ARTICLES

PUBLIC LAND AND RESOURCES LAW IN THE AMERICAN WEST: TIME FOR ANOTHER COMPREHENSIVE REVIEW?

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The federal public lands, a defining characteristic of the American West, are embroiled in change and controversy. This is nothing new as these lands have long ignited passions linked to debates over resource development versus protection and federal-state relations. During the past fifty years, however, changes engulfing the region have helped enflame these historic debates, driven by unparalleled population growth, major economic and social shifts, water conflicts, energy development demands, climate change impacts, emergent recreational and environmental values, new scientific knowledge, extensive litigation, reduced agency budgets, new community-based collaborative initiatives, and the like. These remarkable changes are testing the legal and institutional framework governing the public lands, which has changed little during the past fifty years despite recurrent criticism directed toward its shortcomings. In fact, the last comprehensive review of federal public land and resource law occurred during the 1960s, when the Public Land Law Review Commission convened and issued a groundbreaking report that helped prompt much-needed legal reforms, such as the Federal Land Policy and Management Act, National Forest Management Act, Payment in Lieu of Taxes Act, and Public Rangelands Improvement Act. Given the level of controversy

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prevailing on the public lands today, this Article addresses the question whether the time has come for another comprehensive review of the relevant laws governing these publicly owned lands and their resources. The Article identifies the changes that are inexorably reshaping public land policies, reviews past efforts through federal commissions to examine and reform the laws governing these lands, and assesses the prospects for another comprehensive review. Noting the extreme level of controversy and distrust that persists today, it concludes by proposing a more limited review effort, one focused on accelerating recreational uses and conflicts that may present an opportunity to achieve consensus for the sake of the landscape that everyone is sharing and values.

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I. INTRODUCTION

Wallace Stegner, one of the most astute observers of the American West, once observed that the high concentration of federal public lands and pervasive aridity are the defining characteristics of the region and its society. Federally owned lands and the lack of water have long shaped western state economies and regional growth patterns while also giving rise to a unique body of law designed to fit the region. From high plains to rugged mountains and from sun-drenched deserts to humid rain forests, the West's public lands offer wide-open spaces, abundant natural resources, and unparalleled scenery. Indeed, the vast western landscape has long fashioned history, inspired myths, and drawn people to the area. Today, however, the region is awash in change and controversy, much of it focused on the public lands, generating seemingly endless public policy debate.

Federal public lands are concentrated in the American West, where nearly half the land base is owned by the national government. Although federal lands account for 28% of all land in the United States, [m]ore than 90% of these lands are located in the eleven westernmost states and Alaska. For the most part, the federal public lands are overseen by four land management agencies: the United States Forest Service, Bureau of Land Management, National Park Service, and the United States Fish and Wildlife

 $^{^1}$ See Wallace Stegner, The Sound of Mountain Water 32 (1980) ("And say that in its territory, as in its legendry, much of the West is public domain. Next to aridity, that may be the most important fact about it.").

² Charles F. Wilkinson, *The Law of the American West: A Critical Bibliography of the Nonlegal Sources*, 85 Mich. L. Rev. 953, 955 (1987).

³ Unless otherwise specified, references to "public" lands throughout this article refer specifically to "federal" public lands and resources, in contrast to state and local public lands.

⁴ See George C. Coggins et al., Federal Public Land and Resources Law 18 (7th ed. 2014) (stating that "the highest proportion of federal public lands are found in the eleven western states"); Stegner, The Sound of Mountain Water, *supra* note 1, at 32 (stating that more than half of the land base in the western states are federally owned).

⁵ CAROL HARDY VINCENT ET AL., CONG. RESEARCH SERV., FEDERAL LAND OWNERSHIP: OVERVIEW AND DATA 6 (2017), https://perma.cc/N52X-MQF3.

 $^{^6}$ Matthew McKinney & William Harmon, The Western Confluence: A Guide to Governing Natural Resources 15 (2004).

