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**To:** [Timothy Murphy](#); [Jon Raby](#)  
**Cc:** [Robin Fehla](#); [Jaime Tompkins](#); [Nikki Moore](#); [Christopher McAlear](#); [Kathleen Benedetto](#); [Michael Nedd](#); [Mara Alexander](#); [Rachel Wootton](#); [Fisher, Timothy](#); [Randal Bowman](#); [Kristin Bail](#); [Moody, Aaron](#); [Mali, Peter](#); [Jeff Brune](#)  
**Subject:** National Monument Review - Draft Economic Reports - Quick Review  
**Date:** Friday, July 14, 2017 4:07:48 PM  
**Attachments:** [Craters of the Moon - DRAFT 7-14-17 \(1\) for BLM review.docx](#)  
[Upper Missouri River Breaks review DRAFT 7 14 17 \(1\) for BLM review.docx](#)

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Hi Jon and Tim,

We have been given the opportunity to do a quick review of the draft Department of Interior economic reports for Craters of the Moon and Upper Missouri River Breaks National Monuments. Although both monuments are off the list for recommending any changes, DOI still intends to release these reports at the end of the process and wants them to be as complete and accurate as possible.

If you would like to provide comments, please compile your state's comments in track changes within the attached reports and provide them on or before **Close of Business Wednesday, July 26<sup>th</sup>**. Please email your state's comments to Rachel Wootton ([rwootton@blm.gov](mailto:rwootton@blm.gov)) with a copy to me ([sbutts@blm.gov](mailto:sbutts@blm.gov)) and Nikki Moore ([nmoore@blm.gov](mailto:nmoore@blm.gov)) as soon as you have completed your comments, so that we can get them reviewed by the deadline and submitted back to the Secretary's office. The comments are due back to the Secretary's office by Friday, July 28th.

We have blocked out Tuesday afternoon, July 18, from 4-5pm EST to answer any questions you may have. The conference line and passcode for the meeting are:

- Conference Line: (b) (5) CIP
- Passcode: (b) (5) CIP

Thank you so much for all the time and energy you and your staff have put in to make sure that we are providing DOI with the information they need. Please contact me with any questions.

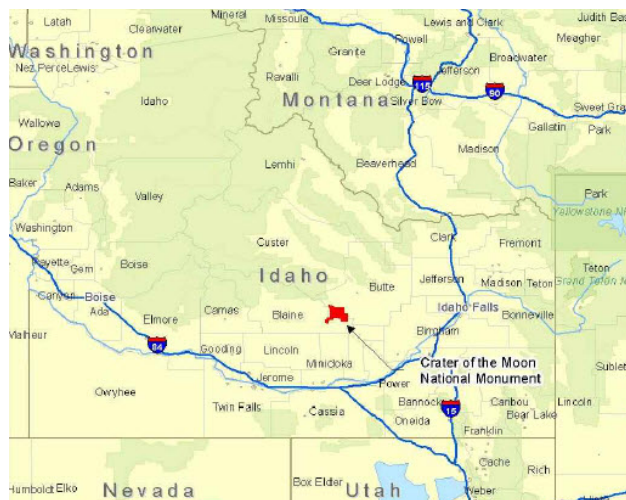
Sally

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# Craters of the Moon National Monument & Preserve *DRAFT*



*Table 1. Blaine, Butte, Minidoka, Power Counties and State of Idaho Economic Snapshot*

## Introduction

The purpose of this paper is to provide information on the economic values and economic contributions of the activities and resources associated with Craters of the Moon National Monument & Preserve (CMNM or Monument). A brief economic profile of Blaine, Butte, Minidoka, and Power Counties, which are in the Snake River Basin of Central Idaho, are also provided.

## Background

CMNM, the first national monument in Idaho, was established by President Coolidge on May 2, 1924 (Proclamation 1694) to preserve its “lunar” landscape thought to resemble that of the Moon. Between 1928 and 1962, four more presidential proclamations were issued, which adjusted the Monument boundary from roughly 25,000 to 53,000 acres. In November 2000, President Clinton issued Proclamation 7373, expanding CMNM from approximately 50,000 acres to nearly 750,100 acres. Proclamation 7373 transferred management of the area’s exposed lava flows from BLM to NPS, and included BLM-managed lands to assure protection for the entire Great Rift volcanic zone, a “remarkable fissure eruption together with its associated volcanic cones, craters, rifts, lava flows, caves, natural bridges, and other phenomena characteristic of volcanic action which are of unusual scientific value and general interest.” In 2002, Congress passed PL 107–213, which re-designated as preserve the approximately 411,475 acres of NPS-managed land added through Proclamation 7373. This designation allows hunting on lands. All BLM lands are open for hunting and fishing.

