating to 'very high' in June 2022, several weeks earlier than normal. This rating implemented restrictions for visitors to the Monument that included no open fires or use of barbecues. These steps were taken to lessen fire starts and bypass the need for complete forest closures which happened in early fall 2021.

The Monument has seen a significant increase in off-highway vehicle (OHV) trespass. This unauthorized use has resulted in impacts to plant communities already stressed by the ongoing drought, as well as damaged fences, which leads cattle to roam outside of designated range allotments and conflict with horse riders.



# Visitors

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Visitation to the Monument in 2022 increased slightly from 2021 with an estimated 220,000 visitors. Neighboring partner lands also saw a slight increase in visitation of 320,000 visitors, many of whom found themselves recreating within the Monument. Visitors to the U.S. Forest Service managed side of the Monument numbered less than the year prior, slightly below 75,000 visits. The highest use occurs in the summer months on the USFS-managed lands; and in the fall, winter, and spring on those lands managed by BLM.

The Sand to Snow National Monument is a very popular destination for hiking along the world-famous Pacific Crest Trail with visitors enjoying short hikes or longer overnight treks.



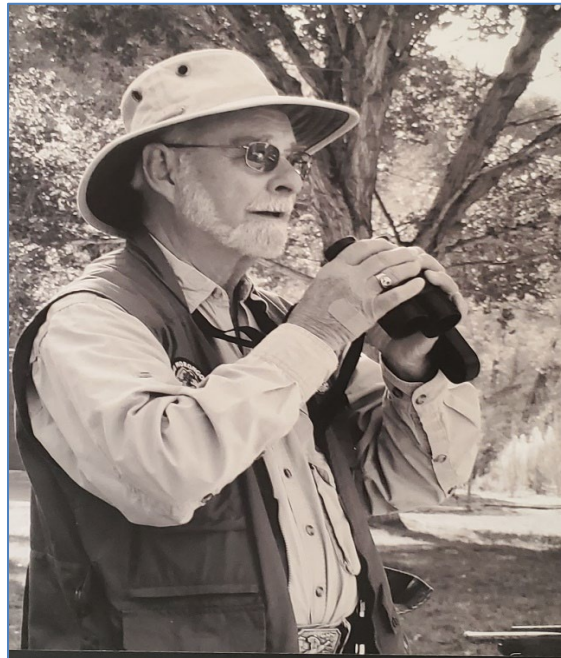


# Partnerships

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Partnerships proved vital in 2022. Volunteers through partnerships donated time, collected native seed, provided environmental education to hundreds of children and adults, and provided invaluable support to recreational infrastructure repair and maintenance. Thank you!

The BLM family mourned the loss of a dedicated and beloved volunteer. Dee Alden Zeller passed away on Friday June 3, 2022, at 90, shortly after retiring as host from his position at Big Morongo Canyon unit. Dee was a BLM volunteer host at the Thousand Palms Preserve and Big Morongo Canyon Preserve for 26 years, where he expanded education programs, served as a bird expert guiding weekly bird walks and sharing data and rare bird sightings. Dee and his wife Betty received several accolades for their public service over the years including the BLM's 2011 Making a Difference National Volunteer Award for their environmental stewardship and education activities.



# Science

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The San Diego Field Station of the U.S. Geological Survey Western Ecological Research Center conducted a field study of Least Bell's Vireos (*Vireo bellii*) at the Big Morongo Canyon unit. The purpose of the study was to use population genomic techniques to delineate the range limit between subspecies, and to provide taxonomic classification of individuals where the subspecies meet. Genetic material was taken from three adult males before they were released back into the unit.

The second year of a three-year study will determine the mountain lion population within the San Gorgonio Wilderness (SGW) continued in 2022 by biologists with California Department of Fish & Wildlife (CDF&W). Field evidence indicates two adult individuals utilize the SGW.

CDF&W conducted their annual census of bighorn sheep populations within the Monument and surrounding lands, results of which indicate increasing bighorn sheep numbers.

Weekly bird walks were offered again this year at the Big Morongo Canyon unit. The weekly counts illustrated the importance of the area for migrating and resident avian populations. Daily staff gauge readings by volunteers in the wetlands of Big Morongo Canyon Unit continued to prove valuable in determining drought impacts as well as the benefits of late monsoonal rains.

