



by Ross W. Gorte

Original Purpose of Federal Lands

This essay explores the original purposes of the federal lands—to provide public goods and services—and proposes a return to those public purposes for federal lands.

The Federal Lands

The U.S. federal government has acquired vast areas of land—1.8 billion acres in total—by treaties, agreements, and purchases. The initial federal acquisition was the “western lands” between the Appalachian Mountains and the Mississippi River which were owned by some of the original colonies. These lands were ceded to the federal government by the large land-owning colonies, such as Massachusetts and Virginia, as a concession to the smaller colonies, such as Delaware and Rhode Island, to reach agreement on the U.S. Constitution.

The next decades saw several acquisitions, beginning with the Louisiana Purchase in 1803. While some questioned the authority of the federal government to acquire lands, the purchase was not successfully challenged. Cessions were made by Great Britain in 1818, exchanging lands along the northern boundary in Minnesota and North Dakota, and 1842 in Maine. Florida was purchased from Spain in 1819. Texas was annexed in 1845. The Oregon treaty with Great Britain in 1846 settled the northern boundary of the coterminous United States, extending federal lands to the Pacific coast. The Mexican cession in 1848 substantially expanded western federal lands, including Arizona, Utah, Nevada, and California. The Gadsden Purchase in 1853 allowed the completion of the southern transcontinental railroad. Alaska—Seward’s Folly—was purchased in 1867, and the final territorial expansion was the Hawaii annexation in 1898.

Many have questioned the authority of the federal government to own lands. However, the Property Clause of the Constitution—Article IV, § 3, Clause 2—gives Congress authority over the lands, territories, or other property of the United States. Initial policy was generally to transfer ownership of the federal lands into private or state ownership. Lands were used to pay Revolutionary War soldiers, to finance the new government, and later to encourage the development of infrastructure and European settlement of the territories. However, from the outset, some lands were reserved for certain federal purposes, including military needs (e.g., lands for forts and certain timbers for navy ship masts) and certain minerals (e.g., salt). Lands were only granted to private landowners if agriculture was feasible (this was expanded to include forestry in the 1870s), but lands were also granted to



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states and to railroads to support western expansion. In total, the federal government has transferred 1.275 billion acres to state and private ownership. The remaining federal lands are the public domain (in contrast to federal lands purchased from state or private owners, federal acquired lands).

Management of Public Lands

The first federal conservation reservation was at Hot Springs, Arkansas, in 1832. The reservation merely removed the lands from privatization under existing land disposal and mineral laws. In 1864, Yo-Semite Valley was given to the State of California to be administered as a pleasuring ground (i.e., for recreation). Most famously, Congress designated Yellowstone in Wyoming Territory as the world's first national park in 1872. From their inception, the national parks (and the National Park Service when it was established in 1916) have had the dual missions of providing access for recreation while protecting the natural and historic resources of the sites.

Concerns about forest depredation arose in the 1870s. Initially, the concern was mostly expressed among scientists and academicians, particularly in the American Association for the Advancement of Science (AAAS) and the American Forestry Association. After several abortive attempts, including bills stalled in the Public Lands Committee, Congress enacted a rider to the 1876 general appropriations bill funding a study and report on forest supplies and conditions in the Department of Agriculture (USDA) appropriations. Hence, the beginning of federal forestry was in USDA rather than the Department of the Interior, which administered the public domain lands. The 1878 report, written by Franklin B. Hough, found wasteful, destructive logging resulting from criminal trespass (theft), and focused on the federal inability to influence activities on private lands. In 1881 Congress established the Division of Forestry in USDA, headed by Hough, to help track the situation.

Despite the Division of Forestry's conservation origins, western forest destruction continued with indiscriminate logging on fraudulent land entries (private acquisition of federal lands for settlement). In 1891, Congress acted to suspend entry to (disposal of) federal forest lands prior to their examination and

classification by granting the President the authority to establish forest reserves from the public domain, in § 24 of the Act of March 3, 1891 (26 Stat. 1095). Shortly thereafter, President Benjamin Harrison proclaimed the first reserve, the Yellowstone Forest Reserve (now the Shoshone National Forest in Wyoming), and created 15 reserves (13 million acres) by the end of 1892. His successor, President Grover Cleveland, quickly added another 5 million acres of reserves, but then stopped because Congress had provided no means of protecting the reserves.

