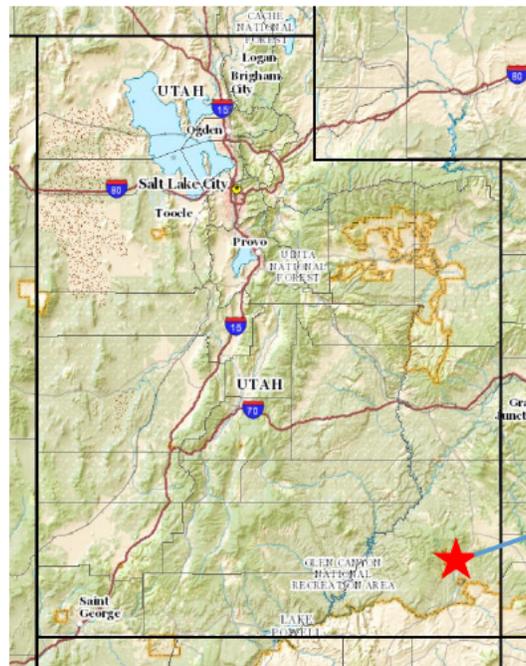




# Bears Ears National Monument

## Economic Values and Economic Contributions



Bears Ears  
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 Bears Ears National Monument (BENM or the Monument), as well as to provide a brief economic profile of San Juan County, Utah (UT).<sup>1</sup>

## Background

The Bears Ears National Monument was established by President Obama on December 28, 2016 (Proclamation 9558), and is jointly managed by the Bureau of Land Management (BLM) and the USDA Forest Service (FS). The Monument encompasses 1.35 million acres of land in San Juan County, UT, and was established for the purposes of protecting lands that contained cultural, prehistoric, historic, geologic, and scientific resources, including objects of archaeological significance. Prior to establishment of the Monument, all lands within the Monument boundaries were Federal lands managed by Bureau of Land Management (BLM, Monticello Field Office) and the USDA FS (USDA FS, Manti-La Sal National Forest), with the exception of about 100,000 acres of land owned by the State of Utah (managed by the Utah School and Institutional Trust Lands Administration (SITLA) and smaller private parcels.<sup>2</sup> Of the BLM and USDA FS acreage, 57% was managed with some level of protective designation under the existing land use plans as Natural Areas, Areas of Critical Environmental Concern, and Special Recreation Management Areas; or as designated Wilderness Study Areas. There have been several previous proposals to protect land in the Bears Ears area varying in terms of land use designations, the number of acres protected, and restrictions on land use.<sup>3</sup>

### Bears Ears National Monument

**Location:** San Juan County, UT  
**Managing agencies:** BLM, USDA FS  
**Adjacent communities, Tribal, and Federal land:** Bluff, UT; Blanding, UT; Monticello, UT; Navajo Nation  
**Resource Areas:**  
 Recreation  Energy  Minerals  
 Grazing  Timber  Scientific  
Discovery  Tribal Cultural

<sup>1</sup>The BLM and USDA Forest Service provided data used in this paper.

<sup>2</sup>SITLA serves as fiduciary of Utah's 3.4 million acres of trust lands, parcels of land held in trust to support 12 state institutions, primarily the K-12 public education system. SITLA is constitutionally mandated to generate revenue from trust lands to build and grow permanent endowments for these institutions. Utah's public school system is the largest beneficiary, holding 96% of all Utah trust lands. A May 2017 SITLA land auction included a 1,120 acre parcel within BENM, the Needles Outpost, which sold for \$2.5 million, or \$2,232 per acre (<https://trustlands.utah.gov/land-auction-earns-3-million-for-public-schools/>).

Economic activities occurring on SITLA land in the area are similar to those on adjacent Federal land, including visitation to prominent cultural resource sites and livestock grazing. Different rules apply to grazing on SITLA land versus Federal land, such as allowing SITLA to post expiring permits on the agency's website, establish 15 years as the maximum length for grazing permits, and set a fee of \$10/Animal Unit Month (AUM) when permits are assigned. The 2016 BLM grazing fee was \$2.11/AUM. The Forest Service grazing fee was \$2.11/Head Month (HM). AUMs and HMs are treated as equivalent measures for fee purposes.