Service.⁷ The United States Forest Service and the Bureau of Land Management, between them, administer roughly one third of the western landscape; they oversee more than 80% of Nevada, more than 60% of Utah and Idaho, and more than 45% in four other western states.⁸ Most of the nation's tribal lands are also located in the West, covering one fifth of the landscape in the eleven most western states.⁹ Another 45 million acres of "school trust" lands are scattered across these states, representing "federal land grants given to each state upon statehood to help fund education."¹⁰ Taken together, these federal, tribal, and state lands dominate the physical geography of the region and much of its politics, economics, and culture.

The western federal lands constitute a veritable storehouse of natural resources, prompting recurrent preservation versus development conflicts and reflecting age-old federal-state tensions over management of these resources. Federal lands are home to iconic national parks and expansive national forests; provide vital water supplies to urban centers; represent important working landscapes; house valuable energy resources; support a diversity of fish, wildlife, plants, and endangered species; contain important cultural and heritage resources; provide a setting for diverse outdoor recreation activities; and promote economic vitality in communities across the region. Much of the acreage operates under a "multiple use' doctrine that allows grazing, mining, logging, energy development, motorized recreation," and wilderness protection, creating a setting ripe for conflict and contention. 11 As scientific knowledge has advanced, it has become clear that the federal lands, whether managed for "multiple use" or preservation purposes, are inherently connected among themselves and with other surrounding lands.

Notwithstanding the continuous presence of the federal lands, the American West is a much different place today than it was fifty years ago. Since 1970, the region's "population grew by 107 percent compared to 41 percent for the rest of the country." It is now the nation's most urbanized region, and most western state economies have steadily evolved away from a predominant reliance on natural resources. A preservation ethic reflected in the region's national parks and wilderness lands has taken hold, generating a robust tourism industry that is of growing importance across

⁷ See About the Agency, U.S. FOREST SERV., https://perma.cc/KS4Y-PT8A (last visited Feb. 16, 2019); About: What we Manage, BUREAU OF LAND MGMT., https://perma.cc/HQ7A-SPN5 (last visited Feb. 16, 2019); About Us, U.S. NAT'L PARK SERV., https://perma.cc/LJJ5-HU39 (last visited Feb. 16, 2019); About the U.S. Fish and Wildlife Service, U.S. FISH & WILDLIFE SERV., https://perma.cc/MF8K-FVXN (last visited Feb. 16, 2019).

⁸ McKinney & Harmon, *supra* note 6, at 15.

⁹ *Id.*

¹⁰ *Id.*

¹¹ Mitch Tobin, What is the West? 5 Ways the Region Stands Out, EcoWest (Apr. 26, 2013), https://perma.cc/V2VT-KYL3.

 $^{^{12}}$ Headwaters Econ., West is Best: How Public Lands in the West Create a Competitive Economic Advantage 1, 3 (2012), https://perma.cc/K4Z2-LJMU.

 $^{^{13}}$ Id. at 4–5 (stating that 89% of the population and 90% of the jobs in the West are located in metropolitan counties).

¹⁴ *Id.* at 15.

the region.¹⁵ Climate change has created a new degree of regional uncertainty, threatening water supplies and wildlife, and enhancing wildfire dangers.¹⁶ A diverse array of constituents demand a broader range of services from the public lands, while several new resource management strategies have emerged organically from local collaborative efforts. In short, the social, economic, legal, and environmental context of federal public land management has changed dramatically during the past several decades.

The laws, policies, and institutions governing the public lands, however, have not evolved at the same pace—a fact that has plainly exacerbated the level of controversy that now prevails across much of the public domain. Many of the key laws and policies governing the public lands are firmly rooted in the past when the West and the demands on its lands and resources were quite different than is the case today.¹⁷ In fact, nearly fifty vears have elapsed since the last comprehensive review of federal public land law, policy, and governance. That review, conducted in 1965–1969 by a congressionally created Public Land Law Review Commission (PLLRC or Commission), published a seminal report entitled *One Third of the Nation's* Land. The report ultimately prompted major legal reforms that helped propel public land management into a new and now increasingly contentious era.¹⁹ Given the changes afoot since then and the escalating level of conflict on the public lands, the federal land management agencies and their diverse constituencies would be well-advised to begin seeking a new path forward, one that might be guided by something akin to the 1960s public land law review commission.

