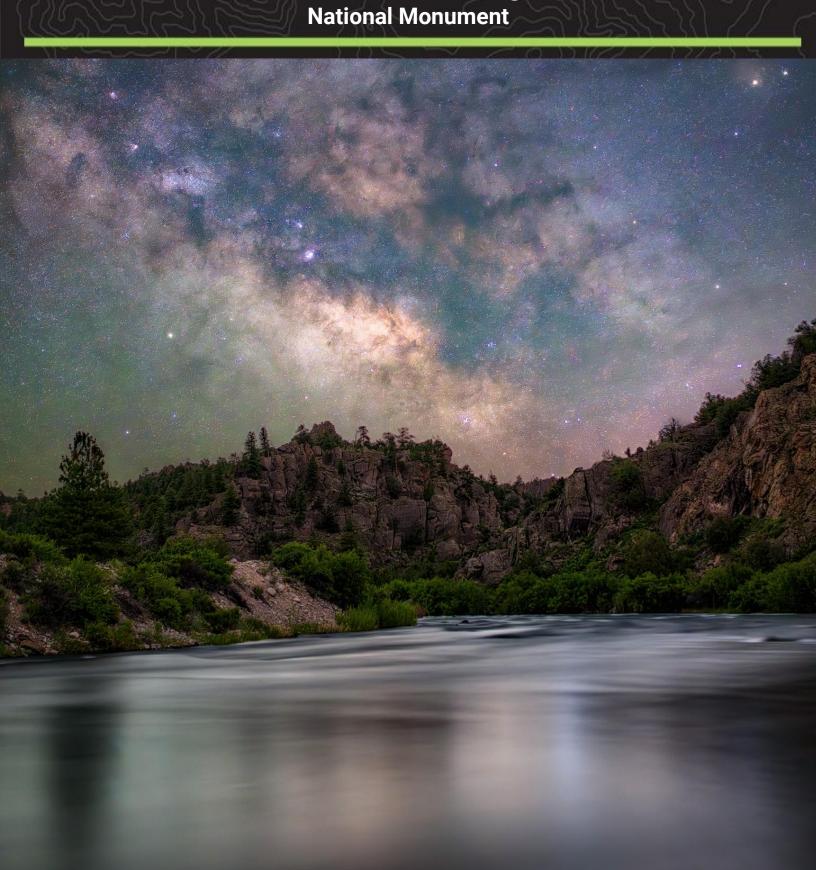


## NATIONAL CONSERVATION LANDS

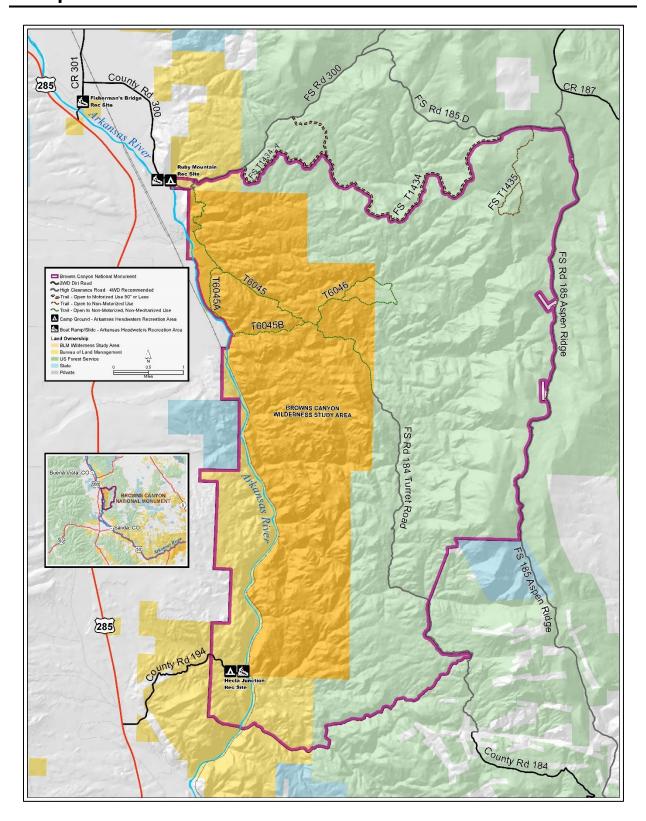
Colorado

2023: Annual Manager's Report

# **Browns Canyon**



## Map



## Accomplishments

Browns Canyon National Monument had many accomplishments in 2023 that included continuing work on existing projects but also starting up a new initiative. 2023 was the final year of the Ethnography Study in partnership with the Southern Ute Cultural Preservation Department and the Ute Mountain Ute Tribal Historic Preservation Office which continued to bring tribal elders out to the monument to record their ethnography.

