

# Grand Canyon as Legal Creation

By Jason Anthony Robison

Standing with Havasupai, Hualapai, Hopi, and Navajo tribal leaders at Grand Canyon National Park's south rim on February 26, 2019, Arizona congressman Raul Grijalva introduced a bill "to protect, for current and future generations, the watershed, ecosystem, and cultural heritage of the Grand Canyon region": the Grand Canyon Centennial Protection Act. "Protecting the canyon is just, it's overdue and it's life-affirming."<sup>1</sup> With these words Grijalva undoubtedly channeled the spirit of the act's Indigenous and other advocates. No fewer than 1,006,545 acres of federal lands would fall within the act's ambit. True to its title, this estate would be withdrawn from the operation of laws that—part and parcel of Euro-American colonization over the past two centuries—have shaped indelibly the American West's landscape and human communities. Superimposed on those portions of Grand Canyon over which it would be cast like a net, the act would preclude "entry, appropriation, and disposal under the public lands laws"; "location, entry, and patent under the mining laws"; and "operation of the mineral leasing and geothermal leasing laws and mineral materials laws." Grijalva had made a bold, fitting gesture a hundred years to the day of the national park's creation.<sup>2</sup>

<sup>1</sup> Andrew Nicla, "Grijalva unveils new attempt to ban uranium mining permanently near the Grand Canyon," *Arizona Republic*, February 23, 2019. The author wishes to thank Byron Pearson and David Turpie for the opportunity to celebrate Grand Canyon National Park's centennial by preparing this essay. My gratitude also extends to both of them, Paul Hirt, and Sam Kalen for feedback on earlier drafts. My research assistant Adam Carman likewise unearthed a wealth of visual and written materials for this work. I am grateful to him, too. All errors and omissions are solely my own.

<sup>2</sup> Grand Canyon Centennial Protection Act, H.R. 1373, 116th Congress (Feb. 26, 2019). The act would make permanent a twenty-year ban on uranium mining at Grand Canyon encompassing approximately 650,000 acres of land managed by the Bureau of Land Management and 350,000 acres of Kaibab National Forest. Applying exclusively to new mining

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In a sense, though, it was a gesture as old hat as it was progressive. Grand Canyon's history is one domain of western history writ large, the essence of which Patty Limerick has captured poignantly: "the history of the West is a study of a place undergoing conquest and never fully escaping its consequences." And there's no mistaking the prevalence of measures such as the Grand Canyon Centennial Protection Act within this narrative:

Conquest basically involved the drawing of lines on a map, the definition and allocation of ownership (personal, tribal, corporate, state, federal, and international), and the evolution of land from matter to property. The process had two stages: the initial drawing of the lines (which we have usually called the frontier stage) and the subsequent giving of meaning and power to those lines, which is still under way.<sup>3</sup>

Law is complicit in this line drawing in more ways than I'm able to tell.<sup>4</sup> But I'm going to try to do so anyway—not just in relation to Grand Canyon National Park, however, but "the entire Grand Canyon, from the mouth of the Paria River to the Grand Wash Cliffs, including tributary side canyons and surrounding plateaus."<sup>5</sup> I remember visiting Grand Canyon for the first time as a kid in the 1980s, the fresh, lovely scent of the north rim's ponderosa pines forever etched in my memory. Although bookish by nature, I was too young to appreciate the eons captured in the rock layers, or precisely where I was situated within that humbling, mind-bending time scale. Nor was I much aware of the spaces constructed by laws all around me, from the national forest to the national park to the sculptor of Grand Canyon, the

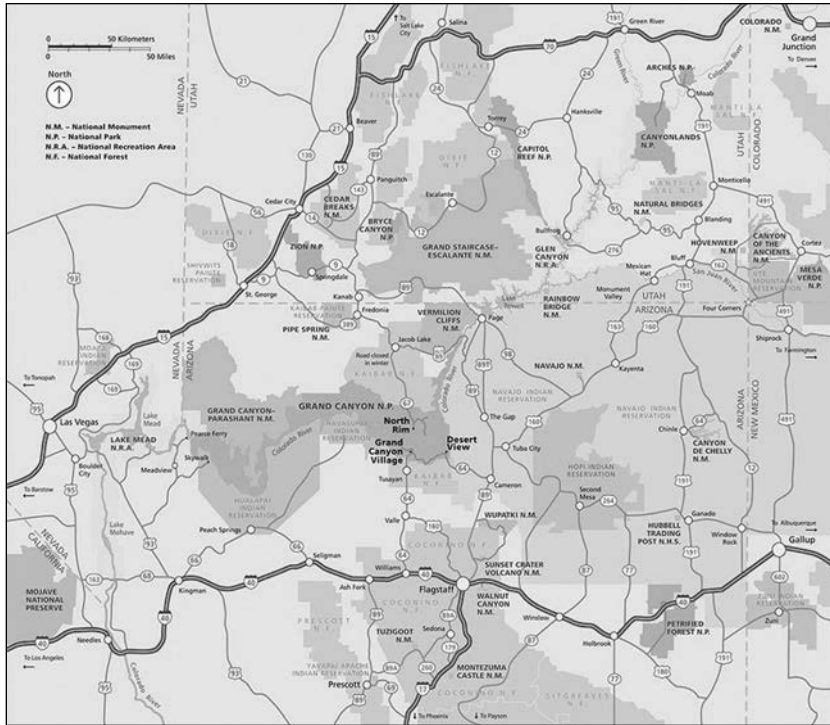
claims, former Secretary of the Interior Ken Salazar imposed the ban on January 18, 2012. It has been subject to unsuccessful legal challenges brought by the mining industry in federal court, and the House Western Caucus has lobbied the Trump administration to have it revoked. James B. Coffin, "BLM has contrasting positions on Chaco, Grand Canyon," *Public Lands News*, June 14, 2019; *National Mining Association v. Zinke*, 877 F.3d 845 (9th Cir. 2017).

<sup>3</sup> Patricia Nelson Limerick, *The Legacy of Conquest: The Unbroken Past of the American West* (New York, 1987), 26 (first quotation), 27 (second quotation).

<sup>4</sup> Michael Anderson & Paul Hirt, "Who Owns the Grand Canyon?," available online at <http://grcahistory.org/history/who-owns-the-grand-canyon/> (accessed July 31, 2019).

<sup>5</sup> Grand Canyon National Park Enlargement Act, 88 Stat. 2089 (Jan. 3, 1975). See also Michael F. Anderson, *Living at the Edge: Explorers, Exploiters and Settlers of the Grand Canyon Region* (Grand Canyon, Ariz., 1998), 2–3. Anderson describes Grand Canyon's eastern portal as "Lees Ferry, a tiny pocket of nearly level alluvial soil beneath the junction of the Echo and Vermillion Cliffs at the Paria River's mouth," and Grand Canyon's western portal as the Grand Wash Cliffs.

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*Grand Canyon map, 2019. Courtesy of the National Park Service, <https://www.nps.gov/grca/planyourvisit/maps.htm>.*

Colorado River. And it would be far too long before I learned of the Havasupai and Hualapai peoples, and what this magical place had been and still is for those tied umbilically to it. With time I would come to see all of this as interconnected—inextricable—and to feel enmeshed within it and beholden to it in ways that perhaps only one's family or one's life's work can ingrain. The centennial offers a chance to connect these dots, even if the pen still rests in the hands of a child.

### **Law in the Anthropocene**

We live in interesting times upon the centennial—interesting times of our own making. Consider the age of Grand Canyon's oldest

rocks: 1.8 billion years. That time span accounts for nearly 40 percent of the Earth's estimated 4.54 billion-year life. Formation of the igneous and metamorphic rocks of Grand Canyon's inner gorge almost two billion years ago was followed by the Colorado Plateau's uplift thirty to seventy million years ago and then by the Colorado River's sculpting of Grand Canyon beginning five to six million years ago. Though scientifically discoverable, these expanses of time are unfathomable to the human mind.<sup>6</sup>

They throw into relief the here and now. Although not a formally defined unit within the geological time scale, the "Anthropocene" has emerged over the past two decades as a term to denote our present geological time interval.<sup>7</sup> It has developed a host of meanings but commonly refers to the current period of Earth's history, wherein human beings pervasively and profoundly influence the conditions, processes, and future of the planet. The Anthropocene thus has been characterized as "an acknowledgment that human action has become an important driver—arguably *the* most important driver—of change on Earth."<sup>8</sup>

Whither the law in this human epoch? Is it everywhere and nowhere? I would suggest yes for a couple reasons. For starters, the mind-numbing array of human actions impacting the Earth at this time—greenhouse gas emissions and climate change, habitat destruction and species extinction, and so on—inherently involve laws. There is variation in the types of laws operating in any given context (international, national, subnational, etc.) as well as the roles played by these laws in enabling or inhibiting human actions. But in one form or another, the law is *present* as a behavioral matrix. It is this presence that, while instrumental to the dizzying human actions that denote the Anthropocene, deserves freestanding attention as a corollary quality of the era. At this point in time, human beings have developed an unprecedented scope of laws to mediate their relations with one another and other parts of nature—collectively, "socioecological relations." Just as it is arguably impossible to identify an ecosystem on the planet where human beings have not

<sup>6</sup> "Grand Canyon, Geology," National Park Service website, <https://www.nps.gov/grca/learn/nature/grca-geology.htm> (accessed May 13, 2019).

