



# NATIONAL CONSERVATION LANDS

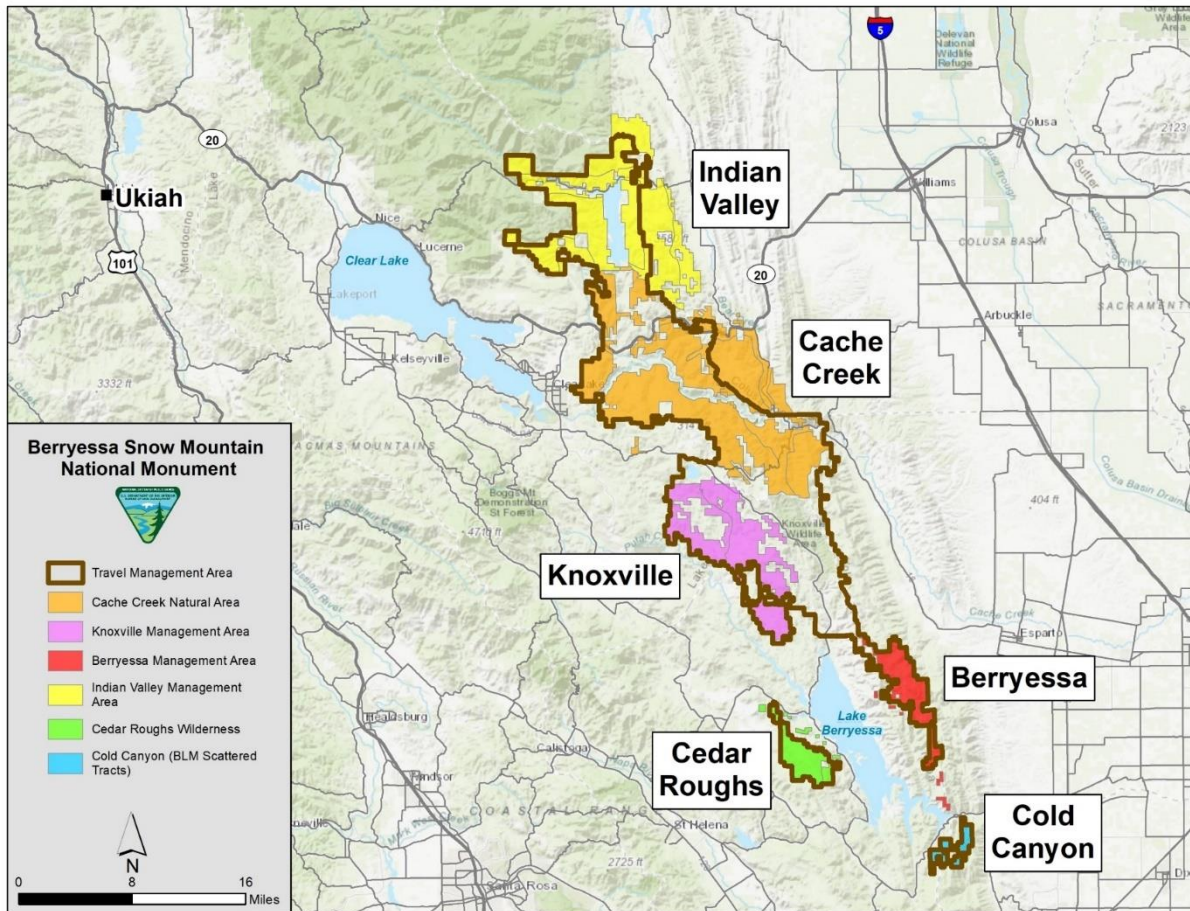
California  
2022: Annual Manager's Report

# Berryessa Snow Mountain

## National Monument



# Map



# Accomplishments

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BLM and Forest Service worked with non-profit partners, schools, and state agencies to offer educational and public engagement programs as much as possible despite the challenges of COVID-19. Additionally, online collaborations enabled agencies and partner organizations to utilize web apps, virtual tours, webinars, and videos to continue outreach programs in the Monument.

The Ukiah Field Office monitored populations of the BLM sensitive foothill yellow-legged frog throughout the monument. Locations included Hunting Creek in the Knoxville Management Area, Wolf Creek, Cache Creek, and Indian Creek in the Cache Creek Management Area, and Kilpepper Creek in the Indian Valley Management Area.

The Ukiah Field Office recorded occurrences of 3 populations of adobe lily (*Fritillaria pluriflora*) within the Indian Valley Area of Critical Environmental Concern. This species is particularly sensitive to changes in soil conditions and disturbance. Increased use has been observed in the occupied habitat of this species. Management actions to protect the species have been undertaken, including installation of vehicle barriers and signage.

The BSMNM is particularly diverse in terms of floral resources. The serpentine soils present in the monument provide the unique soil conditions that lend to many specialized and endemic species. Rare plant populations were monitored in Knoxville, Indian Valley and Cache Creek. New, unauthorized trails were identified, and management actions were taken to prevent further deterioration of occupied and unoccupied rare plant habitat.