Enter the National Academy of Sciences (NAS). NAS was commissioned by the USDA Division of Forestry, supported by the American Forestry Association, to study western forests. The report recommended significant new reserves, and lame-duck President Cleveland proclaimed 13 new reserves totaling 21 million acres on Washington's Birthday in 1897. Congress tried to rescind the proclamations in the 1897 Sundry Civil Appropriations Act, but Cleveland vetoed the bill. The appropriations bill was subsequently enacted and signed by President William McKinley without rescinding Cleveland's proclamations, but with restrictions on the purpose of new reserves: "No public forest reservation shall be established, except 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 for the use and necessities of the citizens of the United States." From the debates over the provision, Congress clearly intended the phrase "citizens of the United States" to mean homesteaders and other settlers, not the timber industry for supplying eastern cities with lumber. Furthermore, the timber could only be used in the state or territory where it was cut. The 1897 Act also limited timber harvests to "dead, matured, and large growth of trees." This restriction on presidential authority, in the 7th unnumbered paragraph of the section titled Surveying the Public Lands of the Act of June 4, 1897 (30 Stat. 11, 34), is commonly called the Forest Service Organic Act, which is commonly cited as the original purposes for administering the national forests. However, timber cutting was intended to be incidental, for local use, while the lands were reserved from large-scale logging.

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Thus, purposes of national parks were for public recreation and resource protection, while the purposes of the forest reserves (renamed “national forests” in 1907) were effectively identified as protection of forests and preservation of water flows while permitting some local timber use. Original purposes of the National Wildlife Refuge System and of the public lands administered by the Bureau of Land Management are not discussed here because general management legislation for these lands was not enacted until after World War II. It should be noted that the 1897 Act authorized regulations to effect the purposes of protecting the forests and preserving water flows. Grazing permits and fees were subsequently established to protect reserves from excessive grazing; both were challenged in court, eventually ending up at the U.S. Supreme Court, which on May 1 and May 3, 1911, upheld the fees and use restrictions as reasonable for protecting the forests.

These public purposes were further supported by two subsequent events: the 1910 Big Burn that identified the need to protect forests from fire; and the 1911 Weeks Law authorizing acquisition of forest lands. The 1910 Big Burn refers to a severe fire season in Idaho and western Montana. By 1907, Forest Service Chief Gifford Pinchot had declared that the agency had developed efficient measures for detecting and extinguishing fires in the national forests. The drought in 1910 had begun in April, and numerous fires had sprung up in the region throughout the summer. Beginning on August 20, high winds drove the “big blowup,” which burned several towns and more than 3 million acres of timberland in Idaho and western Montana in two weeks. This drove fire protection to the forefront of U.S. Forest Service policy for decades.

The 1911 Weeks Law provides a different view of the public purposes of the national forests. Concerns arose over the destruction of eastern forests as well as western forests from widespread, indiscriminate logging, but there was little or no public domain land in the east on which to proclaim forest reserves. The Appalachian National Park Association (renamed Appalachian National Forest Reserve Association in 1903) and the Society for the Protection of New Hampshire Forests led the efforts to create eastern forest reserves. The constitutionality of federal agencies acquiring private lands was questioned.

The House Judiciary Committee initially ruled that legislation authorizing federal land acquisition was unconstitutional. However, the bills were modified to limit the acquisition to lands protecting the headwaters of navigable rivers, with proponents arguing that the Commerce Clause of the Constitution—Article I, § 8, Clause 3—gives Congress authority over navigation, and thus authorizing headwaters land acquisition to reduce downstream flooding was constitutional. The Committee agreed, if indeed forest protection could reduce flooding. The ensuing debate, largely between Hiram M. Chittenden of the Army Corps of Engineers and Forest Service Chief Gifford Pinchot, was spirited, with Pinchot’s view eventually carrying the day.

In summary, the ownership and management of federal lands was originally intended to provide recreation, to protect lands and resources, and to preserve water flows while allowing other activities. In other words, public lands were to provide and protect public goods and services while constraining commercial activities. So what, exactly, are public goods and services?