<sup>7</sup> "What Is the Anthropocene? Current Definition and Status," Subcommittee on Quaternary Stratigraphy website, <http://quaternary.stratigraphy.org/working-groups/anthropocene/> (accessed May 13, 2019).

<sup>8</sup> Melinda H. Benson, "New Materialism: An Ontology for the Anthropocene," *Natural Resources Journal* 59 (forthcoming 2019).

had some impact, so too would one be hard pressed to locate an ecosystem untouched by human laws. In and of itself, this global proliferation of law constitutes a human action that pervasively and profoundly influences the conditions, processes, and future of Earth. And this perspective applies as readily to Grand Canyon as it does anywhere else.

### **Grand Canyon Legal Spaces**

So would it be wrongheaded to say law constructs Grand Canyon in the Anthropocene? Maybe so, maybe not. Grand Canyon is a place shaped by perpetual ecological and geological processes. It is also a place lodged and living in peoples' hearts and minds, perhaps especially so upon the centennial. Neither aspect of the place can be attributed wholly to law. Yet neither aspect can be cleanly compartmentalized from law either. In short, as elaborated in the pages that follow, Grand Canyon is indeed a legal creation at this historical juncture—a conglomeration of legal spaces that have been established since the late nineteenth century to impose rules for socio-ecological relations within their respective domains.<sup>9</sup> Shedding light on this state of affairs entails a journey back to Philadelphia and the birth of the United States as a nation-state.

#### *Constitutional Migration*

The substrate and starting point is the U.S. Constitution. Adopted more than two thousand miles eastward of Grand Canyon, and with assuredly little or no thought given to the document's application to the canyon's landscape, waterscape, and Native peoples, the Constitution anchors the entirety of laws molding this place. The Constitution's drafting in 1787 placed fundamental parameters on socioecological relations in Grand Canyon. From this foundation came the Property Clause in which public-land laws would take root, the Compact Clause from which interstate water compacts would spring, and the Indian Commerce Clause underlying Congress's affairs with Native Americans.<sup>10</sup> The Takings Clause is

<sup>9</sup> An extensive discussion of Grand Canyon's legal and political geography, including a large portion of the "legal spaces" material surveyed below, can be found in Barbara J. Morehouse, *A Place Called Grand Canyon: Contested Geographies* (Tucson, 1996).

<sup>10</sup> The Property Clause appears in Article IV, § 3: "The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other

also notable, forbidding private property from being taken for public use without just compensation, as well as the Supremacy Clause's declaration of federal law as "the supreme Law of the Land."<sup>11</sup> And the Treaty Clause, too, cannot go unmentioned, for it would serve as a gateway through which Grand Canyon and other parts of the Southwest would be opened to the Constitution.<sup>12</sup>

In relation to Grand Canyon and elsewhere, constitutional frameworks require physical space for legal expression. So enters the 1848 Treaty of Guadalupe Hidalgo. A testament to U.S. empire building roughly seventy years after the Constitution's framing, the treaty ended the Mexican-American War. It forced Mexico to relinquish claims to vast lands within the Colorado River Basin, including Grand Canyon, to the United States. A new legal boundary was superimposed on the landscape—a boundary to be "religiously respected by each of the two republics."<sup>13</sup> Notably, the treaty was not blind to human habitation in the territory whose legal status it changed. Provisions on citizenship and property of Mexican residents offer one illustration. Even more on point, however, was Article XI's treatment of Native American tribes. It began on an ethnocentric and colonial note, stating: "A great part of the territories which, by the present treaty, are to be comprehended for the future within the limits of the United States, is now occupied by savage tribes, who will hereafter be under the exclusive control of the government of the United States."<sup>14</sup>

Property belonging to the United States." Phrased in an inverse manner, the Compact Clause is contained in Article I, § 10: "No State shall, without the Consent of Congress, . . . enter into any Agreement or Compact with another State." The Indian Commerce Clause is set forth in Article I, § 8: "The Congress shall have Power . . . To Regulate Commerce . . . with the Indian Tribes."

<sup>11</sup> The Takings Clause is part of the Bill of Rights, providing: "Nor shall private property be taken for public use, without just compensation." Am. V. The Supremacy Clause can be found in Article VI: "This Constitution, and the Laws of the United States which shall be made, under the Authority of the United States, shall be the supreme Law of the Land."

<sup>12</sup> The Treaty Clause states that the president "shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur." Art. II, § 2.

<sup>13</sup> Treaty of Guadalupe Hidalgo, Art. V (1848).

<sup>14</sup> *Ibid.*, Art. VIII and Art. XI. In regards to the formerly Mexican territory, Article VIII provided: "property of every kind, now belonging to Mexicans not established there, shall be inviolably respected. The present owners, the heirs of these, and all Mexicans who may hereafter acquire said property by contract, shall enjoy with respect to it guaranties equally ample as if the same belonged to citizens of the United States." This provision also presented Mexican or U.S. citizenship as options to Mexican residents in the territory.

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That text provides a segue from what might be deemed the foundational laws of this narrative: the U.S. Constitution as the legal cornerstone of the nation-state asserting ownership of and sovereignty over Grand Canyon, and the Treaty of Guadalupe Hidalgo as the international instrument through which the Constitution migrated to this physical space. Growing out of the constitutional clauses identified above and Supreme Court constructions of those clauses, several strands of subconstitutional laws—federal statutes and regulations, executive orders, and presidential proclamations—have emerged since 1848 to shape Grand Canyon into the place it is today. An exhaustive account is impossible and unnecessary. But suffice it to say these strands concern vital subjects that distinguish the American West as a region when considered through the eyes of the law: Native Americans, public lands, and water.

### *Indigenous Space*

Turning initially to the Colorado River Basin's Indigenous peoples, nearly a dozen federally recognized tribes hold traditional connections to Grand Canyon according to the National Park Service.<sup>15</sup> Only a year passed after the Treaty of Guadalupe Hidalgo's drafting before the United States began exercising "exclusive control" over these tribes as contemplated by Article XI. The Navajo Nation formed a treaty in 1849 reciting how the tribe had been "lawfully placed under the exclusive jurisdiction and protection" of the U.S. government via the Treaty of Guadalupe Hidalgo. The 1849 treaty then proceeded to describe how the "United States shall, at its earliest convenience, designate, settle, and adjust their territorial boundaries, and pass and execute in their territory such laws as may be deemed conducive to the prosperity and happiness of [the Navajos]."<sup>16</sup> The segregation and paternalism embedded in this text foreshadowed the futures of tribes with ancestral ties to Grand Canyon.

<sup>15</sup> Havasupai Tribe, Hopi Tribe, Hualapai Tribe, Kaibab Band of Paiute Indians, Las Vegas Band of Paiute Indians, Navajo Nation, Paiute Indian Tribe of Utah, San Juan Southern Paiute Tribe, Pueblo of Zuni, and Yavapai Apache Nation. National Park Service, Grand Canyon, Park Statistics, available online at <https://www.nps.gov/grca/learn/management/statistics.htm> (accessed July 30, 2019). For surveys of these tribes' respective connections to Grand Canyon, see Anderson, *Living at the Edge*, 10–12; and Patricia Biggs, "Native Cultures," Nature, Culture, and History at the Grand Canyon website, <http://grcahistory.org/history/native-cultures/> (accessed July 30, 2019).

<sup>16</sup> Treaty with the Navajos, 144 Cong. Rec. H. 4235 (Sept. 9, 1884).

Rationalized as culturally inferior by John Wesley Powell and other government officials, the prevailing solution to the “Indian problem” in and around Grand Canyon (and elsewhere) was to create reservations where Native Americans could be segregated and acculturated to Euro-American ways—agriculture, private property, English, and Christianity.<sup>17</sup> Federal law was harnessed to this end during the latter half of the nineteenth century and early twentieth century.

Returning to the Navajo Nation, it formed a subsequent treaty with the U.S. government in 1868 under which a reservation was created on a small portion of traditional lands. “This was the first instance in which Indian lands in the greater Grand Canyon were given new identity and substance through the drawing of boundaries.”<sup>18</sup> To be clear, the 1868 treaty came into existence only after the Navajo had endured the Long Walk in 1864—involving a total of fifty-three episodes of forced removal from traditional lands by the U.S. military—and roughly four years of desolation at an internment camp called the Bosque Redondo Reservation.<sup>19</sup> It was in this context that the Navajo agreed to make the reservation created by the 1868 treaty their “permanent home,” not to make “any permanent settlement elsewhere,” and “to induce Indians now away from reservations . . . leading a nomadic life, or engaged in war against the people of the United States, to abandon such a life and settle permanently in one of the territorial reservations.”<sup>20</sup>

Upon the close of the treaty-making era of federal Indian policy in 1871, executive orders served an equivalent function for other tribes with connections to Grand Canyon.<sup>21</sup> These tribes

<sup>17</sup> Writings illustrating Powell’s ethnocentric perspective on Native Americans include John Wesley Powell, “An Overland Trip to the Grand Cañon,” *Scribner’s Monthly*, 1875, pp. 659–78; John Wesley Powell, “A Discourse on the Philosophy of the North American Indians,” *Journal of the American Geographical Society of New York* 8 (1876): 251–68; John Wesley Powell, “Human Evolution,” *Transactions of the Anthropological Society of Washington* 2 (1883): 176–208; John Wesley Powell, “From Savagery to Barbarism,” *Transactions of the Anthropological Society of Washington* 3 (1885): 173–96; John Wesley Powell, “From Barbarism to Civilization,” *American Anthropologist* 1 (1888): 97–123; John Wesley Powell, “Are Our Indians Becoming Extinct?” *Forum* 15 (1893): 343–53; John Wesley Powell, “Proper Training and the Future of the Indians,” *Forum* 8 (1895): 622–29.

