

Public Comments Processing
Attn: DOI-2017-0002-0001

Department of the interior
Monument Review, MS-1530, U.S.
Department of the Interior, 1849 C Street NW
Washington, DC 20240.

Re: David H. Smith Conservation Fellows Comment Opposing “*Review of Certain National Monuments Established Since 1996*”

Dear Secretary Zinke,

Thank you for the opportunity to comment on the proposed “Review of Certain National Monuments Established Since 1996”. We are a group of David H. Smith conservation fellows; as conservation scientists we value the protection of national landscapes for historic, cultural, scientific, and conservation value, and we submit this comment to assist you in the review process. We believe that all 27 National Monuments currently proposed for review were appropriately designated or expanded in accordance to Antiquities Act of 1906, are important to our work as scientists, and should remain at their current size and designation as National Monuments.

Briefly, we provide evidence and support that the National Monuments proposed for review meet the following three of seven criteria under consideration: (criteria i) the requirements and original objectives of the Act, including the Act’s requirement that reservations of land not exceed “the smallest area compatible with the proper care and management of the objects to be protected”; (criteria ii) whether designated lands are appropriately classified under the Act as “historic landmarks, historic and prehistoric structures, [or] other objects of historic or scientific interest”; and (criteria iv) the effects of a designation on the use and enjoyment of non-Federal lands within or beyond Monument boundaries.

We believe that all 27 of the National Monuments currently proposed for review were appropriately designated or expanded in accordance to the Antiquities Act of 1906. This Act was introduced and passed through Congress with bipartisan support, and was championed by Republican president Theodore Roosevelt. The purpose of the Antiquities Act is to protect America’s premier historical, cultural, and scientifically-important sites. Since the Act’s establishment, 16 of the 20 subsequent presidents have designated or expanded 157 national Monuments, amounting to nearly 850 million protected acres. Each of the 22 terrestrial Monuments (proposed for review under executive order 13792) and 5 marine Monuments (proposed for review under executive orders 13795 and 13792) represent “historic landmarks, historic and prehistoric structures, [or] other objects of historic or scientific interest,” as stated in the Act. The 27 newest designations and

expansions that you are reviewing continue in this rich history of protection of America's greatest and most valuable landscapes.

National Monuments protect our country's iconic landscapes, from California's giant sequoias and redwoods, to the Southwest's red rock deserts, and east to the North Woods of Maine. These Monuments preserve sites of cultural, natural, and scientific interest, from cliff dwellings and dinosaur fossils to rare wildlife and wildflowers. By protecting these treasured landscapes into the future, National Monuments help preserve our national heritage and conserve biological diversity, while defending landscapes that provide clean air and drinking water. All 27 Monuments proposed for review are biologically and culturally critical, and they provide opportunities for outreach, education and recreation to many populations across the United States. For these reasons, the National Monuments should stand without any changes.

The 27 National Monuments proposed for review are culturally and scientifically important. Below, we list each national Monument proposed for review and provide support for its designation. As scientists, we value and need America's unique ecosystems, and the plant and animal species they harbor, for our research, and for the protection of our biological heritage.

Terrestrial monuments

1. **Basin and Range, Nevada** protects the largest concentration of prehistoric rock art in the state, with panels dating back 4,000 years according to the Bureau of Land Management. Additionally, the Friends of Basin and Range estimate that the Monument protects approximately 2 dozen threatened and endangered plant and animal species, including the sage grouse and the endemic Bristlecone pine. Finally, this Monument provides an important connectivity corridor and winter range for many large, iconic America wildlife species including mule deer and elk. Any reduction in size to the Monument would jeopardize the culturally important prehistoric rock and the scientifically important plant and animal populations.

2. **Bears Ears, Utah** contains approximately 100,000 culturally important and historical American Indian archaeological sites that without federal protection would be under threat from looting, vandalism, and recreational vehicle use. Additionally, Bears Ears has a high concentration of at least 18 rare, threatened and endangered species including the California Condor, greenback cutthroat trout, Utah's only population of Abert's tassel-eared squirrels, and the federally threatened Mexican spotted owl. Importantly, the Mexican spotted owl's largest contiguous habitat is the Manti-La Sal National Forest, which is partially protected within Bear Ears, and thus a reduction in the size of the Monument may lead to population declines of this species.

