July 3, 2017

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

Docket No. DOI-2017-0002
Review of Certain National Monuments Established Since 1996

Public Comment Re: Grand Staircase-Escalante National Monument

Dear Secretary Zinke,

Since 1919, the National Parks Conservation Association (NPCA) has been the leading voice of the American people in protecting and enhancing our National Park System. On behalf of our more than 1.2 million members and supporters nationwide, including over 10,000 in Utah alone, I write to express our unwavering support for the Grand Staircase-Escalante National Monument (Grand Staircase). In addition to thousands of NPCA members and supporters who submitted comments to the Department of Interior in support of preservation of Grand Staircase during the public comment period (Docket No. DOI–2017– 0002), we too support the preservation of the current monument designation, boundaries and uses as properly established by the proclamation of President Clinton on September 18, 1996, and as ratified and enlarged by Congress on many occasions since that time.

In support of this goal, we submit as an initial matter that a president has no legal authority to alter the designation or reduce the size of national monuments such as Grand Staircase designated under the Antiquities Act.

Further, Congress has not only ratified the designation of Grand Staircase through appropriations and other legislation over the years, but also in fact established its boundaries and removed certain uses that threatened the historic and scientific resources of the monument. On three separate occasions, Congress passed legislation revising the boundaries of Grand Staircase, purchasing territory to add to the monument, and/or purchasing mineral rights within the monument from the State of Utah or private parties. In light of such Congressional ratification and Congress's establishment through subsequent legislation of new boundaries and uses for Grand Staircase, it is appropriate that only Congress revise the monument if it deems appropriate. Any attempt by President Trump to do so would risk overstepping actions taken by Congress and raise serious Constitutional separation of power issues.

Finally, the Grand Staircase designation fits squarely within the requirements and objectives of the Antiquities Act and was properly designated under that law. Any further consideration of its designation under the eight factors set out in President Trump's Executive Order support its

continued protection as a national monument. Grand Staircase's unique historic and scientific resources, key role in protecting the Colorado River watershed and the diverse species that migrate through that watershed, variety of uses allowed within the monument, difficulty and economic infeasibility of extracting coal or other minerals from its lands, broad based support from state, local and tribal groups, and economic benefits to the surrounding communities and State of Utah, collectively support Grand Staircase's continued designation, boundaries and uses.

I. History and Significance of Grand Staircase-Escalante National Monument

The Grand Staircase-Escalante National Monument was established on September 18, 1996, by President William J. Clinton in order to protect the "vast and austere landscape" that "embraces a spectacular array of scientific and historic resources."[1] This monument "presents exemplary opportunities for geologists, paleontologists, archeologists, historians, and biologists."[2] Its features include:

- Geological formations throughout the monument that show clearly exposed stratigraphy and structures, offering a clear view for studying and understanding the processes of the earth's formation. Among the unique formations found in Grand Staircase are the 5,500 foot Grand Staircase geological stairway; naturally burning coal seams; the Cockscomb formation; many arches and natural bridges, including the 130-foot high/100 foot span Escalante Natural Bridge and a rare double arch; and serpentine canyons where erosion has exposed sandstone and shale deposits in shades of red, maroon, chocolate, tan, gray and white.
- World class paleontological sites that contain "remarkable specimens of petrified wood" and "extremely significant fossils" of mollusks, turtles, crocodilians, lizards, dinosaurs, fishes and mammals. The rock formations "contain[] one of the best and most continuous records of Late Cretaceous terrestrial life in the world."[3]
- Archeological objects from ancient Native American cultures, including hundreds of sites throughout the monument with rock art panels, prior occupation sites, ancient campsites and granaries. "Many more undocumented sites that exist within the monument are of significant scientific and historic value worthy of preservation for future study."[4]
- Landscapes and artifacts that provide opportunities for the study of human history, including tribal groups, John Wesley Powell's expedition, and early Mormon pioneers. "The Dance Hall Rock was a center for social activities during the arduous trek of Mormon pioneers to the San Juan River area in 1879-1880"[5] and is being developed today so visitors can walk a portion of the original wagon trail to access the rock formation.
- Five life zones, from low-lying desert to coniferous forest, providing opportunities for biological study of an area that is "perhaps the richest floristic region in the Intermountain West" and "characterized by a diversity of species" such as mountain lion, bear, desert bighorn sheep and over 200 species of birds.[6]

The Grand Staircase proclamation preserved all existing rights at the time of its designation, including oil, gas, coal and mineral leases and mining claims, grazing allotments (most of the

[1] Presidential Proclamation 6920.
[2] *Id.*
[3] *Id.*
[4] *Id.*
[5] Bureau of Land Management, Grand Staircase-Escalante National Monument Manager's Annual Report at 20 (FY 2014), available at https://www.blm.gov/nlcs_web/sites/style/medialib/blm/ut/grand_staircase-escalante/nlcs_mgrs_report.Par.61629.File.dat/GSENM_Manager_Report_FY2014_draft1-25-2015.pdf.
[6] Presidential Proclamation 6920.

monument is still under grazing allotments), rights of way, commercial recreation permits, wood collection permits, and State of Utah fish and wildlife management. Since the designation, no coal rights have been developed, and all of the rights holders voluntarily pursued an exchange of their rights for compensation or other lands or resources outside of the monument area. Holders of oil and gas leases and other mineral rights have engaged in limited exploratory operations but for the most part have remained inactive or let lease rights lapse.[7]

In 1998, Congress passed legislation to exchange land and mineral rights within the monument area owned by the State and by private parties for federal land and mineral interests outside the monument area.[8] Through the exchange, Congress increased the size of the monument from 1.7 million acres to 2.1 million acres. Additional legislation revised the borders of the monument to exclude certain lands for the benefit of the local communities and to add other parcels in exchange.[9]

II. No Legal Authority for the President to Rescind or Reduce the Size of or Materially Modify a Monument under the Antiquities Act

The current review of 27 national monuments, including Grand Staircase, does not provide a legal avenue for President Trump to rescind or reduce in size any national monument. No president has the legal authority to rescind or materially modify any national monument proclaimed under the Antiquities Act.

President Trump's Executive Order on the Review of Designations Under the Antiquities Act signed on April 26, 2017 directs the Secretary of the Department of Interior to provide the Office of Management and Budget and President Trump with potential recommendations "for such presidential actions, legislative proposals, or other actions consistent with law as the Secretary may consider appropriate to carry out the policy set forth in section 1 of this order." Section 1 broadly addresses public input, economic growth, the "original objectives" of the Antiquities Act and "appropriately balanc[ing] the protection of landmarks, structures, and objects against the appropriate use of Federal lands and the effects on surrounding lands and communities." At the time of President Trump's Executive Order, you explained that you will consider whether monuments should be "rescinded, resized, [or] modified." When asked if the president has the power to do so unilaterally, you suggested that it is "untested" whether the president has the unilateral power to rescind a monument, but that "it's undisputed the president has the authority to modify a monument."[10]

We urge you, Secretary Zinke, to re-examine this issue. The president has no power unilaterally to rescind a national monument designation and no power to modify or "resize" a monument. We attach a memorandum from the law firm of Arnold & Porter Kaye Scholer ("APKS Memo") (Appendix A) and a law review article by four professors (the "Squillace Article") (Appendix B) which collectively conclude that no such power of rescission exists and no such power to make material changes exists. The current review ordered by President Trump, therefore, would be limited to

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[7] CRS Report: 98-993 -- Grand Staircase-Escalante National Monument (Dec. 21, 1998).
[8] Pub. L. No. 105-335 (1998).
[9] Pub. L. No. 105-355 (1998). The current size of the Monument as provided on BLM's website is 1.87 million acres. *See* https://www.blm.gov/nlcs_web/sites/ut/st/en/prog/nlcs_new/GSENM_NM/grand_staircase-escalante1.html.
[10] "Press Briefing by Secretary of Interior Ryan Zinke to Review the Designations Under the Antiquities Act," Office of the Press Secretary, White House, April 25, 2017, *available at* https://www.whitehouse.gov/the-press-office/2017/04/25/press-briefing-secretary-interior-ryan-zinke-executive-order-review.

making recommendations to Congress to legislate whatever revocations or modifications your office and the president believe justified.

In summary, whether or not a president may make a rescission or modification of a monument designation does not turn on any power granted the president by the U.S. Constitution. This issue instead concerns administration of federally owned land, and the Constitution gives that power exclusively to Congress.[11] Whether or not the president has the power unilaterally to revoke a national monument designation therefore depends on whether that power is expressly or by implication delegated to the president by an Act of Congress. The Antiquities Act of 1906 authorizes the president to create national monuments on land owned or controlled by the federal government.[12] The Act says nothing about a president having the power to abolish a national monument or to reduce its size. And no such power may be implied. This is so for several reasons:

First, the U.S. Attorney General opined long ago that the Antiquities Act could not be interpreted to imply that a president has the power to revoke a national monument's designation. No president has attempted to revoke such a designation since that Opinion was issued in 1938.[13]

Second, in the more than 100 years since the adoption of the Antiquities Act, Congress has adopted a comprehensive legislative portfolio to govern federally owned land, into which the Antiquities Act was folded and in relation with which it must be interpreted. One of those statutes was the Federal Land Policy and Management Act (FLPMA), adopted in 1976.[14]

- Congress there in effect adopted the Attorney General's interpretation that no revocation power should be read into the Antiquities Act by implication. When Congress legislates on a subject, "[C]ongress is deemed to know the executive and judicial gloss given to certain language and thus adopts the existing interpretation unless it affirmatively acts to change the meaning."[15] Yet in FLPMA, Congress did not "affirmatively act to change the meaning" of the Antiquities Act as interpreted by the Cummings Opinion. Congress therefore in effect adopted that interpretation.

- To the contrary, one of Congress' purposes in FLPMA was to reassert its own authority over federal land withdrawals and to limit to express delegations the authority of the Executive Branch in this regard.[16] Accordingly, Congress there repealed a number of prior statutes that had authorized Executive Branch withdrawals and revocations, and Congress also repealed a Supreme Court decision that had found an implied power in the presidency to withdraw land from oil exploration.[17] The Supreme Court has made clear that, to harmonize different statutes, "a specific policy embodied in a later federal statute should control our construction of [a prior one], even though it had not been expressly amended."[18] This is particularly so

[11] *See* U.S. Const., Property Clause, Art. IV, § 3.
[12] 54 U.S.C. § 320301(a).
[13] "Proposed Abolishment of Castle Pinckney Nat'l Monument," 39 Op. Atty. Gen. 185 (1938).
[14] 43 U.S.C. § 1704 *et seq*.
[15] *Bledsoe v. Palm Beach County Soil & Water Conservation Dist*., 133 F.3d 816, 822 (11th Cir. 1998) (addressing legislative action after earlier Attorney General interpretation); *see also, to the same effect, e.g., Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Curran*, 456 U.S. 353, 381-82 and n.66 (1982) (considering whether rights should be implied under a statute); *Souter v. Jones,* 395 F.3d 577, 598 (6th Cir. 2005).
[16] 43 U.S.C. § 1704(a)(4).
[17] *United States v. Midwest Oil Co.*, 236 U.S. 459 (1915).
[18] *See United States v. Romani,* 523 U.S. 517 (1998).

> when the later statute is a comprehensive legislative scheme.[19] FLPMA was the very sort of "comprehensive legislative scheme" that requires interpreting the Antiquities Act to harmonize with FLPMA, and it would not be harmonious to read into the Antiquities Act an implied authorization for a president to revoke or materially modify a prior monument's designation.[20]

Moreover, while you have stated that the power to modify a monument is supposedly uncontested, that is not the case. A president does not have the power to do in part what he cannot do in full. It is true that some presidents did modify the size of monument designations before FLPMA, but the background of those modifications demonstrates that FLPMA withdrew the underpinnings of that authority. In 1935, the Solicitor of the Department of the Interior was asked to opine about the president's power to reduce in size monuments created under the Antiquities Act. The Solicitor concluded that that power did exist based on the *Midwest Oil* decision.[21] When Congress expressly repealed Midwest Oil, however, the basis for the Solicitor's decision was removed.[22] In FLPMA, Congress made clear when it adopted that statute that it was "specially reserv[ing] to the Congress *the authority to modify* and revoke withdrawals for national monuments created under the Antiquities Act."[23] Accordingly, no president has attempted to modify the size of a national monument since FLPMA any more than to revoke such a designation altogether.

Finally, in his Executive Order of April 26, 2017, President Trump asked for a review of whether the designations "appropriately balance the protection of landmarks, structures, and objects against the appropriate use of Federal lands and the effects on surrounding lands and communities." In the unlikely event that a court might find that a president does have the power to rescind or modify a monument designation, however, such a power can be no broader than the Antiquities Act into which the power is implied. No such balancing test is found in the Antiquities Act. The balancing standard laid out in President Trump's Executive Order on April 26, 2017 is therefore inapplicable and must not be relied on by your office in making any recommendations.

III. Congress Ratified the Designation and Boundaries of Grand Staircase

Congress has enacted a number of bills since 1996 that ratify the designation, boundaries and uses of Grand Staircase.[24] Congress has thereby put to rest any claim that the designation, or the area designated, were not lawful under the Antiquities Act.

Some of the legislation went beyond mere ratification and established new boundaries and uses (repurchasing mineral extraction rights to disable them). Given this Congressional activity with

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[19] *See Northwest Airlines, Inc. v. Transport Workers Union*, 451 U.S. 77, 97 (1981); *see also Hi-Lex Controls Inc. v. Blue Cross*, 2013 WL 228097, at *3 (E.D. Mich. Jan. 22, 2013).
[20] *See* APKS Memo at 8-14; Squillace Article at 3-5.
[21] Opinion of the Solicitor M27657 (Jan. 30, 1935).
[22] *See* Squillace at 6-8.
[23] House Rep. No. 94-1163 (May 15, 1976), at 9 (*emphasis added*).
[24] The Supreme Court has recognized that Congress can ratify executive action by passing legislation that recognizes and affirms that action. *See United States v. Alaska*, 521 U.S. 1 (1997) (Congress ratified a 1923 presidential order reserving submerged lands along the Alaskan coast in the 1958 Alaska Statehood Act when it described the lands as territory owned by the United States). *But see Utah Association of Counties v. Clinton*, Case Nos. 2:97 CV 479, 2:97 CV 492, 2:97 CV 863, 1999 U.S. Dist. LEXIS 15852 (D. Utah Aug. 12, 1999) (denying motion seeking dismissal based on Congressional ratification of Grand Staircase through the Utah Schools and Lands Exchange Act, Automobile National Heritage Area Act, appropriations bill). The ruling in *Utah Association of Counties* is not consistent with Supreme Court precedent on Congressional ratification, did not consider subsequent Congressional legislation discussed below, and used an extremely high standard in determining whether defendants had met their burden to dismiss the case.

respect to Grand Staircase, it is appropriate that only Congress make any further changes to the designation, boundaries or uses of Grand Staircase. An intrusion by the Executive branch into these areas would have the effect of amending legislation and present significant questions as to the president's authority to act in an area that has been occupied by Congress.

A. Land/Mineral Rights Exchange and Boundary Adjustment Legislation

Since Grand Staircase was established, Congress has enacted three bills that recognized its establishment and boundaries. One bill transferred state-owned lands and mineral interests within Grand Staircase to the federal government in exchange for federally owned lands and interests outside the monument. Two subsequent bills modified the boundaries of Grand Staircase to add and remove certain specified parcels of land.

On October 31, 1998, Congress enacted the Utah Schools and Lands Exchange Act of 1998 that ratified an exchange of land and mineral interests between the State of Utah and the federal government.[25] The State of Utah owned 176,600 acres of land and 24,165 acres of mineral interests within Grand Staircase. Congress recognized that the "State . . . lands within the Monument, like the Federal lands comprising the Monument, have substantial noneconomic scientific, historic, cultural, scenic, recreational, and natural resources, including ancient Native American archeological sites and rare plant and animal communities." It further recognized that development of these mineral interests "could be incompatible with the preservation of these scientific and historic resources for which the Monument was established."[26] Accordingly, the State of Utah and the United States agreed that the State would exchange all of its lands and interests within the monument, plus certain other lands, for various federal lands and interests outside the monument that were approximately equal in value. The exchange had the net effect of increasing the size of Grand Staircase to approximately 2.1 million acres. In the Exchange Act of 1998, Congress expressly "ratified and confirmed" the exchange, thereby signaling its approval of the designation of Grand Staircase as a national monument and establishing a larger size, new boundaries and removing certain uses (mining) on land previously held by the state.

On November 6, 1998, Congress enacted the Automobile National Heritage Area Act.[27] Section 201 of this legislation, titled "Boundary Adjustments and Conveyances, Grand Staircase-Escalante National Monument, Utah," modified the boundaries of Grand Staircase to remove certain specified parcels of land from the monument and to add to it another parcel of land.

Over a decade later, on March 30, 2009, Congress enacted the Omnibus Public Land Management Act of 2009, which authorized another modification of the Grand Staircase boundary and thereby permitted the sale of certain land within the monument to a private entity.[28] Here, Congress again established a new boundary for Grand Staircase.

B. Lease Buyouts from Mining Companies

On November 29, 1999, Congress enacted the Consolidated Appropriations Act of 2000.[29] This Act not only appropriated funds for "planning and operation" and "construction" for the monument, but also appropriated $19.5 million that "may be used to acquire mineral rights within the Grand Staircase-Escalante National Monument."[30] The federal government used these funds to buy out coal

[25] Pub. L. No. 105-335, 112 Stat. 3139 (1998).
[26] *Id.*
[27] Pub. L. No. 105-355, 112 Stat. 3247 (1998).
[28] Pub. L. No. 111-11, 123 Stat. 1119, Sec. 2604 (2009.).
[29] Pub. L. No. 106-113, app. C, § 601, 113 Stat. 1501 (1999).
[30] *Id.*

and mineral claims within Grand Staircase that were held by private parties and had been in existence and preserved when President Clinton designated it as a national monument.[31] Congress's decision to buy out the claims rather than allowing them to continue to exist as provided in the designation, again revised the designation, thereby bringing it under Congressional authority. Any attempt by the Administration to revise the designation to allow for mining and extraction activities would contravene Congress's purpose and raise serious Constitutional questions.

C. Appropriations Bills

Congress also ratified the establishment of Grand Staircase by appropriating funds throughout the years since its designation for its protection, maintenance and development as a national monument. The Supreme Court has recognized that Congress can ratify executive action by specifically appropriating funds to support the action in question.[32]

In fiscal year 1998, Congress appropriated $6,400,000 for the Bureau of Land Management to develop a management plan for the newly designated Grand Staircase-Escalante National Monument, including allocating money to facilities maintenance, resource management planning, and recreation resources.[33] Congress appropriated this amount again in fiscal year 1999, plus another $1,000,000 for a visitor facility.[34] In a report regarding the 1999 appropriation, the Senate Committee on Appropriations explained that "[t]he Committee considers continued development of programs at the Grand Staircase-Escalante National Monument to be an important Bureau priority and directs the Bureau to retain funding for the monument at the fiscal year 1998 level of $6,400,000."[35] Congress has continued to appropriate funds for the monument in subsequent years, both for its general operations and for more specific purposes.[36]

By appropriating funds for Grand Staircase, Congress expressed its approval of the designation and continued preservation of the monument.

IV. Creation of Grand Staircase was in Accordance with the Objectives and Requirements of the Antiquities Act

President Trump's Executive Order directed you to review certain national monument designations and to determine whether the designation meets the "requirements and original objectives" of the

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[31] *See* Lee Davidson, *Grand Staircase*, Deseret News (Sept. 17, 2006), *available at* http://www.deseretnews.com/article/645201833/Grand-Staircase.html (federal government bought out one company's claims for $14 million and another company's claims for $5.5 million).

[32] *See Isbrandtsen-Moller Co. v. United States*, 300 U.S. 139 (1937) (Congress ratified presidential order transferring new duties to Commerce Department by appropriating funds to the agency); *Fleming v. Mohawk Wrecking & Lumber Co.*, 331 U.S. 111 (1947) (Congress's appropriation of funds to the post-World War II Office of Temporary Controls ratified President Roosevelt's executive order creating the agency and vesting it with duties of the previous Office of Price Administration); *Brooks v. Dewar*, 313 U.S. 354 (1941) (Congress had ratified the Interior Department's program of selling temporary licenses for grazing livestock on public lands by repeatedly and with knowledge of the license sales appropriating a portion of the revenues the program generated for improvements to grazing areas); *Ivanhoe Irrigation District v. McCracken*, 357 U.S. 275 (1958), *overruled in part on other grounds by California v. United States*, 438 U.S. 645 (1978), (repeated congressional reauthorization and explicit appropriations for a California water project ratified the Interior Secretary's interpretation of a statute regulating the project).

[33] *See* S. Rep. 105-227, at 10 (June 26, 1998).

[34] *Id.*

[35] *Id.*

[36] *See, e.g.*, S. Rep. No. 106-99, at 14-15 (for fiscal year 2000, allocating $6,400,000 for "planning and operation" of the Monument and $3,150,000 for construction of a visitor's center).

Antiquities Act.[37] The Executive Order lists eight factors for you to consider, and in turn, you asked for comments on the application of these factors.[38] As detailed below, the designation of Grand Staircase met the objectives of the Antiquities Act at the time of its designation and, even under a current assessment, is consistent with the factors noted by President Trump.

A. The Designation of Grand Staircase Met the Requirements and Original Objectives of the Antiquities Act, Including the Act's Requirements that Designations Not Exceed "the smallest area compatible with the proper care and management of the object to be protected"

President Clinton designated Grand Staircase in accordance with the provisions of the Antiquities Act and the significant discretion it affords presidents to designate national monuments.[39] That is, his proclamation set aside land of historic or scientific interest that was owned or controlled by the federal government. President Clinton determined that the size was "the smallest area compatible with proper care and management of the objects to be protected."[40] Even considering the designation anew today, given recent scientific discoveries, the ongoing scientific research, and the identification of additional historic resources, as well as increased and broad-based public support for the designation, these factors would overwhelmingly support a national monument designation encompassing the current size.

1. The Antiquities Act Allows Designation of Large Areas of Land

Your press release asks for comment on, as President Trump's Executive Order specified, whether the designation meets the "original objectives" and requirements of the Antiquities Act that the monument be the "smallest area compatible with the proper care and management of the objects to be protected." The assumption behind the use of the term "original objectives" suggests there has been some change in the objectives over time, but that is not true. Nor is it true that the "original objectives" were limited to protecting small areas, as some have argued and as the review of all monuments of more than 100,000 acres suggests. You stated on April 25, 2017 that the average size of monuments designated in the early years of the Act was 442 acres, but that is also incorrect.

In fact, the Antiquities Act from its inception was intended by Congress to include large areas having historic or scientific interest as well as small areas around archeological ruins. President Theodore Roosevelt, who you lauded at your press conference, designated monuments of 818,000 acres (1908, Grand Canyon) and 640,000 (1909, Mount Olympus). The Supreme Court upheld the Grand Canyon designation in 1920.[41] Every court to have considered the issue since then has agreed that the act was intended to protect not just archeological "objects," but large natural areas having historic or scientific interest, as the act provides.[42] For example, in 1976, the Supreme Court found that a pool of water and the fish which live there are such objects.[43] And the Court of Appeals for the District of

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[37] Executive Order 13792 (April 26, 2017).
[38] Notice; Request for Comments, 82 Fed. Reg. 22016 (May 11, 2017).
[39] *See Utah Ass'n of Counties v. Bush*, 316 F. Supp.2d 1172, 1183 (D. Utah 2004) ("The record is undisputed that the President of the United States used his authority under the antiquities Act to designate the Grand Staircase Monument. The record is also undisputed that in doing so the President complied with the Antiquities Act's two requirements, 1) designating, in his discretion, object of scientific or historic value, and 2) setting aside, in his discretion, the smallest area necessary to protect the objects.").
[40] *See* 54 U.S.C. § 320301.
[41] *Cameron v United States*, 252 U.S. 459 (1920).
[42] *See, e.g., Caeppert v United States*, 426 U.S. 128 (1976); *Mountain States Legal Foundation v Bush*, 306 F. 3d 1132 (D.C. Cir. 2002).
[43] *Caeppert,* 426 U.S. at 141-42.