<sup>18</sup> Morehouse, *A Place Called Grand Canyon*, 21.

<sup>19</sup> For a collection of primary sources addressing the Long Walk, Bosque Redondo, and the 1868 treaty, see Bernhard Michaelis, *The Navajo Treaty 1868: Treaty Between the United States of America and the Navajo Tribe of Indians* (Flagstaff, Ariz., 2014).

<sup>20</sup> Treaty with the Navajo Indians, 15 Stat. 667, 668, 671 (June 1, 1868).

<sup>21</sup> The Indian Appropriations Act of 1871 provided: “Hereafter no Indian nation or tribe within the territory of the United States shall be acknowledged or recognized as an



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included the Yavapai-Apache Nation in 1871,<sup>22</sup> Zuni Tribe in 1877,<sup>23</sup> Havasupai Tribe in 1880,<sup>24</sup> Hopi Tribe in 1882,<sup>25</sup> Hualapai Tribe in 1883,<sup>26</sup> and Kaibab Band of Paiutes in 1917,<sup>27</sup> among others. Boilerplate text appeared throughout these documents: “It is hereby ordered that the tract of country [delineated] be and the same is hereby withdrawn from settlement and sale, and set apart for the use and occupancy of [tribe].”

Boundaries, of course, are often fluid. And that certainly has proven to be the case with reservation boundaries for tribes with traditional ties to Grand Canyon. By means of additions, exclusions, allotment, and land exchanges, these boundaries have morphed considerably over the past century and a half. Varying in degree and frequency across the tribes, this morphing occurred via executive orders until 1918 and by statute after that point.<sup>28</sup> Perhaps most remarkable along these lines is the Navajo Reservation, whose boundaries have been adjusted at least seventeen times since the reservation’s initial establishment in 1868.<sup>29</sup>

Although the scope of these adjustments is pronounced, it is not an anomaly.<sup>30</sup> Given the Havasupai Tribe’s cultural and physical

independent nation, tribe, or power with whom the United States may contract by treaty.” 16 Stat. 544, 566 (1871).

<sup>22</sup> Executive Order (Oct. 3, 1871) (“Apache Mohave Indians”).

<sup>23</sup> Executive Order (March 16, 1877).

<sup>24</sup> Executive Order (June 8, 1880) (“Suppai Indians”).

<sup>25</sup> Executive Order (Dec. 16, 1882) (“Moqui”).

<sup>26</sup> Executive Order (Jan. 4, 1883). The U.S. military had previously forced the Hualapai Tribe onto the Colorado River Reservation in 1874 following the Walapai War during the 1860s and a long series of tribal raids and U.S. military retaliations. Anderson, *Living at the Edge*, 34.

<sup>27</sup> Executive Order (July 17, 1917). Preliminary steps toward the creation of this reservation had been made by a public land order on October 16, 1907, and Executive Order No. 1786 on June 11, 1913.

<sup>28</sup> Executive orders were used in this way until passage of the Indian Appropriations Act of 1919, which stated: “Hereafter no public lands of the United States shall be withdrawn by Executive Order, proclamation, or otherwise, for or as an Indian reservation except by act of Congress.” 41 Stat. 3, 34 (1919).

<sup>29</sup> Executive Order (Oct. 29, 1878); Executive Order (Jan. 6, 1880); Executive Order (May 17, 1884); Executive Order (April 24, 1886); Executive Order (Jan. 8, 1900); Executive Order (Nov. 14, 1901); Executive Order No. 324-A (May 15, 1905); Executive Order No. 744 (Jan. 28, 1908); Executive Order No. 1000 (Dec. 30, 1908); Executive Order No. 1284 (Jan. 16, 1911); Executive Order No. 1482 (Feb. 17, 1912); Executive Order No. 1483 (Feb. 17, 1912); Executive Order No. 1699 (Feb. 10, 1913); Executive Order No. 1700 (Feb. 10, 1913); Executive Order No. 2612 (May 7, 1917); Executive Order No. 2789 (Jan. 19, 1918); An Act to define the exterior boundaries of the Navajo Indian Reservation in Arizona, and for other purposes, 48 Stat. 960 (1934).

<sup>30</sup> Additional laws modifying or clarifying reservation boundaries for tribes connected to Grand Canyon include Executive Order (April 23, 1875) (Yavapai-Apache); Execu-

embeddedness within Grand Canyon, it would be a major omission not to mention the Havasupai Reservation's expansion in 1975 via the Grand Canyon National Park Enlargement Act. For roughly a half century prior, the federal government had restricted the Havasupai tribe to a 518-acre reservation in Havasu Canyon delineated in 1882.<sup>31</sup> "To improve the social, cultural, and economic life" of tribal members, the 1975 statute added 185,000 acres to the reservation, providing these lands "shall remain forever wild" subject to prescribed exceptions—traditional uses, agriculture and grazing, but not commercial timber production, commercial mining, or commercial or industrial development. The act also designated 95,300 acres of "Havasupai Use Lands" in Grand Canyon National Park where grazing and other traditional uses would be allowed.<sup>32</sup>

With respect to the Havasupai and other tribes, the basic message in this realm is that federal law has been employed for more than a century and a half—since the 1868 treaty with the Navajo—to delineate legal spaces to be inhabited by Indigenous peoples with connections to Grand Canyon that trace back hundreds if not thousands of years.<sup>33</sup> It should come as no surprise that this line-drawing process has had profound consequences for these Indigenous peoples' connections to place, cultural integrity, and socioeconomic well being. Geographer Barbara Morehouse provides a powerful synthesis as of the late nineteenth century:

By the early 1880s the greater Grand Canyon had been radically transformed from a space shared by a few indigenous peoples since "time immemorial" to an active place of cash-economy production and consumption. . . . The partitioning of space was a major strategy on the part of the United States not only to exert social and geographical control, but

tive Order (Nov. 23, 1880) (Havasupai ["Suppai"]); Executive Order (March 31, 1882) (Havasupai ["Yavai Suppai"]); Executive Order (May 1, 1883) (Zuni); Executive Order (Dec. 12, 1898) (Hualapai); Executive Order (May 14, 1900) (Hualapai); Executive Order (June 2, 1911) (Hualapai ["Walapai"]); Executive Order (May 29, 1912) (Hualapai ["Walapai"]); An Act to determine the rights and interests of the Navaho Tribe, Hopi Tribe, and individual Indians to the area set aside by Executive order of December 16, 1882, and for other purposes, 72 Stat. 403 (July 22, 1958).

<sup>31</sup> Congress had created the Havasupai Tribe's original reservation in 1880, and it consisted of sixty square miles of traditional lands. Anderson, *Living on the Edge*, 12, 37.

<sup>32</sup> Grand Canyon National Park Enlargement Act, 88 Stat. 2089, 2092-2093 (Jan. 3, 1975). See also Stephen Hirst, *I Am the Grand Canyon: The Story of the Havasupai People* (Grand Canyon, Ariz., 2011).

<sup>33</sup> Treaty with the Navajo Indians, 15 Stat. 667, 668, 671 (June 1, 1868).

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Edward Curtis, “Home of the Havasupai,” 1903. Courtesy of the Library of Congress, <http://www.loc.gov/pictures/item/2003652734/>.

also to change the terms of contest from armed force to legalistic negotiation. . . . The native peoples found themselves encircled not only by a new culture, but also by geographical lines that were used to dictate where they could live and what they could do.<sup>34</sup>

### ***Public Lands: On the Ground & In the Air***

The Grand Canyon National Park Enlargement Act mentioned above offers a bridge from the strand of laws governing the relationship between Native Americans and Grand Canyon to a parallel strand of laws dealing with public lands. For most people, it is likely this latter strand that comes to mind when thinking about Grand Canyon as a “legal creation.” The laws surveyed below in regards to Grand Canyon National Park and adjacent federal lands bolster the message conveyed at the outset: Grand Canyon is a patchwork of legal spaces.

<sup>34</sup> Morehouse, *A Place Called Grand Canyon*, 25.