3. **Berryessa Snow Mountain, California** is one of the most biologically diverse regions of California. It is home to rare serpentine plants, which are frequently studied by ecologists and biologists to understand how species evolve to live in harsh and stressful environments. The Snow Mountains provide important wintering ground for bald eagles, as well as habitat for golden eagles, black bears, mountain lions, Tule elk, black-tailed deer, northern spotted owl, marten, fisher, California Coastal chinook

salmon, and Northern California steelhead. Finally, the Snow Mountains contain Native American cultural sites.

4. **Canyons of the Ancients, Colorado** protects many Pueblo historic sites and has the highest known archeological site density of any national Monument in the US. It is estimated that the Monument contains 20,000-30,000 historical sites, which is a rich and important cultural and historic legacy to protect.

5. **Carrizo Plain, California** protects several threatened and endangered plant and animal species from the San Joaquin Valley. It is one of the last remnant native grassland ecosystems in California, often referred to as the “California's Serengeti.” The Monument is also an area of cultural importance to Native Americans; there are several existing rock art sites. In addition, the Monument is also known for its spectacular wildlife blooms and interesting geologic formations due to its location on the San Andreas Fault. Lastly, Carrizo Plain is home to Soda Lake, which the largest remaining natural alkali wetland in southern California.

6. **Cascade Siskiyou, Oregon** was the first National Monument created specifically to protect biodiversity and was expanded under President Obama to link a patchwork of protected areas, thus connecting natural corridors that allow wildlife to migrate across the landscape. The Monument also has an active student research program to study and protect the landscape. Finally, Cascade Siskiyou protects approximately 100 culturally important dwelling or root-gathering sites, important for archaeological research.

7. **Craters of the Moon, Idaho** contains the largest exposed lava flow with a scattering of cinder cones and sagebrush islands, one of the best-preserved flood basalt areas, and an 800-foot deep lava rift crack — the largest known on Earth —, making it an important geological research area.

8. **Giant Sequoia, California** protects 33 groves of Giant Sequoia, which at the time of the Monument's establishment, comprised about half the world's unprotected groves and two-thirds of total groves worldwide. The Giant Sequoia is a highly range-restricted and iconic California conifer tree, which is culturally important to US heritage. Additionally, this park provides ample camping and recreational opportunities.

9. **Gold Butte, Nevada** protects natural and cultural resources, including rock art, sandstone towers, and important desert wildlife habitat. Species under protection include the threatened Mojave Desert tortoise, bighorn sheep, and mountain lion. It also protects historically-important ranching and mining sites such as the ghost town of Gold Butte.

10. **Grand Canyon-Parashant, Arizona** contains scientifically important cave ecosystems that protect nearly 20 bat species. Additionally, the Monument contains thousands of historically and culturally important archaeology sites including petroglyphs, Native American artifacts, and pueblos.

11. **Grand Staircase-Escalante, Utah** is a scientifically important site where multiple dinosaur fossils have been found that are over 75 million years old, including a new species of tyrannosaur. This Monument includes the largest Bureau of Land Management riparian restoration project along 70 miles of the Escalante River. Also, this Monument contains many unique plant communities, and endemic plant species.

12. **Hanford Reach, Washington** protects a vast, desert sage-steppe habitat that

is home to bald eagles, elk, porcupine, beaver and includes the last free-flowing, non-tidal stretch of Columbia River with critical salmon migration habitat. Additionally, this National Monument is important to the Yakima Tribes for cultural resources, rare food, and medicinal plants. It is home to 48 rare, threatened, or endangered animals, including some insects that are found nowhere else.

13. **Ironwood Forest, Arizona** protects a large, contiguous, and dense population of ironwood trees, including some trees over 800 years old. Additionally, the Monument protects populations of the endangered lesser long-nosed bats and contains many archeological sites.