Columbia rejected an argument that Giant Sequoia National Monument was a violation of the Antiquities Act because it included supposedly non-qualifying objects, explaining that "such items as ecosystems and scenic vistas … did not contravene the terms of the statute."[44]

Given that the Antiquities Act may be used to protect objects as large as the Grand Canyon and objects of natural interest that are of historic or scientific interest, size alone does not make a national monument illegal under the act, nor must the "object" be as constrained as opponents of national monuments argue.

2. The Grand Staircase-Escalante National Monument is the Smallest Area Compatible With the Proper Care and Management of Its Historic and Scientific Resources

President Clinton recognized the entirety of the Grand Staircase area is itself a scientific resource to be protected. The proclamation notes the biological significance of the five life zones, from low-lying desert to coniferous forest that make up Grand Staircase. "This presents an extraordinary opportunity to study plant speciation and community dynamics independent of climate variables."[45] Untrodden areas within the monument present a baseline for the study of changes in other areas affected by human activity. President Clinton also recognized Grand Staircase as a place characterized by a diversity of climate zones and species, a place where northern and southern habitat species intermingle.

In addition, the protection of the Grand Staircase landscape as a whole is critical to the protection of each component or object within the national monument. "Most of the ecological communities contained in the monument have low resistance to, and slow recovery from, disturbance. Fragile Cryptobiotic crusts, themselves of significant biological interest, play a critical role throughout the monument, stabilizing the highly erodible desert soils and providing nutrients to plants."[46] It is crucial these historic sites, geological and paleontological resources and remarkable natural resources remain connected under the national monument designation. Further, it is in keeping with the Antiquities Act that these objects must receive "proper care and management," and in order to do so, the landscape and resources it hosts must be considered in their entirety, under the monument's resource management plan.

Landscape scale conservation promotes natural resiliency by providing more opportunity for collaboration between communities and land management agencies, improved science and stronger policy. Intact landscapes also provide more effective wildlife corridors, build climate resiliency and bring diverse communities together. The Grand Staircase-Escalante National Monument provides an opportunity to maintain and promote public land protections at a scale that enhances the cultural and natural conservation values of the region.

We are particularly concerned about your recent statements that link the monument review process to the Trump Administration's goal of opening more federal public lands to energy development in order to achieve "energy dominance" in the global arena.[47] Any attempts to reduce the boundaries of Grand Staircase to allow mining for coal on the Kaiparowits Plateau or oil and gas drilling in other parts of the monument would not only harm objects of historic and scientific interest for which the monument was established, but also affect the resources of the adjacent and nearby national parks.

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[44] *Tulare County v. Bush*, 306 F.3d 1138, 1141-42 (D.C. Cir. 2002).
[45] Pres. Proc. No 6920.
[46] *Id.*
[47] Valerie Volcovici, Interior head says public lands can make U.S. a 'dominant' oil power, Reuters, June 19, 2017, *available at* http://www.reuters.com/article/us-usa-interior-zinke-idUSKBN19A1KG.

While NPCA recognizes the need for diverse energy sources, we have long advocated that energy development, both extractive and renewable, should avoid high-value conservation areas including units of the National Park System, as well as federally designated monuments, wilderness and wildlife management areas. Industrial development and heavy truck traffic for coal mining in the heart of Grand Staircase would not only threaten and destroy cultural, archeological and paleontological sites as well as scientific resources within the monument, but also adversely affect the health and well-being of nearby communities, negatively impact regional tourism related businesses, increase nighttime skyglow, elevate ambient noise levels and release haze causing and toxic air pollutants. These impacts could harm the very resources and visitor experience of Grand Staircase as well as nearby national parks.

B. Designated Lands are Appropriately Classified as Historic and/or Scientific Resources

Grand Staircase is a phenomenal outdoor laboratory and educational and scientific resource. Since the monument was designated over 20 years ago, there has been extensive research throughout the monument and region related to the objects of interest described in the Proclamation. There have been significant discoveries related to many of those objects of interest, and the research has provided benefits not only to local and national land managers and scientists, but in some cases, on a global scale. From existing literature reviews as well as the Bureau of Land Management website[48] there is a tremendous amount of information, data and published research related to the monument's resources and protected values including the air, water, soil, botany and vegetation, cultural heritage, fish and wildlife, grazing, paleontology, and geology.

The attached Appendix C includes a literature review compiled by The Wilderness Society of the extensive scientific research conducted in Grand Staircase ranging from the human history in the monument area to the wildlife, plants, hydrology and paleontology that have and/or continue to exist. Current science projects occurring at Grand Staircase are catalogued by Bureau of Land Management (BLM) in its Manager's Annual Report.[49] In addition, the Society of Vertebrate Paleontology has submitted extensive comments on both the Bears Ears National Monument and Grand Staircase on the importance of maintaining protections for these landscapes in order to discover and preserve scientifically important paleontological resources.[50] While the discovery of vast paleontological resources at Bears Ears is just beginning, Grand Staircase encompasses one of the most densely fossilized dinosaur areas in the world. There are literally thousands of dinosaur fossil sites within the monument and new discoveries still taking place with ongoing research. The Kaiparowits Plateau region in particular has yielded over 2,000 newly documented Late Cretaceous vertebrate localities and scientists have inventoried only 20 percent of them.[51] We encourage you to consult the referenced research in your own review of the objects of interest listed in the proclamation.

C. The Designation of Grand Staircase Allowed All Existing Uses, and Multiple, Varied Uses Continue Today

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[48] Bureau of Land Management, Grand Staircase-Escalante National Monument, https://www.blm.gov/programs/national-conservation-lands/utah/grand-staircase-escalante-national-monument.

[49] Bureau of Land Management, Grand Staircase-Escalante National Monument Manager's Annual Report at 26-43 (FY 2014).

[50] Society of Vertebrate Paleontology comments on Bears Ears National Monument and Grand Staircase, http://vertpaleo.org/GlobalPDFS/Comments-from-Society-of-Vertebrate-Paleontology.aspx.

[51] *See* http://vertpaleo.org/GlobalPDFS/Comments-from-Society-of-Vertebrate-Paleontology.aspx at 7.

The establishment of Grand Staircase preserved all valid existing rights to the land, including mineral and grazing leases, recreational access, and management of hunting and fishing by the State of Utah.[52] Those uses still provide economic or other benefits today.

Specifically, the proclamation for Grand Staircase states: "Nothing in this proclamation shall be deemed to affect existing permits or leases for, or levels of livestock grazing on Federal lands within the monument: existing grazing uses shall continue to be governed by applicable laws and regulations other than this proclamation."[53] Because of this, levels of grazing within the Grand Staircase have stayed nearly the same as they were prior to its designation. Over 95 percent of the monument remains open for grazing with 76,957 Animal Unit Months (AUMs, the federal measure for grazing permits) available today versus 77,400 AUMs available at the time of the designation.[54] The slight reduction in AUMs is attributed to voluntary relinquishment of permits due to drought or buyout from a conservation organization to protect fragile riparian areas.

The holders of rights to mineral and energy resources that existed within Grand Staircase at the time of the designation generally did not exercise those rights in the years prior to and after designation. Most of the holders either voluntarily relinquished those rights to the federal government in exchange for compensation or alternative sites or let their rights lapse. These included 22 coal leases, 89 oil and gas leases, and 70 mining claims for minerals such as gold and silver.[55] Grand Staircase contains known reserves of coal in the Kaiparowits Plateau. The holders to the coal rights—the State of Utah and private companies—sold or exchanged those to the government as authorized by Congressional legislation enacted in 1998 and 1999.[56] Today, those reserves have increasingly diminished economic potential. "The coal deposit is in a remote section of southern Utah with no paved roads or rail access[,]"[57] making extraction and transportation expensive. This, combined with the declining market for U.S. coal both domestically and worldwide, make extraction economically unfeasible. With respect to oil and gas, there were six operating wells at the time of the designation[58] and leaseholders had drilled 47 other exploratory wells, most of which were dry. Following the designation, ConocoPhillips, the largest leaseholder, again received permission to drill, but did not develop its leases after finding dry exploratory wells.[59] Again the remote location, without access to roads or pipelines, appears to have discouraged further exploration, and ConocoPhillips has let several of its oil and gas leases lapse when they came up for renewal.[60]

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[52] Pres. Proc. 6920.
[53] United States Department of the Interior Bureau of Land Management, *Grand Staircase-Escalante National Monument approved management plan* at 40 (1999).
[54] *See* United States Department of the Interior Bureau of Land Management, *Grand Staircase-Escalante National Monument Grazing on the Monument: an Introduction,* at 1 (July 28, 2015), available at https://eplanning.blm.gov/epl-front-office/projects/lup/69026/89840/107421/GSENM_GRAZING_EIS_FACT_SHEET_7-28-2015_(2).pdf.
[55] CRS Report: 98-993 - Grand Staircase-Escalante National Monument (Dec. 21, 1998).
[56] *See* Section III.A and B above.
[57] Donovan Symonds, *Op-Ed: Coal Mining in Grand Staircase Makes No Sense*, The Salt Lake Tribune (May 27, 2017), available at http://www.sltrib.com/opinion/5318279-155/op-ed-coal-mining-in-grand-staircase.
[58] Letter from General Accounting Office to The Honorable Frank Murkowski (April 17, 1997).
[59] *See* Phil Taylor, *National Monuments: Grand Staircase-Escalante Winners and Losers*, E&E News (July 14, 2017), *available at* https://www.eenews.net/stories/1060040270; CRS Report: 98-993 - Grand Staircase-Escalante National Monument (Dec. 21, 1998); John H. Cushman, Jr., *U.S. Approves Testing for Oil in a Utah Park*, New York Times (Sept. 9, 1997), available at http://www.nytimes.com/1997/09/09/us/us-approves-testing-for-oil-in-a-utah-park.html.
[60] Robert B. Keiter, *The Monument, the Plan, and Beyond*, 21 J. Land, Resources, & Envtl. L. 521, 527-28 (2001), *available at* http://heinonline.org/HOL/Page?handle=hein.journals/lrel21&div=26&g_sent=1&collection=journals.

With regard to recreation with Grand Staircase, hunting and fishing continue under the management of the State of Utah. According to the monument Management Plan: "Nothing in this proclamation shall be deemed to diminish the responsibility and authority of the State of Utah for management of fish and wildlife, including regulation of hunting and fishing."[61] Additional recreational opportunities in the monument are plentiful and include camping, hiking, canyoneering, rock climbing, horseback riding, mountain biking, swimming, boating, and ATV riding/dirt biking. According to Grand Staircase Partners:

> There are approximately 908 miles for street legal motorized vehicle routes, and 553 miles of this includes non-street legal ATVs and dirt bikes. There are also around 192 miles of administrative routes for authorized users such as grazing permittees, researchers, State or Federal agencies, Native American Indians accessing recognized traditional cultural properties, and others carrying out authorized activities under a permit or other authorization.[62]

The most recent Grand Staircase Manager's Annual Report states that 2014 was a record year for visitation, with 878,000 total visitors. Special Recreation Permits increased from 78 the prior year to 92 in 2014.[63]

Grand Staircase also allows special use access for hunting outfitters, heritage group events and film making.[64]

D. The Designation of Grand Staircase has Enhanced the Economic Use of Non-federal Lands Beyond the Monument's Boundaries, Through Increased Tourism

Key economic indicators show the communities in both Kane and Garfield counties have continued growth trends that began before monument designation. According to a report from Headwaters Economics (Appendix D), in the Grand Staircase-Escalante region from 2001 to 2015 the population grew by 13 percent, jobs grew by 24 percent, real personal income grew by 32 percent and real per capita income grew by 17 percent.

While traditional jobs in agriculture, mining and timber have held steady in the Grand Staircase region, the majority of employment growth has been in the service industry, particularly lodging, restaurants, healthcare, finance, and professional and administrative services. As a result, traditional jobs have become a smaller share of the overall economy in Garfield and Kane counties, contributing to the false perception that these sectors of the economy are declining.

While some longtime residents of Garfield and Kane counties have resisted the shift to a more service based economy, others are embracing the opportunities for economic growth and sustainability resulting from public land and recreation assets in the counties with Grand Staircase at the core surrounded by Bryce Canyon and Capitol Reef National Parks and Glen Canyon National Recreation Area. Research has shown that natural amenities, such as the protected landscape of Grand

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[61] United States Department of the Interior Bureau of Land Management, *Grand Staircase-Escalante National Monument approved management plan* at 12 (1999).
[62] Grand Staircase Partners factsheet, http://gsenm.org/wp-content/uploads/2011/01/Fact-Sheet-2-13.pdf.
[63] Bureau of Land Management, Grand Staircase-Escalante National Monument Manager's Annual Report at 14 (FY 2014).
[64] Bureau of Land Management, Grand Staircase-Escalante National Monument Manager's Annual Report at 6 (FY 2014).

Staircase, help attract new investments and maintain property values[65] and improve quality of life for local residents.

In 2015, travel and tourism represented about 44 percent of total private wage and salary employment, or 1,630 jobs in the Grand Staircase region (Appendix D). Kane County in particular has actively pursued opportunities to grow their tourism and recreation economy by stepping up to be one of the first Utah counties to participate in the Utah Office of Tourism's Rourism (Rural Tourism) program focused on assessing and improving visitor services, branding and marketing[66]. And this focus appears to be paying off as the state economic snapshot for Kane County in 2016 said "the county's indicators point to a strong, well-functioning economy" and while many sectors are contributing to economic growth a spurt of new accommodations pushed leisure/hospitality jobs up and expanded sales[67]. In 2016, state economic data showed Garfield County to have notable employment gain in leisure/hospitality and accommodations, and retail trade experienced the strongest sales gains in the county[68].

Growth in the Kane and Garfield County recreation and tourism economies reflects the rapid increase in visitation to public lands in Southwest Utah. The Escalante Visitor Center, one of the four Grand Staircase Visitor Centers established in gateway communities surrounding the monument to increase economic opportunities and visitor education, documented a 51 percent increase in visitation from 2015 to 2016[69] alone. Anecdotally, we have heard repeatedly that increased visitation to the surrounding national parks, including Zion, Bryce Canyon, Capitol Reef and Glen Canyon National Recreation Area, has motivated visitors looking for a less congested experience to seek out opportunities to visit Grand Staircase.

In the absence of updated detailed visitation and economic impact data from federal land managers regarding Grand Staircase, we can therefore extrapolate from information reported for the national parks surrounding Grand Staircase. This includes Bryce Canyon and Capitol Reef National Parks and Glen Canyon National Recreation Area. In 2016, 2.4 million park visitors spent an estimated $201 million in local gateway regions while visiting Bryce Canyon National Park. These expenditures supported a total of 3,036 jobs, $78.9 million in labor income, $139.5 million in value added, and $244.7 million in economic output in local gateway economies surrounding Bryce Canyon National Park. In 2016, 1.1 million park visitors spent an estimated $77 million in local gateway regions while visiting Capitol Reef National Park. These expenditures supported a total of 1.1 thousand jobs, $28.5 million in labor income, $50.1 million in value added, and $88.2 million in economic output in local gateway economies surrounding Capitol Reef National Park. And finally, in 2016, 3.2 million park visitors spent an estimated $235.2 million in local gateway regions while visiting Glen Canyon National Recreation Area. These expenditures supported a total of 3.3 thousand jobs, $88.4 million in labor income, $157 million in value added, and $272.5 million in economic output in local gateway economies surrounding Glen Canyon National Recreation Area. Without question, it is clear, based on the above noted 2016 National Park Service data, that the landscape surrounding Grand Staircase is important to local community economies.

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[65] Deller, S.C., T.H. Tsai, D.W. Macrouiller, and D.B.K. English. 2001. The Role of Amenities and Quality of Life in Rural Economic Growth. American Journal of Agricultural Economics 83(2): 352-365.
[66] Rourism Programs for Utah, Roger Brooks International, http://www.rogerbrooksinternational.com/utah-tourism/.
[67] Economic Snapshot: Kane County, Utah Department of Workforce Services, https://jobs.utah.gov/wi/regions/current/snapshotkane.pdf.
[68] Economic Snapshot: Garfield County, Utah Department of Workforce Services, https://jobs.utah.gov/wi/regions/current/snapshotgarfield.pdf.
[69] Grand Staircase Partners factsheet, http://gsenm.org/wp-content/uploads/2011/01/Fact-Sheet-2-13.pdf.

Further, the outdoor recreation economy in Utah adds more than $12 billion in direct spending, supports 122,000 jobs in the state, pays $3.6 billion in salaries and wages, and contributes more than $856 million in state and local tax revenue every year.

E. Utahans and the American People Support Grand Staircase-Escalante National Monument.

The American people, including NPCA's members, overwhelmingly oppose efforts to roll back protections for the parks, monuments, marine sanctuaries and other public lands and waters they love and value. According to Colorado College's 2017 Conservation in the West Poll, 80 percent of western voters support keeping existing national monuments protections in place while only 13 percent of western voters supported removing protections for existing monuments. This poll reinforces other surveys that document widespread public opposition to congressional attacks on new parks. In a December 2014 Hart Research Poll, 90 percent of Americans supported the permanent protection of some public lands, monuments, wildlife refuges and wilderness.

Locally, a poll of Utah voters conducted by Benenson Strategy Group and Public Opinion Strategies released in August 2016, found that Utahans believe that the designation of Grand Staircase was a good rather than a bad thing for their state by a margin of better than 2 to 1. Of those polled, 70 percent believe Grand Staircase has had a beneficial impact on the state's tourism industry while only 6 percent believe it has had a negative impact on state tourism. A separate poll of Utah voters conducted by Colorado College and also released in 2016 found similar results. When asked whether the decision to increase protections for public lands now part of Grand Staircase was a good or bad thing, 45 percent said it was a good thing while only 25 percent said it was a bad thing.

In addition, local communities and counties adjacent to the monument have been promoting the monument for tourism and have seen boosts to their economies because of increasing visitation. As you may recall from your visit to Utah, the Escalante & Boulder Chamber of Commerce strongly supports the nearby monument and made repeated requests to meet with you while you were touring the Grand Staircase Region. In a memo addressed to you, they wrote:

> As business people who make a living in the Escalante Boulder region of Utah, we can tell you from firsthand experience that since the protection of the Grand Staircase-Escalante National Monument, our local tourism industry in Escalante has grown and is thriving. Three new lodging facilities have just opened, with two more currently under construction, a clear indication of the increasing visitation to Escalante. More than that, people want to live here, and new home construction is at an all time high. Businesses continue to open to respond to the demand from new residents. While there are undoubtedly many factors that play a part in a region's growth, the Escalante Boulder Chamber attributes the majority of our success to the attraction of the nearby Grand Staircase-Escalante National Monument. [70]

F. Congress has Appropriated Funds to the Bureau of Land Management for the Proper Management of Grand Staircase.

[70] Escalante & Boulder Utah Chamber of Commerce, MEMO to Interior Secretary Ryan Zinke: An Invitation to Speak with us about Utah's National Monuments (May 3, 2017), *available at* http://www.escalanteut.com/grand-staircase/memo-to-zinke/.

Congress has annually appropriated funds to properly manage Grand Staircase since shortly after its designation. The BLM manages Grand Staircase in accordance with a monument Management Plan, with a 2014 budget of approximately $6.2 million.[71] In return, the unique and undeveloped land of Grand Staircase generates significant scientific and recreational value to the public.

In addition to Congressional funding, Grand Staircase generates some income from grazing leases, amenity and campground fees (which support the operation and management of the Calf Creek Recreation Area and the Deer Creek Campground), and book sales at the monument's Visitor's Center (which fund paleontological research).[72]

The BLM has formed partnerships with more than 50 public and private organizations that provide funding, volunteer time and research assistance to Grand Staircase. These are catalogued in BLM's 2014 Manager's Annual Report (the most recent report available).[73] We encourage you to review this list in order to understand not only the resources available to Grand Staircase, but also the significant support from local community organizations.

G. Other considerations.

1. Grand Staircase's Significance to Nearby National Parks

The Grand Staircase boundaries, as established, secure significant protection for adjacent national parks, including Capitol Reef National Park to the northeast, Bryce Canyon National Park to the northwest and Glen Canyon National Recreation Area to the south and east. Realistically, protection for National Parks can be assured only when their adjacent lands are well managed and host compatible uses. Simply, Grand Staircase provides security for the management of Southern Utah's public lands, including its national parks.

These national parks have been designated as Class I areas under the Clean Air Act, including Bryce Canyon, Capitol Reef, Zion, Arches, Canyonlands and Grand Canyon National Parks. Class I areas are places where the law requires the air quality to be at its most pristine, unaffected by human-made or human-caused pollutants. Any allowance for mining or other energy development in Grand Staircase would release particulate matter (PM), nitrogen oxides (NOx), sulfur dioxide (SO2) and volatile organic compounds (VOCs). These haze-causing pollutants would obscure scenic vistas in adjacent national parks by impairing a viewer's ability to see long distances, color and geologic formation. Visitors to national parks and wilderness areas consistently rate visibility and clear scenic vistas as one of the most important aspects of their experience.[74]

2. Public Input

President Trump's Executive Order asks you to review designations made "without adequate public outreach and coordination," suggesting that such is required under the Antiquities Act. As is plain from the face of the statute, no such requirement exists. In recent years, presidents have employed a more transparent process in making designations and, although desirable, this is not required by the Act.

Many reports detail the process for designating Grand Staircase and the lack of public outreach or public coordination by President Clinton. Although this may be a fair criticism of the process at the

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[71] Bureau of Land Management, Manager's Annual Report Grand Staircase-Escalante Monument at 2 (FY 2014).
[72] *Id.* at 14, 18.
[73] *Id.* at 20-24.
[74] Out of Sight: Haze in our National Parks, Clear the Air, *available at* http://www.catf.us/resources/publications/files/Out_of_Sight.pdf.

time, it does not invalidate the designation and is not a useful consideration in assessing the importance of the Grand Staircase today, more than 20 years later. The same can be said of many of our national park and monument lands, which faced public opposition at the time they were created. From today's perspective, the monument has broad support and is managed with local input. Congress has supported the designation of Grand Staircase almost every year since its designation through legislation specific to the monument and appropriations. The BLM employs a public process for managing the land by working with its Management Plan Advisory Committee. Also, as noted above, public support for this monument far outweighs public opposition, and the monument has been an important economic driver for the surrounding counties.

V. Conclusion

NPCA urges the administration to recommend maintaining the current designation, boundaries and protections of the Grand Staircase. We ask your office, along with the BLM, to provide the leadership necessary to move forward with a plan that embraces this "vast and austere landscape"[75] and its scientific and historic resources in a manner that preserves our natural history, addresses local support for the monument and allows the growing outdoor recreation industry to flourish. Grand Staircase-Escalante National Monument is a unique, rich landscape worthy of its current designation and wholly in keeping with the intention and purposes of the Antiquities Act.

On May 2, 2017 over 450 organizations signed a letter to your office in support of the Antiquities Act and expressed deep concerns with the April 26th Executive Order from President Trump. In this letter, the community, including NPCA notes:

> Since its enactment over a hundred years ago, the Antiquities Act has been one of our nation's most critical conservation tools for preserving our nation's most important public lands and waters. Our national parks and monuments and other protected public lands and waters unite all Americans by protecting our shared American heritage for future generations to enjoy. The sheer diversity of historic, cultural, and natural treasures that have been protected by the Antiquities Act is the reason why hundreds of groups representing sportsmen, cultural heritage organizations, evangelicals, conservation, recreation businesses, historic preservation, social justice, and many others all oppose efforts to undermine our national monuments and view an attack on any one national monument as an attack on them all.