Roughly four decades elapsed between the Treaty of Guadalupe Hidalgo's formation in 1848 and the initial watershed event in the public lands arena: the Forest Reserve Act's passage in 1891. While the treaty made the Property Clause applicable to Grand Canyon, the 1891 act empowered the president to establish forest reservations—to “set apart and reserve . . . any part of the public lands wholly or in part covered with timber or undergrowth . . . as public reservations.”<sup>35</sup> The Grand Canyon Forest Reserve sprang into being two years later. “The public good would be promoted” by the reservation, declared the proclamation, reserving the area from “entry or settlement” and excepting prior valid land entries and mining claims.<sup>36</sup> Fast forward four years and another milestone occurred with the 1897 Forest Service Organic Act. It articulated the purposes of forest reservations: “to improve and protect the forest within the reservation, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber.” The act likewise elaborated how forest reservations would be administered, touching on fire protection, timber sales, settlers' access, mining, and water use. Congress expressly authorized the president to modify forest reservation boundaries, which contrasts with the 1906 Antiquities Act covered below.<sup>37</sup>

Taken together, the 1891 Forest Reserve Act and the 1897 Organic Act paved the way for forest reserves—latter called “national forests”—to be superimposed on Grand Canyon as a distinct class of federal lands. The statutes spawned a new type of legal space within this one-of-a-kind place. Through a series of presidential proclamations beginning in the early twentieth century, national forests in and around Grand Canyon went through successive boundary adjustments, consolidation, and renaming in a pattern similar to that described above for the reservations of Native American tribes with traditional ties to Grand Canyon.<sup>38</sup> Painting in broad strokes,

<sup>35</sup> An act to repeal timber-culture laws, and for other purposes, 26 Stat. 1095, 1103 (March 3, 1891).

<sup>36</sup> Proclamation No. 45, 27 Stat. 1064, 1065 (Feb. 20, 1893). Senator Benjamin Harrison of Indiana had introduced unsuccessful legislation in 1882, 1883, and 1886 to set aside Grand Canyon as a public park. Anderson, *Living at the Edge*, 87.

<sup>37</sup> An Act Making appropriations for sundry civil expenses of the Government for the fiscal year ending June thirtieth, eighteen hundred and ninety-eight, and for other purposes, 30 Stat. 11, 34-36 (June 4, 1897).

<sup>38</sup> Examples include Proclamation, 34 Stat. 3009 (May 6, 1905) (enlarging Grand Canyon Forest Reserve); Proclamation, 34 Stat. 3223 (Aug. 8, 1906) (enlarging Grand Canyon Forest Reserve); Proclamation, 35 Stat. 2196 (July 2, 1908) (consolidating portion of

proclamations creating or enlarging national forests contained common provisions reserving the particular area from entry and settlement for the “public good,” and excepting from the reservations prior valid land claims. Conversely, proclamations excluding areas that formerly had been part of national forests restored such areas to the public domain.

Although closely intertwined with the forests in and around Grand Canyon, the Grand Canyon National Game Preserve deserves brief mention as a separate federal-land classification. In 1906, Congress authorized the president “to designate such areas in the Grand Canyon Forest Reserve as should . . . be set aside for the protection of game animals and be recognized as a breeding place therefor.” This statute imposed criminal penalties for hunting, trapping, killing, or capturing of game animals in the preserve unless permitted by the secretary of agriculture.<sup>39</sup> Several months after the statute’s enactment, Theodore Roosevelt exercised his authority to create the Grand Canyon National Game Preserve.<sup>40</sup> This development did *not* bode well for all species in Grand Canyon, as the U.S. Forest Service “declared war on any form of four-legged predator.”<sup>41</sup> The game preserve was later reduced in size in 1909, 1919, 1931, and 1969—as well as subject to the Grand Canyon Forest Reserve’s becoming, in part, the Kaibab National Forest in 1908—but nonetheless has retained its protective, procreative purpose.<sup>42</sup>

And that brings us one step closer to the heart of the public-land laws constructing Grand Canyon—namely, laws addressing national monuments and national parks. In this vein, there are two

Grand Canyon National Forest into Coconino National Forest and renaming different portion of Grand Canyon National Forest as Kaibab National Forest); Proclamation, 38 Stat. 2737 (Aug. 23, 1910) (modifying Kaibab National Forest boundaries); Proclamation No. 3889, 83 Stat. 924 (Jan. 20, 1969) (excluding Kaibab National Forest lands from Marble Canyon National Monument).

<sup>39</sup> An Act For the protection of wild animals in the Grand Canyon Forest Reserve, 34 Stat. 607 (June 29, 1906).

<sup>40</sup> Proclamation, 34 Stat. 3263 (Nov. 28, 1906).

<sup>41</sup> “By 1931, an estimated 800 mountain lions, 550 bobcats, 30 wolves, and nearly 5,000 coyotes lost their lives to deer-hunters-turned-‘varmint’-killers, aided by government hunters, trappers, and [game warden James T. ‘Uncle Jim’ Owens].” Anderson, *Living at the Edge*, 137.

<sup>42</sup> Proclamation, 35 Stat. 2196 (July 2, 1908) (renaming portion of Grand Canyon National Forest as Kaibab National Forest); Proclamation, 36 Stat. 2496 (June 3, 1909); Proclamation No. 1971, 47 Stat. 2483 (Oct. 6, 1931); Proclamation No. 3889, 83 Stat. 924 (Jan. 20, 1969) (excluding preserve lands from Marble Canyon National Monument); An Act To establish the Grand Canyon National Park in the State of Arizona, 40 Stat. 1175, 1178 (Feb. 26, 1919) (excluding preserve lands from Grand Canyon National Park).

counterparts to the 1891 Forest Reserve Act and the 1897 Forest Service Organic Act: the 1906 Antiquities Act and the 1916 National Park Service Organic Act. We are all beneficiaries of the dynamic interplay between these two statutes in Grand Canyon, as designations under the former have been consistently succeeded by designations per the latter.

With a couple key intermittent steps, Grand Canyon National Park's genesis can be traced to the Antiquities Act's passage in 1906. It authorized the president to establish national monuments—"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." Such reservations were to be "confined to the smallest area compatible with the proper care and management of the objects to be protected," and private claims could be relinquished as necessary for this proper care and management.<sup>43</sup>

Grand Canyon National Monument followed on the heels of the Antiquities Act. President Roosevelt's 1908 proclamation described the "Grand Canyon of the Colorado River" as "an object of unusual scientific interest, being the greatest eroded canyon within the United States," and reserved the canyon as a national monument "with such other land as is necessary for its proper protection." While making an exception for prior valid claims, mining and settling were prohibited within the monument, as well as appropriation, injury, or destruction of its features. Thus, as had been the case with Grand Canyon Forest Reserve fifteen years earlier, Grand Canyon National Monument's creation—predicated on a landmark piece of federal legislation—drew another unique type of legal space on Grand Canyon.<sup>44</sup> For the next decade, the U.S. Forest Service would administer this space with an "expanded mission."<sup>45</sup>

Then things forged ahead with the National Park Service Organic Act in 1916. It did nothing less than establish the National Park Service, charging the new agency with promoting and regulating use of national parks and monuments, and articulating their remarkable purpose: "to conserve the scenery and the natural and historic

<sup>43</sup> An Act For the preservation of American antiquities, 34 Stat. 225 (June 8, 1906).

<sup>44</sup> Proclamation, 35 Stat. 2175 (Jan. 11, 1908).

<sup>45</sup> Michael F. Anderson, *Polishing the Jewel: An Administrative History of Grand Canyon National Park* (Grand Canyon, Ariz., 2000), 8–10.

## Grand Canyon as Legal Creation



Rand McNally and Company, "Grand Canyon National Park Arizona," 1919. Courtesy of the Library of Congress, <https://www.loc.gov/resource/g4332g.np000099/?r=-0.086,-0.058,1.18,0.891,0>.

objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."<sup>46</sup> The secretary of the interior would wield authority to make rules and regulations for the use of national parks and monuments. And the secretary would also be empowered to grant privileges, leases, and permits for visitor accommodation—so long as there was no interference with public access to "natural curiosities, wonders, or objects of interest"—as well as to allow livestock grazing if not detrimental to the primary purpose for which a national park or monument was designated.<sup>47</sup>

<sup>46</sup> Considered the Magna Carta of the national parks, the Organic Act's charge is inspiring in aspiration yet often perplexing in implementation, having been interpreted in diverse ways that parallel correspondingly diverse conceptions of what exactly national parks are. As described eloquently, "the only constant in our national park heritage is the reality of change: change in how we conceive of national parks, change in how we manage them, change in what we seek from them, and change on the landscape surrounding them." Robert B. Keiter, *To Conserve Unimpaired: The Evolution of the National Park Idea* (Washington, D.C., 2013), 8–9.

<sup>47</sup> An Act To establish a National Park Service, and for other purposes, 39 Stat. 535 (Aug. 25, 1916).