<sup>3</sup> Proposals to protect land in the Bears Ears area date back over 80 years. In 2015, the "Inter-Tribal Coalition for Bears Ears" proposed establishing a 1.9 million acre National Monument. Utah Congressmen Rob Bishop and Jason Chaffetz proposed establishing two National Conservation Areas (NCAs, which are designated by Congress)—Bears Ears and Indian Creek—totaling 1.3 million acres as part of their Public Lands Initiative (PLI). In contrast to the Inter-Tribal Coalition's proposal, the PLI did not specify that all areas were to be withdrawn from future mineral development, placed a restriction on decreasing grazing permits in one of the proposed NCAs, and placed restrictions on Federal negotiations with the State of Utah for land exchanges for State-owned land within the proposed boundaries.

Native Nations organizations (including the Hopi, Navajo, Uintah and Ouray Ute, Ute Mountain Ute, and Zuni and Native Americans representing the Utah Diné Bikéyah (UDB)) have been working collaboratively with all parties to protect the Bears Ears landscape for more than five years.

In 2011, Navajo President Ben Shelley met with former Interior Secretary Ken Salazar and requested a national monument proclamation. In April 2013, the Navajo Nation and UDB submitted a proposal to the county for the creation of a Bears Ears National Conservation Area, to be co-managed by Tribes. Between 2013 and 2015, the Tribes indicated they made four visits to Washington, DC, meeting with two Utah Congressmen and their staff. In July 2015, the Bears Ears Inter-Tribal Coalition was formed, led by Hopi, Navajo, Uintah and Ouray Ute, Ute Mountain Ute and Zuni Tribes and supported by 25 other Tribes. According to the October 2015 Inter-Tribal Coalition Proposal, UDB "...interviewed and surveyed thousands of people; held eight Town Hall meetings; obtained over 15,000 statements of support; held five annual gatherings of Tribes at Bears Ears to discuss land protection strategies; interviewed dozens of elders and medicine men; developed sophisticated GIS data and many maps displaying that data; and obtained 24 resolutions of support from many Navajo chapter houses and Tribes".

The Monument management plan has not yet been drafted. Development of a management plan is anticipated to require five years and involve extensive public involvement.<sup>4</sup> The Presidential Proclamation established the Bears Ears Commission, consisting of one elected official each from five different Tribes (Hopi Tribe, Navajo Nation, Ute Mountain Ute Tribe, Ute Indian Tribe of the Uintah Ouray, and Zuni Tribe). The Commission is to work with the Federal government to provide guidance and recommendations on the development and implementation of management plans and on management of the Monument. The Proclamation also requires a Monument Advisory Committee (MAC) be established according to the Federal Advisory Committee Act (FACA) regulations. In addition, DOI sought to enter into a MOU with the State of Utah to negotiate the exchange of state land within the Monument boundaries for other BLM land outside the Monument.

### *Public Outreach Prior to Designation*

A public meeting was held in Bluff, UT in July 2016. The meeting was hosted by former Secretary of the Interior Sally Jewell and former USDA Under Secretary for Natural Resources and Environment Robert Bonnie for the purposes of hearing about community visions for the management of public lands in Southeastern Utah. Over 1,500 individuals attended, including representatives from DOI, the Department of Agriculture (USDA), tribes, members of the Utah congressional delegation, and Utah state legislature. In addition, almost 600 written comments were submitted, the majority of which were in favor of the Monument designation.<sup>5</sup> During their visit to Utah, Jewell and Bonnie also toured various sites in the Southeastern Utah alongside stakeholders and land managers to better understand local views related to the area's public lands.<sup>6</sup>

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<sup>4</sup>Land management plans are developed in compliance with the Federal Land Policy and Management Act (FLPMA) and NEPA regulations, the National Forest Management Act (NFMA), and the Forest Service 2012 Planning Rule.