To call into question whether 27 national monuments are worth protecting will have lasting repercussions on the preservation of our public lands for generations to come. Eight Republican and eight Democratic presidents have designated 157 national monuments under the authority of the Antiquities Act. As noted above, this includes nationally significant cultural, historical, and natural sites such as, the Grand Canyon and Acadia National Parks, Statue of Liberty and Muir Woods National Monuments, and the Chesapeake and Ohio Canal National Historical Park. In fact, many of our nation's most popular and iconic national parks were first protected using the Antiquities Act. More recently, the Antiquities Act has helped safeguard and honor more diverse stories in the National Park System through the designations of Stonewall, Belmont-Paul Women's Equality, and César E. Chávez National Monuments. We urge you to imagine what our country would be like without these incredible places, protected just as they should be.

Thank you for your consideration of these comments and those of our members and supporters. We call on your administration to maintain and support all of our country's national monuments,

[75] Proclamation 6920, 61 Fed. Reg. 50223 (Sept. 18, 1996).

including the Grand Staircase-Escalante National Monument, in order to help preserve these ancestral lands, while leaving a lasting legacy for all Americans.

Sincerely,

Theresa Pierno
President and CEO

Enclosures
Appendix A Arnold & Porter Kaye Scholer Memo: The President Has No Power Unilaterally to Abolish or Materially Change a National Monument Designation Under the Antiquities Act of 1906
Appendix B "National monuments: Presidents can create them, but only Congress can undo them" by Nicholas Bryner, Eric Biber, Mark Squillace and Sean B. Hecht
Appendix C Literature review of research at Grand Staircase (complied by The Wilderness Society)
Appendix D Headwaters economic report on Grand Staircase

Appendix A

Arnold & Porter Kaye Scholer Memo: The President Has No Power Unilaterally to Abolish or Materially Change a National Monument Designation Under the Antiquities Act of 1906

ARNOLD & PORTER KAYE SCHOLER

The President Has No Power Unilaterally to Abolish or Materially Change a National Monument Designation Under the Antiquities Act of 1906

We have been asked by our client, National Parks Conservation Association, whether a sitting President may unilaterally abolish or materially change a national monument that was established by an earlier President under the authority of the Antiquities Act of 1906. The question arises in the context of President Trump's Executive Order of April 26, 2017 directing the Secretary of the Interior to conduct a review of all national monuments designated since 1996 which are at least 100,000 acres or which the Secretary determines were designated without adequate public input.[1] The Executive Order directs the Secretary to report back to the President and make recommendations "for such Presidential actions, legislative proposals, or other actions consistent with law as the Secretary may consider appropriate to carry out the policy set forth in section 1 of this order." Section 1 broadly talks about public input, economic growth, the "original objectives" of the Antiquities Act and "appropriately balance[ing] the protection of landmarks, structures, and objects against the appropriate use of Federal lands and the effects on surrounding lands and communities."

President Trump stated when he issued the Order that "the Antiquities Act does not give the federal government unlimited power to lock up millions of acres of land and water, and it's time that we ended this abusive practice."[2] That review will cover some 25 national monuments designated or expanded since 1996.

President Trump said he was particularly eager to change the boundary of Bears Ears National Monument in Utah.[3] President Obama designated that monument primarily at the request of Native American tribes, declaring that the "paleontological resources [there] are among the richest and most significant in the United States" and that the area's "petroglyphs and pictographs capture the imagination with images dating back at least 5,000 years."[4] President Trump, however, referred to this monument designation as a "massive federal land grab,"[5] which suggests that the federal government did not already own the land before that event. However, the federal government has owned that land since long before Utah became a state in 1896. While the federal government made land grants to the new State for various purposes,[6] the new State's constitution, as Congress required, "forever disclaim[ed] all right and title" to federal

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[1] *Review of Designations Under the Antiquities Act*, Exec. Order 13792, 82 Fed. Reg. 20429 (May 1, 2017).

[2] Juliet Eilperin, "Trump orders a review of newer national monuments," Washington Post, April 27, 2017, at A3.

[3] *Id.*

[4] *Establishment of the Bears Ears National Monument*, Proclamation No. 9558, 82 Fed. Reg. 1139 (Jan. 5, 2017).

[5] Eilperin, at A3.

[6] *See* Utah Enabling Act, ch 138, § § 6-12, 28 Stat. 107 (1894), https://archives.utah.gov/research/exhibits/Statehood/1894text.htm.

lands within the State's boundaries."[7] Under these circumstances, it is unclear from whom the federal government supposedly "grabbed" this land.

Secretary Ryan Zinke explained at the time of President Trump's Executive Order that he will be considering whether monuments should be "rescinded, resized, [or] modified." When asked if the President has the power to do so unilaterally, he said it is "untested" whether the President has the unilateral power to rescind a monument but that "it's undisputed the President has the authority to modify a monument."[8]

It is apparent, in part from the President's terminology (e.g., that Bears Ears was a federal "land grab") and the Secretary's description of the law, that they have been influenced by a March 2017 report written for the American Enterprise Institute by John Yoo and Todd Gaziano entitled "Presidential Authority to Revoke or Reduce National Monument Designations." Those authors argue there that President Trump has the authority to rescind or revoke the creation of national monuments by President Obama and that the President also has the authority to reduce the size of national monuments. They also argue that the Antiquities Act only authorized, or at least that Congress only intended that it be used to designate, relatively small areas as monuments around human archeological sites.

It is beyond the scope of this memorandum to discuss the merits of particular national monument designations or the fact that President Obama established procedures to assure there was significant public outreach and input before each of his monument designations. The purpose of this memorandum is instead to address the Yoo and Gaziano arguments about the scope and nature of the monuments Congress authorized to be designated in the Antiquities Act and their arguments that a President may unilaterally rescind or materially reduce the size of a monument previously established. After evaluating the U.S. Constitution, relevant statutes and other relevant authorities, we have concluded that Yoo and Gaziano are wrong about these matters.

Executive Summary

The authority granted by the Antiquities Act is not limited to small areas around human archeological sites.

President Trump's Executive Order and accompanying Administration statements suggest that the "original" objective of the Antiquities Act was limited to permitting the President to set aside small areas of land around human archeological sites. Monument designations outside this constrained scope are called "abuses." This is the view for which Yoo and Gaziano argue and this ("abuses") is how they describe large monuments protecting natural sites. However, they base their argument - - not on the final language of the statute - - but on early bills rejected by Congress. This is a novel way to understand a statute.

[7] *Id.,* § 3.

[8] "Press Briefing by Secretary of Interior Ryan Zinke to Review the Designations Under the Antiquities Act," Office of the Press Secretary, White House, April 25, 2017.

In fact, in the five or six years before the Antiquities Act was adopted, there were two camps seeking such a statute, but they had different concepts of what it should authorize. Archeologists wanted a narrow statute to protect archeological sites. The Department of the Interior wanted a statute authorizing the protection of large scenic areas, this being before creation of the National Park System. In the end, all sides agreed upon compromise language that became the Antiquities Act. The compromise added a clause authorizing protection of areas having "historic or scientific interest" and provided that the monument "shall be confined to the smallest area compatible with the proper care and management of the objects to be protected."[9]

Almost immediately after the Act's adoption, President Theodore Roosevelt established the Grand Canyon National Monument, protecting 818,000 acres, and almost immediately someone challenged the legality of that monument's designation under the Act. But the U.S. Supreme Court rejected the challenge in *Cameron v. United States*.[10] Referring to the clause which formed the basis of the compromise, the Court explained that the Grand Canyon "is an object of unusual scientific interest" and went on to explain its scientific importance and natural wonders.

Every court thereafter has reached the same conclusion as to other monuments challenged as natural rather than archeological. It is not surprising that larger areas are required to protect natural wonders than the areas required to protect archeological sites. Congress provided flexibility concerning the size of each monument in order to allow for differences based on what is being protected. Referring to larger monuments as "abuses" ignores the text of the statute and the history behind its adoption.

The President has no authority to revoke or materially reduce previously designated monuments.

In our system of Government, Presidents have no power other than that granted to them by the U.S. Constitution or by an Act of Congress. The issue here does not invoke any power granted the President by the U.S. Constitution. The issue instead concerns administration of federally owned land, and the Constitution gives that power exclusively to Congress. U.S. Const., Property Clause, Art. IV, § 3. Whether or not the President has the power unilaterally to revoke a national monument designation therefore depends on whether that power is expressly or by implication delegated to the President by an Act of Congress. The Antiquities Act of 1906 authorizes the President to create national monuments on land owned or controlled by the federal government.[11] The Act says nothing about a President's having the power to abolish a national monument or to reduce the size of a monument. The question is therefore whether such a power may be implied.

Contrary to the arguments of Yoo and Gaziano, reading a revocation power into that statute by implication would be improper. This is so for several reasons.

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[9] 54 U.S.C. § 320301(a) and (b).

[10] 252 U.S. 459 (1920).

[11] 54 U.S.C. § 320301(a).

First, the U.S. Attorney General opined long ago that the Antiquities Act could not be interpreted to imply that a President has the power to revoke a national monument's designation. No President has attempted to revoke such a designation since that Opinion was issued in 1938.

Second, Yoo and Gaziano fail to recognize that in the more than 100 years since the adoption of the Antiquities Act, Congress has adopted a comprehensive legislative scheme to govern federally owned land, into which the Antiquities Act was folded and in relation with which it must be interpreted. One of those statutes was the Federal Land Policy and Management Act ("FLPMA"), adopted in 1976.[12] Congress there in effect adopted the Attorney General's interpretation that no revocation power should be read into the Antiquities Act by implication. Thereafter, it would be particularly improper to interpret the Antiquities Act as implying that the President has the power to revoke a monument designation.

Third, as to those national monuments which were made part of the National Park System, Congress has mandated that the power to manage those special places "shall not be exercised in derogation of the values and purposes for which the System units have been established, except as directly and specifically provided by Congress."[13] Revoking the designation of such a national monument and pulling it out of the National Park System would certainly be in derogation of the reasons such special places were added to that System.

Secretary Zinke, however, stated that a President has the authority to modify a monument, and President Trump stated he is eager to modify the boundaries of Bears Ears National Monument. If they are thinking that the President would have the power to modify that monument in a material way that would undermine the protection of the resources for which it was created, they are wrong. A President does not have the power to do in part what he may not do in full. While there were some instances before 1976 of Presidents changing the boundaries of monuments, no President has attempted to do so after FLPMA was adopted.

The revocation of the designation of a national monument or the material reduction in its size, and particularly a monument that is part of the National Park System, is therefore beyond the power of a President acting without Congress. The interpretation proffered by Yoo and Gaziano would therefore, if acted upon, result in a usurpation of congressional powers by the Executive Branch.

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I. The Antiquities Act of 1906.

The Nineteen Century saw substantial western expansion of the United States, and it was the federal government that acquired the land making that expansion possible. While that government had acquired land since its founding, the government substantially increased its holdings by such events as the Louisiana Purchase of 1803, the Oregon Compromise with

[12] 43 U.S.C. 1704 *et seq*.

[13] 54 U.S.C. § 100101(b)(2).

England in 1846 and the treaty resolving the Mexican-American War in 1848.[14] No sooner had the public land domain been established in the Eighteenth Century than a policy of disposing of the land had been initiated.[15] The federal government transferred nearly 816 million acres of public domain land to private ownership and 328 million acres to the States as they became established.[16]

By late in the Nineteenth Century, however, demands grew to "withdraw" some public lands from that available for sale, grant or other disposition so it could be retained by the federal government for conservation and similar purposes. The first permanent federal land reservation was Yellowstone National Park, created in 1872, and in 1891 the President was given power to withdraw forest lands and prevent their disposal.[17] The federal government retained for the benefit of all Americans a large part of the land that government had acquired, totaling approximately 600 million acres.[18]

In recognition of the slow process of enacting federal legislation, Congress adopted the Antiquities Act in 1906 to empower the President to protect some of that federal land promptly. That Act, as now codified, provides:

> (a) The President may, in the President's discretion, declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated on land owned or controlled by the Federal Government to be national monuments.
>
> (b) The President may reserve parcels of land as a part of the national monuments. The limits of the parcels shall be confined to the smallest area compatible with the proper care and management of the objects to be protected.[19]

President Theodore Roosevelt was the first to use that Act, establishing 18 national monuments, including Devil's Tower, Muir Woods, Mount Olympus (the predecessor to Olympic National Park) and the Grand Canyon. Almost every President thereafter has designated additional national monuments. These monuments were created to provide for the enjoyment and use of the federal lands by the American people.

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[14] *See generally* "Natural Resources Land Management Act," S. Rep. No. 94-583 (hereafter the "Senate Report") at 27-32; Carol Hardy Vincent et al., Cong. Research Serv., *Federal Land Ownership: Overview and Data* 5 (2014), *available at* https://fas.org/sgp/crs/misc/R42346.pdf.

[15] *See* Senate Report, at 28.

[16] Kristina Alexander and Ross W. Gorte, Cong. Research Serv. RL34267, *Federal Land Ownership: Constitutional Authority and the History of Acquisition, Disposal, and Retention* 5 (2007), *available at* https://fas.org/sgp/crs/misc/RL34267.pdf.

[17] 17 Stat. 326; 26 Stat. 1095.

[18] Alexander and Gorte, at 9.

[19] 54 U.S.C. § 320301(a) and (b).

II. The President's Authority under the 1906 Act is not Limited to Protecting Small Areas Around Archeological Sites, As Yoo and Gaziano Argue and the Administration Claims.

Yoo and Gaziano argue that Congress only intended in the Antiquities Act to authorize the President to create monuments to protect small areas around human archeological sites. They concede that the Act's "final language covered more than antiquities" and that "small scenic areas" were contemplated. But they argue that "the statute's title, drafting history and historical context" should convince Presidents "to follow the text and spirit of the original law."[20] And they repeatedly call Presidential proclamations that did not do so "abuses." This is a novel way of understanding a statute passed by Congress, i.e., by looking to earlier versions of a bill not adopted rather than to the "final language" of the act. Contrary to these arguments, the Act by its terms and as understood by Congress at the time authorizes protection of large areas containing natural resources, and the size of the protected area depends on the resources being protected.

It is true that the national monument authority is generally referred to as the "Antiquities Act," but that is so because parts of the statute did in fact address only antiquities, such as by prohibiting their looting.[21] But the legislative history of the portion of the Act relating to monuments, as well as its text, makes clear that that authority was not limited to protecting antiquities. There was considerable disagreement about what became this part of the Act in the years before its adoption. There were two views: archeologists and the Smithsonian Institution wanted a law providing for the protection only of archeological sites in order to address Western legislators' concerns over the size and scope of protected areas, as Yoo and Gaziano say.[22] The Department of the Interior and some members of Congress, on the other hand, wanted a law that would provide protection as well for large "scenic beauties and natural wonders and curiosities".[23] While Yoo and Gaziano say Congress had rejected bills the Department supported, they omit the fact that bills limited as the archeologists wanted had also failed.[24] This process went on for 5 years. Finally, Professor Edgar Hewett drafted a compromise bill that was adopted without much further ado and became the relevant part of the Antiquities Act of 1906.[25]

Yoo and Gaziano rely largely on a work by Ronald Lee for their recital of the history of the Act.[26] Here is what he says about the final bill:

> Senator Lodge's bill, in its earlier versions, had been limited to historic and prehistoric antiquities and made no provision for protecting natural areas. At some point in his

[20] Yoo and Gaziano, at 3.

[21] *See* 54 U.S.C. § 32032.

[22] *See* Ronald F Lee, "The Antiquities Act, 1900-1906," in *The Story of the Antiquities Act* (National Park Service, March 15, 2016), www.nps.gov/archeology/pubs/lee/Lee_CH6.htm at 2-3.

[23] *Id*., at 3.

[24] *Id*., at 4-6.

[25] *Id*., at 7.

[26] Yoo and Gaziano, at nn. 3, 5, 6 and 8.

> discussions with government departments, Hewett was persuaded, probably by officials of the Interior Department, to broaden his draft to include the phrase "other objects of historic or scientific interest." … As it later turned out, the single word "scientific" in the Antiquities Act proved sufficient basis to establish … national monuments preserving many kinds of natural areas, …[27]

One of the first monuments to be designated under that Act was President Theodore Roosevelt's 1908 creation of Grand Canyon National Monument, which covered 818,000 acres.[28] The holder of a mining claim to land on the south rim of the Canyon challenged the legality of the monument designation because it supposedly exceeded the President's power under the Antiquities Act. In *Cameron v. United States*, the Court rejected that argument.[29] The mining claim, the Court explained, included the trailhead of the famous Bright Angel Trail "over which visitors descend to and ascend from the bottom of the canyon."[30]

> The act under which the President proceeded empowered him to establish reserves embracing "objects of historic or scientific interest." The Grand Canyon, as stated in his proclamation, "is an object of unusual scientific interest." It is the greatest eroded canyon in the United States, if not the world, is over a mile in depth, has attracted wide attention among explorers and scientists, affords an unexampled field for geologic study, is regarded as one of the great natural wonders, and annually draws to its borders thousands of visitors. [31]

In 1976, the Supreme Court again was called on to address this issue and again explained that the Antiquities Act is not limited to archeological areas. In *Caeppert v. United States*, the Court upheld President Truman's creation of a national monument at Devil's Hole, Nevada, as a habitat for a species of fish found only there. The fish, said the Court, were "objects of historic or scientific interest" within the meaning of that clause in the Antiquities Act.[32] Similarly, when President Carter designated several national monuments in Alaska based in part on their natural resources, opponents challenged the designations in court, making the same arguments about the supposedly constrained nature of places that could be so designated. The district court resoundingly rejected those arguments, based in part on *Cameron* and *Caeppert* as well as on the court's analysis of the Act's legislative history.[33] Reciting the same legislative history discussed above, the court found that Mr. Hewett's compromise bill, which contained the clause "other objects of historic or scientific interest" and which had become law, "was indeed intended to enlarge the authority of the President." Moreover, the court concluded that "matters of scientific

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[27] Lee, at 9.

[28] *Establishment of Grand Canyon National Monument*, Proclamation No. 794, 35 Stat. 2175 (1908).

[29] 252 U.S. 459 (1920). President Roosevelt also designated the 60,000 acre Petrified Forest National Monument in 1906, the 10,000 Chaco Canyon National Monument in 1907 and the almost 640,000 acre Mount Olympus National Monument in 1909. *See* Mark Squillace, *The Monumental Legacy of the Antiquities Act of 1906*, 37 GA. L. Rev. 473, 490 n. 92 (2003).

[30] 252 U.S. at 455 and n.1.

[31] *Id.*, at 455-56.

[32] 426 U.S. 128, 141-42 (1976).

[33] *Anaconda Copper Co. v. Andrus*, No. A79-161, civil, 14 ERC 1853 (D, Alaska July 1, 1980).

interest which involve geological formations or which may involve plant, animal or fish life are within this reach of the presidential authority under the Antiquities Act."[34]

The Administration's claims that large monuments are "abuses" of the Antiquities Act and that it was only intended to apply to small areas are simply wrong. In setting limits on the size of areas to be protected, the Act merely imposed the requirement that the president designate the "smallest area compatible with the proper care and management of the objects to be protected." From the very beginning, that Act was used to protect large areas such as the Grand Canyon and Mount Olympus, which later became Olympic National Park. It is obvious that more land is needed to protect natural resources such as these areas than to protect isolated archeological sites. It is therefore simply not true that the areas protected under the Act in its early years were limited to small areas of a few hundred acres.

III. The President Has No Implied Power to Revoke a National Monument Created under the Antiquities Act.

Because the Antiquities Act does not expressly empower or prohibit Presidents to revoke national monuments, proponents of such a power argue that that power may be read into the Act by implication. Gaziano and Yoo and some members of Congress argue that the President has many implied powers and that this is merely one such power. They are wrong.

Yoo and Gaziano argue for a general proposition that "the authority to execute a discretionary government power usually includes the power to revoke it -- unless the original grant expressly limits the power of revocation."[35] They argue that this supposedly follows from the principle that each "branch of government can reverse its earlier actions using the same process originally used."[36] They point to the President's power to fire Executive Branch officials even after the Senate has confirmed the appointment and to the President's power over foreign treaties. The problem with that argument is that it ignores the source of the original power. There is no government-wide general rule on this subject; each source of power must be examined to assess whether a power to revoke previous actions should be implied. As former President and Supreme Court Chief Justice Taft stated:

> The true view of the Executive function is, as I conceive it, that the President can exercise no power which cannot be fairly and reasonably traced to *some specific grant of power or justly implied and included within such express grant as proper and necessary to its exercise.* Such specific grant must be either in the Federal Constitution or in an act of Congress passed in pursuance thereof.[37]

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[34] *Id.*

[35] Yoo and Gaziano, at 7.

[36] *Id.*, at 8.

[37] William Howard Taft, OUR CHIEF MAGISTRATE AND HIS POWERS 139-40 (1916), *available at* https://archive.org/stream/ourchiefmagistra00taftuoft#page/n5/mode/2up) (*emphasis added*).

Accordingly, when Yoo and Gaziano point to the power of the President to fire Executive Branch officers and to revoke treaties with foreign governments, they are pointing to powers found in the Constitution's grant of executive authority to the President. The Constitution provides that "[t]he executive Power shall be vested in a President of the United States of America." U.S. Const., Art. II, § 1. It is reasonable to conclude that that broad grant includes the power to revoke what has been done. As Justice Taft explained:

> The grants of Executive power are necessarily in general terms in order not to embarrass the Executive within the field of action plainly marked for him, but his jurisdiction must be justified and vindicated by affirmative constitutional or statutory provision, or it does not exist.[38]

The same may be said of specific powers granted the President, including that to make treaties with foreign countries. *See* U.S. Const., Art. II, § 2.

But here we are not dealing with the scope of the powers granted the Executive Branch under the Constitution. Here, we are dealing instead with the power over federal lands, and the Constitution grants that power, not to the President, but exclusively to the Congress. The Property Clause of the Constitution provides that "[t]he Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States …." *Id.*, Art. IV, § 3, Cl. 2.

For the President to have the power to revoke a monument designation under the Antiquities Act, therefore, the issue is whether that Act of Congress, not the Constitution's grant of the executive power to the President, may be interpreted to imply the unstated power to revoke a monument designation thereunder.[39]

This is a question on which the Attorney General of the United States, Homer S. Cummings, ruled in the negative.[40] In 1938, President Franklin Roosevelt asked Attorney General Cummings for a formal Legal Opinion as to whether the President could rescind former President Coolidge's designation of the Castle Pinckney National Monument under the Antiquities Act. After careful study, Attorney General Cummings explained that the answer was "no."

> A duty properly performed by the Executive under statutory authority has the validity and sanctity which belong to the statute itself, and, unless it be within the terms of the power conferred by that statute, the Executive can no more destroy his own authorized work, without some other legislative

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[38] *Id.*

[39] Yoo and Gaziano also argue as an analogy that the Executive Branch has the power to repeal regulations adopted under discretionary statutory authority. But that authority is recognized, in the words of Justice Taft, as "included within such express grant as proper and necessary to its exercise." *Id.* That says nothing about whether such implied power should also be implied in the Antiquities Act.