In anticipation of the fiftieth anniversary of *One Third of the Nation's Land*, this Article addresses the question of whether it is time for another comprehensive review of public land laws, policies, and institutions, and what shape that review might take. The Article will first chronicle the dramatic changes that have occurred during the past fifty years and their effect on the federal public lands. It will then review the impact and legacy of past public land commissions, focusing particularly on the 1960s commission and its effect on public land law and policy. Next, the Article will highlight the arguments for and against another public land commission given the changes and controversies impacting federal lands and resources. The Article concludes by reviewing alternative strategies for conducting a comprehensive review of federal land law, policy, and governing arrangements.

 $^{^{15}}$ See discussion infra Part II.D.

¹⁶ See discussion infra Part II.E.

¹⁷ For an authoritative history of federal land law, policy, and governance, see CHARLES F. WILKINSON, CROSSING THE NEXT MERIDIAN: LAND, WATER, AND THE FUTURE OF THE WEST (1992).

¹⁸ See generally The Pub. Land Law Review Comm'n, One Third of the Nation's Land: A Report to the President and to the Congress by the Public Land Law Review Commission (1970) [hereinafter One Third of the Nation's Land].

¹⁹ Id. at ix-x.

II. A CHANGING WEST: TRENDS INFLUENCING FEDERAL LAND MANAGEMENT

By any measure, the pace of change is accelerating as the nation moves ever deeper into the twenty-first century. Perhaps nowhere is this more evident than in the American West and on the federal public lands, where mounting changes are provoking controversy and frustration over existing laws and policies. In April 2015, recognizing the expanding level of change and controversy engulfing the region's prized public lands, the Center for Natural Resources & Environmental Policy (University of Montana) and the Wallace Stegner Center for Land, Resources and the Environment (University of Utah) convened recognized experts on federal public land law, policy, and governance for an exploratory workshop. The workshop coincided, intentionally, with the approaching fiftieth anniversary of the last PLLRC, which represents the last comprehensive review of federal public land law and policy. The workshop coincided and policy.

The participants—dubbed the Wasatch Front Working Group—began their deliberations by identifying the most salient changes that have occurred over the past fifty years, focusing on social and economic trends, emergent environmental concerns, scientific and technical advancements, new management tools, and the legal and institutional framework governing federal public lands.²³ Realizing that "these changes cut across categories," the participants identified nine overarching trends with significant implications for federal land law, policy, and governance.²⁴ Collectively, these trends point toward the need to rethink the basic legal and institutional structure governing the western public lands.

²⁰ Recent high-profile controversies over public land policies include the Cliven Bundy stand-off over livestock grazing in southern Nevada, the Malheur National Wildlife Refuge occupation by disgruntled individuals, the illegal trail ride in southern Utah organized by a county commissioner, and protests over oil and gas leasing. See Max Strasser, Fed Up with the Feds, Newsweek (May 2, 2014), https://perma.cc/S9GL-JY8M) (outlining the anti-federal sentiments inspiring the Nevada standoff); Kirk Johnson, Siege Has Ended, but Battle over Public Lands Rages On, N.Y. TIMES (Apr. 14, 2017), https://perma.cc/7HEP-8R22) (describing the public land debate in the wake of the Malheur occupation); Brian Maffly, Dozens Illegally Ride ATVs into Utah Canyon in Lands Fight Rally, SALT LAKE TRIB. (May 11, 2014), https://perma.cc/6NT7-3MSQ (reporting on the Utah protest ride).

²¹ See Appendix 1 for a list of the initial participants in this working group.

 $^{^{22}~}See$ Univ. of Utah S.J. Quinney Coll. of Law et al., One Third of the Nation's Land (Revisited): The Wasatch Front Prospectus on the Future of Federal Public Land & Resources 2 (2015), https://perma.cc/V9R2-EW4Z.

²³ Id.

²⁴ Id. at 4–7. For documents published since this initial gathering, including a needs assessment from interviewing several additional experts in federal public land law, policy, and governance, and another working session in March 2018 following the Stegner Center's annual symposium, which focused on federal public lands, see *The Future of Federal Public Lands*, CTR. FOR NAT. RESOURCES & ENVIL. POLICY, https://perma.cc/8Q7K-Q6EJ (last visited Feb. 16, 2019). The upshot of this subsequent work is the addition of two more overarching trends, as identified and discussed herein.