A crown jewel of the national park system was born against this backdrop: Grand Canyon National Park. As declared by the 1919 statute creating it: "There is hereby reserved and withdrawn from settlement, occupancy, or disposal under the laws of the United States and dedicated and set apart as a public park for the benefit and enjoyment of the people . . . the 'Grand Canyon National Park.'" Its administration, protection, and promotion were entrusted to the National Park Service, and prior valid rights were unaffected by the designation, "whether for homestead, mineral, right of way, or any other purpose." Looking forward, a curious trio of activities would be permitted whenever consistent with the park's primary purposes: railroad access via easements or rights of way; prospecting, development, and use of mineral resources; and development and maintenance of a federal reclamation project. Members of the Havasupai Tribe likewise would be allowed to use and occupy park lands for agriculture subject to the secretary of the interior's discretion. In terms of the national park's relation to other legal spaces that had been created in the vicinity, Grand Canyon National Monument would be no more—with President Roosevelt's 1908 proclamation being revoked and repealed—and Grand Canyon National Game Preserve lands would also be excluded from the park's boundaries.<sup>48</sup>

Boundary setting based on the 1906 Antiquities Act and the 1916 Organic Act, of course, did not end in Grand Canyon with the national park's creation. Congress enacted statutes during the 1920s revising the park's boundaries and facilitating a land exchange.<sup>49</sup> These measures, in turn, were followed by a 1931 statute providing: "hereafter no permit, license, lease, or other authorization for the prospecting, development, or utilization of the mineral resources within . . . the Grand Canyon National Park, Arizona, shall be granted or made."<sup>50</sup> Dovetailing with this mining prohibition was a 1962 statute addressing conveyance of a patented claim on the

<sup>48</sup> An Act To establish the Grand Canyon National Park in the State of Arizona, 40 Stat. 1175 (Feb. 26, 1919).

<sup>49</sup> An Act To authorize the exchange of certain patented lands in the Grand Canyon National Park for certain Government lands in said park, 44 Stat. 497 (May 10, 1926); An Act To revise the boundary of the Grand Canyon National Park in the State of Arizona, and for other purposes, 44 Stat. 1238 (Feb. 25, 1927).

<sup>50</sup> An Act To provide for uniform administration of the national parks by the United States Department of the Interior, and for other purposes, 46 Stat. 1043 (Jan. 26, 1931). This mining provision also applied to Mesa Verde National Park in Colorado.



park's south rim held partly by C. J. Babbitt—Interior Secretary Bruce Babbitt's grandfather.<sup>51</sup>

Perhaps most important during this period, however, was stage setting for a cyclical pattern. With text mirroring Theodore Roosevelt's roughly twenty-five years before, Herbert Hoover penned a presidential proclamation in 1932 creating a new Grand Canyon National Monument.<sup>52</sup> It encompassed approximately 427 square miles of the lower canyon, including Toroweap Valley, located adjacent to the national park's western boundary.<sup>53</sup> Three decades later, in 1969, this addition would be joined by a national monument at Marble Canyon—"a northerly continuation of the world-renowned Grand Canyon [that] possesses unusual geologic and paleontologic features and objects and other scientific and natural values."<sup>54</sup> The latter proclamation made clear where the new monument fit within the patchwork of legal spaces, assimilating parts of Kaibab National Forest and Grand Canyon National Game Preserve, and abutting the Navajo Reservation's western boundary.

Then history repeated itself and Grand Canyon National Park grew—to 1.2 million acres. Lands previously within Grand Canyon National Monument and Marble Canyon National Monument became part of the enlarged national park. The 1975 Enlargement Act's policy declaration was referenced earlier and bears quoting in elaborated form:

<sup>51</sup> An Act To provide for the acquisition of a patented mining claim on the south rim of Grand Canyon National Park, and for other purposes, 76 Stat. 79 (May 28, 1962). See also Dean Smith, *Brothers Five: The Babbitts of Arizona* (Tempe, Ariz., 1989).

<sup>52</sup> Proclamation No. 2022, 47 Stat. 2547 (Dec. 22, 1932). The proclamation reiterated, "the Grand Canyon of the Colorado River is an object of unusual scientific interest, being the greatest eroded canyon within the United States," and then added, "that portion of the canyon which continues down the Colorado River below the Grand Canyon National Park contains much that is most significant and important in this unusual scientific interest." Certain lands were excluded from the monument in 1940. Proclamation No. 2392, 54 Stat. 2514 (April 4, 1940).

<sup>53</sup> Anderson, *Polishing the Jewel*, 38.

<sup>54</sup> Proclamation No. 3889, 83 Stat. 924 (Jan. 20, 1969). Marble Canyon National Monument's designation in 1969 took place after a heated controversy during the mid-1960s over proposed construction of Bridge Canyon and Marble Canyon dams in Grand Canyon. This controversy is chronicled in Byron E. Pearson, *Still the Wild River Runs: Congress, the Sierra Club, and the Fight to Save Grand Canyon* (Tucson, 2002); and Russell Martin, *A Story that Stands Like a Dam: Glen Canyon Dam and the Struggle for the Soul of the West* (Salt Lake City, 1987), 247–79. Neither dam was authorized in the federal legislation that ultimately emerged from the controversy in 1968, the Colorado River Basin Project Act, which provides that nothing in the statute "shall be construed to authorize the study or construction of any dams on the main stream of the Colorado River between Hoover Dam and Glen Canyon Dam."

The entire Grand Canyon, from the mouth of the Paria River to the Grand Wash Cliffs, including tributary side canyons and surrounding plateaus, is a natural feature of national and international significance. Congress therefore recognizes the need for, and in this Act provides for, the further protection and interpretation of the Grand Canyon in accordance with its true significance.<sup>55</sup>

Within the enlarged park's boundaries, the secretary of the interior was authorized to acquire private lands through donations, purchases, and exchanges, and limits were imposed on renewing existing grazing rights. In addition, the 1975 act (and an amendment later that year) addressed a couple topics that had not been on the radar when the national park was established in 1919: designation of wilderness in certain areas of the park under the 1964 Wilderness Act, and regulation of air traffic over the park to protect natural quiet and visitor experience.<sup>56</sup>

In the four decades since Grand Canyon National Park's enlargement, a good deal of attention has been paid to wilderness in and around Grand Canyon, but no designation has been made within the park itself. The National Park Service has proposed four wilderness areas totaling 1,143,918 acres—approximately 94 percent of the park's total area—but Congress has not yet acted on this proposal.<sup>57</sup> In contrast, glancing outside the park's boundaries, a 1984 statute created seven wilderness areas within or adjacent to Grand Canyon.<sup>58</sup> Two wilderness areas are located partly or wholly inside Kaibab National Forest, while five wilderness areas fall partly or wholly within two national monuments established in 2000: Grand Canyon-Parashant National Monument and Vermillion Cliffs National Monument.<sup>59</sup> All told, each of these post-enlargement

<sup>55</sup> Grand Canyon National Park Enlargement Act, 88 Stat. 2089, 2089-2090 (Jan. 3, 1975).

<sup>56</sup> An Act to amend the Grand Canyon National Park Enlargement Act, 89 Stat. 172 (June 10, 1975).

<sup>57</sup> "Final Wilderness Recommendation, 2010 Update, Grand Canyon National Park, Arizona" (2010): 4-5, National Park Service website, [https://www.nps.gov/grca/learn/management/upload/Draft\\_2010\\_Final\\_Wilderness\\_Rec.pdf](https://www.nps.gov/grca/learn/management/upload/Draft_2010_Final_Wilderness_Rec.pdf) (accessed September 10, 2019).

<sup>58</sup> An Act to designate certain national forest lands in the State of Arizona as wilderness, and for other purposes, 98 Stat. 1485, 1492-93 (Aug. 28, 1984).

<sup>59</sup> Proclamation No. 7265, 114 Stat. 3236 (Jan. 11, 2000) (Grand Canyon-Parashant National Monument); Proclamation No. 7374, 114 Stat. 3422 (Nov. 9, 2000) (Vermillion Cliffs National Monument). Vermillion Cliffs National Monument contains Paria Canyon-Vermillion Cliffs Wilderness. Kaibab National Forest contains Saddle Mountain Wilderness and part of Kanab Creek Wilderness. Grand Canyon-Parashant National Monument contains Mount Trumbull Wilderness, Mount Logan Wilderness, part of Kanab Creek Wilderness, and part of Paiute Wilderness. The 1984 statute also created Cottonwood

wilderness areas and national monuments represents another legal space that has been created and superimposed on Grand Canyon's magnificent landscape.

Finally, leaving the ground for just a moment, Grand Canyon's air space has also been a key focus in the four decades since the national park's enlargement. One concern was already noted: the need for "substantial restoration of the natural quiet and experience of the park and protection of public health and safety from adverse effects associated with aircraft overflight."<sup>60</sup> Expressed in the 1987 National Parks Overflights Act, this priority has spawned several federal statutes and a slew of federal regulations, with remedial measures ranging from flight route designations to quiet aircraft technology requirements to operational caps on commercial air tours.<sup>61</sup> A second concern for the canyon's air space is pollution. The Clean Air Act adheres here. In 1977, two years after its enlargement, Grand Canyon National Park was designated a "Class I area" under the act. In line with this designation, there are air-quality-deterioration limits and visibility-related protections for scenery. Congress amended the act in 1990 to establish a Grand Canyon Visibility Transport Commission to study interstate transport of air pollutants.<sup>62</sup> In turn, recommendations made by this commission in 1996 are now being implemented by the Western Regional Air Partnership and the Environmental Protection Agency (EPA). EPA has also been extensively involved in the development of federal and state implementation plans addressing regional haze at Grand Canyon, including legal challenges brought against these plans in federal court.<sup>63</sup> Yet again, the takeaway in this domain

Point Wilderness and Beaver Dam Mountains Wilderness.

<sup>60</sup> An Act to require the Secretary of the Interior to conduct a study to determine the appropriate minimum altitude for aircraft flying over national park system units, 101 Stat. 674, 676 (Aug. 18, 1987).