<sup>5</sup>Fast Facts and Q&A about the Bears Ears National Monument Designation, BLM.

<sup>6</sup>DOI Press Release, 7/18/2016 <https://www.doi.gov/pressreleases/secretary-jewell-under-secretary-bonnie-join-utah-local-leaders-public-meeting-hear>

### *Local Economy and Economic Impacts*

Table 1 presents socio-economic metrics for San Juan County and the State of Utah. The County contains roughly 0.5% of the State's population. The population of the County increased about 5% from 2000 to 2015. Nearly half of the population of the county is Native American. The median household income of Native Americans in San Juan County is over 40% lower than that of the total county population (see Table 1). The County has historically experienced higher levels of unemployment and lower levels of median household income in comparison to the State.

The San Juan County economy is dependent upon recreation-based or tourism-based businesses.<sup>7</sup> The accommodation and food services industry is the largest sector by employment, accounting for about 30% of total employment in the county (see Figure 1).<sup>8</sup>

### *Activities and Resources Associated With Bears Ears National Monument*

Information on the economic contributions associated with the activities occurring at Bears Ears National Monument, as well as resources within the Monument, is provided below. Table 2 provides estimates of the economic contributions of activities associated with BENM. Additional information on the difference between economic contribution and economic value is provided in the Background and Overview materials.

- **Recreation:** Annual recreation visitation data for FY 2001-2016 is available for the BLM Monticello Field Office. About 60 percent of the area formerly under the jurisdiction of the Field Office represents the area included in the BENM. This area receives the vast majority of recreation use on BLM managed lands within the Field Office boundary. Recreation visits increased steadily from an estimated 111,000 in FY 2001 to about 419,000 in 2016 (see Figure 2).<sup>9</sup> In comparison, visitation to National Monuments and National Conservation Areas (NCAs) that have tracked unit-level visitation since 2005 has grown at an average rate of about 5.4% per year. Annual recreation visits to the Manti-La Sal National Forest, part of which is now within BENM boundaries, are estimated to number around 350,000. USDA FS estimates that around 35,000 visits are to the area that is now contained within Mounument boundaries.

Recreation activities provide the opportunity for economic activity to be generated from tourism for an indefinite period of time. The economic contributions occur annually, and in cases where visitation increases over time, recreation generates additional activity each year. These contributions affect the regional and state economies. Recreation activities based on visitation to BLM-managed land are estimated to contribute about \$23 million in value added (net economic contributions) and support 463 jobs;<sup>10</sup> these could be considered conservative estimates for the Monument area as a whole, as they do not include the impacts of visitation to USDA FS-managed

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<sup>7</sup>Approved Resource Management Plan for Monticello Field Office, 2008

<sup>8</sup>U.S. Census Bureau County Business Patterns, 2015

<sup>9</sup>The BLM utilizes the Recreation Management Information System (RMIS) to report visitation. The RMIS, implemented in 1984, is the agency's official system of record for recreation information relating to recreation visitation, permits, and partnerships. Visitation information is based on the best available collection tools and data. Providing definitive visitation information at each National Monument is difficult to quantify, given the numerous factors influencing visitation and collection of visitor information data. Federal land managers are continually improving the methodology and technological resources for visitation reporting.

<sup>10</sup>Draft Regional Economic Contributions of National Monuments and National Conservation Areas, BLM, 2016.

land. Including the estimated 35,000 annual visits to the USDA FS-managed land, recreation activities based on visitation to all land within Monument boundaries are estimated to contribute about \$27 million in value added and support 473 jobs<sup>11</sup>; the values should be considered an upper bound as there may be some double-counting between visits to BLM-managed and to USDA FS-managed land.