[40] Attorney General Cummings held a PhD and law degree from Yale University. He served from 1933 until 1939. (*See* U.S. Department of Justice, *Attorneys General of the United States,* at https://www.justice.gov/ag/bio/cummings-homer-still)

> sanction, than any other person can. To assert such a principle is to claim for the Executive the power to repeal or alter an act of Congress at will.[41]

The Attorney General's Opinion explained that under long-standing precedent "if public lands are reserved by the President for a particular purpose under express authority of an act of Congress, the President is thereafter without authority to abolish such reservation."[42] Since the Cummings Opinion, no President has attempted unilaterally to rescind a national monument.[43] Rather, as contemplated by the Cummings Opinion, when some monuments have been abolished, it has been Congress that has done so by legislation.[44]

Yoo and Gaziano argue that the Cummings Opinion was "poorly reasoned" and "erroneous as a matter of law."[45] But their description of that opinion is not a fair characterization of Attorney General Cumming's reasoning. For example, they claim he found binding an 1862 opinion when he merely relied on its reasoning and they then describe that earlier opinion unfairly. But what Cummings found significant about that earlier case is that, as in the case of the Antiquities Act, the statute in question had authorized the President to reserve lands but had said nothing about his power to undo the reservation made. And the earlier Attorney General had concluded that such power could not be implied. In reaching the same conclusion as to the Antiquities Act, Attorney General Cummings distinguished statutes that expressly authorize the President to revoke reservations.

The gaping hole in the Yoo and Gaziano arguments, however, is that they ignore or minimize the importance of the fact that, since 1906, Congress has adopted a comprehensive system of laws to govern federally-owned lands, and that the Antiquities Act must be understood and interpreted as part of that legal structure. Statutes covering the same subject matter are interpreted together. *See Food & Drug Admin. v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132–33 (2000). Two particular later statutes are relevant here. First, in 1976, Congress adopted the Federal Land Policy and Management Act ("FLPMA").[46] Second, in 1916,

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[41] "Proposed Abolishment of Castle Pinckney Nat'l Monument," 39 Op. Atty. Gen. 185, 185 (1938), *citing* Opinion by Attorney General Edward Bates to the Secretary of the Interior, 10 U.S. Op. Atty. Gen. 359 (1862). As a general matter, opinions of the Attorney General are binding on the Executive Branch offices that request them until they are overruled or withdrawn. *See Pub. Citizen v. Burke*, 655 F. Supp. 318, 321–22 (D.D.C. 1987) ("As interpreted by the courts, an Attorney General's opinion is binding as a matter of law on those who request it until withdrawn by the Attorney General or overruled by the courts." (citation and internal quotations omitted)), *aff'd*, 843 F.2d 1473 (D.C. Cir. 1988); *cf.* Trevor W. Morrison, *Stare Decisis in the Office of Legal Counsel*, 110 Colum. L. Rev. 1448, 1472, 1482–84 (2010).

[42] 39 Op. Atty. Gen. at 186–87.

[43] Squillace, at 553.

[44] Congress has abolished a number of National Monuments by legislation. *See, e.g.*, Wheeler National Monument in 1950 (64 Stat. 405); Shoshone Cavern in 1954 (68 Stat. 98); Papago Saguaro in 1930 (46 Stat. 142); Old Kasaan in 1955 (69 Stat. 380); Fossil Cyad in 1956 (70 Stat. 898); Castle Pinkney in 1956 (70 Stat 61); Father Millet Cross in 1949 (63 Stat. 691); Holy Cross in 1950 (64 Stat. 404); Verendrye in 1956 (70 Stat. 730), and Santa Rosa Island in 1946 (60 Stat. 712).

[45] Yoo and Gaziano, at 5.

[46] 43 U.S.C. 1704 *et seq*.

Congress adopted the National Park System Organic Act, to which Congress added significant provisions in 1970 and 1978.

When FLPMA was adopted in 1976, Congress legislated against the backdrop of the Antiquities Act providing that the President could create national monuments and the Cummings Opinion that the President could not revoke national monuments. There is evidence that Congress was aware of the Cummins Opinion, which was reported in one of the studies leading to FLPMA's passage.[47] But in any event, when Congress legislates on a subject, "[C]ongress is deemed to know the executive and judicial gloss given to certain language and thus adopts the existing interpretation unless it affirmatively acts to change the meaning."[48] Yet in FLPMA, Congress did not "affirmatively act[] to change the meaning" of the Antiquities Act as interpreted by the Cummings Opinion. Congress therefore in effect adopted that interpretation.

Moreover, the Supreme Court has made clear that, to harmonize different statutes, "a specific policy embodied in a later federal statute should control our construction of [a prior one], even though it had not been expressly amended."[49] This is particularly so when the later statute is a comprehensive legislative scheme.[50] FLPMA was the very sort of "comprehensive legislative scheme" that requires interpreting the Antiquities Act to harmonize with FLPMA. It would not be harmonious with FLPMA to read into the Antiquities Act an implied authorization for a President to revoke a prior monument's designation because in FLPMA, one of Congress' purposes was to reassert its own authority over federal land withdrawals and to limit to express delegations the authority of the Executive Branch in this regard.

FLPMA was the result of a years-long re-examination and reorganization of laws governing management of federal lands, including the creation of reservations or "withdrawals" of land for particular purposes.[51] In 1964, Congress had created The Public Land Law Review Commission to undertake that reexamination, finding in part that there were many statutes governing federal lands "which are not fully correlated with each other."[52] The Commission obtained extensive studies and finally issued its report in 1970.[53] One of its recommendations was that "[d]elegation of the congressional authority should be specific, not implied, …."

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[47] *See* Charles F. Wheatley, Jr., "Study of Withdrawals and Reservations of Public Domain Lands" (Public Land Law Review Commission 1969), at 17, 264.

[48] *Bledsoe v. Palm Beach County Soil & Water Conservation Dist.*, 133 F.3d 816, 822 (11th Cir. 1998) (addressing legislative action after earlier Attorney General interpretation); *see also, to the same effect, e.g., Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Curran,* 456 U.S. 353, 381-82 and n.66 (1982) (considering whether rights should be implied under a statute); *Souter v. Jones,* 395 F.3d 577, 598 (6th Cir. 2005).

[49] *See United States v. Romani,* 523 U.S. 517 (1998).

[50] *See Northwest Airlines, Inc. v. Transport Workers Union,* 451 U.S. 77, 97 (1981); *see also Hi-Lex Controls Inc. v. Blue Cross,* 2013 WL 228097 (E.D. Mich. Jan. 22, 2013) at *3.

[51] Pub. Law No. 94-579, codified at 43 U.S.C. § 43 U.S.C. § 1701 *et seq.* As the Senate Report accompanying the bill that became FLPMA explained, Congress had long recognized "a need to review and reassess the entire body of law governing Federal lands." Senate Report, at 34.

[52] *See* 78 Stat. 982 (Sept. 19, 1964).

[53] Public Land Law Review Commission, "One Third of the Nation's Land: A Report to the President and the Congress" (1970); *see also* Senate Report, at 32-36.

Congress followed that recommendation, declaring in FLPMA that "it is the policy of the United States that … the Congress exercise its constitutional authority to withdraw or otherwise designate or dedicate Federal lands for specified purposes and that Congress delineate the extent to which the Executive may withdraw lands without legislative action."[54] Accordingly, Congress expressly repealed a large number of statutes previously authorizing the Executive Branch to make withdrawals of federal land and overturned a court decision implying such power.[55] But FLPMA did not repeal the Antiquities Act. This was no oversight; the decision to leave that Act in effect was noted in the House Report.[56] And while Congress gave the Secretary of the Interior some powers to make, modify or revoke withdrawals, FLPMA provided that the Secretary did not have power to "revoke or modify" any Antiquities Act monument designation.[57]

The House Report made clear that there were to be no more implied powers to withdraw lands or to revoke previous withdrawals; only Congress was to have those powers except as expressly delegated.

> With certain exceptions [including under the Antiquities Act], H.R. 13777 will repeal all existing law relating to executive authority to create, modify, and terminate withdrawal and reservations. It would reserve to the Congress the authority to create, modify, and terminate withdrawals for national parks, national forests, the Wilderness System, ... *It would also specially reserve to the Congress the authority to modify and revoke withdrawals for national monuments created under the Antiquities Act ....* These provisions will insure that the integrity of the great national resource management systems will remain under the control of the Congress."[58]

Specifically as to national monuments, therefore, just as Attorney General Cummings concluded, while the President would continue to have the power to <u>establish</u> national monuments under that Act, only Congress would be empowered to <u>revoke</u> a monuments designation. Any other understanding of the Antiquities Act would be contrary to Congress'

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[54] *Id.*, codified at 43 U.S.C. § 1704(a)(4).

[55] *See* Pub. Law No. 74-597, § 704 ("Effective on and after the date of approval of this Act, the implied authority of the President to make withdrawals and reservations resulting from acquiescence of the Congress (*U.S. v. Midwest Oil Co.*, 236 U.S. 459) and the following statutes and parts of statutes are repealed: …").

[56] "The exceptions, which are not repealed, are contained in the Antiquities Act (national monuments), ..." House Report, at 29.

[57] 43 U.S.C. §1714 and § 1714(j). Those sections speak in terms of the authority of the Secretary of the Interior to make, modify or revoke withdrawals, but it is relevant to note in understanding that section that at the time of FLPMA's adoption, the President had delegated to the Secretary of the Interior all of the President's "authority … vested in him to withdraw or reserve lands of the public domain and other lands owned or controlled by the United States in the continental United States or Alaska for public purposes, including authority to modify or revoke withdrawals and reservations of such lands heretofore or hereafter made." *Delegating to the Secretary of the Interior the Authority of the President to Withdraw or Reserve Lands of the United States for Public Purposes*, Exec. Order 10355, 17 Fed. Reg. 4831 (May 28, 1952); Wheatley, at 379 (that Executive Order, as of 1969, "is now the controlling authority").

[58] House Report, at 9 (*emphasis added*).

purpose and comprehensive legislative scheme in FLPMA to eliminate all implied delegations of authority to the Executive Branch to withdraw or revoke withdrawals.

Yoo and Gaziano nevertheless suggest that a President could revoke a prior designation if the later President determines it was based on a factual error, is no longer a valid designation due to changed circumstances, or is "illegally or inappropriately large."[59] But there already exists a remedy under such circumstances; those same arguments can be made to Congress.[60]

The conclusion that only Congress may revoke a national monument designation applies doubly to those national monuments created under the Antiquities Act and administered by the National Park Service ("NPS").[61] Ten years after adoption of the Antiquities Act, Congress adopted the Organic Act of 1916 creating the National Park System.[62] Congress there mandated that the fundamental purpose of the System is to "conserve the scenery, natural and historic objects, and the wild life in the System units … [and] leave them unimpaired for the enjoyment of future generations."[63] In 1970, Congress adopted amendments to that Organic Act which made clear that national monuments administered by NPS are part of that System and are to be protected as such.[64] And Congress provided that the entire National Park System is a "cumulative expression[] of a single national heritage."[65] In 1978, not satisfied that the Executive Branch had gotten the message, Congress returned to this subject and added the mandate that

> the protection, management, and administration of the System units shall be conducted in light of the high public value and integrity of the System and shall not be exercised in derogation of the values and purposes for which the System units have been established, *except as directly and specifically provided by Congress*.[66]

Congress clearly did not intend that a President could unilaterally revoke the designation of a national monument that is part of the National Park System without Congress' directly and

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[59] Yoo and Gaziano, at 9, 10.

[60] As described in noted 4 above, on several occasions Congress has abolished national monuments by legislation.

[61] For example, recent Proclamations establishing national monuments as part of the National Park System have provided "The Secretary of the Interior (Secretary) shall manage the monument through the National Park Service, pursuant to applicable legal authorities, consistent with the purposes and provisions of this proclamation." *Establishment of the Belmont-Paul Women's Equality National Monument,* Proclamation No. 9423, 81 Fed. Reg. 22505 (Apr. 15, 2016).

[62] Now codified at 54 U.S.C. §100101(a).

[63] *Id.*

[64] *See* Pub. L. No. 91-383 (National Park System General Authorities Act), codified in this regard at 54 U.S.C. §§ 100102(2), 100501 (defining "National Park System" to include any area administered by the Director of NPS, including for "monument" purposes). Those monuments are as fully covered by general regulations protecting the entire System as are any national parks created by Congress. *See* 36 C.F.R. §1.2 (NPS regulations apply to federally owned land administered by NPS).

[65] 54 U.S.C. § 100101(b)(1)(B).

[66] *Id.*, § 100101(b)(2) (*emphasis added*).

specifically so providing. Such an act would certainly be in derogation of the values and purposes for which the monument had previously been established.[67]

All of this simply goes further to establish that in the 1970s Congress adopted the Cummins Opinion's conclusion that no President may unilaterally revoke the establishment of any national monument. Such a revocation would require an act of Congress.

IV. For the Same Reasons, No President May Unilaterally Materially Reduce the Size of a National Monument.

President Trump's Executive Order of April 26, 2017 and Secretary Zinke's comments also raise the issue whether a President may unilaterally reduce the size of a national monument. Yoo and Gaziano argue that that power is to be implied into the Antiquities Act even if the President does not have the power to revoke a monument's designation.[68] But there is no merit to this claim, which is simply an alternative formulation of the baseless argument that a President may unilaterally abolish a national monument. Any attempts by the President to remove land or features that would undermine the purposes and values for which the monument was originally created would be a partial revocation of the monument. The President does not have the power to do in part what he cannot do in full.

Yoo and Gaziano rely on the fact that Presidents have issued a handful of proclamations that reduced the size of some national monuments. Whatever the understanding of this power might have been before the 1970s legislation discussed above, however, they cite not one example of any such reduction after FLPMA was adopted in 1976. The last time such a thing happened was in 1963, when President Kennedy issued a Proclamation to remove certain lands from Bandelier National Monument in New Mexico.[69] In FLPMA, Congress reasserted its authority over such matters. As discussed above, Congress made clear that it was "specially reserv[ing] to the Congress *the authority to modify* and revoke withdrawals for national monuments created under the Antiquities Act."[70]

It is unclear whether a President could make non-material adjustments to monument boundaries without congressional authorization. But President Trump does not appear to be planning to test that question when he says he is eager to change the boundaries of Bears Ears National Monument. It is at least clear that any reduction in the size of the monument or other modification that undermines the purpose and values for which it was created could be made only by Congress.

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[67] For example, the Presidential Proclamation designating Bears Ears National Monument explains that it is intended to preserve features of the lands that are sacred to Native Americans, paleontological resources, and a wide variety of vegetation. *Establishment of the Bears Ears National Monument*, Proclamation No. 9558, 83 Fed. Reg. 1139 (Jan. 5, 2017).

[68] Yoo and Gaziano, at 14-17.

[69] *Revising the Boundaries of the Bandelier National Monument*, Proclamation No. 3539, 28 Fed. Reg. 5407 (May 27, 1963).

[70] House Report, at 9 (*emphasis added*).

V. Conclusion.

For over one hundred years, the Antiquities Act has allowed Presidents to create national monuments and preserve worthy lands for the enjoyment of all Americans and future generations. There are today national monuments in 31 states. For all Americans, they offer recreational opportunities and preserve a heritage of beauty, scientific marvels, and human achievement. But the Antiquities Act and subsequent legislation reserved to Congress, which has Constitutional authority over public lands, the sole power to revoke such a designation or materially to reduce the monument's size.

Robert Rosenbaum, Andrew Shipe, Lindsey Beckett, Andrew Treaster, Jamen Tyler

May 3, 2017

Appendix B

"National monuments: Presidents can create them, but only Congress can undo them" by Nicholas Bryner, Eric Biber, Mark Squillace and Sean B. Hecht

VIRGINIA LAW REVIEW ONLINE

VOLUME 103 JUNE 2017 55–71

ESSAY

PRESIDENTS LACK THE AUTHORITY TO ABOLISH OR DIMINISH NATIONAL MONUMENTS*

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INTRODUCTION

BY any measure, the Antiquities Act of 1906 has a remarkable legacy. Under the Antiquities Act, 16 presidents have proclaimed 157 national monuments, protecting a diverse range of historic, archaeological, cultural, and geologic resources.[1] Many of these monuments, including such iconic places as the Grand Canyon, Zion, Olympic, and Acadia, have been expanded and redesignated by Congress as national parks.

While the designation of national monuments is often celebrated, it has on occasion sparked local opposition, and led to calls for a President to abolish or shrink a national monument that a predecessor proclaimed.[2]

[1] See Nat'l Parks Conservation Association, Monuments Protected Under the Antiquities Act (Jan. 13, 2017), https://www.npca.org/resources/2658-monuments-protected-under-the-antiquities-act.

[2] On April 26, 2017, President Trump issued an Executive Order calling for the Secretary of the Interior to review certain national monument designations made since 1996. Exec. Order No. 13,792, Review of Designations Under the Antiquities Act, 82 Fed. Reg. 20,429 (2017), https://perma.cc/CA3A-QEEQ. The Order encompasses Antiquities Act designations since 1996 over 100,000 acres in size or "where the Secretary determines that the designation or expansion was made without adequate public outreach and coordination with relevant stakeholders[.]" Id. at § 2(a). The Order asks the Secretary to make "recommendations for . . . Presidential actions, legislative proposals, or other actions consistent with law as the Secretary may consider appropriate to carry out the policy" described in the Order. Id. at

This article examines the Antiquities Act and other statutes, concluding that the President lacks the legal authority to abolish or diminish national monuments. Instead, these powers are reserved to Congress.

I. THE AUTHORITY TO ABOLISH NATIONAL MONUMENTS

The Property Clause of the Constitution vests in Congress the "[p]ower to dispose of and make all needful Rules and Regulations respecting [public property]."[3] The U.S. Supreme Court has frequently reviewed this power in the context of public lands management and found it to be "without limitations."[4] Congress can, however, delegate power to the President or other members of the executive branch so long as it sets out an intelligible principle to guide the exercise of executive discretion.[5]

Congress did exactly this when it enacted the Antiquities Act and delegated to the President the power to "declare by public proclamation" national monuments.[6] At the same time, Congress did not, in the Antiquities Act or otherwise, delegate to the President the authority to modify or revoke the designation of monuments. Further, the Federal Land Policy and Management Act of 1976 ("FLPMA") makes it clear that the President does not have any implied authority to do so, but rather that Congress reserved for itself the power to modify or revoke monument designations.[7]

§ 2(d)-(e). The limits of presidential authority to abolish or diminish monuments has been the subject of prior analysis, including a report published by the Congressional Research Service in November 2016 and an analysis by the law firm Arnold & Porter Kaye Scholer. Alexandra M. Wyatt, Cong. Research Serv., R44687, Antiquities Act: Scope of Authority for Modification of National Monuments (2016), https://perma.cc/RCT9-UJ8N; Robert Rosenbaum et al., Arnold & Porter Kaye Scholer, The President Has No Power Unilaterally to Abolish or Materially Change a National Monument Designation Under the Antiquities Act of 1906 (May 3, 2017), https://www.npca.org/resources/3197-legal-analysis-of-presidential-ability-to-revoke-national-monuments.

[3] U.S. Const. art. IV, § 3, cl. 2.

[4] See Kleppe v. New Mexico, 426 U.S. 529, 539 (1976) (quoting United States v. San Francisco, 310 U.S. 16, 29 (1940)). See also Ivanhoe Irrigation Dist. v. McCracken, 357 U.S. 275, 294–295 (1958).

[5] J. W. Hampton, Jr. & Co. v. United States, 276 U.S. 394, 409 (1928). The Supreme Court has also made clear that any delegation of legislative power must be construed narrowly to avoid constitutional problems. Mistretta v. United States, 488 U.S. 361, 373 n.7 (1989).

[6] 54 U.S.C. § 320301(a) (2012).

[7] See infra Section I.A.

A. The Antiquities Act does not grant authority to revoke a monument designation

The United States owns about one third of our nation's lands.[8] These lands, which exist throughout the country but are concentrated in the western United States, are managed by federal agencies for a wide range of purposes such as preservation, outdoor recreation, mineral and timber extraction, and ranching. Homestead, mining, and other laws transferred ownership rights over large areas of federal lands to private parties. At the same time, vast tracts of land remain in public ownership, and these lands contain a rich assortment of natural, historical, and cultural resources.

Over its long history, Congress has "withdrawn," or exempted, some federal public lands from statutes that allow for resource extraction and development, and "reserved" them for particular uses, including for preservation and resource conservation.[9] Congress has also, in several instances, delegated to the executive branch the authority to set aside lands for particular types of protection. The Antiquities Act of 1906 is one such delegation.

The core of the Antiquities Act is both simple and narrow. It reads, in part:

> [T]he President of the United States is hereby authorized, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected . . . .[10]

[8] See Public Land Law Review Commission, One Third of the Nation's Land 19 (1970).

[9] See, e.g., The Wilderness Act, 16 U.S.C. § 1133(d)(3) (2012) ("[E]ffective January 1, 1984, the minerals in lands designated. . . as wilderness are withdrawn from all forms of appropriation under the mining laws and from disposition under all laws pertaining to mineral leasing. . . ."); The Wild and Scenic Rivers Act, 16 U.S.C. § 1280(b) (2012) ("The minerals in any Federal lands which constitute the bed or bank or are situated within one-quarter mile of the bank of any river which is listed [for study as wild and scenic] are hereby withdrawn from all forms of appropriation under the mining laws. . . .").

[10] Antiquities Act of 1906, 34 Stat. 225 (1906) (prior to 2014 amendment). The language of the Antiquities Act was edited and re-codified in 2014 at 54 U.S.C. § 320301(a)-(b) with the stated intent of "conform[ing] to the understood policy, intent, and purpose of Congress

The narrow authority granted to the President to *reserve* land[11] under the Antiquities Act stands in marked contrast to contemporaneous laws that delegated much broader executive authority to designate, repeal, or modify other types of federal reservations of public lands. For example, the Pickett Act of 1910 allowed the President to withdraw public lands from "settlement, location, sale, or entry" and reserve these lands for a wide range of specified purposes "*until revoked by him or an Act of Congress*."[12] Likewise, the Forest Service Organic Act of 1897 authorized the President "to modify any Executive order that has been or may hereafter be made establishing any forest reserve, and by such modification *may reduce the area or change the boundary lines of such reserve, or may vacate altogether any order creating such reserve*."[13]

Unlike the Pickett Act and the Forest Service Organic Administration Act, the Antiquities Act withholds authority from the President to change or revoke a national monument designation. That authority remains with Congress under the Property Clause.

This interpretation of the President's authority finds support in the single authoritative executive branch source interpreting the scope of Presidential power to revoke monuments designated under the Antiquities Act: a 1938 opinion by Attorney General Homer Cummings.[14] President Franklin D. Roosevelt had specifically asked Cummings through the Secretary of the Interior whether the Antiquities Act authorized the President to revoke the Castle Pinckney National Monument. In his opinion, Cummings compared the language noted above from the Pickett Act and the Forest Service Organic Act with the language in the Antiquities Act, and concluded unequivocally that the Antiquities Act

in the original enactments[.]" Pub. L. No. 113-287, §§ 2-3, 128 Stat. 3094, 3259 (2014) (codified at 54 U.S.C. § 320301(a)-(b)).

[11] In an opinion dated September 15, 2000, the Office of Legal Counsel in the Department of Justice found that the authority to reserve federal land under the Antiquities Act encompassed the authority to proclaim a national monument in the territorial sea—3-12 nautical miles from the shore—or the exclusive economic zone—12-200 nautical miles from the shore. Administration of Coral Reef Resources in the Northwest Hawaiian Islands, 24 Op. O.L.C. 183, 183–85 (Sept. 15, 2000), https://perma.cc/E8J8-EDL3.

[12] Pickett Act, Pub. L. No. 303, 36 Stat. 847 (1910) (repealed 1976) (emphasis added).

[13] Forest Service Organic Act of 1897, ch. 2, 30 Stat. 34 (1897) (codified as amended at 16 U.S.C. § 475 (2006)) (emphasis added).

[14] Proposed Abolishment of Castle Pinckney National Monument, 39 Op. Att'y Gen. 185 (1938).

"does not authorize [the President] to abolish [national monuments] after they have been established."[15]

B. FLPMA clarifies that only Congress can revoke or downsize a national monument

In 1976, Congress enacted FLPMA.[16] FLPMA governs the management of federal public lands lacking any specific designation as a national park, national forest, national wildlife refuge, or other specialized unit. The text, structure, and legislative history of FLPMA confirm the conclusion of Attorney General Cummings that the President does not possess the authority to revoke or downsize a monument designation.