Public Goods and Services

Public goods are identified by economists as goods and services that have two particular characteristics. First, public goods are “non-consumptive” or “non-rivalous.” This means that their “use” does not diminish the availability of the goods for “use” by others. Scenery is one classic example; your viewing a scenic vista doesn’t reduce the scenic vista for others. This contrasts with private goods where your ownership or use necessarily makes those goods or services unavailable for others; your eating an apple,

for example, makes that apple unavailable to others.

At their most extreme, there are non-consumptive goods and services whose primary value is their existence rather than use. Wilderness, for example, is for many something they want protected, without any expectation of visiting wilderness areas.

The second characteristic of public goods is “non-excludability.” This means that if the good is provided to one individual, it is provided to all. National defense is the classic example: if you are protected, your neighbors are also protected—whether or not they want that protection, and whether or not they pay for it. This raises the “free rider” problem, where people who do not pay for the public good or service still have it available. Of course, it also raises an “unwilling rider” issue: some people who do pay for the public good may not want it, but have no choice about paying.

Economists generally recognize that many goods and services may have some degree of public goods characteristics rather than being purely public or private goods. Wildlands provide a variety of goods and services—timber, livestock grazing, wildlife habitat, water, scenery, etc.—some of which are partially or substantially public goods. This complicates matters, because lands produce several goods and services, some of which do not meet the test of non-excludability. The use of one good, such as harvesting the timber, affects the production and availability of others, such as water quality and quantity and habitat for various species of wildlife. Thus, management decisions for individual resources necessarily affect provision or protection of other goods and services.

Economists and others have also debated whether it is necessary that governments provide public goods directly, or even through regulation of private markets. The lack of government intervention in providing public goods and services commonly results in overproduction or underproduction (compared to “socially optimal” levels) of those goods and services. For federal lands, the question of government intervention was decided more than a century ago, with federal ownership of lands chosen as the means of providing public goods and services. But that has

not settled questions about the adequacy and efficiency with which these goods and services are provided. Many assert that the public goods and services being provided by federal lands are being short-changed. Management of the national forests and Bureau of Land Management lands has generally emphasized commodity production (timber, livestock grazing, and mineral production) since World War II. This emphasis, together with the joint production of public and private goods and services from federal lands and the dominance of private lands in producing private goods and services, certainly suggests the underproduction of public goods and services from federal lands.

Conclusion

It is time to rethink the public lands and to consider a return to the original purposes of the federal lands—management to preserve, protect, and produce public goods and services. Under this regime, some of the current uses of federal lands would likely diminish and could even disappear.

- First and foremost among these is water, both the quality and quantity of water coming off federal lands. This is also consistent with the geography of federal lands, since the majority of rivers and streams in the United States have their headwaters on federal lands.
- Providing wildlife habitat is another public good/service from federal lands. States are responsible for administering hunting and fishing and the population levels of huntable and fishable species. Federal lands can and should contribute to habitats for these species to the extent that such habitats are unavailable on other lands, but can and should emphasize habitats for species with no current market value, including (but not limited to) endangered, threatened, and rare species. While markets may not value most of the flora and fauna, that does not diminish their societal value and their integration into ecosystems that depend on the health of a multiplicity of species.
- Recreation management can emphasize public goods and services, such as dispersed recreation (e.g., hiking and berry-picking) and otherwise unmarketable activities.

- While timber production commonly focuses on commodities, timber from public lands managed for public goods and services could be managed for diverse, unusual, and unprofitable species and sizes (e.g., managing for old-growth timber) for poorly served markets.
- Livestock grazing on federal lands is questionable; federal lands do not appear to provide any unique, irreplaceable grazing, while livestock grazing significantly damages watersheds and many wildlife habitats.
- Finally, federal lands can be managed for additional values and purposes, such as ameliorating climate change by sequestering carbon and protecting forests by promoting diversity of tree species, sizes, and genetics, and emphasizing existence values, such as wilderness and habitat for charismatic megafauna.

In summary, public lands should be managed for public purposes.

Suggested Reading

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