A new initiative being actively pursued and spearheaded by the Friends of Browns Canyon (FOBC) is applying for being considered an International Dark Sky Park through the International Dark Sky Association. This has included a number of events highlighting and celebrating dark skies as well as monitoring to determine light pollution levels.

Monitoring also continued throughout vear including Assessment, the Inventory and Monitoring (AIM) plots conducted by the field offices seasonal AIM crew. Annual campsite monitoring found that campsite impacts remain stable despite high volumes recreation use along the river corridor. Wild Connections also conducted climate monitoring in partnership with FOBC to develop baseline data of flora and fauna.



In moving forward on interpretation and visitor education, FOBC made updates to their website to better reflect the decisions found in the management plan and step-down interpretation plan, providing better and more relevant information for the public about the objects for which the monument was designated.

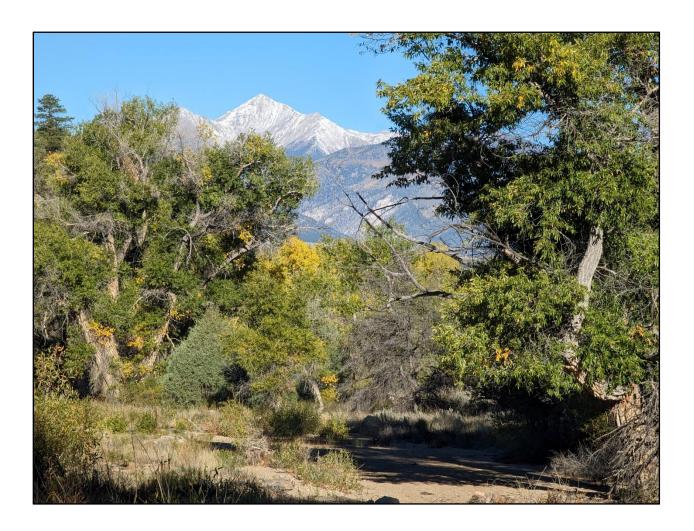
## Challenges

Funding for implementing the management and interpretation plans continues to be a challenge for Browns Canyon National Monument (BCNM). While the interpretation, education, and sign plan were completed in 2022, partners continue to be challenged with funding for implementation of priority components within those plans. Priorities include developing/updating interpretation panels at key entrance points and regular monitoring of boundaries and camping impacts. Visitor use has declined to pre-COVID levels which has alleviated some of the previous challenges associated with full facilities and increased resource impacts.



#### **Visitors**

In 2023, BCNM saw approximately 84,000 visitors through commercial rafting or fishing and 143,000 visitors to the monument either as private boaters (6,355), staying in the developed campgrounds, or hiking on the trails within the national monument. This is a decrease from 2022 levels and a return to pre-pandemic levels of visitation. Following the record highs of 2021 and 2022, the commercial rafting companies operating on the Upper Arkansas River through the monument noted declines in numbers of customers.



### **Partnerships**

The monument is managed jointly between BLM and the US Forest Service. With new US Forest Service staff to support the Forest Service portion of the monument, there was an opportunity to build relationships and introduce new employees to the monument and the ongoing efforts to educate visitors and continued monitoring of the objects of the monument. FOBC held a number of dark-sky focused events and conducted dark sky monitoring to support efforts to apply for Dark Sky Park recognition. Events held included a benefit concert with a world-renowned guitarist, night sky photography classes, and light pollution awareness talks to communities directly adjacent to the monument. The partnership with Colorado Parks and Wildlife (CPW) in management of the river corridor continued as well, including visitor contacts, visitor safety checks and maintenance of the Ruby Mountain and Hecla Junction Recreation Sites. Colorado Parks and Wildlife also assisted with the annual campsite clean-up and monitoring efforts. BLM hosted a visit from tribal elders to record reflections and history for a pilot tribal Ethnography Study through a partnership with Living Heritage Research Council. This partnership effort is in its final year. Living Heritage Research Council has submitted an application for expanding these efforts with other tribes in future years.

#### Science

BLM conducted monitoring of upland vegetation on BLM lands within the BCNM area during the summer of 2023. Points were randomly generated in ArcGIS using aerial imagery and geospatial data and were restricted to open rangelands with slopes of less than thirty percent. A total of two points were sampled to assess foliar cover and floristic diversity during that time. Each point consisted of a line point intercept transect to estimate foliar cover using modified BLM AIM (Assessment, Inventory, and Monitoring) protocol where a 50-meter transect with a randomly generated azimuth was established. Vegetation present was sampled by dropping a vertical pin flag every half meter along the transect for a total of one hundred sample points. Every plant species touching the pin flag, as well as ground cover type, and presence/absence of litter at each sample point was recorded.

A species richness inventory was conducted to estimate the number of species present at each sampling point using the modified BLM AIM protocol. Team members surveyed the fifty square meter survey area and recorded every plant species present and the approximate abundance of the plant. After two minutes passed without observing a new plant species the inventory and survey for that site was completed.