Within the CMNM boundary are 275,100 acres of BLM land, 465,300 acres of NPS land, 8,200 acres of state land, and 6,600 acres of private land. The CMNM boundary occupies approximately 14% of the area in the five counties. Because the Monument boundary is minimal in Lincoln County (2%), it is excluded from the economic profile provided below. Shoshone-Bannock and Shoshone-Paiute tribes claim the CMNM is within their historic cultural area.

## Public Outreach Prior to Designation

According to newspaper articles published in the early 2000s (prior to expansion), there had been numerous attempts by local boosters to expand the CMNM, most recently in the 1980s. Secretary Bruce Babbitt visited the area in April 2000, meeting with local government officials, permittees, and others to have conversations regarding ways to protect the special volcanic resources found in the area. Babbitt returned to the area to meet with local ranchers in the area the following month and, with their input, mapped out what would become the boundaries of the expansion.

In June 2000, Senator Larry Craig held a Hearing of the U.S. Senate Subcommittee on Forests and Public Land Management in Twin Falls, Idaho. Three panels were convened from a mix of local government officials, environmental organizations, permittees, and others. There were approximately 75 people in attendance. More than 30 people provided oral testimony in addition to the people on the panels. Oral testimony was about split between those testifying for the expanded Monument and those testifying against.

### Craters of the Moon National Monument & Preserve, Idaho

**Location:** Blaine, Butte, Minidoka, and Power Counties, ID

**Managing agencies:** NPS, BLM

**Adjacent cities/counties/reservations:**

- Counties: 2% of Monument area extends into Lincoln County, ID

**Resource Areas:**

- ☒ Recreation ☐ Energy ☐ Minerals
- ☒ Grazing ☐ Timber ☒ Scientific Discovery
- ☒ Tribal Cultural

Measure	Blaine, Butte, Minidoka, Power Counties, ID	Idaho
Population, 2016 <sup>a</sup>	51,972	1,616,547
Unemployment Rate, April 2017 <sup>b</sup>	2.2-3.5%	3.4%
Median Household Income, 2015 <sup>a</sup>	\$37,891-\$60,088	\$47,583

<sup>a</sup>U.S. Census Bureau, 2011-2015 American Community Survey

<sup>b</sup><http://lmi.idaho.gov/publications/2017/LAUS/unemploymentbycounty.pdf>

On the NPS-administered portion of the 2000 monument expansion, the primary public concern was hunting restrictions on the expanded monument lands. The re-designation of this area to national preserve allows hunting, eliminating this concern.

### *Local Economy and Economic Impacts*

As summarized in Table 1, Blaine, Butte, Minidoka, and Power Counties in central Idaho account for approximately 3% of the State's population. Only Blaine County exceeds the State's median household income. All but Power County have

unemployment rates lower than the State. The population of Blaine County has increased substantially over the past 20 years, while Butte County has dropped. Native American population ranges from 0% to just over 4% in these counties.

The USDA Economic Research Service (ERS) has developed a set of county-level typology codes that captures a range of economic and social characteristics. The CMNM counties are classified as follows:

- Farming dependent – Minidoka and Power Counties (farming accounted for 25% or more of the county's earnings or 16% or more of the employment averaged over 2010-2012)
- Recreation dependent – Blaine County (ERS formula based on recreation-related employment, earnings, income, and seasonal housing)
- Manufacturing dependent – Power County (manufacturing accounted for 23% or more of the county's earnings or 16% of the employment averaged over 2010-12)
- No dependence on mining, and no persistent poverty

Socioeconomic conditions in these counties have followed roughly the same pattern as the rest of the U.S. in recent years with a long upward trajectory in personal income and employment, which was interrupted by the 2007-2009 recession. Over time, unearned income (income from investments, rental properties, retirement accounts, etc.) has become an increasingly large source of total income within the five counties, reaching a high of around 45% of all income as of 2009. This implies that the local economy could be enjoying stability that comes with income independent on the labor market, and it corresponds with an aging population. From 1970 to 2000, job growth in services, construction, and retail-related industries outpaced growth in every other economic sector in the region. Services industry jobs increased by a much larger number than did jobs in any other industry during those same years, but since 2000, most sectors' employment numbers have remained fairly steady. At 12.5% in 2012, farm earnings as a percentage of total earnings are quite a bit higher in the five-county region than in the U.S. (1%). In 2007, beef cattle operations comprised nearly 30% of all farm enterprises in the study area.