<sup>61</sup> In addition to the National Parks Overflights Act, examples of federal statutes include the Airport and Airway Safety, Capacity, Noise Improvement, and Intermodal Transportation Act, 106 Stat. 4872, 4887 (Oct. 31, 1992); Wendell H. Ford Aviation Investment and Reform Act for the 21st Century, 114 Stat. 61, 192 (April 5, 2000); Vision 100—Century of Aviation Reauthorization Act, 117 Stat. 2490, 2541 (Dec. 12, 2003); Moving Ahead for Progress in the 21st Century Act, 126 Stat. 405, 842 (July 6, 2012).

<sup>62</sup> An Act to amend the Clean Air Act to provide for attainment and maintenance of health protective national ambient air quality standards, and for other purposes, 104 Stat. 2399, 2697 (Nov. 15, 1990).

<sup>63</sup> "Regional Haze in Arizona," Environmental Protection Agency website, <https://www3.epa.gov/region9/air/az/haze/index.html#20170316> (accessed July 29, 2019); "The Mohave Generating Station & Grand Canyon Visibility," Environmental Protection Agency website, <https://www3.epa.gov/region9/air/mohave/index.html> (accessed

does not so much concern the nuances of these laws (and litigation) regarding aircraft overflights and air pollution, but rather the fundamental point that they have emerged to shape Grand Canyon's air space.

*Colorado River as Encumbered Sculptor*

But what about Grand Canyon's sculptor, the Colorado River? To what extent has law channeled *it* since the 1848 Treaty of Guadalupe Hidalgo brought the U.S. Constitution to this place? A labyrinth called the "Law of the River" must be navigated for answers. Nearly a century old, it governs transboundary allocation and management of water in the Colorado River Basin, domestically and internationally. Thus, in relation to Grand Canyon (and elsewhere across the basin), the Law of the River constructs the Colorado River as a fluid legal space.

One aspect of this construction involves the Law of the River's transboundary allocation framework. The 1922 Colorado River Compact is its cornerstone.<sup>64</sup> Oodles could be written about the compact's history and features, but flow obligations imposed by the document are most relevant.<sup>65</sup> They are twofold and apply at Lee Ferry—the compact's dividing line between the Upper Basin and Lower Basin located approximately two miles downstream of the historic ferry crossing itself, Lees Ferry, which marks the upstream tip of Grand Canyon National Park.<sup>66</sup> On one hand, the Upper Basin states (Colorado, New Mexico, Utah, and Wyoming) are obligated to contribute flows at Lee Ferry to satisfy Mexico's entitlement to Colorado River water under a 1944 treaty, at least insofar as "surplus" is not available for this purpose.<sup>67</sup> On the other hand, these states are obligated not to "cause the flow of the river at Lee Ferry

July 29, 2019); "Air Actions, Navajo Nation," Environmental Protection Agency website, <https://www3.epa.gov/region9/air/navajo/index.html#station> (accessed July 29, 2019); *Yazzie v. Environmental Protection Agency*, 851 F.3d 960 (9th Cir. 2017); *Phoenix Cement Co. v. Environmental Protection Agency*, 647 Fed. Appx. 702 (9th Cir. 2016); *Arizona ex rel. Darwin v. Environmental Protection Agency*, 815 F.3d 519 (9th Cir. 2016).

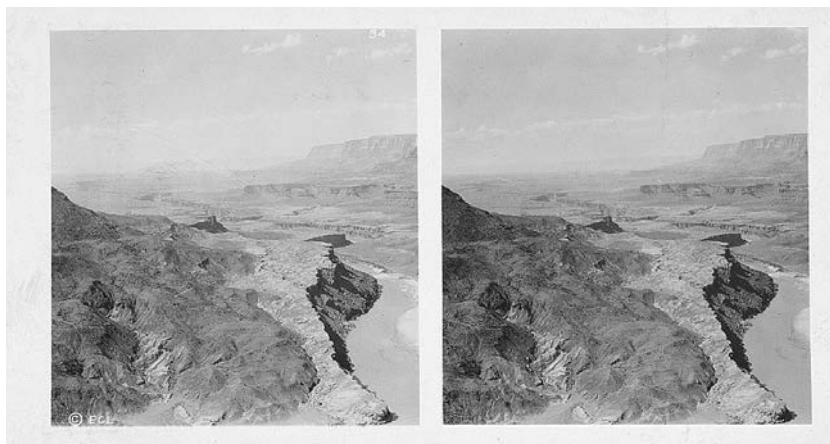
<sup>64</sup> Colorado River Compact, 45 Stat. 1057 (Nov. 24, 1922). The compact's flow obligations appear in Article III(c)-(d).

<sup>65</sup> Norris Hundley Jr., *Water and the West: The Colorado River Compact and the Politics of Water in the American West* (Berkeley, Calif., 1975).

<sup>66</sup> For a map depicting the locations of Lee Ferry versus Lees Ferry, see U.S. Bureau of Reclamation, *The Colorado River Documents* (Washington, D.C., 2008), 2-9 fig. 2-2.

<sup>67</sup> Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, Treaty Between the United States of America and Mexico (Feb. 3, 1944). Article 10 contains Mexico's Colorado River entitlement.

## *Grand Canyon as Legal Creation*



*Eugene C. La Rue, “A view down Marble Canyon from the plateau 1500 feet above Colorado River at Lees Ferry, Arizona,” 1922. Courtesy of the Library of Congress, <https://www.loc.gov/item/2017652349/>.*

to be depleted below an aggregate of 75,000,000 acre-feet for any period of ten consecutive years reckoned in continuing progressive series.”<sup>68</sup> This domestic obligation benefits the Lower Basin states (Arizona, California, and Nevada). Given Lee Ferry’s location, the core insight is that annual volumes of Colorado River flows in Grand Canyon hinge directly on these flow obligations.

An overlapping aspect of law’s construction of the Colorado River involves plumbing—that is, water infrastructure (dams, reservoirs, canals, etc.) implanted over the course of the twentieth century to implement the Law of the River’s allocation framework. Three main federal laws produced this plumbing: the 1928 Boulder Canyon Project Act (BCPA), the 1956 Colorado River Storage Project Act (CRSPA), and the 1968 Colorado River Basin Project Act (CRBPA).<sup>69</sup> The BCPA brought about Hoover Dam to impound the Colorado River into the basin’s largest reservoir, Lake Mead,

<sup>68</sup> An acre-foot is the amount of water needed to fill one acre of land to a depth of one foot—approximately 326,000 gallons. U.S. Geological Survey, Dictionary of Water Terms, [https://www.usgs.gov/special-topic/water-science-school/science/dictionary-water-terms?qt-science\\_center\\_objects=0#qt-science\\_center\\_objects](https://www.usgs.gov/special-topic/water-science-school/science/dictionary-water-terms?qt-science_center_objects=0#qt-science_center_objects) (accessed May 18, 2019).

<sup>69</sup> Boulder Canyon Project Act, 45 Stat. 1057 (Dec. 21, 1928); Colorado River Storage Project Act, 70 Stat. 105 (April 11, 1956); Colorado River Basin Project Act, 82 Stat. 886 (Sept. 30, 1968).

immediately downstream of Grand Canyon. The CRSPA followed suit just upstream of Grand Canyon, authorizing Glen Canyon Dam to impound the Colorado River into the basin's second-largest reservoir, Lake Powell. It operates as a savings account to ensure the Upper Basin states satisfy their Colorado River Compact flow obligations, while Glen Canyon Dam serves as a "cash-register dam" with its hydropower generation. The CRBPA built on its predecessors by requiring the secretary of the interior to develop criteria for operating Glen Canyon Dam in a way that fulfills the compact flow obligations—again, directly impacting Colorado River flows through Grand Canyon.<sup>70</sup> Further, something the CRBPA almost did—but ultimately did not do—was authorize the Marble Canyon and Bridge Canyon dams at the head and foot of Grand Canyon, respectively. They would have electrified the CRBPA's centerpiece, the Central Arizona Project, with hydropower, but history took a different course. This job went instead to a coal-fired power plant adjacent to Grand Canyon, Navajo Generating Station, with attendant impacts on the canyon's air quality.<sup>71</sup>

It was not until after the allocation framework and plumbing-related laws were on the books that environmental laws became part of the Law of the River. Some even today contest whether they fall inside or outside the labyrinth. Regardless, just as their counterparts, these laws plainly construct the Colorado River as a legal space in Grand Canyon.

The 1992 Grand Canyon Protection Act is the elephant in the room.<sup>72</sup> It saddled the secretary of the interior with a dual mandate. Glen Canyon Dam must be operated "to protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established." Yet the secretary must fulfill this mandate without running afoul of the allocation and infrastructure laws identified above. Long story short, the act required an environmental

<sup>70</sup> Criteria for Coordinated Operation of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of September 30, 1968 (June 10, 1970), available online at <https://www.usbr.gov/lc/region/pao/pdfiles/opcritcr.pdf>. These criteria were amended in March 2005. They are being implemented up through December 31, 2026, by the Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead (Dec. 13, 2007), available online at <https://www.usbr.gov/lc/region/programs/strategies/RecordofDecision.pdf>.