The Big Morongo Canyon unit was chosen as a site for White-Nose Syndrome (WNS) surveillance monitoring in the Mojave Desert. The surveillance involved mist netting bats during the early evening hours to check for presence of the fungus that causes WNS (*Pseudogymnoascus destructans, Pd*). Adding this site allowed The National Park Service, Mojave Desert Inventory and Monitoring Network, a larger sample size that would add value to the study.



# Climate Impacts

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The winter of 2021-2022 was relatively dry, leaving little snowpack and below normal precipitation. The dry trend was expected to continue through fall. What was not expected was an unusually lengthy monsoonal summer/fall that brought heavy precipitation to the mountains and rarer rain to coastal areas through late July and September. The summer storms brought heavy rains to the San Bernardino Mountains, at times, 1 inch per hour. Unfortunately, some of the monsoonal storms hit directly over the El Dorado Fire burn scar, resulting in heavy debris flows prompting evacuations in communities at lower elevations such as Forest Falls and Angeles Oaks, and closures of partner lands within the Monument boundary.



Massive debris flows on Sep. 12 damaged dozens of homes and businesses, like this home (above) in Forest Falls ([onscene.tv](https://www.onscene.tv)). Birch Creek in Oak Glen exceeded its banks and spread thick debris and boulders (below) across a long stretch of Potato Canyon Road (Alex Tardy).





# Climate Resiliency

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The Monument saw rare impacts from climate change in 2022 in the unusual heavy monsoonal rains. To lessen impacts to communities, information and maps of burn scars were shared broadly, to inform and predict potential debris flows during these heavy summer rain events and issue early evacuations and warnings to communities as necessary.

Fire severity increased with the arrival of higher temperatures. To lessen potential fire starts, temporary closures of recreation areas, roads and facilities were implemented in several areas of the Monument.

The Monument was chosen as a site for the research project developing drought adaptation tools for conserving desert habitats. The Great Basin Cooperative Ecosystem Studies Unit proposes to first identify and predict which portions of landscapes and ecological site types are most susceptible to drought and second, identify the species, species traits, or ecotypes that increased the resistance and resilience of habitats to drought. This would potentially serve as a key part of prioritizing plant materials and development of strategies for enhancing drought resistance.



# Social and Environmental Justice

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The BLM celebrated the ninth annual Latino Conservation Week with partners Hispanic Access Foundation, The Wildlands Conservancy, Mojave Desert Land Trust and Friends of Big Morongo Preserve. Activities included guided nature hikes, environmental education and independent nature exploration. The main goal of this week is to inform policymakers, the media and the general English and Spanish speaking public of the Latino community's views on local and national conservation issues and to encourage the Latino community to enjoy public lands.

The group Southern California Outdoor Black Adventures, participated in a hike through the Monument. The hike was a 6.5-mile hike starting at Mission Creek and concluding in Whitewater Preserve. The activity was to introduce the diversity of public lands to group members and plan future visits to BLM and the California Desert District.





# Events

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Events on the Sand to Snow National Monument included its sixth anniversary in February. The week-long celebration drew both new and returning visitors. Families participated in environmental activities, nature hikes and listened to the Bird Singers from the nearby Cahuilla Tribe. Activities took place at the Whitewater and Big Morongo Canyon units of the Monument.

Two National Public Lands Day events were held this year at Big Morongo and Whitewater Canyon. Though scaled back in number, the group pulled together and cleared trails, trimmed brush, and removed invasive plants. Cable fence was installed to prevent OHV trespass in several areas. Great job team!





**NATIONAL  
CONSERVATION  
LANDS**

## **Sand to Snow**

### **National Monument**

California Desert District Office  
Bureau of Land Management  
Palm Springs South Coast and Barstow Field Offices  
1201 Bird Center Drive and 2601 Barstow Road  
Palm Springs, CA 92262 and Barstow, CA 92311  
Phone: 760-833-7100 and 760-252-6000

<https://www.blm.gov/visit/sand-snow-national-monument>  
<https://www.fs.usda.gov/recarea/sbnf/recarea/?recid=81734>

**Report compiled by:** Jihadda M. Govan, Monument Manager

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