14. **Mojave Trails, California** protects springs, volcanic cinder cones and lava flows, as well as more than a dozen unique mountain ranges, sand dunes, and parts of historic byways including the longest undeveloped stretch of Route 66. It protects historic features from petroglyphs to World War II training camps. Finally, it also provides a corridor between Joshua Tree National Park and the Mojave National Preserve.

15. **Organ Mountains-Desert Peaks, New Mexico** protects 243 known and an estimated 5000 or more unknown archeological sites. The Monument contributes between \$8 million to \$34 million per year to local economy. Part of the Monument is designated as a Wilderness area and the Monument protects endemic plant species as well as animal and plant species of special concern.

16. **Rio Grande del Norte, New Mexico** protects scientifically important habitats ranging from deep river gorges to vital grassland habitats, to ancient volcanic cones. It contains numerous archeological sites giving us a window into the lives of people who lived up to 10,000 years ago. It allows wildlife movement between two mountain ranges, Sangre de Cristo and Tusas mountains, and protects nesting sites for our national bird, the bald eagle. The Monument provides numerous diverse recreational opportunities including whitewater rafting, hunting, fishing, hiking, mountain biking, climbing, and camping.

17. **Sand to Snow, California** encompasses 30 miles of the Pacific Crest Trail, the headwaters of southern California's longest river, the Santa Ana, the wetlands of Big Morongo Canyon, and the Whitewater River that is a major tributary of the Salton Sea. It also covers two volcanic mesas with unique flora and many Native American cultural resources. Importantly, the Monument connects three Californian ecosystems: the Colorado desert to the south, the Mojave desert to the east, and up 10,000 feet to the alpine forests of the San Bernadino Mountains. As such, the Monument provides critical wildlife connectivity between San Bernadino National Forest, the Santa Rosa and San Jacinto Mountains National Monument, and Joshua Tree National Park.

18. **San Gabriel Mountains, California** protects the large expanses of wild forest and alpine landscapes, four wilderness areas, and streams and rivers that provide important sources of drinking water for the greater Los Angeles area. Additionally, it protects opportunities for fishing, picnicking, and camping.

19. **Sonoran Desert, Arizona** encompasses three mountain ranges, is the wettest desert in the world and is home to diverse plant and animal communities, including the endangered Acuna pineapple cactus and endangered Sonoran pronghorn antelope.

20. **Upper Missouri River Breaks, Montana** spans 149 miles of the upper Missouri River, which was designated as a wild and scenic river for this expanse and

includes six wilderness study areas. It is historically important as Lewis and Clark traveled through the area in 1805 and 1806 and made many notes about its biological diversity in their journals. The Monument has large herds of elk and bighorn sheep. It is also a spawning habitat for endangered pallid sturgeon.

21. **Vermilion Cliffs, Arizona** protect a 1000-foot high escarpment on the west side of Marble Canyon and is home to swirling, multicolored rock formations. It is a popular recreation site for hikers and climbers, as well as a popular place to see mountain lions, antelopes, and the recently reintroduced California condor.

22. **Katahdin Woods and Waters National Monument, Maine** protects a landscape that iconic naturalists, including John James Audubon, Henry David Thoreau, and Teddy Roosevelt, explored and noted for its rugged beauty and biodiversity. This land was donated by a private landowner to create the National Monument and there is no legal precedent for the federal government returning such a gift or reducing the size of a National Monument created from donated land.

Marine monuments

23. **Marianas Trench, Pacific Ocean** protects the deepest point in the Earth's ocean, which is deeper than the height of Mt. Everest. It is 5 times longer than Grand Canyon and is largely unexplored. It is one of only two known hydrothermal vents in the world that produce pure liquid carbon dioxide.

24. **Northeast Canyons and Seamounts, Atlantic Ocean** is the first and only National Monument in the Atlantic Ocean and is home to rare and endangered species like sperm whale, fin whales, sei whales, and Kemp's Ridley sea turtle. This National Monument protects a diverse topological/geological landscape including four seamounts and three submarine canyons.