The value of recreation opportunities and experiences is different from the economic activity supported by visitors to the Monument. Recreationists place a value on characteristics of a site, including non-marketed ones (e.g., dark skies, quiet, scenic views), over and above their expenditures to visit the site (this is referred to as consumer surplus). Using an average consumer surplus unit value of \$54.19 per person per day, the estimated economic value (net benefits) generated in 2016 was \$22.7 million to \$24.6 million.<sup>12</sup> As one of the most intact and least roaded areas in the contiguous United States, the Monument provides iconic western viewsheds along with opportunities to experience solitude, natural soundscapes, absolutely black night skies, and wilderness values.

- **Energy:** In general, the scope, magnitude, and timing of energy and minerals activities are closely related to supply and demand conditions in world markets and the market prices of mineral commodities. Local or regional cost considerations related to infrastructure, transportation, etc. also may play a role in defining the supply conditions. To date, energy development on the Monument has been limited. The total value or amount of energy or mineral production forgone as a result of the designation cannot be determined. For more information, see the Background and Overview materials.
  - **Coal:** There have been no coal developments in the Monument area. Furthermore, there is very little, if any, prospectively valuable coal within the Monument boundaries, based on the energy and mineral resource assessment conducted for BENM. Coal deposits, as surveyed by the USGS, lie almost entirely to the east of the Monument.<sup>13</sup>
  - **Oil and gas:**
    - There are currently no producing oil and gas wells within the Monument. USGS assessments indicate a high level of potential for oil and gas for an assessment unit that includes the Monument boundaries, though it is not scientifically valid to statistically assign energy resource numbers in an assessment unit to a specific area.<sup>14</sup> The upper northeast panhandle of BENM lies within the boundaries of the Moab Master Leasing Plan (approved in December 2016) and portions of the southeastern and southcentral areas of the Monument were included in a proposed San Juan Master Leasing Plan.<sup>15</sup>

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<sup>11</sup>USDA FS data.

<sup>12</sup>The consumer surplus unit value is a survey-based value for general recreation in the Intermountain region from the USGS Benefit Transfer toolkit (<https://my.usgs.gov/benefit-transfer>). This unit value was applied to FY 2016 visitation estimates, which range from 416,000 to 454,000 visits, to derive an estimate of economic value. Economic value is the net benefit to recreational users (total benefits minus total costs).

<sup>13</sup>BLM Information Memo “Cursory Review of the Mineral Potential/Occurrence within the Bears Ears NM” from Larry Garahana, Geologist, January 31, 2017

<sup>14</sup>The Monument area is within a USGS Energy Assessment Unit (AU) and has historic uranium mining activity (the Monument is within 2 conv. AUs and 1 cont. AU, Paradox Basin Province (315 MMBO, 999 BCF, 18 MMBNGL) <https://pubs.usgs.gov/fs/2012/3031/>

<sup>15</sup>Master Leasing Plans (MLPs) establish a framework for determining which areas are appropriate for responsible exploration and development of minerals while protecting the area’s conservation resources. MLPs also provide

Approximately 63,600 acres within the proposed San Juan Master Leasing Plan planning area have been nominated for leasing since 2014. All of these lease nominations were deferred due to existing land use plan decisions and potential adverse impacts on cultural resources.

- There are currently 23 existing federal oil and gas leases that are partially or wholly contained within the Monument boundaries on BLM-managed lands, with lease authorizations spanning the period from 1972 to 2012. Currently, there are no authorized or pending applications for permit to drill (APDs) associated with these leases. No oil and gas wells have been drilled on existing leases since 1993 and all wells within Monument boundaries have been plugged. Of the 250 wells that have been drilled since 1920, only three wells have produced economical quantities of oil and gas. The last producing well was drilled in 1984 and ceased production in 1992.
- **Uranium:** While there are no active mining operations on USDA FS-managed land, there are 78 active unpatented mining claims for uranium. The uranium ore in the Manti-La Sal National Forest is low grade, affecting the ability of the local industry to compete economically on the world market.<sup>16</sup> Uranium prices are volatile and, though currently higher than historical prices, have been trending downward since peaking in 2008.<sup>17</sup>
- **Non-Energy Minerals:**
  - **Sand and gravel:** There is one commercial minerals materials mining site within Monument boundaries on BLM-managed land that produces sand and gravel. The permit for this site was renewed in March, 2016 for a 10-year period. Production is limited to a maximum of 200,000 cubic yards over the life of the 10-year permit, and designation of the Monument does not affect the limits on production.<sup>18</sup>
  - **Potash:** While USGS surveys have assessed potential for potash in the northeastern panhandle of BENM (an area within the boundaries of the Moab Master Leasing Plan prior to designation), no sites in this area were identified as Potash Leasing Areas in the most recent Moab Master Leasing Plan (2016). BLM has denied all potash prospecting permit applications received from 2008 to 2015, primarily because they were inconsistent with protection of multiple resource values use (such as natural or cultural use) in the area.<sup>19</sup>