FLPMA codified federal policy to retain—rather than dispose of—the remaining federal public lands,[17] provided for specific procedures for land-use planning on those lands, and consolidated the wide-ranging legal authorities relating to the uses of those lands.[18] Prior to FLPMA's enactment, delegations of executive authority to withdraw public lands from development or resource extraction were dispersed among federal statutes, including the Pickett Act and the Forest Service Organic Act. Moreover, in *United States v. Midwest Oil Co.*, the Supreme Court held that the President enjoyed an implied power to withdraw public lands as might be necessary to protect the public interest, at least in the absence of direct statutory authority or prohibition.[19]

FLPMA consolidated and streamlined the President's withdrawal power. It repealed the Pickett Act, along with most other executive au-

[15] Id. at 185–86 (1938).

[16] Federal Land Policy and Management Act of 1976, Pub. L. No. 94-579, 90 Stat. 2743 (1976) (codified primarily at 43 U.S.C. §§ 1701–1782 (2012)) [hereinafter "FLPMA"].

[17] See 43 U.S.C. § 1701 (2012).

[18] Land use planning is specifically provided for under § 202 of FLPMA. Id. at § 1712. Additional public land use management authority is found at § 302 of FLPMA, which, among other things, requires the Secretary of the Interior to "take any action necessary to prevent the unnecessary or undue degradation of the lands." Id. at § 1732(b).

[19] 236 U.S. 459, 491 (1915). *Midwest Oil* involved withdrawals by President Taft of certain public lands from the operation of federal laws that allowed private parties to locate mining claims on public lands and thereby acquire vested rights to the minerals found there. The Secretary of the Interior recommended the withdrawals after receiving a report from the Director of the Geological Survey describing the alarming rate at which federal oil lands were being claimed by private parties. Noting the government's own need for petroleum resources to support its military, the report lamented that "the Government will be obliged to repurchase the very oil that it has practically given away . . . ." Id. at 466–67 (quotation marks omitted).

thority for withdrawing lands—with the notable exception of the Antiquities Act.[20] In place of these prior withdrawal authorities, FLPMA included a new provision—section 204—that authorizes the Secretary of the Interior "*to make, modify, extend, or revoke withdrawals* but only in accordance with the provisions and limitations of this section."[21]

FLPMA left unchanged the President's authority to create national monuments under the Antiquities Act, and included language confirming that Congress alone may modify or abolish monuments. Subsection 204(j) of FLPMA somewhat curiously states that "[t]he Secretary [of Interior] shall not . . . modify or revoke any withdrawal creating national monuments under [the Antiquities Act]. . . ."[22] Because only the *President*, and not the Secretary of the Interior, has authority to proclaim national monuments, Congress's reference to the *Secretary*'s authority under the Antiquities Act is anomalous and, as explained further below, may be the result of a drafting error. Nonetheless, this language reinforces the most plausible reading of the text of the Antiquities Act: that it deliberately provides for one-way designation authority. The President may act to create a national monument, but only Congress can modify or revoke that action.

An examination of FLPMA's legislative history removes any doubt that section 204(j) was intended to reserve to Congress the exclusive au-

[20] FLPMA, § 704(a), 90 Stat. 2792 (1976). The authority to create or modify forest reserves was repealed in 1907 for six specific states before its repeal was extended to all states in FLPMA Section 704(a). 34 Stat. 1269, 1271 (1907).

[21] 43 U.S.C. § 1714(a) (2012) (emphasis added).

[22] Id. at § 1714(j). The provision reads in its entirety as follows, with emphasis on the part relating to the Antiquities Act:

> The Secretary shall not make, modify, or revoke any withdrawal created by Act of Congress; make a withdrawal which can be made only by Act of Congress; *modify or revoke any withdrawal creating national monuments under [the Antiquities Act]*; or modify, or revoke any withdrawal which added lands to the National Wildlife Refuge System prior to October 21, 1976, or which thereafter adds lands to that System under the terms of this Act. Nothing in this Act is intended to modify or change any provision of the Act of February 27, 1976 (90 Stat. 199; 16 U.S.C. 668dd(a)).

Id. The reference in the first clause prohibiting the Secretary from "mak[ing]" a withdrawal "created by [an] Act of Congress" does not make sense because the Secretary cannot logically "make" a withdrawal already created by Congress. But it also is not relevant to the Antiquities Act since national monuments are created by the President, not Congress. Id. The second clause likewise addresses withdrawals made by Congress. The third clause is the only one that specifically addresses the Antiquities Act; it makes clear that the Secretary cannot modify or revoke national monuments. The final operative clause likewise prohibits the Secretary from revoking or modifying withdrawals, in that case involving National Wildlife Refuges.

thority to modify or revoke national monuments. FLPMA's restriction of executive withdrawal powers originated in the House version of the legislation.[23] Skepticism in the House towards executive withdrawal authority dated back to the 1970 report of the Public Lands Law Review Commission (PLLRC), a Congressionally-created special committee tasked with recommending a complete overhaul of the public land laws. The PLLRC report called on Congress to repeal all existing withdrawal powers, including the power to create national monuments under the Antiquities Act.[24] The Commission suggested replacing this authority with a comprehensive withdrawal process run by the Secretary of the Interior and closely supervised by Congress.[25]

The House Committee on Interior and Insular Affairs' Subcommittee on Public Lands largely followed this recommendation by including Section 204 in its draft of FLPMA.[26] Complementing this section, the bill presented to and passed by the House included a provision—ultimately enacted as Section 704(a) of FLPMA—that repealed the Pickett Act and other extant laws allowing executive withdrawals, as well as the implied executive authority to withdraw public lands that the Supreme Court had recognized in *Midwest Oil*.[27]

Consistent with this approach, the Subcommittee on Public Lands drafted Section 204(j) in order to constrain executive branch discretion in the context of national monuments. The Subcommittee frequently discussed the issue during its detailed markup sessions in 1975 and early 1976 on its version of the bill that would eventually become FLPMA.[28]

At an early markup session in May 1975, some subcommittee members, under the mistaken impression that the Secretary of the Interior created national monuments, expressed concerns that some future Secretary might modify or revoke them.[29] The Subcommittee therefore began

[23] See H.R. 13777, 94th Cong. § 604(b) (1976). The Senate bill contained no restrictions on executive withdrawal power. See S. 577, 94th Cong. (1975).

[24] See Public Land Law Review Commission, supra note 8, at 2, 54–57.

[25] Id. at 56–57.

[26] H.R. 13777, 94th Cong. § 204 (1976).

[27] See id. at § 604(b) (1976). See also *Midwest Oil*, 236 U.S. at 491.

[28] The subcommittee's hearings and markups focused on H.R. 5224, which eventually passed the full Committee in April 1976. An amended version was reintroduced as a clean bill, H.R. 13777, which was approved by the House and sent to the conference committee. See H.R. Rep. No. 94-1163, at 33 (1976), *reprinted in* 1976 U.S.C.C.A.N. 6175, 6207 (1976) (describing replacement of H.R. 5224 with H.R. 13777 by committee).

[29] See H.R. 5224, et al., Public Land Policy and Management Act of 1975: Hearing Before the Subcomm. on Pub. Lands of the H. Comm. on Interior and Insular Affairs, 94th Cong.

shaping the bill to eliminate any possibility of unilateral executive power to modify or revoke monuments, while maintaining the existing power to create monuments.[30]

Once the Subcommittee's misunderstanding about Secretarial authority to designate monuments became apparent, the Subcommittee also proposed shifting the authority to create national monuments from the President to the Secretary, in the pattern of consolidating withdrawal authority in Section 204.[31] The first version of what later became Section 204(j) of FLPMA was drafted after this discussion, as was a provision that would have amended the Antiquities Act to transfer designation authority from the President to the Secretary of the Interior.[32] The Ford Administration appeared to object generally to constraining executive power to withdraw public lands.[33] As part of the subsequent changes to the draft legislation, the Subcommittee dropped the provision that would

88–93 (May 6, 1975) [hereinafter May 6 Hearing]. Later statements by subcommittee members indicate that their understanding was that the Secretary had delegated authority to propose the creation of monuments, but that they were ultimately proclaimed by the President. H.R. 5224 & H.R. 5622: Hearing before the Subcomm. on Pub. Lands of the H. Comm. on Interior and Insular Affairs, 94th Cong. 184 (June 6, 1975) [hereinafter June 6 Hearing].

[30] May 6 Hearing, supra note 29, at 91 (statement of Rep. Melcher):

> I would say that it would be better for us if, in presenting this bill to the House, for that matter in full committee, if we made it clear that the Secretary and perhaps also make it part of the bill somewhere, that he can not revoke a national monument.

See also id. at 93 (statement of committee staff member Irving Senzel: "So we could put in here that—we can put in the statement that he cannot revoke national monuments once created."); H.R. 5224 & H.R. 5622: Hearing Before the Subcomm. on Pub. Lands of the H. Comm. on Interior and Insular Affairs, 94th Cong. 176 (June 6, 1975) (statement of committee staff member Irving Senzel: "In accordance with the decision made the last time, there is a section added in there that provides that no modification or revocation of national monuments can be made except by act of Congress.").

[31] See June 6 Hearing, supra note 29, at 183–85.

[32] See Public Land Policy and Management Act of 1975 Print No. 2: Hearing Before the Subcomm. on Pub. Lands of the H. Comm. on Interior and Insular Affairs, 94th Cong. 23–24 (Sept. 8, 1975) (prohibiting the Secretary from modifying or revoking a national monument). Id. at 92 (amending the Antiquities Act by substituting "Secretary of the Interior" for "President of the United States").

[33] See H.R. Rep. No. 94-1163, at 41–42, 52 (May 15, 1976). The comments from the Assistant Secretary of the Interior from November 21, 1975, on Subcommittee Print No. 2 listed the proposed changes to withdrawal authority as one of the reasons for the Administration's opposition to that version of the bill, noting that under it, "the proposed . . . Act would be the only basis for withdrawal authority." Id. at 52.

have transferred monument designation authority from the President to the Secretary.[34]

Nonetheless, the Subcommittee retained Section 204(j). Pairing Section 204(j) with the proposed transfer of monument designation power strongly suggests that the language of Section 204(j) was not an effort to constrain (non-existent) Secretarial authority to modify or revoke national monuments while retaining Presidential authority to do so. Instead, it was part of an overall plan to constrain and systematize all executive branch withdrawal power, and reserve to Congress the powers to modify or rescind monument designations.[35] The House Committee's Report on the bill makes clear that this provision was designed to prevent *any* unilateral executive modification or revocation of national monuments. In describing Section 204 of the bill as it was presented for debate on the House floor, the Report explains:

> With certain exceptions, [the bill] will repeal all existing law relating to executive authority to create, modify, and terminate withdrawals and reservations. It would reserve to the Congress the authority to create, modify, and terminate withdrawals for national parks, national forests, the Wilderness System, Indian reservations, certain defense withdrawals, and withdrawals for National Wild and Scenic Rivers, National Trails, and for other "national" recreation units, such as National Recreation Areas and National Seashores. *It would also specifically reserve to the Congress the authority to modify and revoke withdrawals for national monuments created under the Antiquities Act* and for modification and revocation of withdrawals adding lands to the National Wildlife Refuge System. These provisions will insure that the integrity of the great national resource management systems will remain under the control of the Congress.[36]

Thus, notwithstanding the anomalous reference to the Secretary in Section 204(j), Congress explicitly stated its intention to reserve for it-

[34] See See Public Land Policy and Management Act of 1975 Print No. 4: Hearing Before the Subcomm. on Pub. Lands of the H. Comm. on Interior and Insular Affairs 94th Cong. (March 16, 1976).

[35] See id. at 30.

[36] H.R. Rep. No. 94-1163, at 9 (May 15, 1976) (emphasis added). Floor debates in the House do not contain any record of discussing this particular issue, and the Conference Report on FLPMA, later in 1976, did not specifically address it.

self the authority to modify or revoke national monuments.[37] The plain language of this report, combined with other statements in the legislative history and the process by which Congress created Section 204(j), make clear that Congress' intent was to constrain all executive branch power to modify or revoke national monuments, not just Secretarial authority.

In light of the text of the Antiquities Act, the contrasting language in other statutes at the turn of the 20th century, and the changes to federal land management law in FLPMA, the Antiquities Act must be construed to limit the President's authority to proclaiming national monuments on federal lands. Only Congress can modify or revoke such proclamations.

II. AUTHORITY FOR SHRINKING NATIONAL MONUMENTS OR REMOVING RESTRICTIVE TERMS

If the President cannot abolish a national monument because Congress did not delegate that authority to the President, it follows that the President also lacks the power to downsize or loosen the protections afforded to a monument. This conclusion is reinforced by the use of the phrase "modify and revoke" in Section 204(j) of FLPMA to describe prohibited actions.[38] Moreover, while the Antiquities Act limits national monuments to "the smallest area compatible with the proper care and management of the objects to be protected,"[39] that language does not grant the President the authority to second-guess the judgments made by previous Presidents regarding the area or level of protection needed to protect the objects identified in an Antiquities Act proclamation.

[37] The most plausible interpretation of the reference to the Secretary in the text is that there was a drafting error on the part of the Subcommittee in failing to update the reference in Section 204(j) when it dropped the parallel language transferring monument designation authority from the President to the Secretary. The only other plausible interpretation of Section 204(j) is that the provision was designed to make clear that Section 204(a), which authorizes the Secretary to modify or revoke withdrawals, was not intended to grant new authority to the Secretary over national monuments. Under this reading, the reference to the Secretary in Section 204(j) would not be anomalous but would serve the specific purpose of restricting the scope of Section 204(a). But whether the reference to the Secretary in Section 204(j) was a drafting error, or simply a clarification about the limits of the Secretary's power under Section 204(a) does not really matter because either interpretation is consistent with the conclusion that Congress intended to reserve for itself the power to modify or revoke national monuments. FLPMA's legislative history strongly reinforces this point. See supra notes 29–36.

[38] FLPMA, § 204(j), 90 Stat. 2743, 2754 (1976).

[39] 54 U.S.C. § 320301(b).

A. Presidents lack legal authority to shrink national monuments

Over the first several decades of the Antiquities Act's existence, various Presidents reduced the size of various monuments that their predecessors had designated. Most of these actions were relatively minor, although the decision by President Woodrow Wilson to dramatically reduce the size of the Mount Olympus National Monument, which is described briefly below, was both significant and controversial.[40] Importantly though, no Presidential decision to reduce the size of a national monument has ever been tested in court, and so no court has ever ruled on the legality of such an action. Moreover, all such actions occurred before 1976 when FLPMA became law. As the language and legislative history of FLPMA make clear, Congress has quite intentionally reserved to itself "the authority to *modify* and revoke withdrawals for national monuments created under the Antiquities Act."[41]

In his 1938 opinion, Attorney General Cummings acknowledged the history of modifications to national monuments, noting that "the President from time to time has diminished the area of national monuments established under the Antiquities Act by removing or excluding lands therefrom."[42] The opinion, however, does not directly address whether these actions were legal, and does not analyze this issue, other than to reference the language from the Antiquities Act that limits monuments to "the smallest area compatible with the proper care and management of the objects to be protected."[43]

The Interior Department's Solicitors did review several presidential attempts to shrink monuments, but reached inconsistent conclusions. In

[40] See Mark Squillace, The Monumental Legacy of the Antiquities Act of 1906, 37 Ga. L. Rev. 473, 561–64 (2003).

[41] H.R. Rep. 94-1163, at 9 (emphasis added). 43 U.S.C. 1714(j) ("The Secretary shall not. . . *modify* or revoke any withdrawal creating national monuments under [the Antiquities Act].") (emphasis added).

[42] Proposed Abolishment of Castle Pinckney National Monument, 39 Op. Att'y Gen. 185, 188 (1938).

[43] Id. at 188 (quoting 54 U.S.C. § 320301(b)). See also Wyatt, supra note 2, at 5. Much like the Attorney General's 1938 Opinion, the CRS report acknowledges that "there is precedent for Presidents to reduce the size of national monuments. . .", and that "[s]uch actions are presumably based on the determination that the areas to be excluded represent the President's judgment as to 'the smallest area compatible with the proper care and management of the objects to be protected.'" Id. But also like the Attorney General's Opinion, the report never actually analyzes the legal issue in depth and it does not address the particular question as to whether FLPMA might have resolved or clarified the issue against allowing presidential modifications. Id.

1915, the Solicitor examined President Woodrow Wilson's proposal to shrink the Mount Olympus National Monument, which President Theodore Roosevelt had designated in 1909.[44] Without addressing the core legal issue of whether the President had authority to change the monument status of lands designated by a prior President, the Solicitor expressed the opinion that lands removed from the monument would revert to national forest (rather than unreserved public domain) because they had previously been national forest lands.[45]

In the end, President Wilson did downsize the Mount Olympus National Monument by more than 313,000 acres, nearly cutting it in half.[46] Despite an outcry from the conservation community, Wilson's decision went unchallenged in court.[47]

In 1924, for the first time, the Solicitor squarely confronted the issue of whether a President has the authority to reduce the size of a national monument, concluding that the President lacked this authority. The Solicitor considered whether the President could reduce the size of the Gran Quivira[48] and Chaco Canyon National Monuments.[49] Relying on a 1921 Attorney General's opinion involving "public land reserved for lighthouse purposes," the Solicitor concluded that the President was not authorized to restore lands to the public domain that had been previously set aside as part of a national monument.[50] The Solicitor confirmed this position in a subsequent decision issued in 1932.[51]

[44] Proclamation No. 869, 35 Stat. 2247 (1909) (creating Mount Olympus National Monument); see also Squillace, supra note 40, at 562–63 (discussing the review of President Wilson's proposal).

[45] U.S. Dep't of the Interior, Office of the Solicitor, Solicitor's Opinion of April 20, 1915, at 4–6. The University of Colorado Law Library has established a permanent, online database that includes the four unpublished Solicitor's Opinions cited in this article. That database is available at http://scholar.law.colorado.edu/research-data/4/.

[46] Proclamation No. 1293, 39 Stat. 1726 (1915); Squillace, supra note 40, at 562.

[47] See Squillace, supra note 40, at 563–64.

[48] Proclamation No. 959, 36 Stat. 2503 (1909) (creating Gran Quivira National Monument).

[49] Proclamation No. 740, 35 Stat. 2119 (1907) (creating Chaco Canyon National Monument).

[50] U.S. Dep't of the Interior, Office of the Solicitor, Solicitor's Opinion of June 3, 1924, M-12501 (citing 32 Op. Att'y Gen 438 (1921)). In language that anticipated the later 1938 opinion, this 1921 Attorney General's opinion concluded that "[t]he power to thus reserve public lands and appropriate them . . . does not necessarily include the power to either restore them to the general public domain or transfer them to another department." Disposition of Abandoned Lighthouse Sites, 32 Op. Att'y Gen. 488, 488–91 (1921) (quoting Camp Hancock–Transfer to Dept. of Agriculture, 28 Op. Att'y Gen. 143, 144 (1921)). The Solicitor's 1924 opinion on Gran Quivara and Chaco Canyon might be distinguished from the 1915

Subsequently, in 1935, the Interior Solicitor reversed the agency's position, but this time on somewhat narrow grounds.[52] This opinion relied heavily on the implied authority of the President to make and modify withdrawals that the U.S. Supreme Court upheld in *United States v. Midwest Oil Co*.[53] The argument that *Midwest Oil* imbues the President with implied authority to modify or abolish national monuments is problematic, however, for at least three reasons. First, as described previously, Congress enjoys plenary authority over our public lands under the Constitution, and the President's authority to proclaim a national monument derives solely from the delegation of that power to the President under the Antiquities Act.[54] But the Antiquities Act grants the President only the power to reserve land, not to modify or revoke such reservations. Such actions, therefore, are beyond the scope of Congress' delegation. Second, the *Midwest Oil* decision relied heavily on the perception that Presidential action was necessary to protect the public interest by preventing public lands from exploitation for private gain. Construing the law to allow a President to open lands to private exploitation protects no such interest. Finally, and as noted previously, Congress expressly overruled *Midwest Oil* when it enacted FLPMA in 1976.[55] Thus, even if those earlier, pre-FLPMA monument modifications might arguably have been supported by implied presidential authority, that implied authority

opinion on Mount Olympus National Monument, on the grounds that the earlier opinion had specifically supported the modification of the monument because the lands would not be restored to the public domain, but would rather be reclassified as national forests. Solicitor's Opinion of April 20, 1915, supra note 45, at 6. The legal argument against the modification of monument proclamations, however, has never rested on whether the lands would be restored to the public domain or revert to another reservation or designation.

[51] U.S. Dep't of the Interior, Office of the Solicitor, Solicitor's Opinion of May 16, 1932, M-27025 (opinion regarding Death Valley National Monument).

[52] U.S. Dep't of the Interior, Office of the Solicitor, Solicitor's Opinion of January 30, 1935, M-27657 (upholding the validity of the reduction of Mount Olympus National Monument since no interdepartmental transfer). See also National Monuments, 60 Interior Dec. 9, 9–10 (July 21, 1947) (solicitor opinion reaffirming the 1935 opinion).

[53] U.S. Dep't of the Interior, Office of the Solicitor, Solicitor's Opinion of January 30, 1935, M-27657; United States v. Midwest Oil Co., 236 U.S. 459, 483 (1915).

[54] See , supra Part I.

[55] FLPMA, § 704(a), 90 Stat. 2792 (1976). While the text of Section 704(a) specifically mentions the power of the President "to make withdrawals," given the clear intent of Congress in FLPMA to reduce executive withdrawal power, the section is best understood as also repealing any inherent Presidential power recognized in *Midwest Oil* to modify or revoke withdrawals as well.

is no longer available to justify the shrinking of national monuments following the passage of FLPMA.[56]

Some critics of national monument designations have argued that a President can downsize a national monument by demonstrating that the area reserved does not represent the "smallest area compatible" with the protection of the resources and sites identified in the monument proclamation.[57] But allowing a President to second-guess the judgment of a predecessor as to the amount of land needed to protect the objects identified in a proclamation is fraught with peril because it essentially denies the first President the power that Congress granted to proclaim monuments. If that were the law, then nothing would stop a President from deciding that the objects identified by a prior President were themselves not worthy of protection. Congress clearly intended the one-way power to reserve lands as national monuments to avoid this danger. Moreover, the fact that national monuments often encompass large landscapes, which are themselves denoted as the objects warranting protection, is not a cause for concern because the courts, including the U.S. Supreme Court, have consistently upheld the use of the Antiquities Act to protect such landscapes as "objects of historic or scientific interest."[58] Courts

[56] This repeal removes any presumption of inherent Presidential authority to withdraw public lands or modify past withdrawals. As noted above, such authority, if any, must derive from an express delegation from the Congress. In this way, the power of the President or any executive branch agency over public lands is unlike the inherent power of the President to issue, amend, or repeal executive orders or the inherent power of the Congress to promulgate, amend or repeal laws. It is arguably akin to the power of administrative agencies to issue, amend, or repeal rules but, unlike the Antiquities Act, each of these powers has been expressly delegated to agencies by the Administrative Procedure Act. See 5 U.S.C. § 551(5) (2012) (definition of "rulemaking").

[57] See, e.g., John Yoo & Todd Gaziano, Am. Enter. Inst., Presidential Authority to Revoke or Reduce National Monument Designations 14–18 (2017), https://perma.cc/PX7W-UD3E. The Interior Solicitor's 1935 opinion, and a subsequent one in 1947, addressed this issue in reviewing and supporting the validity of the decision by Woodrow Wilson to shrink the Mt. Olympus National Monument. Squillace, supra note 40, at 560–64. According to that opinion, both the Interior and Agriculture Departments thought the area was "larger than necessary." U.S. Dep't of the Interior, Office of the Solicitor, Solicitor's Opinion of Jan. 30, 1935, M-27657 (http://scholar.law.colorado.edu/research-data/4/.). However, there is no legal basis for concluding that the opinions of cabinet officials should overturn a prior presidential determination as to the scope and management requirements of a protected monument. Squillace, supra note 40, at 560–64.