<sup>71</sup> Pearson, *Still the Wild River Runs*; Martin, *A Story that Stands Like a Dam*, 247–79.

<sup>72</sup> Grand Canyon Protection Act, 106 Stat. 4669 (Oct. 30, 1992).

impact statement (EIS) to be prepared that would thread this needle.<sup>73</sup> The EIS's record of decision was released in 1996 and called for several key measures for Grand Canyon, including an operating regime for Glen Canyon Dam with flow-release restrictions, a Glen Canyon Dam Adaptive Management Program, beach/habitat-building flows aimed at depositing sediment in Grand Canyon for recreation and ecosystem management, and establishment of a new population of endangered humpback chub.<sup>74</sup>

Twenty years of scientific information was gathered before the 1996 EIS's record of decision was supplanted by a successor: the Glen Canyon Dam Long-Term Experimental and Management Plan (LTEMP). The LTEMP controls how the Colorado River will flow through Grand Canyon up to 2036.<sup>75</sup> Contained in a 2016 EIS record of decision, an option called "Alternative D" was selected for the plan to fulfill the Grand Canyon Protection Act's dual mandate. Decommissioning of Glen Canyon Dam and Glen Canyon Institute's "Fill Mead First" proposal were notably dismissed from the analysis.<sup>76</sup> Alternative D largely, though not wholly, follows the path begun in 1996. The Glen Canyon Dam Adaptive Management Program will continue its work, including scientific studies by the U.S. Geological Survey's Grand Canyon Monitoring and Research Center.<sup>77</sup> A regime for Glen Canyon Dam's operation will govern

<sup>73</sup> Subject to statutory exemptions for certain projects, the National Environmental Policy Act generally requires preparation of an EIS for "major Federal actions significantly affecting the quality of the human environment." National Environmental Policy Act, 83 Stat. 852 (Jan. 1, 1970).

<sup>74</sup> U.S. Dept. of the Interior, Record of Decision, Operation of Glen Canyon Dam, Final Environmental Impact Statement (Oct. 9, 1996), available online at <https://azmemory.azlibrary.gov/digital/collection/p17220coll7/id/781/> (accessed July 27, 2019). Glen Canyon Dam's impacts on Grand Canyon's aquatic and riparian ecosystems are, of course, apparent in these measures. In particular, the beach/habitat-building flows reflect the dam's trapping of massive amounts of sediment that otherwise would flow through Grand Canyon, in some cases depositing along the riparian corridor. Figures from the Glen Canyon Institute are illuminating: "Built in 1963, Glen Canyon Dam is 563 feet high and has been steadily filling with the equivalent of 30,000 dump truck loads of sediment every single day—100 million tons of sediment annually." Glen Canyon Institute, All Dams Are Temporary—Sedimentation, <https://www.glencanyon.org/all-dams-are-temporary-sedimentation/> (accessed July 30, 2019).

<sup>75</sup> U.S. Dept. of the Interior, Record of Decision for the Glen Canyon Dam Long-Term Experimental and Management Plan Final Environmental Impact Statement (Dec. 15, 2016), available online at [http://ltempis.anl.gov/documents/docs/LTEMP\\_ROD.pdf](http://ltempis.anl.gov/documents/docs/LTEMP_ROD.pdf) (accessed July 27, 2019).

<sup>76</sup> "Fill Mead First," Glen Canyon Institute website, <https://www.glencanyon.org/fill-mead-first/> (accessed July 27, 2019).

<sup>77</sup> Southwest Biological Science Center, Grand Canyon Monitoring and Research Center, U.S. Geological Survey website, <https://www.usgs.gov/centers/sbcs/gcmrc/>

that involves slightly modified restrictions on reservoir releases as well as continued beach/habitat-building flows, the latter tracking high-flow experiments conducted in 1996, 2004, 2008, 2012, 2013, 2014, 2016, and 2018 to deposit sediment in Grand Canyon. Alternative D also entails flow measures to benefit Grand Canyon's humpback chub population, including flows intended to mediate its relationship with an exotic trout population (fishery).

Alternative D is thus a Grand experiment in the Anthropocene. Pun intended. The same can be said about the entire Law of the River as it encumbers Grand Canyon's sculptor. While distinct in its fluid nature, the Colorado River is yet another legal space whose features are delineated by law. In this way, the river joins ranks with the reservations carved to segregate Native American tribes with traditional ties to Grand Canyon, as well as the wide-ranging legal spaces in and around the canyon generated by public-land laws. It is one thing, however, to suggest the prevalence of these laws in Grand Canyon is a distinguishing characteristic of this human epoch. And it is yet another to survey the diverse laws constructing Grand Canyon that support this view. What remains untouched are macro questions that provide an opportunity for synthesis and insights into the "big picture"—namely, the precise nature of this human institution called "law" that serves to project a behavioral matrix across Grand Canyon.

### **Metanarrative via Metaphor**

How should we conceive of the laws that construct Grand Canyon as a place? At the end of the day, what do these laws really do and what are they fundamentally about? The line of thought outlined by these questions seems especially worthwhile upon the centennial, and I will rely on three metaphors to explore it.<sup>78</sup> For those accustomed to engaging with Grand Canyon (and other parts of the American West) from an advocacy angle, this content is the essay's prescriptive piece. We should think long and hard about what these laws mean and do. We should conceive of them as formative

(accessed July 27, 2019).

<sup>78</sup> The material in this section has been adapted from the "Property" Part (Part I) of Jason Anthony Robison, "The Law of the River: A Contemporary Perspective on Its Transformation" (S.J.D. diss., Harvard University Law School, 2013).



elements of an intergenerational trust embracing Grand Canyon. And to the extent the laws betray that trust—shaping this one-of-a-kind place in ways that run contrary to our individual and collective views on human relations and stewardship—we should work tirelessly for progressive change.

Picture as an initial metaphor a trail sign in Grand Canyon National Park. Any number of signs along popular trails like Bright Angel will do. Details are unimportant, only the simple image of a post, sign, and message. The essential nature of the laws constructing Grand Canyon can be appreciated, in part, through this metaphor. Two aspects of it are key.

At the outset, the trail sign is a regulatory tool.<sup>79</sup> Depending upon its message, the sign could regulate a host of human behaviors. Broadly speaking, such regulation may concern interactions among human beings—for example, members of the public and parties with private inholdings in the park—or interactions between human beings and other sentient beings or non-sentient parts of Grand Canyon's ecosystem—for example, wildlife, fish, or sensitive soils. Regardless of its behavioral target, the sign, as an expression of the laws underlying it, shapes Grand Canyon by regulating socioecological relations inside the boundary lines.

Yet neither the trail sign's existence nor its message are foreordained. Put differently, the park service's posting of, and particular message on, the sign cannot be viewed as inevitable, standardized acts. This reality speaks to a conjoined aspect of the metaphor. Nothing should be taken as simply given in terms of how socioecological relations within Grand Canyon National Park are regulated. Rather, the sign is inherently a *normative* tool.<sup>80</sup> It owes its life

<sup>79</sup> This content regarding the role of law in regulating socioecological relations stems from scholarship addressing application of the construct of "property" to the environment. See, e.g., J. Peter Byrne, "Property and Environment: Thoughts on an Evolving Relationship," *Harvard Journal of Law & Public Policy* 28 (2004): 679; Eric Freyfogle, "Ownership and Ecology," *Case Western Law Review* 43 (1993): 1269.

<sup>80</sup> This content regarding the inherently normative nature of the laws constructing Grand Canyon grows out of scholarship examining the inherently normative nature of property law. I would be remiss not to mention Morris Cohen's famous piece in this vein: "It is necessary to apply to the law of property all those considerations of social ethics and enlightened public policy which ought to be brought to the discussion of any just form of government." Morris R. Cohen, "Property & Sovereignty," *Cornell Law Quarterly* 13 (1927): 12. See also Eric T. Freyfogle, "Property and Liberty," *Harvard Environmental Law Review* 34 (2010): 75; Joseph Singer, "Democratic Estates: Property Law in a Free and Democratic Society," *Cornell Law Review* 94 (2009): 1009; Laura Underkuffler, *The Idea of Property: Its Meaning and Power* (New York, 2003).

to human values. That is, whether focused on human interactions or interactions between human beings and other parts of Grand Canyon's ecosystem, the sign's posting and message realize human values about how socioecological relations should look. What exact forms these values take depends upon many factors, including peoples' conscious and/or unconscious views on human exceptionalism and social hierarchy. Without tracing these roots any deeper for now, the takeaway is that human values stand up the sign as well as the laws it signifies.

And that brings back to the stage Grand Canyon's sculptor: the Colorado River. Is there a better metaphor for the passage of time than its sacred, ceaseless flows? As mentioned earlier, these flows began sculpting five to six million years ago according to Western science, which makes miniscule the human scale for which the river serves as a metaphor here.<sup>81</sup> Nonetheless, coupled with its constant carving, the river's winding channel and fluctuating flows in Grand Canyon shed further light on the essential nature of the laws constructing this place.