25. **Pacific Remote Islands, Pacific Ocean** sustains a diversity of species including corals, fish, shellfish, marine mammals, seabirds, land birds, insects, and vegetation not found anywhere else in the world. Many threatened, endangered, and depleted species thrive in the Pacific Remote Islands, including the green and hawksbill turtle, pearl oyster, giant clams, reef sharks, coconut crabs, groupers, humphead and Napoleon wrasse, bumphead parrotfish, dolphins and whales. Both Palmyra Atoll and Kingman Reef support higher levels of coral diversity (180-190 species) than any other atoll or reef island in the central Pacific. Wake Island, to the west of Hawaii, is the northernmost atoll in the Marshall Islands geological ridge and is perhaps the oldest living atoll in the world. Johnston Atoll is also an ancient atoll and probably one of the oldest in the Pacific Ocean.

26. **Papahānaumokuākea Marine National Monument, Pacific Ocean** is one of the largest marine conservation areas in the world and a World Heritage Site. It was created by President George W. Bush and expanded by President Barack Obama. . De-listing or reducing the extent of this National Monument could compromise research and monitoring on the reserve's role as one of the world's few climate refugia for sensitive coral reef ecosystems. The Monument is also a culturally important site for the Hawaiian people, with the highest density of sacred sites in the Hawaiian Archipelago.

27. **Rose Atoll, American Samoa/Pacific Ocean** remains one of the most

pristine atolls in the world. It protects diverse marine ecosystems and millions of wildlife dependent upon the Central Pacific. To date, over 270 species of reef fish have been recorded. The two islands at Rose Atoll are important nesting sites for the threatened green and endangered hawksbill turtles in American Samoa.

These National Monuments cause positive and important impacts on the use and enjoyment of non-Federal lands within or beyond Monument boundaries (review criteria iv). Specifically, these designations bolster local economies through increasing tourism-related visitation to these regions. Visitation rates to National Monuments show immense support for these public lands: based on publicly available management plans and manager's reports, we conservatively estimate that annually about 7 million people visit 20 of the 27 National Monuments currently proposed for review (data not available for the 7 Monuments created since 2014).

Visitors to these Monuments observe wildlife, explore ruins, hike, hunt, and fish. To be sure, National Monument status can limit resource extraction – including mining, timber harvest, and grazing – on these lands, but all Monument designations preserved existing leases and property rights. For example, grazing that abides by existing permitting laws and regulations is allowed in Canyon of the Ancients, Craters of the Moon, and Carrizo Plains in Colorado, Idaho and California, respectively. National Monuments provide an overall net boost to local economies. Headwaters Economics examined 17 western National Monuments and found that following the Monument's designation, every local economy expanded, and local population, employment, and income all increased. From our perspective, these Monuments are important research sites, but we stress that they are also vital to local economies.

Preserving our National Monuments is vital to protecting our diverse American heritage. They are a link to our past and a gift to our future.

Respectfully submitted,

Dr. Rebecca Barak, PhD, Chicago Botanic Garden/Michigan State University

Dr. Molly C. Bletz, PhD, University of Massachusetts - Boston

Dr. Michael Bogan, PhD, University of Arizona

Dr. David Gill, PhD, George Mason University

Dr. Jacqueline Grant, PhD, Southern Utah University

Dr. Meredith A. Holgerson, PhD, Portland State University

Dr. Sara Kross, PhD, California State University, Sacramento

Dr. Sara Kuebbing, PhD, Yale University

Dr. Caitlin McDonough MacKenzie, PhD, University of Maine

Dr. Mariah Meek, PhD, Michigan State University

Dr. Oliver Pergams PhD, City Colleges of Chicago

Dr. Chelsea M. Rochman, PhD, University of Toronto

Dr. Morgan W. Tingley, PhD, University of Connecticut

Dr. Rebecca Tonietto, PhD, Saint Louis University

Dr. Diogo Verissimo, PhD, Johns Hopkins University