[58] See Cameron v. United States, 252 U.S. 450, 455–56 (1920). The Court dismissed the plaintiff's objection to the establishment of the 808,120 acre Grand Canyon National Monument with these words:

> The Grand Canyon, as stated in [President Roosevelt's] proclamation, "is an object of unusual scientific interest." It is the greatest eroded canyon in the United States, if not

have upheld two prominent examples of landscape level monuments under these broad interpretations: the Grand Canyon,[59] designated less than two years after the Antiquities Act's passage; and the Giant Sequoia National Monument, created in 2000.[60]

It is conceivable, of course, that a revised proclamation might be needed to correct a mistake or to clarify a legal description in the original proclamation, as occurred very early on when President Taft proclaimed the Navajo National Monument and subsequently issued a second proclamation clarifying what had been an extremely ambiguous legal description.[61] But the clear restriction on modifying or revoking a national monument designation—cemented by FLPMA—indicates that a President cannot simply revisit a predecessor's decision about how much public land should be protected.

> in the world, is over a mile in depth, has attracted wide attention among explorers and scientists, affords an unexampled field for geologic study, is regarded as one of the great natural wonders, and annually draws to its borders thousands of visitors.

Id. at 455–56. See also, Tulare Cty. v. Bush, 306 F.3d 1138, 1140–41 (D.C. Cir. 2002) (discussing Giant Sequoia National Monument). Additional Supreme Court cases that address Antiquities Act designations support this broad interpretation of what may constitute an "object of historic or scientific interest." See United States v. California, 436 U.S. 32, 34 (1978) (Channel Islands); Cappaert v. United States, 426 U.S. 128, 131–32, 142 (1976) (Devil's Hole).

[59] Cameron, 252 U.S. at 455–56.

[60] Tulare Cty., 306 F.3d at 1140–41.

[61] Taft's original proclamation for the Navajo National Monument in Arizona protected:

> [A]ll prehistoric cliff dwellings, pueblo and other ruins and relics of prehistoric peoples, situated upon the Navajo Indian Reservation, Arizona between the parallels of latitude thirty-six degrees thirty minutes North, and thirty-seven degrees North, and between longitude one hundred and ten degrees West and one hundred and ten degrees forty-five minutes West . . . together with forty acres of land upon which each ruin is located, in square form, the side lines running north and south and east and west, equidistant from the respective centers of said ruins.

Proclamation No. 873, 36 Stat. 2491, 2491–92 (1909). The map accompanying the proclamation states that Navajo National Monument is "[e]mbracing all cliff-dwelling and pueblo ruins between the parallel of latitude 36°30' North and 37 North and longitude 110° West and 110° 45' West. . . with 40 acres of land in square form around each of said ruins." Id. at 493 Thus, the original proclamation was ambiguous. It plainly was not intended to include all of the lands within the latitude and longitude description but only 40 acres around the ruins in that area. The map specifically identified at least 7 sites as "ruins" and appeared to denote a handful of other sites that might have been intended for protection under the original proclamation, although the map is a little unclear on this point. The revised proclamation issued three years later, also by Taft, clarified the ambiguous references in the original proclamation. It included a survey done after the original proclamation and protects two, 160-acre tracts of land and one, 40 acre tract. Proclamation No. 1186, 37 Stat. 1733, 1733–34, 1738 (1912).

B. Removing protections that apply on national monuments would be an unlawful modification

A related issue is whether a President can modify a national monument proclamation by removing some or all of the protections applied to the monument area, such as limitations on livestock grazing, mineral leasing, or mining claims location. Plainly, these are types of "modifications." As discussed above, Congress's use of the phrase "modify and revoke" to describe prohibited actions demonstrates that the same legal principles apply here as would apply to an attempt to abolish a monument.[62] More generally, if a President lacks the authority to abolish or downsize a monument, it would also suggest a lack of presidential authority to remove any restrictions imposed by a predecessor. Moreover, to the extent that a claim of presidential authority rests on an argument that the President can shrink a monument to conform to the "smallest area compatible" language of the Antiquities Act, that argument would be inapplicable to an effort to remove restrictive language from a predecessor's national monument proclamation.[63]

Aside from these legal arguments, construing the Antiquities Act as providing one-way Presidential designation authority is consistent with the fundamental goal of the statute. Faced with a concern that historical, archaeological, and natural or scenic resources could be damaged or lost, Congress purposefully devised a delegation to the President to act quickly to ensure the preservation of objects of historic and scientific interest on public lands before they are looted or compromised by incompatible land uses, such as the location of mining claims. Once the President has determined that these objects are worthy of protection, no future President should be able to undermine that choice. That is a decision that Congress lawfully reserved for itself under the terms of the Antiquities Act, a point that Congress reinforced in the text and legislative history of FLPMA.

[62] See supra Section II.A.

[63] In National Monuments, supra note 52, at 10, the Solicitor acknowledged that the Mineral Leasing Act does not apply to national monuments. Nonetheless, he held that "in the event of actual or threatened drainage of oil or gas under lands within the Jackson Hole National Monument by wells on non-federally-owned lands, the authority to take the necessary protective action, including the issuance of oil and gas leases, would impliedly exist." Id. at 10–11. To be clear, however, the Solicitor was not sanctioning surface occupancy of national monument lands but only the issuance of leases that would allow the federal government and the lessee to share in the oil and gas production that was being extracted from a well on nonfederal lands. For further discussion of this issue, see Squillace, supra note 40, at 566–68.

CONCLUSION

Our conclusion, based on analysis of the text of the Antiquities Act and other statutes, legislative history, and prior legal opinions, is that the President lacks the authority to abolish or downsize a monument, or otherwise weaken the protections afforded by a national monument proclamation declared by a predecessor. Moreover, while we believe this to be the correct reading of the law from the time of enactment of the Antiquities Act in 1906, the enactment of FLPMA in 1976 removes any doubt as to whether Congress intended to reserve for itself the power to revoke or modify national monument proclamations, because Congress stated so explicitly.

Presidents may retain some authority to clarify a proclamation that contains an ambiguous legal description or a mistake of fact.[64] Where expert opinions differ, however, courts should defer to the choices made by the President proclaiming the monument and the relevant objects designated for protection. Otherwise, a future President could undermine the one-way conservation authority afforded the President under the Antiquities Act and the congressional decision to reserve for itself the authority to abolish or modify national monuments.

The remarkable success of the Antiquities Act in preserving many of our nation's most iconic places is perhaps best captured by the fact that Congress has never repealed any significant monument designation.[65] Instead, in many instances, Congress has expanded national monuments and redesignated them as national parks.[66] For more than 100 years, Presidents from Teddy Roosevelt to Barack Obama have used the Antiquities Act to protect our historical, scientific, and cultural heritage, often at the very moment when these resources were at risk of exploitation. That is the enduring legacy of this extraordinary law. And it remains our best hope for preserving our public land resources well into the future.

[64] See supra note 61 and accompanying text.

[65] About a dozen monuments have been abolished by the Congress. None of these were larger than 10,000 acres, and no monument established by a president has been de-designated by Congress without redesignating the land as part of another national monument or other protected area since 1956. See Squillace, supra note 40, at 550, 585–610 (appendix). See also National Park Service, Archeology Program: Frequently Asked Questions (May 31, 2017), https://perma.cc/BW3C-X52Z (noting no parks as "abolished" since 1956 except for Misty Fjords, which was subsequently made part of Tongass National Park).

[66] See e.g., Proclamation No. 277, 40 Stat. 1175 (1919)(expanding size of Grand Canyon park).

Appendix C

Literature review of research at Grand Staircase (complied by The Wilderness Society)

APPENDIX A:

LITERATURE REVIEW AND SUMMARY OF THE RESEARCH OF MONUMENT OBJECTS OF INTEREST BY CATEGORY FOR THE GRAND STAIRCASE-ESCALANTE NATIONAL MONUMENT

WILDLIFE

Summary: The diversity of geologic substrates and landforms in Grand Staircase-Escalante National Monument (GSENM) has resulted in a similar diversity of habitat types, ranging from barren sandstone cliffs and colorful badland slopes to Ponderosa pine-Douglas fir-aspen mountain woods, sagebrush grasslands, and wet meadows, springs, hanging gardens, and riparian woodlands. As a result, the diversity of animal species is high. Atwood et al. (1980) conducted a survey of terrestrial vertebrates of the Kaiparowits area and documented about 300 species of mammals, birds, reptiles, and amphibians. Belnap (1997) reported a comparable number of vertebrate species(excluding fish) from the entire monument area. Flinders et al. (2002) conducted a review of available literature and concluded that 86 species of mammals were present within GSENM and another 21 species were reported from the vicinity. At least 243 bird species are likely to occur within the monument, based on the checklist of Jensen et al. (no date). About 50 species of fish, amphibians, and reptiles are known from the Escalante drainage based on Utah Natural Heritage Program data (cited in Fertig et al. 2011). The Escalante is a tributary of the Colorado River, which is a major center of fish endemism in North America (Davidson et al. 1996). Reintroduction programs have added to the diversity of animal species in GSENM and include elk, bighorn sheep, turkeys, and chukar (Belnap 1997).

GSENM may be even more significant for its diversity of invertebrates. Preliminary surveys by Griswold et al. (1997) found the diversity of ground nesting bees in the monument to be comparable to that of the San Rafael Swell in central Utah which as 49 genera and 333 species. Other surveys of invertebrates have resulted in the discovery of undescribed species (Graham and Norton 1998). A bioblitz sponsored by The Nature Conservancy on private and GSENM lands in the Deer Creek drainage near Boulder suggested that as many as 4000-5000 invertebrate species might be present in the watershed (Fertig et al. 2011).

Four vertebrate species in GSENM are listed as Threatened or Endangered under the US Endangered Species Act. Mexican spotted owl is known from narrow shady canyons in northern portions of the monument. Long-term surveys by Willey and Willey (2010) have shown that maintaining prey populations is critical for the survival of spotted owl populations in GSENM. In 1997, surveys documented populations of Southwest willow flycatcher along the Paria and Escalante rivers. Bald eagles winter over much of the Grand Staircase. Occasionally California condors are observed in the monument. About 50 other vertebrate species from GSENM are considered species of concern by the Utah Natural Heritage Program.

Atwood, N. Duane, Clyde L. Pritchett, Richard D. Porter, and Benjamin W. Wood. “Terrestrial Vertebrate Fauna of the Kaiparowits Basin.” *The Great Basin Naturalist*, 1980, 303–350.

Belnap, Jayne. "The Biota and Ecology." In *Visions of the Grand Staircase-Escalante: Examining Utah's Newest National Monument*, 21–30. Utah Museum of Natural History and Wallace Stegner Center, 1998.

- Summary of flora and fauna of GSENM, including invertebrates and biological soil crust. Also includes a nice discussion of the rationale for the GSENM boundary and its large size

Bogan, Michael A., C. A. Ramotnik, and L. M. Hill. "Mammalian Species Diversity of the Grand Staircase-Escalante National Monument." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings: November 4-5, 1997, Southern Utah University*. US Department of the Interior, Bureau of Land Management, 1998. http://tinyurl.com/nyqeqne.

- As of 1997, most of the information on the mammal fauna of GSENM was based on work by Durrant (1952), though good baseline information on mammalian diversity is available from adjacent national parks and monuments in southern Utah. The authors present a preliminary checklist of the mammal fauna of the monument with 68-81taxa. At least seven subspecies of mammals are endemic to the GSENM region.

David W. Willey, and Charles van Riper III. "Ecology of Mexican Spotted Owls (Strix Occidentalis Lucida) in the Canyonlands of Southern Utah and Potential Relationships to the GSENM." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*, pp 219–28. US Department of the Interior, Bureau of Land Management, 1998.

- Based on surveys of Mexican spotted owls in southern Utah, the authors developed a potential habitat model for the species that identified extensive areas of suitable habitat within GSENM. There was an especially strong correlation between spotted owl range and steep canyon topography. The authors recommended surveying areas highlighted in the model and conducting additional research on habitat needs of the owl and its primary prey (woodrats and deer mice).

Durant, S. D. "Mammals of Utah." *University of Kansas Publication*, 1952, 63.

- Summary of distribution of mammal species across Utah, including information on mammal diversity of the area that would become GSENM

Flinders, Jerran T., Duke S. Rogers, Jackee L. Webber-Alston, and Harry A. Barber. "Mammals of the Grand Staircase–Escalante National Monument: A Literature and Museum Survey." *Monographs of the Western North American Naturalist* 1, no. 1 (2002): 1–64.

Graham, Tim. "Grasshopper Communities in Native and Nonnative Grasslands of the Colorado Plateau: Differences in Density and Species Composition." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings: November 4-5, 1997, Southern Utah University*. US Department of the Interior, Bureau of Land Management, 1998. http://tinyurl.com/lguf6dq.

Griswold, Terry, F. D. Parker, and V. J. Tepedino. "The Bees of the San Rafael Desert: Implications for the Bee Fauna of the Grand Staircase-Escalante National Monument." In *Learning from the Land, Biology Section. Grand Staircase-Escalante National Monument*

Science Symposium Proceedings, Cedar City, Utah, 1998. https://www.ars.usda.gov/research/publications/publication/?seqNo115=98566.

- The Colorado Plateau appears to be a region of rich bee diversity and endemism. A 15-year study of the bee fauna of southeastern Utah's San Rafael Desert, a small portion of the Plateau dominated by sand dunes, recoded 49 genera and 333 species - more genera and nearly as many species as in all of New England. Endemism is very high (one-fourth of the species). Diversity is the result of such factors as floral specialization (at least one-third of the species specialize on plants at the family or generic level), abundant and diverse nesting sites, strong seasonality of solitary species, and the historical contributions of diverse sources. Limited sampling in the Grand Staircase-Escalante National Monument suggests it to be equally diverse, but distinctive; nearly half of the Monument's bees are not present in the San Rafael Desert.

Hepworth, Dale K., Michael J. Ottenbacher, and Charles B. Chamberlain. "Occurrence of Native Colorado River Cutthroat Trout (Oncorhynchus Clarki Pleuriticus) in the Escalante River Drainage, Utah." *Western North American Naturalist*, 2001, 129–138.

Jennifer Jackson, Michael Herder, and Harry Barber. "Status of Bats in the Grand Staircase-Escalante National Monument." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*, 187–95, 1998.

- 15 of 19 species of bats known from Utah were documented in GSENM through netting and acoustical detection, including several rare species

K.R. Kelson. "Speciation in Rodents of the Colorado River Drainage." *University of Utah Biological Series* 11, no. 3 (1951): 1–125.

- Paper describes the significance of the Colorado River and its tributaries in shaping the distribution and evolution of mammal species in southern Utah. Kelson also identifies the "Kaiparowits Subcenter" (of GSENM) of the Canyon Lands Province of the Colorado Plateau Faunal Area as an important center of mammal speciation and diversity.

Messinger, Olivia. *A Survey of the Bees of Grand Staircase-Escalante National Monument, Southern Utah: Incidence, Abundance, and Community Dynamics*. Utah State University, 2006.

- A survey of the bees of Grand Staircase-Escalante National Monument found six hundred and fifty-six species, including numerous range extensions, several new species, and three genera new to the state of Utah. This is the richest bee landscape studied to date; reasons for the high diversity include the large elevation gradient, the richness of flowering plants, many of which are limited in distribution and require specific pollinators, and the many small local populations of species. Flowering species richness was found to be the most significant predictor of bee richness and abundance, but landscape type also played a substantial role. Abundant perennial shrubs may also provide a more predictable resource. These results provide a foundation for future studies of bee communities in GSENM, and indicate the importance of long-term, spatially extensive sampling across a broad range of elevations and including numerous landscape types if bee faunas are to be fully documented.

Stegner, Mary Allison. "Spatial and Temporal Variation in Mammalian Diversity of the Colorado Plateau (USA)," 2015. http://escholarship.org/uc/item/1f474437.pdf.

Stock, A. Dean. "Notes on Mammals of Southwestern Utah." *Journal of Mammalogy* 51, no. 2 (1970): 429–433.

Tim B. Graham, and Roy A. Norton. "Uncharismatic Microfauna of the Colorado Plateau: Notes on Distribution and Ecology of an Undescribed, Pothole-Dwelling Ameronothroid (Acari: Ameronothridae) Mite." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*, 477–83. US Department of the Interior, Bureau of Land Management, 1998.

Willey, D. W., and H. C. Willey. "Ecology of Small Mammals within Spotted Owl Nest Areas in Grand Staircase-Escalante National Monument." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*, 2:463–480, 2010.

ARCHAEOLOGY

Summary: The Antiquities Act of 1906 is best known for giving the President authority to create National Monuments to protect historic and prehistoric sites and objects. Less well known is the provision of the Act that provides fines or imprisonment for unauthorized disturbance or vandalism of archaeological sites on federal lands (Metcalfe 1997). Part of the justification for the large extent and boundaries of Grand Staircase-Escalante National Monument (GSENM) is to protect archaeological sites of the Anasazi and Fremont cultures distributed throughout the monument's 1.7 million acres. McFadden (1998, 2001) recorded 457 Virgin Anasazi archaeological sites in a 12.3 square mile area in the Grand Staircase portion of the Monument (a density of 37 sites per square mile). Extrapolating these figures across the entire monument would suggest 100,000 archaeological sites in GSENM (Metcalfe 1997). Madsen (1997) working only on state school trust lands located within the monument also derived an estimate of 100,000 archaeological sites in GSENM based on similar extrapolations. Fawcett and Latady (1997) note that as little as 1% of the monument's archaeological sites are currently known.

McFadden (2016) describes in detail just 160 of the most important archaeological sites that have been excavated on GSENM, but his map (Figure 2, pg 5) illustrates that these sites are scattered across all three main subsections of the monument. Sites in the Grand Staircase region mostly date from 200 BC to 1300 AD and represent the Virgin Anasazi culture through the Basketmaker II to Pueblo eras. One especially important site on GSENM in Kitchen Corral Wash also includes remnants of an archaic period pithouse dating to 1700 BC (McFadden 2012). Based on their diet at artifacts, the Virgin Anasazi were predominantly dryland farmers (Martin 1997) who probably migrated seasonally from one farming area to another (McFadden 1997, 2016). By contrast, the Fremont culture of northern Utah and the Escalante region of GSENM practiced a mixture of dryland farming and hunting, necessitating a more dispersed and transient style of

settlement. The Fremont initially also occupied the Kaiparowits Plateau, but were later displaced by an Anasazi group that apparently immigrated to the area from the Kayenta area of SW Utah (McFadden 2016).

As with paleontology, important new scientific discoveries are made every year in the Grand Staircase-Escalante NM, many of which are improving or altering our understanding of human history of the area. Undoubtedly, many more discoveries remain to be made, as tens of thousands of sites have yet to be discovered or analyzed. Yet the clock is also ticking, as "new" archaeological sites are obviously not being made, and existing sites are vulnerable to natural decay, inadvertent trampling, or vandalism. Metcalf (1997) makes a plea for preserving archaeological sites in GSENM for study by future generations of scientists who will have better tools for analysis and new hypotheses to test. Far from being too large, GSENM's boundaries may not be adequate to encapsulate the diversity of archaeological treasures found in Kane and Garfield counties.

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Tipps, Betsy L. “Archaeology in the Grand Staircase-Escalante National Monument: Research Prospects and Management Issues.” In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*, 133–50, 1998.

Tipps, Betsy L., and William A. Lucius. *The Tar Sands Project: An Inventory and Predictive Model for Central and Southern Utah*. Utah State Office, Bureau of Land Management, 1988.

Todd Prince, William Latady, and W. Geoffrey Spaulding. "Anasazi Occupation in the Northeastern Portion of the GSENM." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*, 121–32, 2007.

Walling, Barbara A., and Richard A. Thompson. *Archeology of the Dead Raven Site*. United States Department of the Interior, Bureau of Land Management, 2004.

William B. Fawcett, Jr., and William Latady. "Changes in the Organization of Technology and Labor among Archaic and Ancestral Pueblo Peoples in the Vicinity of the Coombs Site, South-Central Utah." In *Proceedings of the Fourth Biennial Conference of Research on the Colorado Plateau*. Report Series USGSFRESC/COPL/1999/16. US Geological Survey, 1999.

BOTANY AND VEGETATION

Summary: Grand Staircase-Escalante National Monument (GSENM) has been referred to as the "Science Monument" because of its early emphasis on promoting research on topics ranging from geology and paleontology to bee diversity, spotted owl ecology, archaeology, oral history, and recreation impacts. One of the most important areas of research has been on the flora and vegetation of the monument. These studies vary from applied research on range ecology and weed management to baseline inventories of biological soil crusts, vascular plant diversity, and vegetation composition and response to climate change. Belnap (1997) noted that the large size of GSENM made it an important outdoor laboratory for studying ecosystem-wide processes and for providing sufficient diversity of habitats and space for replicating large-scale experiments. The vastness of the monument and its proximity to other important protected areas, such as Glen Canyon NRA, Capitol Reef NP, Grand Canyon NP, and Bryce Canyon NP also is important for providing corridors for the dispersal of plant and animal species across the southern Colorado Plateau.

Baseline studies on the flora of the GSENM area began in the early 1970s with work by Stan Welsh, Duane Atwood, and colleagues from Brigham Young University documenting the biota of the Kaiparowits Plateau when the area was being proposed for coal mining (Welsh et al. 1978). When the monument was established in 1996, the known flora stood at 756 plant species. Leila Shultz predicted the monument flora would ultimately contain about 1100 species in a presentation at the first GSENM Science Symposium in 1996 (Shultz 1997). In the years since, Welsh and Atwood (2002), Stohlgren et al.(2005), and Fertig (2005) have documented almost 250 additional species for GSENM. The flora currently stands at 1002 taxa, making GSENM the most species-rich protected area in Utah and second only to Grand Canyon National Park in the Colorado Plateau (Fertig 2010). GSENM contains 26% of the entire flora of Utah and 46% of

the flora of the Colorado Plateau (Fertig 2007). Of these species, 44 are local endemics (restricted to GSENM or vicinity in southern Utah). One species from the monument is presently listed as Endangered (*Physaria tumulosa*) and two are Threatened (*Cycladenia humilis* var. *jonesii*, *Spiranthes diluvialis*) under the Endangered Species Act. Another 15 species are designated as Sensitive by the Bureau of Land Management. In all, 53 plant species are considered species of concern by the Utah Native Plant Society (Alexander 2016). These species occur throughout GSENM, but are often associated with unusual geologic substrates, such as deep sand dunes, Moenkopi clay flats, Chinle badlands, Claron rims, and Kaiparowits exposures.

Additional baseline work has been done to document the diversity of biological soil crust species on GSENM (Bowker and Belnap 2008) and their ecology (Chaudhary et al. 2009). This has also resulted in models to predict the distribution of crust species across different soil types (Bowker et al. 2006). Additional species and vegetation modeling has also been done on GSENM by Aitken et al. (2007) for rare plants and Stohlgren et al. (2005) for weeds.

At least 10 regional vegetation classifications have been done for the monument area, including the Utah GAP analysis land cover map (Edwards et al. 1995). These classifications can be divided into 5 major vegetation zones that correspond with elevation, parent material, and moisture and are summarized by Fertig (2005). Several uncommon vegetation types have been documented on GSENM, including hanging gardens (Fowler et al. 2007) and sand seeps (Welsh and Atwood 2002).