## Activities and Resources Associated With CMNM

Activities taking place at CMNM include:

- Recreation:** As summarized in Table 2, 255,400 NPS park visitors spent an estimated \$8.9M in local gateway regions while visiting CMNM in 2016. These expenditures supported a total of 139 jobs, \$3.3M in labor income, \$5.3M in value added, and \$10.2M in economic output in local gateway economies surrounding the Monument. Another 3,654 visitors spent \$117,842 on BLM lands, supporting 2 additional jobs and \$78,941 in value added. The average consumer surplus value for the area is \$54.19 per recreational visitor-day, resulting in an estimated \$14M of economic value (net benefits) generated in 2016.<sup>1</sup> The Idaho Fish and Game Commission sets hunting seasons and other regulations for hunting in Idaho. Most of CMNM is within Idaho Fish and Game Hunting Unit 52A. The length of season and number of available controlled-hunt tags vary annually on the basis of wildlife population levels and other factors.
- Energy:** There are no known natural gas or oil deposits within the Monument boundaries. The area has not been formally assessed for energy but a USGS survey on the mineral resource potential of an area that included CMNM noted that “Locating...hypothetical resources (oil and gas) that may underlie the geologically young lava flows of the study area would require extensive geophysical exploration and drilling.”<sup>2</sup>
- Non-Energy Minerals:** There are no known mineral deposits within the Monument boundaries. There was one Free Use Permit in existence in the BLM Monument on the date of Proclamation 7373. Free Use Permits at two sites within the Monument produced 12,750 cubic yards in 1997 and 1,053 cubic yards in 1998. Once the permit expired, it was not re-issued. The Idaho Transportation Department holds three right-of-way grants for five pumice/cinder material sites in the Monument. These right-of-way grants are valid existing rights unaffected by Proclamation 7373. No mineral processing facilities are identified as located close to the Monument.
- Grazing:** NPS administers 465,047 acres (62%) of CMNM. The NPS-administered areas are not available for livestock use. These areas consist primarily of exposed lava flows, which are mostly devoid of available forage and/or inaccessible to livestock. BLM manages livestock grazing on approximately 290,000 acres (including BLM, private, and state lands) in the Monument. Of the 275,100 acres managed by BLM, 273,900 (99.6%) are available for livestock grazing. Current permitted Animal Unit Months (AUMs) within the Monument total 36,965. Grazing is managed by three different BLM field offices and data on billed AUMs provided by BLM includes AUMs billed on allotments that do not fall within Monument boundaries. In FY 2016, there were 51,386 billed

Table 2. Estimated Economic Contributions, 2016

Activities	Value added (net additions to GDP), \$ millions	Employment supported (number of jobs)
Recreation*	\$5.3M	139
Grazing	Grazing value-added is not available	94
Cultural resources	Unquantifiable; some values would be included in recreation	Unquantifiable; some values would be included in recreation

\*Source: National Park Visitor Spending, <https://www.nps.gov/subjects/socialscience/vse.htm>. Recreational visits are based on counts at the main entrance off Highway 20/26 and overnights are at the NPS campground in the park.

<sup>1</sup> Recreation unit value is a survey-based value for general recreation for the Intermountain region from the USGS Benefit Transfer Toolkit <https://my.usgs.gov/benefit-transfer/>. Economic value is the net benefit to recreational users (total benefits minus total costs).

<sup>2</sup> Mineral Resource Potential of the Great Rift Instant Study Area Blaine, Butte, Minidoka, and Power Counties, Idaho <https://pubs.usgs.gov/mf/1462-B/report.pdf>

AUMs between the three field offices of which an estimated 14,650 are attributed to the Monument. It is estimated that this level of grazing is associated with economic output of approximately \$7.0 million and supports around 94 jobs.<sup>3</sup> Direction contained in the CMNM Management Plan prohibits new livestock developments in the North Laidlaw Park pasture and Bowl Crater allotment. The Shoshone Field Office recently released a Proposed Plan Amendment that analyzes alternatives for livestock grazing management on BLM managed lands. The Proposed Plan includes minor changes to the total number of AUMs permitted in the Monument.