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direction for resolving resource conflicts, protecting important conservation resources, and supporting outdoor recreation and other activities that benefit local communities and public land visitors. For additional information on the Moab MLP see <https://eplanning.blm.gov/epl-front-office/eplanning/planAndProjectSite.do?methodName=dispatchToPatternPage&currentPageId=99717>.

<sup>16</sup>Manti-La Sal National Forest Land and Resource Management Plan, 1986.

<sup>17</sup><https://www.eia.gov/uranium/marketing/>

<sup>18</sup>Supply and demand conditions determine how much is produced annually within the overall limit on production.

BLM receives a royalty of \$1.08 per cubic yard (\$0.66 per ton) of mineral production. The national average price for sand and gravel used in construction in 2016 was \$8.80/metric ton

(<https://minerals.usgs.gov/minerals/pubs/commodity/sand & gravel construction/mcs-2017-sandc.pdf>).

<sup>19</sup>Potash production depends largely on market forces. U.S. consumption of potash was down in 2016 owing to a drop in agricultural use in the first half of the year and lower industrial usage, primarily in oil well-drilling mud additives. The world potash market in 2016 was marked by weak demand in the first half of the year, mainly in China and India, the largest consumers of potash. This excess supply resulted in lower prices, and reduced production. The average price of potash in 2016 was \$360 per ton.

- **Other locatable minerals:** There are 266 mining claims on BLM-administered lands inside BENM. There are no active operations associated with these claims. Based on historic mining activity in the region, many of these claims may be associated with uranium. However, BLM does not require claimants to identify the mineral claimed.
- **Timber:** Timber harvest activities such as non-commercial Christmas tree cutting and collection of wood for posts and firewood are allowed by permit on both BLM and USDA FS-managed land. For BLM-managed lands, no information is available on the level of magnitude of these activities strictly within Monument boundaries, however within the boundaries of the Monticello Field Office the total estimated value of permit sales for harvesting firewood, wooded posts, and Christmas trees was about \$12,000 in FY 2016.<sup>20</sup> There have not been any recent commercial timber activities on USDA FS-managed land.
- **Grazing:** The allotments that are wholly or partially contained within the boundaries of BENM include 50,469 permitted Animal Unit Month (AUMs)<sup>21</sup> on BLM-managed land and 11,078 AUMs permitted on USDA FS-managed land. Figure 3 shows the number of AUMs billed by BLM annually over 2012-2016. In 2016, there were about 36,400 billed AUMs on BLM-managed land and about 9,700 billed AUMs<sup>22</sup> on USDA FS-managed land.
- **Resource Values:** Monument designation is intended to protect historic landmarks, historic and prehistoric structures, and other objects of historic and scientific interest. In general, these resources are valued by society, but those values are not bought or sold in the marketplace and therefore, difficult to quantify. Below is a brief overview of the natural, cultural, and scientific features identified in the Proclamation that the designation is intended to protect:
  - **Tribal Cultural Resources:** Indigenous communities may utilize natural resources to an extent and in ways that are different from the general population, and the role that natural resources play in the culture of these indigenous communities may differ from that of the general population. Culturally important sites and unique natural resources, by definition, have limited or no substitutes. Recognizing this is a critical consideration in land management because it may affect consideration of tradeoffs. Activities currently undertaken by tribal members include hunting, fishing, gathering, wood cutting, and the collection of medicinal and ceremonial plants, edible herbs, and materials for crafting items like baskets and footwear.
  - **Cultural (Historic and Archaeological) and Paleontological Resources:** According to the Utah State Historic Preservation Office, as of Feb. 6, 2017, there are 8,480 recorded archaeological sites and four archaeological districts within BENM. The following archaeological districts are either completely within or partially within BENM: Butler Wash, Grand Gulch, Natural Bridges, and the Salt Creek Archaeological District. More than 70 percent of the sites are prehistoric (pre-dating the 1800s). These prehistoric sites include