From 1999-2003 GSENM staff conducted a comprehensive survey of upland and riparian sites at over 1000 locations across the monument to assess rangeland health conditions. These data, and the ecological implications of livestock grazing on monument lands are summarized by Miller (2008). Busby (2010) and Fertig (2005) applied state and transition models to explain potential vegetation responses to grazing, fire, chaining, drought, and other human or climatic influences on the monument. Dendrochronology and packrat midden studies in GSENM and adjacent areas have also helped inform vegetation management by helping decipher historical plant-climate interactions (Grow 2001).

Aitken, M., D. W. Roberts, and L. M. Shultz. "Modeling Distributions of Rare Plants in the Great Basin, Western North America." *Western North American Naturalist* 67, no. 1 (2007): 26–38.

Albee, B.J., Leila M. Shultz, and Sherrill Goodrich. *Atlas of the Vascular Plants of Utah.* Vol. 7. Utah Museum of Natural History Occasional Publications, 1988.

Alley, Nathaniel, Thomas J. Stohlgren, Paul Evangelista, and Debra Guenther. "Iterative Model Development for Natural Resource Managers: A Case Example in Utah's Grand Staircase-Escalante National Monument." *Annals of GIS* 10, no. 1 (June 2004): 1–9.

- Paper addresses modeling hotspots of invasive weeds, using *Bromus tectorum* from GSENM as an example.

Atwood, N. Duane, Clyde L. Pritchett, Richard D. Porter, and Benjamin W. Wood. "Terrestrial Vertebrate Fauna of the Kaiparowits Basin." *The Great Basin Naturalist,* 1980, 303–350.

Barger, Nichole N., Henry D. Adams, Connie Woodhouse, Jason C. Neff, and Gregory P. Asner. "Influence of Livestock Grazing and Climate on Pinyon Pine (*Pinus edulis*) Dynamics." *Rangeland Ecology & Management* 6, no. 62 (2009): 531–39.

Bashkin, Michael, Thomas J Stohlgren, Yuka Otsuki, Michelle Lee, Paul Evangelista, and Jayne Belnap. "Soil Characteristics and Plant Exotic Species Invasions in the Grand Staircase—Escalante National Monument, Utah, USA." *Applied Soil Ecology* 22, no. 1 (January 2003): 67–77.

- Many exotic plant species have become established in GSENM, potentially threatening native plant diversity. In general, exotic species invasions tend to occur in fertile soils relatively high in C, N and P. These areas are represented by rare mesic high-elevation habitats that are rich in native plant diversity. This suggests that management should focus on the protection of the rare but important vegetation types with fertile soils.

Belnap, J. "Ecological Resources of the Grand Staircase-Escalante National Monument." Pp. 17 to 26." In *Learning From the Land: GSENM Science Symposium Proceedings.* Cedar City, UT, 1997.

- The Antiquities Act of 1906 gives the President of the United States the power to set aside areas of outstanding scientific interest with the caveat that these areas be the minimum necessary size to protect the identified objects of interest. This paper addresses which objects of biological interest are found in the Grand Staircase-Escalante National Monument, why they are unique or of interest to scientists and the public, and what is the minimum area required to protect their scientific value.

_____. "Impacts of Trampling Soils in Southeast Utah Ecosystems." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*, 231–44. US Department of the Interior, Bureau of Land Management, 1998.

- Review of the characteristics and ecological role of biological soil crusts in arid and semi-arid lands in the west, with a discussion of impacts from trampling by livestock, people, and off-road vehicles. Includes a discussion of potential management issues relating to preserving biological soil crusts in GSENM.

———. "The Biota and Ecology." In *Visions of the Grand Staircase-Escalante: Examining Utah's Newest National Monument*, 21–30. Utah Museum of Natural History and Wallace Stegner Center, 1998.

Belnap, Jayne, and John S. Gardner. "Soil Microstructure in Soils of the Colorado Plateau: The Role of the cyanobacterium *Microcoleus vaginatus*." *The Great Basin Naturalist* 53, no. 1 (1993): 40–47.

- The role of the cyanobacterium *Microcoleus vaginatus* in cold-desert soil crusts is investigated. It may significantly enhance soil stability, moisture retention, and fertility of cold-desert soils.

Bowker, Matthew A., and Jayne Belnap. "A Simple Classification of Soil Types as Habitats of Biological Soil Crusts on the Colorado Plateau, USA." *Journal of Vegetation Science* 19,

no. 6 (April 15, 2008): 831–40.
- Community properties of BSCs are overwhelmingly influenced by edaphic factors. These factors can be summarized efficiently by land managers and laypeople using a simple soil habitat classification, which will facilitate incorporation of BSCs into assessment and monitoring protocols and help prioritize conservation or restoration efforts. Gypsiferous soils, non-calcareous sandy soils, and limestone-derived soils were all very high in both species richness and evenness. Additionally, we found that gypsiferous soils were the most biologically unique group, harboring eight strong to excellent indicator species.

Bowker, Matthew A., Jayne Belnap, and Mark E. Miller. "Spatial Modeling of Biological Soil Crusts to Support Rangeland Assessment and Monitoring." *Rangeland Ecology & Management* 59, no. 5 (2006): 519–529.

Bradley, Martha. *A History of Kane County*. Utah Centennial County History. Accessed May 23, 2017. https://www.abebooks.com/history-Kane-County-Utah-Centennial-series/16009226635/bd.

Cathleen L. May. "Geoecology of the Hanging Gardens: Endemic Resources in the GSENM." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*, 245–57. US Department of the Interior, Bureau of Land Management, 1998.
- Overview of the significance and ecology of hanging gardens, an unusual wetland vegetation type associated with shaded seeps at the contact of permeable sandstones and impermeable clays in scattered locations in canyons in the Colorado Plateau. The author describes the geology and geomorphology that dictates the underlying hydrology supporting hanging gardens and briefly describes hanging gardens found in GSENM.

Chaudhary, V. Bala, Matthew A. Bowker, Thomas E. O'Dell, James B. Grace, Andrea E. Redman, Matthias C. Rillig, and Nancy C. Johnson. "Untangling the Biological Contributions to Soil Stability in Semiarid Shrublands." *Ecological Applications* 19, no. 1 (2009): 110–122.

Chong, Geneva W., Yuka Otsuki, Thomas J. Stohlgren, Debra Guenther, Paul Evangelista, Cynthia Villa, and Alycia Waters. "Evaluating Plant Invasions from Both Habitat and Species Perspectives." *Western North American Naturalist* 66, no. 1 (January 1, 2006): 92–105.
- We present an approach to quantitatively assess nonnative plant invasions at landscape scales from both habitat and species perspectives. Three mesic habitats (aspen, wet meadow, and perennial riparian types) were particularly invaded. This multiscale sampling scheme was effective at evaluating habitat vulnerability to invasion and the occurrence of the 7 most invasive nonnative species. This approach could be applied in other natural areas to develop strategies to document invasive species and invaded habitats.

Crall, Alycia W., Gregory J. Newman, Thomas J. Stohlgren, Catherine S. Jarnevich, Paul Evangelista, and Deb Guenther. "Evaluating Dominance as a Component of Non-Native Species Invasions." *Diversity and Distributions* 12, no. 2 (March 2006): 195–204.

Crall, Alycia W., Thomas J Stohlgren, Paul Evangelista, and Deb Guenther. "Natural Variation in Diversity and Invasion Patterns of the Grand Staircase-Escalante National Monument, Utah." In *The Colorado Plateau III. Integrating Research and Resources Management for Effective Conservation*, 287–306. University of Arizona Press, 2008.

Davidson, Diane W. "Nonnative Brome Grasses in the New National Monument." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings: November 4-5, 1997, Southern Utah University*. US Department of the Interior, Bureau of Land Management, 1998. http://tinyurl.com/lce86nb.

Davidson, Diane W., William D. Newmark, Jack W. Sites, Jr., Dennis K. Shiozawa, Eric A. Rickart, Kimball T. Harper, and Robert B. Keiter. "Selecting Wilderness Areas to Conserve Utah's Biological Diversity." *Great Basin Naturalist* 56, no. 2 (1996): 95–118.

- Discussion of BLM roadless areas in Utah with important biological attributes worthy of protection under Congressional Wilderness designation. Includes areas later included in Grand Staircase-Escalante NM

Edwards, T. C., C. G. Homer, S. D. Bassett, A. Falconer, R. D. Ramsey, and D. W. Wight. "Utah Gap Analysis: An Environmental Information System. Utah Cooperative Fish and Wildlife Research Unit." Technical Report 95–1. Utah State University, Logan, USA, 1995.

- Coarse scale land cover map for all of Utah, including Grand Staircase-Escalante National Monument

Evangelista, Paul, Thomas J. Stohlgren, Debra Guenther, and Sean Stewart. "Vegetation response to fire and postburn seeding treatments in juniper woodlands of the Grand Staircase-Escalante National Monument, Utah." *Western North American Naturalist* 64, no. 3 (2004): 293–305.

- Unburned sites in the region had equally high cover of nonnative species compared with the rest of the Monument. Cheatgrass (*Bromus tectorum*) dominated both burned and unburned sites. Despite the invasion of cheatgrass, unburned sites still maintain higher native species richness; however, the high cover of cheatgrass may increase fire frequency, further reduce native species richness and cover, and ultimately change vegetation composition in juniper woodlands.

Fertig, Walter. "Annotated Checklist of the Flora of Grand Staircase-Escalante National Monument." Moenave Botanical Consulting, May 2005.

- This checklist tracks the growth in the number of plant species known from GSENM since its establishment. In 1996, 756 plant taxa were documented from the monument's boundaries. Based on additional field work by the author and other researchers, that number increased to 983 by 2005 (it has since reached 1002, based on Fertig 2010). GSENM and Zion National Park have the richest floras of any protected area in the Colorado Plateau of Utah.

———. "Finding Gaps in the Protected Area Network in the Colorado Plateau: A Case Study Using Vascular Plant Taxa in Utah." *The Colorado Plateau IV: Shaping Conservation*

Through Science and Management. University of Arizona Press, Tucson, AZ, 2010, 109–119.

- This study compares the vascular plant floras of 11 national parks and monuments in the Colorado Plateau of Utah (including GSENM) and identifies which species are being protected and which are not. Presently 1948 of the 2859 vascular plant taxa known from the Colorado Plateau in Utah are protected in at least one park or monument (including 1002 from GSENM). The paper identifies 12 additional areas on the plateau that, if protected, would capture 70% of the currently unprotected species. Based on the species richness data, GSENM has the largest flora of any park in Utah, although more recently Zion NP has passed GSENM in total numbers (Fertig 2015).

———. "Overview of the Vegetation of Grand Staircase-Escalante National Monument." Moenave Botanical Consulting, 2005.

- Summary of the 12 major vegetation types of Grand Staircase-Escalante National Monument based on a review of regional vegetation literature. Includes state and transition models of ecological processes influencing vegetation dynamics in the major vegetation types.

Fertig, Walter, Linda Whitham, and John Spence. "Knowing the Cogs and Wheels: Using Bioblitz Methods to Rapidly Assess Floras and Faunas." In *The Colorado Plateau V. Research, Environmental Planning, and Management for Collaborative Conservation.*, 149–83. University of Arizona Press, n.d.

- Discussion of the Deer Creek Bioblitz in the Deer Creek watershed on private and BLM lands at the north edge of Grand Staircase-Escalante NM near Boulder, UT. The two year effort increased the known vascular plant and vertebrate richness of the area by nearly 20%. Bioblitzes are an effective tool for collecting data on species richness and fostering collaboration among researchers and local stakeholders.

Fowler, James F., N. L. Stanton, and Ronald L. Hartman. "Distribution of Hanging Garden Vegetation Associations on the Colorado Plateau, USA." *Journal of the Botanical Research Institute of Texas*, 2007, 585–607.

- Discussion of plant species and vegetation of hanging garden communities in the Colorado Plateau. Although it does not include specific examples from GSENM, similar communities occur sporadically in the monument.

Grow, David. "Effects Of Substrate On Dendrochronologic Streamflow Reconstruction: Paria River, Utah; With Fractal Application To Dendrochronology." University of Arizona, 2001. http://hdl.handle.net/10150/191258.

- Discusses hydrology on the Paria River watershed but also provides evidence of very old (800 yrs) pinyon individuals and relict pinyon-juniper communities on the Grand Staircase part of the monument on the Skutumpah Terrace.

Harris, A. Thomas, Gregory P. Asner, and Mark E. Miller. "Changes in Vegetation Structure after Long-Term Grazing in Pinyon-Juniper Ecosystems: Integrating Imaging Spectroscopy and Field Studies." *Ecosystems* 6, no. 4 (June 2003): 368–83.

Ironside, Kirsten E., and Neil S. Cobb. “Effects of Past Management Treatments on Vegetation Structure and Dynamics in Pinyon-Juniper Woodlands at Grand Staircase-Escalante National Monument Kirsten E. Ironside and Neil S. Cobb.” In *Learning from the Land Grand Staircase-Escalante National Monument Science Symposium Proceedings*. Grand Staircase-Escalante Partners, 2006.

Miller, Mark E. “Broad-Scale Assessment of Rangeland Health, Grand Staircase–Escalante National Monument, USA.” *Rangeland Ecology & Management* 3, no. 61 (2008): 249–62.

Miller, Mark E., Jayne Belnap, Richard Reynolds, Jason Neff, and Marith Reheis. “Cheatgrass Performance in Relation to Soil Characteristics in Colorado Plateau Drylands.” In *Learning from the Land Grand Staircase-Escalante National Monument Science Symposium Proceedings*. Grand Staircase-Escalante Partners, 2006.

Phillips, Susan L. “Burning Coal Seams in the Grand Staircase-Escalante National Monument: A Natural System for Studies of Plant Responses to Elevated C0.” In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings: November 4-5, 1997, Southern Utah University*. US Department of the Interior, Bureau of Land Management, 1998. http://tinyurl.com/kbb9er3.

Ramsey, R. Douglas, and Leila Shults. “Evaluating the Geographic Distribution of Plants in Utah from the Atlas of Vascular Plants of Utah.” *Western North American Naturalist*, 2004, 421–432.

Rasband, James R. “Utah’s Grand Staircase: The Right Path to Wilderness Preservation.” *U. Colo. L. Rev.* 70 (1999): 483.

Shultz, Leila M. “Patterns of Endemism in the Utah Flora.” In *Southwestern Rare and Endangered Plants: Conference Proceedings. Miscellaneous Publication*, 249–263, 1993.

———. “The Flora of the Colorado Plateau: What Do We Know?” In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*, 203–9, 1997.

- Of the five major floristic divisions in the state of Utah, none is richer in plant diversity than the Colorado Plateau division. The Grand Staircase-Escalante National Monument may harbor more than 1,100 species of vascular plants, or approximately 50 percent of the flora found in the Colorado Plateaus and 30 percent of the flora of Utah. We know that as many as 40 species of rare and sensitive species are in the area. Shultz has identified the Colorado Plateau as the most species-rich area of Utah for vascular plants.

Spence, John R., and Linda Whitham. “The Escalante River Watershed Partnership.” *The Colorado Plateau VI: Science and Management at the Landscape Scale*, 2015, 339.

Stohlgren, T. J., Jayne Belnap, G. W. Chong, and R. Reich. “A Plan to Assess Native and Exotic Plant Diversity and Cryptobiotic Crusts in the Grand Staircase-Escalante National Monument.” In *Learning from the Land: Grand Staircase-Escalante National Monument*

Science Symposium Proceedings, 269. US Department of the Interior, Bureau of Land Management, 1998. http://digitalcommons.usu.edu/crc_research/569/.
- Describes goals of ongoing research by Stohlgren lab at Colorado State University to systematically survey GSENM for hot spots of native biological diversity and rare/unique habitats, determine areas where biological soil crusts are vulnerable to disturbance,

Stohlgren, Thomas J., Catherine Crosier, Geneva W. Chong, Debra Guenther, and Paul Evangelista. "Life-History Habitat Matching in Invading Non-Native Plant Species." *Plant and Soil* 277, no. 1–2 (December 2005): 7–18.

Stohlgren, Thomas J., Debra A. Guenther, Paul H. Evangelista, and Nathaniel Alley. "Patterns of Plant Species Richness, Rarity, Endemism, and Uniqueness in an Arid Landscape." *Ecological Applications* 15, no. 2 (2005): 715–725.

Tuhy, Joel S. "Ecological Characterization of the Canyon Country Region: A Basis for Sustainable Land Management." In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings: November 4-5, 1997*, Southern Utah University. US Department of the Interior, Bureau of Land Management, 1998. http://tinyurl.com/mo8lows.
- Discussion of a large scale study to describe ecological characteristics of the Colorado Plateau in southern Utah, model potential vegetation, infer historic range of variability, and management issues relating to vegetation and landscape dynamics. GSENM is in the SW corner of the study area and monument managers might benefit from the results of the research.

Utah Division of Wildlife Resources. "Inventory of Sensitive Species and Ecosystems in Utah. Endemic and Rare Plants of Utah: An Overview of Their Distribution and Status.," 1998.
- Detailed summary of the status of rare plant species identified by the State of Utah's Natural Heritage Program, including dozens of species known from GSENM.

Waters, M. Alycia, Thomas J. Stohlgren, Paul H. Evangelista, Debra A. Guenther, Nathaniel W. Alley, and Greg J. Newman, eds. "Landscape-Scale Assessment of Grand Staircase-Escalante National Monument." Natural Resource Ecology Laboratory, Ft Collins CO, 2000.

Welsh, S. L., and N. D. Atwood. "Plant Endemism and Geoendemic Areas of Utah." *Revised Edition. Published Privately*, 2012, 97.
- Discussion of patterns of endemism and plant speciation in Utah with special emphasis on vascular plant species associated with particular geologic substrates. Includes information on rare and endemic plants of the Dixie Divide and Navajo Basin areas of southern Utah, which includes the Grand Staircase-Escalante NM.

Welsh, S.L., and N.D. Atwood. "Flora of Bureau of Land Management Grand Staircase-Escalante National Monument and Kane County, Utah." Brigham Young University, 2002.

Welsh, Stanley L. "Utah Plant Novelties in Cymopterus and Penstemon." *Great Basin Naturalist*

35, no. 4 (1975): 2.

———. “Utah Plant Novelties in Cymopterus and Penstemon.” *Great Basin Naturalist* 35, no. 4 (1975): 2.

- Two new plant species are described from the Grand Staircase-Escalante NM: *Cymopterus higginsii* and *Penstemon atwoodii*. The species are endemic to the Kaiparowits area and were described before GSENM was established, but are largely restricted to the monument.

Welsh, Stanley L., and N. Duane Atwood. “New Taxa and Nomenclatural Proposals in Miscellaneous Families - Utah and Arizona.” *Rhodora* 103, no. 913 (2001): 71–95.

- Six new plant taxa from Utah and Arizona are described, including four species named from Grand Staircase-Escalante National Monument: *Salvia columbariae* var. *argillacea, Sphaeralcea grossulariifolia* var. *fumariensis, Oenothera murdockii, Aquilegia loriae*.

———. “The Grand Staircase-Escalante National Monument History of Plant Collecting and Collections, 1872-Present.” In *Learning from the Land: Grand Staircase-Escalante National Monument Science Symposium Proceedings*, 213–18, 1997.

- Summary of the history of plant collecting in the GSENM area from the late 1800s to 1996. 650-800 plant species had been documented from the general area, though no formal numbers were yet available for the new monument itself (Fertig 2005 later analyzed Welsh's data and placed the known flora of GSENM in 1996 at756 taxa). The authors summarize the plant species described from the monument area and the rare species from the region.

Welsh, Stanley L., N. Duane Atwood, and Joseph R. Murdock. “Kaiparowits Flora.” *The Great Basin Naturalist*, 1978, 125–179.

- Annotated vascular plant checklist of the greater Kaiparowits area from survey work in the early 1970s prior to the establishment of GSENM.

Welsh, Stanley L., J.K. Rigby, and W.K. Hamblin. “A Survey of Natural Landmark Areas of the North Portion of the Colorado Plateau - Biologic and Geologic Themes.” Brigham Young University, 1980.

- The Blues WSA

Witt, Christopher, and John D. Shaw. “Characteristics of Pinyon-Juniper Woodlands in Grand Staircase-Escalante National Monument: Changes since Monument Establishment and Prospects for Future Monitoring,” 2010. http://www.treesearch.fs.fed.us/pubs/download/36936.pdf.

Woodruff, Dorde W. “A Sclerocactus Population Crashes: Analysis and Repeat Photography after Four Decades.” In *Learning from the Land Grand Staircase-Escalante National Monument Science Symposium Proceedings*. Grand Staircase-Escalante Partners, 2006.

- A unique population of Sclerocactus parviflorus, Little Barrel Cactus, was observed along 6 km of Cottonwood Canyon in 1962.

GEOLOGY AND SOILS

Summary: One of the major features of Grand Staircase-Escalante National Monument (GSENM) is its rich variety of geologic substrates exposed in massive cliffs, deep canyons, and colorful badlands. These strata range in age from Early Permian to Late Cretaceous, capped in places by unconsolidated Quaternary alluvium, talus, and wind-blown sand dunes (Doelling et al. 2003). The western section of the monument forms the "Grand Staircase" so-named by 19th Century geologist Clarence Dutton for the series of multi-colored cliffs arising stairstep-like from the rim of the Grand Canyon to the top of the Paunsaugunt Plateau at Bryce Canyon. These layers form the Vermilion, White, Gray, and Pink cliffs and contain outcrops of the Moenkopi, Chinle, Moenave, Kayenta, Navajo, Carmel, Dakota, Tropic, Kaiparowits/Wahweap/Straight Cliffs, and Claron formations. Most prominent of these is the white or pink Navajo Sandstone which forms the massive White Cliffs which are carved by several scenic canyons. The central area of the monument contains the Kaiparowits Plateau and its renowned deposits of Cretaceous shales, sandstones, and mudstones rich in dinosaur, early mammal, and angiosperm fossils. The Escalante Canyons region at the far east side of the monument includes many of the same strata as the Grand Staircase (although some have different names, such as the Wingate Formation instead of Moenave, Entrada in place of Carmel, and Mancos rather than Tropic Shale). This area is also deeply cut by tributaries of the Colorado River, forming the impressive Escalante Canyon (Doelling et al. 2003).

As with paleontology, GSENM has been an important outdoor laboratory for research on a variety of geologic phenomena, ranging from the formation of iron concretions ("moqui marbles") to fossilization of Sand Volcanos and effects of enhanced carbon dioxide from burning coal seams on vegetation (Sargent 1990, Simpson et al. 2013, Philips et al. 1997). The monument's colorful and spectacular geologic formations are also a major draw for visitors exploring by vehicle or on foot. Among the more significant geologic attractions are Buckskin Gulch, the Burning Hills, Calf Creek Falls, Circle Cliffs, Dance Hall Rock, Devils Garden, dinosaur track sites, Escalante Canyons (including several natural bridges), Grosvenor Arch, Hackberry Canyon, the Hole-in-the-Rock Road, Kelly Grade, No Man's Mesa, Lick Wash, Peek-a-boo Gulch, Petrified Hollow, Phipps Arch, Little Egypt sand dunes, Straight Cliffs and Fifty Mile Mountain, The Blues, The Cockscomb, Vermilion Cliffs, White Canyon tar seep, and Wolverine petrified wood area. Many of these features are important components of Wilderness Study Areas that comprise nearly 50% of GSENM. The monument boundaries were largely drawn to contain these vast geologic marvels.

As part of the field studies conducted to assess rangeland health, GSENM contracted for a soil survey of the entire monument. GSENM was also the site of a large body of research on biological soil crust by Dr. Matt Bowker and others. These studies inform the understanding and management of ecosystem functions throughout the Colorado Plateau and wherever biological soil crust is an important part of ecological processes.