- **Timber:** None. This area is not conducive to timber production.
- **Scientific Investigation:** Scientific research in the CMNM is diverse and includes ongoing investigations of the geology and kipukas (isolated vegetation communities surrounded by lava). The CMNM focuses interpretive and educational programs on geology, the prehistoric and historic value of the park, ecosystems, and adaptation.
- **Tribal Cultural Resources:** The archaeological record indicates members of the Shoshone-Bannock tribes and their ancestors spent considerable time at CMNM. A small amount of subsistence hunting occurs by members of the tribes. NPS reports that tribal access is good, and members appear to come to CMNM on a regular basis.

(b) (5) DPP [REDACTED] Quantitative data regarding mineral extraction, subsistence activities, and cultural uses are not available.

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<sup>3</sup> BLM data.





# Upper Missouri River Breaks National Monument

Economic Values and Economic Contributions

*DRAFT*



Upper Missouri  
River Breaks  
National  
Monument

## Introduction

The purpose of this paper is to provide information on the economic values and economic contributions of the activities and resources associated with Upper Missouri River Breaks National Monument (UMRBNM).<sup>1</sup>

## Background

The Upper Missouri River Breaks National Monument, designated in 2001, spans 374,663 in Blaine, Fergus, Phillips and Chouteau counties in Montana. The Monument contains a number of biological, geological, and historical objects, and a number of tribes that inhabited the area prior to the American westward expansion have an interest in the area.

### Upper Missouri River Breaks National Monument

Location: Blaine, Fergus, Phillips and Chouteau counties, MT

Managing agency: BLM

Adjacent towns: Fort Benton, Big Sandy

Tribal land: Fort Belknap Reservation, Rocky Boy's Reservation

#### Resource Areas:

☒ Recreation ☒ Energy ☐ Minerals

☒ Grazing ☐ Timber ☒ Scientific Discovery

☒ Tribal Cultural

## Local Economy and Economic Impacts

Collectively the population of the four counties on which the Monument is located (Blaine, Fergus, Phillips, and Chouteau) make up about 3% of the population of the State of Montana. Nearly half of the population of Blaine County, in which the majority of the Fort Belknap Reservation is located, and around 20% of Chouteau County, where part of the Rocky Boy's Reservation is located, is Native American. The four counties on which the Monument is located have recently experienced relatively low unemployment rates (ranging from 2.9% to 3.5% in May 2017), the adjacent reservations have substantially higher unemployment rates (7.8% in Ft. Belknap and 9.7% in Rocky Boy's in May 2017). Median household incomes for the four counties are somewhat lower than that of the State, ranging from \$36,071 to \$40,881 in 2015. The median household incomes of Native Americans in Blaine and Chouteau counties are substantially lower, ranging from \$20,078 to \$26,364.<sup>2</sup>

## Activities and Resources

Information on the economic contributions associated with the activities occurring at Upper Missouri River Breaks National Monument are provided below.

- **Recreation:** UMRBNM hosts a variety of recreation opportunities including hiking, camping, hunting, fishing, boating, horseback riding, mountain biking, and off-highway vehicle riding. In addition, commercial recreation activities are permitted for hunting, fishing, and scenic and interpretive tours. In FY2016, the visitation level of 46,342 visitors was associated with approximately \$1.3 million in value-added and \$2.4 million in economic output and supported approximately 32 jobs.
- **Energy:** The monument includes about 396,000 acres of federal minerals. While the Monument designation closed the area to new oil and gas leases, those with valid existing rights are allowed to continue operation subject to lease stipulations.

<sup>1</sup> The BLM provided data used in this paper.

<sup>2</sup> All population and income data are 2015 estimates from the 2011-2015 American Community Survey 5-Year Estimates, US Census Bureau