In addition to mapping and recording individual rare plant populations, the field office was able to contract important rare plant habitat monitoring. Using AIM techniques, BLM partners established several monitoring plots and long-term transects along Walker Ridge. This area is rich with rare plants due to the ultra-mafic, serpentine soils. This mapping effort will provide a great baseline for rare plant habitat for any planning effort within the Indian Valley Management Area. Ukiah Field Office Archaeologist Jennie Leonard completed the cultural survey portion for the BSMNM Travel Management Plan. Circa 2020, the California SHPO's office signed off on the Ukiah Field Office's survey strategy of using a previously authored predictive model (FWARG 2018) to inform inventory efforts. This helped to expedite inventory by focusing on landforms with increased sensitivity. Ms. Leonard's survey exceeded the agreed upon 300 acres of identified inventory – helping to make the survey effort even more defensible. Hispanic Access Foundation (HAF) intern Samantha Steindel-Cymer, a recent Sonoma State University graduate, assisted Ms. Leonard in completing the inventory effort. Additionally, Ms. Leonard has continually engaged with Yocha Dehe Wintun Nation during the inventory effort. This has helped to further build a positive relationship between the Ukiah Field Office (UKFO) and Tribe, all-the-while re-familiarizing Yocha Dehe Wintun Nation Tribal monitors with the BLM managed land-base. In FY22 the inventory report will be fine-tuned and completed.

Former graduate student Ryan Poska completed the catalog of two sites he excavated and wrote-up for his thesis entitled, “An Archaeological Study of Culture Contact, Colonialism, and Colonial Landscapes in the Cache Creek Watershed”. Mr. Poska’s thesis entailed the excavation of two test unit excavations at the Bear Creek Unit of the CCNA – and helps to shed light on the colonial landscape of the Cache Creek Natural Area and relationships between the indigenous population and homesteaders. The cataloging of artifacts has been completed and are now ready to be curated at a facility meeting Bureau standards.



# Challenges

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The continuation of COVID-19 into 2021 was without doubt the most challenging aspect of the past year. Previous routines and engagements that the cultural program depends upon to meet program accomplishments / objectives were dropped due to health and safety concerns - specifically PE Code AE, Heritage Resources Education and Outreach.



# Visitors

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As previously mentioned, heritage interpretation was affected by the COVID-19 pandemic and previously relied-upon and established opportunities for public engagement were shelved due to health and safety concerns. Additionally, a subgroup of the Off-Highway Vehicle (OHV) user community caused damage to the BLM land-base in the Walker Ridge locale – creating numerous trespass / user-created trails through blue-oak woodlands and through cultural site CA-COL-740.



# Partnerships

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The Ukiah Field Office has worked with Yocha Dehe Wintun Nation (YDWN) during travel and transportation management survey efforts within the Monument to provide additional eyes on-the-ground and cultural information that the Ukiah Field Office archaeologists may not know about.



# Science

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Sonoma State University's Anthropological Studies Center (ASC) finished-up the field work component of their 5-year assistance agreement. This in-the-field work will culminate with a professional report detailing modeling efforts, Class III survey observations, site records, and subsurface testing data, results, and interpretation. This report will be submitted to the Office of Historic Preservation (OHP) California Historical Resources Information System (CHRIS) which will in turn inform cultural researchers on the prehistory of the Cache Creek locale. Additionally, this assistance agreement (L17AC00132) was the catalyst to graduate student Liz Niec writing her thesis on the Paleo Indian presence in the North Coast Ranges. This thesis will be available to the public via the Sonoma State library website – helping to further the public's understanding of North Coast Range prehistory.





# Climate Impacts

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The Berryessa Snow Mountain National Monument (BSMNM) landscape increasingly shows impacts of elevated annual temperatures, including vegetation changes, more frequent wildfires, and soil instability. Adverse impacts to water quality including elevated turbidity levels often result from increased instability and erosion from wildfires. The FY21 drought conditions had a visible impact on the blue oak species (*Quercus douglasii*) and gray pines (*Pinus sabiniana*) within BSMNM. Many oaks appeared to be dormant or dead – not having any obvious leaves. An increase in tree mortality may affect Tribes that rely on traditional subsistence foods for cultural renewal activities and educating their youth. Additionally, tree mortality increases fuel loading and the potential that cultural sites may burn more intensely resulting in affects to cultural site artifacts such as obsidian hydration rinds.



# Climate Resiliency

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The Ukiah FO has worked on projects at the monument to remove invasive plants, improve eroded areas caused by improper visitor use, and minimization of informal/social trails that fragment habitat. Grazing continues in various areas of the monument to reduce fire danger and invasive species.

# Social and Environmental Justice

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BLM provides educational and experiential opportunities to reach a variety of audiences. The Ukiah FO works closely with various non-profit organizations such as Tuleyome, to provide interpretive programs and nature hikes, focusing on under-served communities, throughout the monument.



# Events

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Events were minimal in 2021 due, in part, to COVID-19 restrictions. Although public engagement opportunities were limited, several trail stewards workdays and events were led by Berryessa-Snow Mountain National Monument partners.





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# **Berryessa Snow Mountain**

## **National Monument**

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