Not only are these laws regulatory tools whose existence and substance are animated by human values. They are also afloat on the river of time. Like all laws, they are dynamic.<sup>82</sup> Just as the Colorado River is anything but stationary—and same goes for Grand Canyon's ecosystem as a whole—the laws developed to mediate socioecological relations within the canyon inevitably evolve. Consider as just one example the 1919 and 1975 statutes creating and enlarging Grand Canyon National Park, respectively, both of which incorporated previously designated national monuments whose founding documents were superseded. Thus, one might say that ecological dynamism syncs with institutional dynamism in Grand Canyon. And the latter pattern is fully unsurprising given what has already been discussed. Human values about socioecological relations underpin laws governing such relations. As values change over time, so do

<sup>81</sup> "Grand Canyon: Geology," National Park Service website, <https://www.nps.gov/grca/learn/nature/grca-geology.htm> (accessed May 13, 2019).

<sup>82</sup> This content concerning the dynamic nature of the laws constructing Grand Canyon stems from scholarship about the dynamic nature of property law. See, e.g., Freyfogle, "Property and Liberty," 87, 115; Eric T. Freyfogle, "Goodbye to the Public-Private Divide," *Environmental Law* 36 (2006): 7; Carol M. Rose, "A Dozen Propositions on Private Property, Public Rights, and the New Takings Legislation," *Washington & Lee Law Review* 53 (1996): 268; Joseph William Singer & Jack M. Beermann, "The Social Origins of Property," *Canadian Journal of Law & Jurisprudence* 6 (1993): 217; Cohen, "Property & Sovereignty," 22.

laws, whether in the domain of Native American affairs (for example, commencement of the self-determination era of federal Indian policy in the late 1960s) or public lands and water (for example, enactment of the Grand Canyon Protection Act in 1992).<sup>83</sup> Far more could be said about the proactive versus reactive roles played by laws in the evolution of human values concerning socioecological relations. But the Colorado River's flows convey the main point: change is a constant for the regulatory, value-infused laws constructing Grand Canyon.

A transition from the sculptor to the block is in order for the final metaphor, from the incising Colorado River to the uplifting Colorado Plateau. Recall the age of Grand Canyon's oldest rocks, 1.8 billion years, and the portion of Earth's history revealed by them, 40 percent of an estimated 4.54 billion-year life.<sup>84</sup> What a gift these rock strata are as a record of natural history, not only to understand our shared past, but also to harness that understanding to chart our shared future. A similar sentiment applies to Grand Canyon's legal landscape.

Laws memorialize identity.<sup>85</sup> Like Grand Canyon's rock strata, the layers of laws that began constructing the canyon during the latter half of the nineteenth century are a historical record. They reveal the essence of the metaphors above: the dynamic evolution of human values about socioecological relations in Grand Canyon. Again, the laws are regulatory tools that have shaped the canyon in line with these values. Gazed at from an intergenerational perspective, it is an obvious yet often hard truth that certain laws, or even integrated layers of laws, regulate socioecological relations in ways that may seem wrongheaded or worse from the vista of the present. This pattern is discussed further below, but suffice it to say that it is apparent with regard to relations among human beings in and around Grand Canyon (for example, historical treatment of Native American tribes connected to the canyon), as

<sup>83</sup> *Cohen's Handbook of Federal Indian Law* (New York, 2012), § 1:07.

<sup>84</sup> "Grand Canyon, Geology," National Park Service website.

<sup>85</sup> This memorialization applies to law writ large. In the context of water law, Joseph Sax's scholarship is a proverbial treasure trove in this vein. As Sax succinctly described, "the story of water law is a record of historical change." Joseph L. Sax, "The Constitution, Property Rights, and the Future of Water Law," *University of Colorado Law Review* 61 (1990): 267. See also Donald Pisani, "Enterprise and Equity: A Critique of Western Water Law in the Nineteenth Century," *Western Historical Quarterly* 18 (Jan. 1987): 15; Morton Horwitz, *The Transformation of American Law, 1780-1860* (Cambridge, Mass., 1977), 31-62.

well as relations between human beings and other parts of Grand Canyon's ecosystem (for example, Glen Canyon Dam's plugging of the Colorado River).<sup>86</sup> Just like the canyon's naked rocks, however, the laws baldly expose the identity of the age—warts and all. And that poses some questions.

Do you like our identity at Grand Canyon? How do you feel, and what do you think, about the rock strata of the legal landscape? Do the laws align with your values about human relations and stewardship? That word "align" is clutch.<sup>87</sup> Here's a basic notion riffing off it: laws constructing Grand Canyon should align with prevailing contemporary values about socioecological relations. Grand Canyon should not be constructed by a dead hand. Although perhaps sensible at their times of origin, laws embodying antiquated conceptions of socioecological relations—"lords of yesterday" as they have been called—should not set perpetual behavioral rules for how human beings are allowed or forbidden to interact with one another at Grand Canyon or with Grand Canyon's broader ecosystem.<sup>88</sup> The metaphorical rock strata should be understood. And parties who have built their lives and livelihoods atop the rock strata should be treated equitably in the values-driven legal evolution. But the dead hand cannot and should not thwart that evolution. Rather, it must be guided not only by a reverence for history, but also unyielding benevolence toward generations to come.

\* \* \* \* \*

My kids are now about the same age I was on my first trip to the north rim. I haven't yet been able to bring myself to take them to Grand Canyon, however, due to the unnerving combination of their boundless energy and the canyon's stark topographical relief—a

<sup>86</sup> To reiterate, these tribes include the Havasupai Tribe, Hopi Tribe, Hualapai Tribe, Kaibab Band of Paiute Indians, Las Vegas Band of Paiute Indians, Navajo Nation, Paiute Indian Tribe of Utah, San Juan Southern Paiute Tribe, Pueblo of Zuni, and Yavapai Apache Nation. "Grand Canyon: Park Statistics," National Park Service website, <https://www.nps.gov/grca/learn/management/statistics.htm> (accessed May 14, 2019).

<sup>87</sup> As presented here, the concept of alignment is derived from scholarship about the inevitable evolution of property regimes. See, e.g., Underkuffler, *The Idea of Property*, 43; Joseph L. Sax, "The Unfinished Agenda of Environmental Law," *Hastings West-Northwest Journal of Environmental Law & Policy* 14 (2008): 8; Joseph L. Sax, "Reflections on Western Water Law," *Ecology Law Quarterly* 34 (2007): 303.

<sup>88</sup> Charles F. Wilkinson, *Crossing the Next Meridian: Land, Water, and the Future of the West* (Washington, D.C., 1992), xiii, 3–27.

nightmare-inducing cocktail. We'll get there, though. Of that you can be sure.

Between now and then, the line-drawing animating this essay will undoubtedly continue. It's a sure bet western history won't reverse course on this front.<sup>89</sup> Part of that process will entail drawing new lines at Grand Canyon, while another part will involve defining the meaning of existing ones. In both cases, the lines will be visible and invisible simultaneously, manifest in laws, policies, and sundry, yet often overlooked by or indiscernible to those enveloped in the demarcated legal spaces. The fates of the Native inhabitants of this indescribable corner of North America are in play in this process—though “play” is too light a word given what's at stake for these Indigenous peoples: their right to self-determination as human beings. And this gravity applies to our species' relation to Grand Canyon in its entirety: sculpting river, ancient rock strata, evergreen forests, even the “small city” sprawled on the south rim. This whole place is being constructed by law in the Anthropocene. Future iterations of our legal creation will inherently determine our fidelity to Theodore Roosevelt's charge upon seeing Grand Canyon for the first time in 1903—a charge that can pull a person's heart from their chest:

I have come here to see the Grand Canyon of Arizona, because in that Canyon Arizona has a natural wonder which, so far as I know, is in kind absolutely unparalleled throughout the rest of the world. I shall not attempt to describe it because I cannot. I could not choose words that would convey or that could convey to an outsider what that Canyon is. I want to ask you to do one thing in connection with it in your own interest and in the interest of the country—to keep this great wonder of nature as it now is. . . . Leave it as it is. You cannot improve it; not a bit.

The ages have been at work on it, and man can only mar it. What you can do is to keep it for your children and your children's children and for all who come after you, as one of the great sights which every American if he can travel at all should see.

Keep the Grand Canyon of Arizona as it is. We have gotten past the stage, my fellow-citizens, when we are to be pardoned if we simply treat any part of our country as something to be skinned for two or three years for the use of the present generation, whether it is the forest, the water, the scenery; whatever it is handle it so that your children's children will get the benefit of it; handle it that way.<sup>90</sup>

<sup>89</sup> Limerick, *Legacy of Conquest*, 27.

<sup>90</sup> Address of President Roosevelt at Grand Canyon, Arizona, May 6, 1903, available



*President Theodore Roosevelt, Grand Canyon, 1903. Courtesy of the National Park Service, <https://www.nps.gov/media/photo/gallery-item.htm?pg=0&id=2883394D-155D-451F-67FDC8058C61049D&gid=288338D0-155D-451F-67FDA56599E7667E>.*

That is vision. That is wisdom. And that is leadership. Thus, when I eventually build the courage to take my kids to Grand Canyon in not too many years, there will be no mistaking the intention. It will be a trip about things that matter most—relations, identity, and trust.

online at <https://www.theodorerooseveltcenter.org/Research/Digital-Library/Record?libID=o289796> (accessed July 31, 2019).