## Climate Impacts

Mountain snowpack plays a significant role in Colorado, not only for the farmers, ranchers, and municipal water providers but also the outdoor recreation industry who rely on consistent flows from snowmelt for commercial white-water rafting. Eastern Colorado saw an average snowpack in 2023 with average run-off. Thanks to the Voluntary Flow Program which is a coalition of water managers and water users who work together toward optimizing water releases for all water users, the commercial rafting season had another successful year. On the west side of Colorado, 2023 recorded a record snowpack which likely contributed to fewer private boaters on the Arkansas River since numerous other rivers also had good run-off. For example, the Dolores River in Southwest Colorado had runnable flows well into the summer and many boaters made an effort to float that river during this unusual opportunity.

The outdoor recreation industry in the region surrounding the monument continues to closely monitor Colorado River flows. The Frying Pan Arkansas Project transfers water from the Colorado River Basin to the Arkansas River Basin and this added flow helps sustain and greatly benefit recreation economies in the Arkansas River basin. Drought years with low snowpack in the west affects the ability to divert water from the Colorado River into the Arkansas River.



## Climate Resiliency

The management plan has been completed recently and BLM resource staff are beginning to develop monitoring and research within the Monument, including studying climate resiliency in the monument. Assessment Inventory and Monitoring plots were established in 2022 (see Science section above) that will serve as a baseline for future monitoring of plant species, foliar cover, litter cover, and bare ground.



#### Social and Environmental Justice

The last site visit with representatives from the Southern Ute Tribe as part of the Monument's Pilot Ethnographic Study was held August 29<sup>th</sup>, 2023. This is a pilot study to inform monument staff about Native American perspectives on management recommendations, conservation concerns, interpretative themes, the identification of significant natural and cultural resources, and other outcomes as identified by tribal participants. This will assist the staff in better managing important cultural resources particularly as recreational visitation to the monument increases. Living Heritage Research Council (LHRC) coordinated the ethnographic research and tribal engagement with the Southern Ute Indian Tribe and the Ute Mountain Ute Tribe, in collaboration with the Bureau of Land Management (BLM). The project aims to strengthen government-togovernment relationships in the understanding of tribal connections with BCNM. The project strategic goals are:

- 1) Provide information relevant to the management of cultural and natural resources within the monument boundary through ethnographic research with traditionally associated tribal communities.
- 2) Provide opportunities for elders and cultural experts from associated tribal communities to participate in onsite field research to preliminarily identify natural and cultural resources of cultural significance.
- 3) Serve as a pilot study that will solicit tribal input regarding future and more in depth ethnographic, traditional cultural property, ethnobotanical, traditional use and/or cultural landscape studies.
- 4) Generate Tribe-approved educational and public outreach material to be shared with tribal communities and with the public at BCNM.

Living Heritage Resource Council is finalizing the report which will also be shared with the tribe and BCNM managing agencies (BLM and USFS).



#### **Events**

Three education events were hosted in Browns Canyon in 2023 in partnership with CPW. This included two interpretive hikes and one astronomy program. Additionally, FOBC hosted three other events in support of applying for a Dark Sky Park certification. This included a dark sky photography class, a music concert, and an educational talk about light pollution with the homeowner's association adjacent to Browns Canyon. Vicky Genfan is one of the top acoustic guitarists in the world and over 130 people attended her benefit concert. She generously donated all proceeds from her performance to support the Browns Canyon Dark Sky Park certification efforts.

No competitive or commercial events were hosted in the monument in fiscal year 2023.



#### Words from the staff

BCNM's application to become an International Dark Sky Park made for an exciting year. FOBC was a successful grant recipient, and they used the funds to purchase light measuring equipment. FOBC also organized volunteers to measure nearby light pollution at the opportune time of cloudless evenings during new moon cycles throughout the monument. Our friends group hosted events to bring awareness about light pollution and dark sky resources within the monument and even held a benefit concert. We anticipate submitting the dark sky park application in 2024 and anticipate a favorable recommendation and approval from the International Dark Sky Association.

Once again, the national monument was excited to host the Ute Mountain Utes as they reflected on their heritage and connection to Browns Canyon and surrounding river valley and mountains. As a land manager it is always humbling and an honor to visit with the tribal elders and hear their perspective on the landscapes that we have the privilege to care for.

In 2024, BCNM hopes that we can move forward with interpretation and education projects which will better enable visitors to the monument to appreciate what makes this place special while also learning how to reduce their impact while they experience and enjoy the monument. We look forward to continuing regular and ongoing monitoring and working together to build relationships among the monument and all our partners.

Thank you,

Kalem Lenard Browns Canyon National Monument Manager



## **Browns Canyon National Monument**

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