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HUMAN HISTORY

Summary: Archaeologists have documented the presence of humans in the Grand Staircase-Escalante National Monument (GSENM) area to as early as 8000 BC at sites near Escalante (North Creek Rock Shelter) and Kitchen Corral Wash east of Kanab (Janetski et al. 2012, McFadden 2012). At this time, the climate of the area was cooler and wetter and resembled higher elevation Douglas-fir/aspen vegetation. More complete records remain for Indian occupation of the region from ca 200 BC to 1300 AD in tens of thousands of archaeological sites representing the Virgin Anasazi, Kayenta Anasazi, and Fremont cultures in the Grand Staircase, Kaiparowits, and Escalante regions of GSENM, respectively (McFadden 2016). After the prolonged drought of the 1300s ended this era of habitation, Southern Pauite, Ute, Navajo, Hopi, and Apache peoples used the GSENM area for hunting and foraging, but left less permanent remains behind (May 1997).

European exploration of the area can be traced to Fathers Dominguez and Escalante, who skirted the southern boundary of GSENM in 1776 (May 1997). John Wesley Powell led mapping and scientific expeditions in the general area in 1869 and 1871. Mormon pioneers settled Kanab in

1864 and founded the short-lived communities of Paria (1865) and Johnson (1871) in the southwestern corner of GSENM. Additional towns along the edge of the monument were founded at Escalante in 1875, Clifton and Losee in 1876 (both now ghost towns), Cannonville in 1877, Henrieville in 1883, Boulder in 1889, and Tropic in 1891 (May 1997). Early settlers used monument lands for homesteading, grazing, mining (such as the Hattie Green mine in the Cockscomb), timber cutting (firewood and construction materials) and built many roads and trails, including the Boulder Mail Trail and Hole-in-the-Rock Road (Miller 1966). Historical artifacts from the early pioneer era include remnant ghost town buildings, cowboy line shacks, rock houses, inscriptions, gravesites (such as the Washington Phipps grave) and artifacts . GSENM was established, in part, to preserve these historic objects and to promote appreciation and research on early settlement history. The oral history project (Holland, no date) was initiated by GSENM in the early 2000s to record the recollections and perspectives of local residents, and was later expanded to include contemporary viewpoints on the monument and its founding. GSENM has also promoted tourism focusing on pioneer history with its themed visitor center in Cannonville and promotion of scenic highway 12 (an illustrated guidebook also includes a cd of local music and oral history).

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HYDROLOGY AND CLIMATE

Summary: From its inception in 1996, Grand Staircase-Escalante National Monument (GSENM) has been an immense outdoor laboratory for pure and applied research. Although not identified specifically as one of the primary values for which GSENM was created, hydrology

and climate have been the focus of many research projects. Efforts to better understand hydrology as it relates to riparian and wetland ecological functioning and pollution was a significant component of the rangeland health surveys conducted by GSENM staff from 1999-2003. In particular, springs and hanging garden wetlands have been the focus of considerable scrutiny (Rice and Springer 2006; Fowler et al. 2007). Hydrology and water quality stations have been established in major watersheds across the monument to better inform resource management. Pure research on hydrodynamics of the region include Turaski (2006) focusing on the hydrology of Navajo Sandstone systems.

Climate researchers have been interested in GSENM because of its vast size and diversity of landforms, which make weather inferences from surrounding towns less likely to be representative of the entire region. (Horel 1997) described a program to establish climate stations throughout the monument to better predict regional weather patterns. Sharpe et al. (1997) found the monument to be an ideal setting to study modern climate variability relating to landform diversity and compare this with abundant paleoecological datasets (from tree rings and packrat middens) to predict future climate change. Philips et al. (1997) proposed studying the vegetation adjacent to burning coal seams in the Kaiparowits area to better predict changes in Carbon dioxide levels on plant survival in arid lands.

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PALEONTOLOGY

Summary: Since 1875, scientists have been excavating fossil invertebrates, vertebrates, and vascular plants from late Cretaceous sediments exposed in the Kaiparowits Plateau section of Grand Staircase-Escalante National Monument (GSENM). These formations, which include the Dakota, Tropic, Straight Cliffs, Wahweap, and Kaiparowits, contain a "terrestrial vertebrate fossil record that is certainly the most continuous known in the southern United States, if not the world" (Titus 2013). In the late Cretaceous, the GSENM area was located near the western shore of the vast Interior Seaway that covered much of central North America. Periodic shifts in the boundary of the coastline provide excellent reference markers for dating deposits and establishing fossil chronologies. The sediments deposited in the future monument also record plants and animals found at a crucial juncture in the history of life before the extinction of the non-avian dinosaurs and early in the ascendency of the flowering plants (angiosperms). The diversity of species in the fossil record and the ability to accurately date them in GSENM has revolutionized the field of late Cretaceous paleontology by allowing researchers to understand regional differences in biodiversity and ecology (Titus 2013, Roberts et al. 2013).

Although much was already known about fossil organisms in the region when GSENM was established in 1996, creation of the monument has greatly accelerated paleontological research. Initially, the monument was able to fund researchers directly. As news of exciting discoveries spread, however, researchers began to descend on GSENM and its enormous "outdoor laboratory". The monument also was successful in establishing partnerships with several regional museums, such as the Utah Museum of Natural History and Museum of Northern Arizona, to enhance collaboration among specialists. In 2009, GSENM sponsored a two-day conference in St. George, Utah, in which dozens of experts in Cretaceous paleontology and geology could share the results of their work in the monument. These papers were published in 2013 in a book entitled "At the Top of the Grand Staircase, the Late Cretaceous of Southern Utah" edited by Alan Titus (GSENM paleontologist) and Mark Loewen. This book highlights the dozens of studies that have been done within the monument on topics including fossil shells, shark teeth, freshwater bony fish, salamanders and frogs, turtles, lizards and snakes, crocodilians,

early mammals, marine plesiosaurs, and terrestrial dinosaurs ranging from ankylosaurs to pachycephalosaurians, and tyranosaurids. Important paleobotanical finds were also reported that indicate the paleoclimate of the region was similar to the contemporary Gulf Coast (Miller et al. 2013).

Important new discoveries continue to be made each field season from sites scattered nearly throughout the Kaiparowits region of GSENM. This portion of the monument is often considered the most controversial because of its coal deposits and dearth of massive and colorful sandstone cliffs and deep canyons, as found in the Grand Staircase and Escalante regions. The original boundaries of the monument were drawn to include most of the Kaiparowits area to protect its extensive fossil layers. In hindsight, this was an exceedingly wise decision, as this seemingly bare and uninteresting region has been proven to be one of the most important fossil-producing areas of North America and is a resource of global significance.

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———. “Cretaceous Mammals of Southern Utah. I. Marsupials from the Kaiparowits Formation (Judithian).” *Journal of Vertebrate Paleontology* 10, no. 3 (September 20, 1990): 295–319.

- Marsupial mammals are herein described from the Kaiparowits Formation of southcentral Utah, of probable Judithian (Campanian, Late Cretaceous) age. Marsupials of the Kaiparowits Formation are most closely similar to those previously reported from the Judithian, although the relative primitiveness of several Utah species and the presence of a taxon otherwise restricted to the Aquilan suggests that assemblages from the lower Kaiparowits Formation, at least, may be somewhat older than typical Judithian faunas. It is also likely that the distinctiveness of the Kaiparowits taxa from those represented in more northerly faunas is, in part, due to Zoogeographic differentiation among North American Cretaceous terrestrial vertebrates.

———. “Cretaceous Mammals of Southern Utah. II. Marsupials and Marsupial-like Mammals from the Wahweap Formation (Early Campanian).” *Journal of Vertebrate Paleontology* 10, no. 3 (September 20, 1990): 320–31.

- The Wahweap Formation of southern Utah is probably early Campanian in age. Its mammalian fauna is generally similar to that of the Aquilan upper Milk River Formation, Alberta, but differs substantially from that and all other known Late Cretaceous mammalian local faunas. Wahweap taxa referable to the Marsupialia include a new, somewhat derived

species of Protalphadon and an unidentified taxon. Two new genera and species of advanced therian mammals are described.

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- Eight taxa of therian mammals are herein recorded from the Smoky Hollow Member of the Straight Cliffs Formation, southcentral Utah. The assemblage is of middle to late Turonian age (early Late Cretaceous), a time period for which mammals are poorly represented worldwide in the fossil record. Three unidentified and unnamed marsupial taxa are also present in the fauna. Evidence of some marsupial diversification in North America by the Turonian, the presence on the continent of primitive marsupial and marsupial-like taxa (depending upon how the group is defined), and the hypothesized derivation of South American and Australian taxa from an Alphadon-like form, suggest that marsupial origination in North America, followed by dispersal to South America, may be the simplest explanation for the temporal and geographic distribution of the group.

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- This skull represents a new genus of long-horned centrosaurine ceratopsid. It is the first diagnosable centrosaurine recovered southof Montana and may be the oldest.

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- Multituberculate faunas from the Dakota Formation (upper Cenomanian) and the Smoky Hollow Member of the Straight Cliffs Formation (middle or upper Turonian) are described. The presence of Cimolodon is established in the Cenomanian; a new genus, possibly cimolodontid, is present as well. A new genus (Dakotamys) is described from the Dakota Formation, and another (Bryceomys) from the Smoky Hollow Member. The difference in composition of mammalian faunas from the Cenomanian to Turonian may reflect ecologic changes causing geographic shifts in mammalian faunas rather than an episode of catastrophic extinction.

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- The first North American mammals of definite Santonian age are described from the John Henry Member of the Straight Cliffs Formation of the Grand Staircase-Escalante National Monument of southern Utah. The fauna includes the oldest documented record of the Mesodma, the Cimolomyidae, the tribotheres, and the marsupial Varalphadon. The fauna has close affinities with the fauna of the Milk River Formation of Alberta, Canada, and may indicate that the Milk River fauna is of latest Santonian age rather than early Campanian.

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- A diverse therian fauna is present in the Dakota Formation of Cenomanian age. Two pediomyid-like taxa are described on the basis of upper molars, but may be deciduous molars of nonpediomyid taxa. A new genus and species of marsupial-like tribothere is described and named (Dakotadens morrowi). A new family of marsupials (Alphadontidae) is established for Alphadon-like genera. The range of Alphadon is extended back into the Cenomanian, two new species are named (A. clemensi, A. lillegraveni), and a possible third new species is described. The range of Protalphadon is also extended back into the Cenomanian. The marsupial-like tribothere described here, together with several other tribotheres, share derived characters with marsupials and may be part of an early diversification of the Metatheria.

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- Initiation of a large-scale research project aimed at the Campanian macrovertebrates of Grand Staircase-Escalante National Monument,southern Utah, has resulted in numerous discoveries of ornithopod dinosaurs.

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recognized theropod dinosaur fauna of the late Campanian Kaiparowits Formation of southern Utah.

SOCIAL SCIENCE AND RECREATION

Summary: The breath-taking scenery and vast, open spaces of Grand Staircase-Escalante National Monument (GSENM) are two of the primary drivers of recreation in the area (Lambrechtse 1985). Social science research on GSENM has focused on potential impacts of tourism on fragile desert ecosystems (Foti 2004. Ruddell 1997), economic impacts of the monument on local communities (Blattenberger and Kiefer 1998), and societal attitudes towards land and local versus federal power (Truman 1998). These issues can be at the core of debates over road closures, grazing management, or developing visitor amenities.

Wilderness Study Areas (WSA) and other special management emphasis areas are especially relevant to recreation issues and the size of GSENM. Sixteen Wilderness Study Areas have been identified within GSENM (see map 9 in 2000 GSENM Monument Management Plan). These areas range in size from 638 acres (Devils Garden) to 148,800 acres (Fiftymile Mountain). Cumulatively, the Wilderness Study Areas comprise nearly 882,000 acres or 47% of the total monument area. WSAs were identified in a lengthy BLM review process based on their lack of roads, outstanding scenery, and wild attributes (citizen proposals for potential wilderness in the same region tend to be even larger). Each of the three main subdivisions of GSENM contains extensive WSAs. The Paria-Hackberry WSA makes up about 40% of the western "Grand Staircase" region and includes such popular recreation destinations as Hackberry Canyon, the Paria River Valley, and No Man's Mesa. Nearly ⅔ of the central Kaiparowits section of GSENM is comprised of large WSAs including Carcass Canyon, Fiftymile Mountain, Burning Hills, Wahweap, Death Ridge, The Blues, Mud Spring Canyon, and The Cockscomb. These areas include some of the most significant Cretaceous fossil dinosaur beds on the monument. Important WSAs in the Escalante region include Phipps-Death Hollow, Escalante Canyons, The Gulch, Steep Creek, and Scorpion (west of the historic Hole-in-the-Wall Road).

Other important recreational destinations include Dance Hall Rock, the Hole-in-the-Rock road, Cottonwood Road, scenic Highway 12 between Escalante and Boulder, and Skutumpah Road. Riparian areas, such as the Escalante River, Deer Creek, The Gulch, Calf Creek, Paria River, and Harris Wash have been proposed or Wild and Scenic River status and are popular tourist sites.

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Some general thoughts on the boundaries and on the justification of the monument:

Boundary expansion Boundary could be expanded to include all of the Kaiparowits Plateau. The dozens of references extolling the paleotological resources on the plateau would all be justifications for that expansion. GSENM contains some of the Blues but not all. It wouldn't be a huge expansion.

The boundary could be expanded on the south end of the Monument to encompass Buckskin Wash and the Coyote Buttes area, which are world-class recreation spots. Conflicts with cattle are a problem at the entrance to Buckskin wash along the House Rock Canyon road. The sticking point with extending south is running into Arizona. The original monument

boundary avoided that just because sharing between two states would complicate things, according to John Leshy's oral history transcript. I briefly looked for citations about increasing Coyote Buttes visitation but only came up with sites for how to apply for permits and a site for commenting on the BLM's management plan (which does reference the need for a management plan/permit system due to increasing numbers of visitors so maybe that would be a good justification reference).

Size: The sheer size of the monument contains landscapes that are less affected by human activity than most other areas in the United States. There are not a lot of places that can accommodate studies that require large expanses of unaltered habitat. Jayne Belnap explains this well in her oral history under the Human History/Oral History folders and in her talks on ecological resources in Learning from the Land (1997 version) in the Botany and Vegetation folder.

Dark Skies Need to add a US map showing light pollution and the relative darkness around Grand Staircase. This region is not yet as polluted with light and that is becoming more and more rare. This has implications for wildlife, solitude, astronomy research.

Vegetation Sagebrush may seem common but actually functioning communities are rare. Due to its size the Monument provides an opportunity for research into sustainable grazing regimes, including a system of large research exclosures. Such research may lead to techniques for grazing in arid systems, a resource use that must adapt in the face of climate change or risk dying out.

Research continuity The vast amount of research that has been conducted since establishment of the monument is in itself a valuable resource that is worth protecting. Monument designation came with research funding, and as a result, the monument has been the site of decades of investigation into a multitude of disciplines. The monument should be preserved because of the ongoing and future research that will build on past efforts. Long-term large-scale studies across big landscapes are very rare; changing the boundary has the potential to destroy this scientific legacy.

Grand Staircase section: This western section is the one I fear for the most. The Kaiparowits and Escalante Canyons sections have pretty strong justifications (paleontology and recreation respectively - even the Garfield County commissioner admits to the appeal of the Escalante Canyons) but the Grand Staircase section, with its p-j forests, might be a harder case to make. We are mentioning Values under some of the write-ups by discipline, including the exposed sedimentary layers that make up the Staircase itself, No Man's Mesa, scenic areas and slot canyons, and rare and endangered plants.

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- Kaiparowits Plateau p. 147
- Dance Hall Rock p. 182

Appendix D

Headwaters economic report on Grand Staircase

Grand Staircase-Escalante National Monument

A Summary of Economic Performance in the Surrounding Communities

HEADWATERS ECONOMICS

Grand Staircase-Escalante National Monument

BACKGROUND

The 1,880,000 acre Grand Staircase-Escalante National Monument was designated in 1996 in recognition of the region's unspoiled natural beauty—from its spectacular Grand Staircase of cliffs and terraces, to the rugged Kaiparowits Plateau, and the wonders of the Escalante River Canyons. Located in Garfield and Kane counties, Utah the monument is managed by the Bureau of Land Management.

PUBLIC ACCESS AND USE OF THE MONUMENT

The monument allows grazing, rights of way, hunting, fishing, and many other activities. The pristine landscape and unparalleled recreational opportunities attract thousands of Americans each year.

TRAVEL AND TOURISM

Travel and tourism are important to communities in the Grand Staircase-Escalante Region, representing about 44% of total private wage and salary employment, or 1,630 jobs, in 2015. In Utah, the Outdoor Industry Association reports that recreation contributes more than $12 billion annually to the state's economy.[6]

SUMMARY FINDINGS

Research shows that conserving public lands like the Grand Staircase-Escalante National Monument helps to safeguard and highlight amenities that draw new residents, tourists, and businesses to surrounding communities.[1]

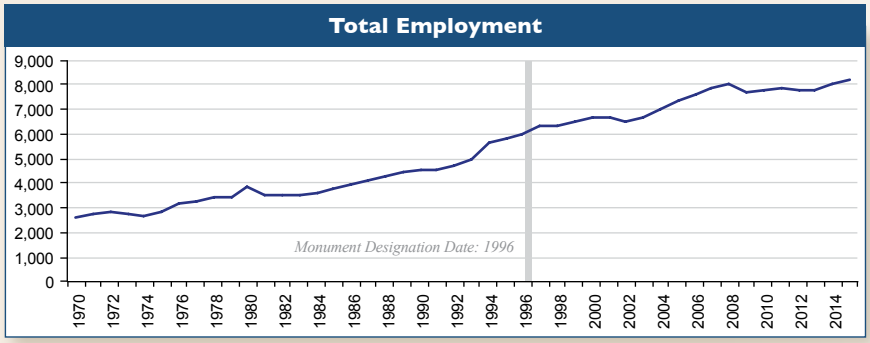
Western counties with protected public lands, like national monuments, have been more successful at attracting fast-growing economic sectors and as a result grow more quickly, on average, than counties without protected public lands.[2] In addition, protected natural amenities—such as the pristine scenery found at Grand Staircase-Escalante—also help sustain property values and attract new investment.[3]

ECONOMY GROWS AFTER DESIGNATION

The communities in Garfield and Kane counties, Utah neighboring the Grand Staircase-Escalante National Monument (the Grand Staircase-Escalante Region) experienced strong growth after the designation of the monument, continuing previous growth trends.

From 2001 to 2015, in the Grand Staircase-Escalante Region:[4]

- **Population grew by 13%**
- **Jobs grew by 24%**
- **Real personal income grew by 32%**
- **Real per capita income grew by 17%**

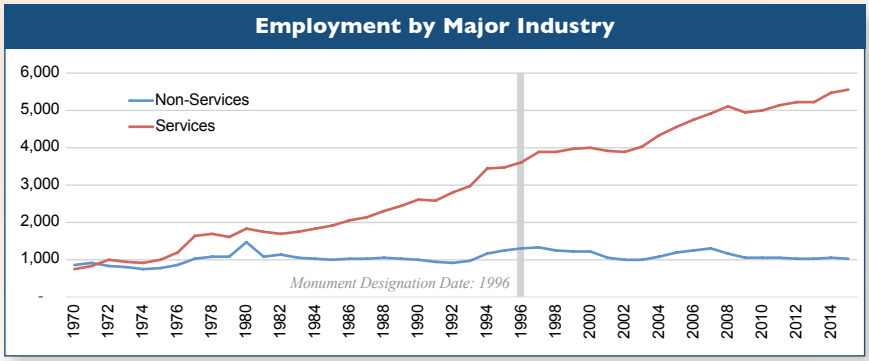


SERVICES JOBS INCREASING ACROSS THE BOARD

Services jobs—such as doctors, engineers, and teachers—account for the majority of employment growth in the Grand Staircase-Escalante Region in recent decades. These jobs are increasingly mobile, and many entrepreneurs locate their businesses in areas with a high quality of life.

From 2001 to 2015, in the Grand Staircase-Escalante Region:[5]

- **Services grew from 3,916 to 5,561 jobs, a 42% increase**
- **Non-Services shrank from 1,057 to 1,027 jobs, a 3% decrease**



Grand Staircase-Escalante National Monument

THE COMMUNITIES IN GARFIELD AND KANE COUNTIES NEIGHBORING THE NATIONAL MONUMENT EXPERIENCED STRONG GROWTH SINCE ITS DESIGNATION IN 1996.

THE INCREASES IN POPULATION, JOBS, PERSONAL INCOME, AND PER CAPITA INCOME MIRROR OTHER WESTERN COUNTIES WITH NATIONAL MONUMENTS OR OTHER PROTECTED LANDS.

METHODOLOGY

This fact sheet is part of a series that assesses the economic performance of local communities that are adjacent to national monuments. The series examines national monuments in the eleven western continental states that are larger than 10,000 acres and were created in 1982 or later.

FOR MORE INFORMATION
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Series: The Economic Importance of National Monuments to Local Communities

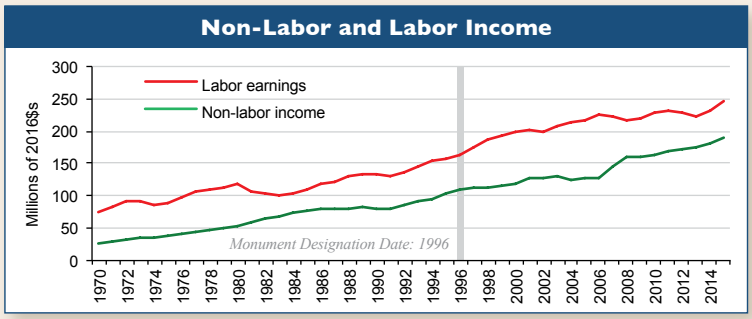
NON-LABOR INCOME GROWS FASTEST

One of the largest and fastest growing sources of new personal income in the Grand Staircase-Escalante Region is non-labor income, which is made up of investment income such as dividends, interest and rent, and government transfer payments such as Social Security and Medicare.

For people with investment income and many retirees, protected public lands and recreation provide important aspects of a high quality of life. Non-labor income already represents more than a third of all personal income in the West—and will grow as the Baby Boomer generation retires.[7]

From 2001 to 2015, in the Grand Staircase-Escalante Region:

- **Non-Labor income grew from $127 million to $189 million, a 49% increase**
- **As a result, in 2015 non-labor income made up 44% of total personal income**



TRADITIONAL JOBS HOLD STEADY

Long before the monument's creation, commodity industries (agriculture, mining, timber) were becoming a smaller share of the overall economy in the Grand Staircase-Escalante Region. These industries remain part of the region's economy today.

In 2015, in the Grand Staircase-Escalante Region:

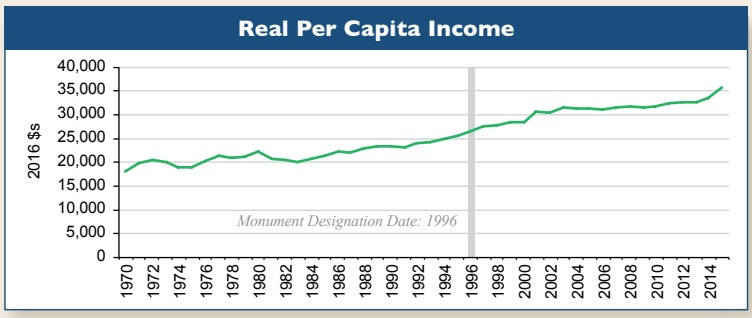
- **Agriculture accounted for 6% of total employment**
- **Mining accounted for 0.4% of total private employment**
- **Timber accounted for 0.2% of total private employment**

PROSPERITY ON THE RISE

As the economy has grown since designation of the Grand Staircase-Escalante National Monument, per capita income has risen as well. This indicates growing prosperity in the region.

From 2001 to 2015, in the Grand Staircase-Escalante Region:

- **Real per capita income grew from $30,687 to $35,812, a 17% increase**



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