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<sup>20</sup>This does not necessarily represent a market value.

<sup>21</sup>BLM measures an AUM as the amount of forage needed to sustain one cow and her calf, one domestic horse, or 5 sheep or goats for one month <https://www.blm.gov/programs/natural-resources/rangelands-and-grazing/livestock-grazing/fees-and-distribution>.

<sup>22</sup>USDA FS billed 7,335 Head Months in 2016, which were converted to AUMs using a conversion factor of 1.32.

pottery and stone tool (lithic) scatters, the remains of cooking features (hearths), storage features such as adobe granaries and subsurface stone lined granaries, prehistoric roads, petroglyphs, pictographs and cliff dwellings. The remaining sites are historic and include debris scatters, roads, fences, and uranium and vanadium mines from World War II and the Cold War. About 9% of the BLM-managed portion of BENM has been surveyed for cultural resources.

The USDA FS-managed portion of BENM includes 2,725 known cultural sites and features an area containing over 2,027 Puebloan sites, most of which are Pueblo I. The Pueblo I culture is limited to only a few locations and the USDA FS-managed portion of BENM contains the only high elevation communities of this era. These sites include hunting camps and blinds, ceremonial sites, granaries, stone quarries, villages and residences, agricultural systems, kilns, rock art, and shrines, as well as protohistoric sweat lodges and hogans. Only 15-20% of the USDA FS-managed portion of BENM has been surveyed for cultural resources.

In addition, the Monument contains rich paleontological resources with many sites teeming with fossils, providing the opportunity for research that is revealing new insights into the transition of vertebrate life from reptiles to mammals and from sea to land.

- **Scientific Investigation:** The diversity of the soils and microenvironments in the Monument area provide habitat for a wide variety of vegetation, including populations of rare endemic plants and animals.

### *Land Management Tradeoffs*

Managing land for multiple use requires the consideration of a variety of users, resource needs, and legal requirements, among others. Not all of the competing uses are compatible with one another. Regardless of designation, legal authorities would continue to apply, including the American Indian Religious Freedom Act (42 U.S.C. 1996) and Executive Order 13007 of May 24, 1996 (Indian Sacred Sites). See the Background and Overview materials for more information on tradeoff considerations.

Prior to designation, BLM tracked the number of visits to the Kane Gulch ranger station that served the southern end of the Monument. The number of visits to this ranger station in March and April of 2017 was more than 50% higher than the average visitation during the same months of the four previous years. An increase in visitation to the area of the Manti-La Sal National Forest within the Monument has also been locally observed since designation.<sup>23</sup> The Proclamation does not affect existing laws, regulations, and policies followed by the USDA FS or the BLM associated with timber activities, allowing for the continuation of all pre-designation timber activities as well as the continuation of all pre-designation grazing activities, including maintenance of stock watering facilities. Valid existing rights for minerals are also protected under the Proclamation, so development on those existing leases could occur if it is determined to be economic.

In the 2008 update to the Resource Management Plan for the Monticello Field Office, 60% of which is now BENM, an alternative emphasizing commodity development was considered but not selected due to its adverse impacts on wildlife and recreation opportunities, which includes visits for cultural purposes. This alternative was determined to be insufficient to protect all the important and sensitive resources

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<sup>23</sup>USDA FS data.

within the planning area. Likewise, an alternative emphasizing protection of the area's natural and biological values was not selected in part due to the restrictions it placed on recreation permits and opportunities, which would have resulted in negative economic impacts on local businesses.