- **Coal.** There have been no commercial coal developments in the Monument area.
- **Oil and gas.** Historically, the majority of oil and gas exploration activity in the Monument area has been for natural gas. Oil in commercial quantities is not present within the monument.<sup>3</sup> The production of natural gas occurs on Monument land. Production levels of 27,314 mcf of natural gas in FY2016 are associated with about \$0.03 million in value-added and \$0.09 million in economic output, and supported about 1 job.
- **Non-fuel minerals.** No locatable mineral production occurs within the Monument. USGS survey reports of the area found deposits containing copper, lead, zinc, zeolites, uranium, niobium, zirconium, thorium, titanium, sulfur, tantalum, beryllium, lanthanum, cerium, and vermiculite, but estimates these occurrences to be unrecoverable and marginal in value. There are no existing leases or mining claims for solid leasables and no active pit or quarry sites located on the Monument.<sup>4</sup>
- **Timber.** There is no commercial timber production on the Monument both pre- and post-designation.
- **Grazing.** In FY2016, there were 45,829 permitted Animal Unit Months (AUMs), of which 39,950 were billed. This level of billed AUMs is associated with approximately \$10 million in economic output and supported approximately 105 jobs. Although grazing levels have varied considerably from year to year due to factors such as drought, no reductions in permitted livestock grazing use have been made as a result of the Monument designation.<sup>5</sup>
- **Tribal cultural, archeological, and historic resources.** Archaeological surveys carried out to date reveal concentrated use of the UMRBNM, primarily along the Upper Missouri Wild and Scenic River. Other areas of note include artifacts and sites associated with Native American hunting activity. Hundreds of recorded sites include rock art panels, occupation sites, campsites, hunting impoundments and drive lines. Cultural landscapes associated with the Lewis & Clark National Historic Trail and the Nez Perce National Historic Trail remain intact. Landscapes associated with steamboats and later exploration, as well as settlement associated with homesteading and other agricultural settlement still exist as well. As of April 25, 2017, there are 439 recorded cultural sites within the UMRBNM; at this time twenty-two percent of the Monument has been surveyed. Seven tribes in and around Montana have interest in the UMRBNM; none are resident. Lewis & Clark noted the presence of tribes in the area; the 1855 Lane Bull Treaty at Council Island had representatives from Piegans, Bloods, Gros Ventres, Blackfeet, Nez Perce, Salish, and Cree.

(b) (5) DPP

### *Land Management Tradeoffs*

This section presents some information to help understand land management tradeoffs. Decision-making often involves multiple objectives and the need to make tradeoffs among those objectives. However, tradeoffs and decision making are often subject to constraints, such as Monument designations. In general, market supply and demand conditions drive energy and minerals activity; societal preferences and household disposable income affect recreation activity levels; and market prices and range conditions affect the demand for forage. Culturally important sites and unique natural resources, by definition, have

<sup>3</sup> BLM data.

<sup>4</sup> BLM data.

<sup>5</sup> BLM data.

limited or no substitutes. A particularly challenging component of any tradeoff analysis is estimating the nonmarket values associated with UMRBNM resources, particularly the nonmarket values associated with cultural and scientific resources.

Planning for permitted resource use on National Monuments will involve trade-offs among different activities on the land area being managed in order to allow permitted activities that are compatible with monument objects. Once designated, National Monuments continue to be managed under the multiple use mandate outlined in the Federal Land Policy and Management Act of 1976. In some cases, certain areas of the Monument may be appropriate for more than one use. After the careful consideration of tradeoffs, management decisions in those cases may prioritize certain uses over others. In other cases, land areas may be more appropriate for a particular use and activities could be restricted to certain areas of the Monument. These decisions are based upon whether a use is compatible with the designation. Factors that could inform these tradeoffs include demand for the good or activity, prices, costs, and societal preferences. Other considerations might include the timeframe of the activity - how long the benefits and costs of a given activity would be expected to extend into the future. Trust responsibilities and treaty rights should also be considerations.

In considering any trade-offs, it is not just the level and net economic value associated with an activity that occurs in a given year that is relevant to decision making. Virtually all activities within the Monument occur over time and it is the stream of costs and benefits over a given period of time associated with each activity that is relevant. For example, recreation activities could continue indefinitely assuming the resources required for recreation remain intact and of sufficient quality for individuals to remain interested in the activity. Likewise, the values associated with the natural and cultural resources could continue indefinitely provided they are not degraded by other activities (and assuming preferences do not change). Grazing could also continue indefinitely as long as the forage resource is sustainably managed and remains consistent with the protection of monument objects. Timber harvest may also continue indefinitely as long as the timber resource is sustainably managed. The stream of costs and benefits associated with some other non-renewable resources would be finite, however (assuming these activities were consistent with the designation). For example, oil, gas, coal and minerals are all non-renewable resources and would only be extracted as long as the resource is economically feasible to produce.

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*DRAFT – July 14, 2017 – values, figures, and text are subject to revision*

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