(b) (5)

A comprehensive evaluation of tradeoffs would require a significant amount of research and additional analysis. For example, mineral and archeological surveys could be updated and completed for the entire Monument. For the near term, however, existing information can be summarized as indicating that: significant cultural resource values are present; the last producing oil or gas well was drilled in 1984; and recreation use has been increasing over this same period.

Table 1. State and County Economic Snapshot

	San Juan	Utah
Population, 2016 <sup>a</sup>	15,152	2,903,379
Native American % of population <sup>a</sup>	47.0%	1.1%
Employment, December 2016 <sup>c</sup>	2,299	1,187,682
Unemployment rate, March 2017 <sup>b</sup>	7.0%	3.1%
Median Household Income, 2015 <sup>a</sup>	\$41,484	\$60,727
Native American Median Household Income, 2015 <sup>a</sup>	\$24,132	\$36,428

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

<sup>b</sup> <http://www.jobs.utah.gov/wi/pubs/une/season.html>.

<sup>c</sup> Bureau of Labor Statistics

Table 2. BENM Estimated Economic Contributions, 2016

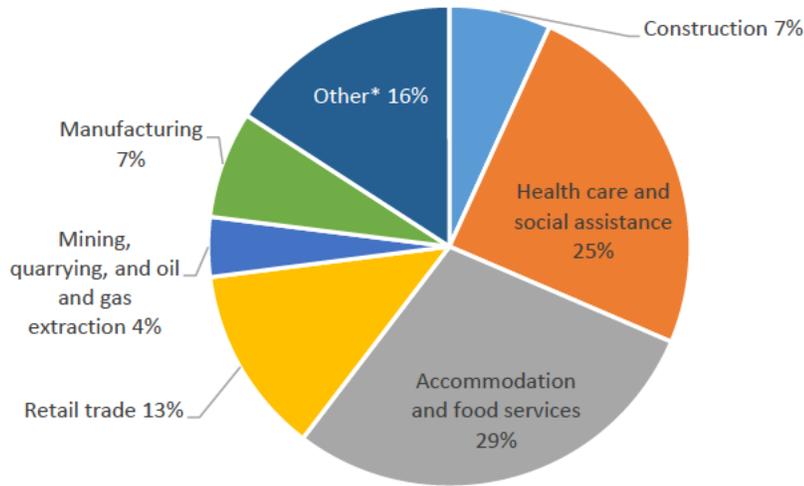
Activities	Economic output (\$ millions)	Value added (net addition to GDP, \$ millions)	Employment supported (number of jobs)
Recreation <sup>a</sup>	\$41.3-\$44.8	\$23.0-\$24.9	463-501
Non-energy Minerals <sup>b</sup>	\$0.4	\$0.2	2
Grazing <sup>c</sup>	\$7.2-\$9.5	Not available	161-210
Cultural Resources	Not available; some values would be included in recreation		

<sup>a</sup>Draft Regional Economic Contributions of National Monuments and National Conservation Areas, BLM, 2016; USDA FS data.

<sup>b</sup>BLM data.

<sup>c</sup>BLM data; USDA FS data.

Figure 1. Percent of employment by sector in San Juan County, 2015



\*Other includes agriculture/forestry; utilities; wholesale trade; finance and insurance; real estate; professional, scientific and technical services; admin and support services; waste management; educational services; arts and entertainment; and transportation and warehousing. Each of these represents less than 4% of total employment. While this data source covers most NAICS industries, it excludes crop and animal production; rail transportation; National Postal Service; pension, health, welfare, and vacation funds; trusts, estates, and agency accounts; private households; and public administration. Most establishments reporting government employees are also excluded.  
 Source: 2015 County Business Patterns, U.S. Census Bureau.

Figure 2. Recreation Visits to BLM Monticello Field Office, 2001-2016



Figure 3. BLM AUMs Billed, 2012-2016