A. The Nation's Fastest Growing Region

The American West boasts many of the country's fastest growing states and communities in the country. By 2030, the region is expected to be home to a quarter of all Americans, up from a mere 15% in 1970. From 1970–2016, population in the West has grown by 120% compared to 46% for the rest of the country, the West's employment rate is double the rest of the country, and personal income has grown by 299% compared to 179% for the rest of the country. The country of the country.

In West is Best: How Public Lands in the West Create a Competitive Advantage, the authors conclude that the region's national parks, monuments, wilderness areas, and other federal public lands are one of the primary reasons the West has economically outperformed the rest of the nation.²⁸ The West's fastest growing counties lie next to wilderness and other public lands.²⁹ Higher-wage service industries—such as high-tech and health care—are leading the West's job growth and diversifying its economy.³⁰ Entrepreneurs and talented workers are choosing to live and work near the region's wide-open spaces to enjoy the outdoor recreation, scenic amenities, and natural landscapes provided by federal lands.³¹ To accommodate this influx of new residents, open spaces are being subdivided into ranchettes and smaller lots, not only fragmenting wildlife habitat but also creating barriers to accessing the region's public lands.³² As a result, the regional economy is changing, and the traditional resource-based industriesfarming, ranching, mining, and timber harvesting—are fading in importance in many locations and being supplemented elsewhere with other economic opportunities.33

Five urban-anchored "megaregions" are emerging in the American West—three along the Pacific Coast and two in the Rocky Mountain region, where one stretches south of Denver to Albuquerque and another is centered around Phoenix and Tucson.³⁴

These megaregions are defined as population areas with "[i]nterlocking economic systems, shared natural resources and ecosystems, and common

²⁵ HEADWATERS ECON., *supra* note 12, at 14.

²⁶ Id.

 $^{^{27}}$ $\emph{Id.}$ at 3–4, 13. Percentages updated in 2018 using data from U.S. Department of Commerce. 2017. Bureau of Economic Analysis, Regional Economic Accounts, Washington, D.C.

²⁸ Id. at 1.

 $^{^{29}}$ See id. at 19–20 ("Our research and that of others clearly show that protected public lands are a competitive economic advantage in the West, supporting faster rates of job growth and higher levels of per capita income.").

³⁰ *Id.* at 9.

³¹ See Ctr. of the Am. West, Univ. of Colo. at Boulder, Atlas of the New West: Portrait of a Changing Region 107 (William E. Riebsame et al. eds., 1997).

³² E.g., Greg Nickerson, Subdividing the West: Wyoming at Planning Crossroads, NEWWEST (Mar. 30, 2010), https://perma.cc/NS38-ZXE3.

³³ HEADWATERS ECON., supra note 12, at 7.

³⁴ See, e.g., Megaregions, AM. 2050, https://perma.cc/8S5K-RUJG (last visited Feb. 16, 2019).

transportation systems."³⁵ No matter how large the metropolitan footprint, each megaregion includes and relies on natural resources linked to the public lands that are vital to urban life—water, food, energy, wood products, open space, wildlife corridors, and recreational opportunities, as well as important ecosystem services derived from the public lands.

The last PLLRC report, in the opening narrative, states, "We start with a strong belief that the public lands of the United States and their resources are important to everyone." The report then explains that "the 'general public' is in fact made up of many publics." The same is true today. Wildly diverse national and regional constituencies and the steady influx of new residents to the region are placing ever more disparate and growing demands on the public lands, 38 thus presenting a fundamental challenge for federal land managers and others who care about the American West.

B. Limited and Variable Water Resources

Except for areas along the Pacific Coast, most of the American West receives less than twenty inches of rain each year, making it a semi-arid to arid environment. Regional settlement and development patterns reveal that the West is a "hydraulic society," dependent upon a vast network of dams, reservoirs, and canals to move water from its source to where it is most needed—mining, agriculture, and urban centers and increasingly for instream environmental values.³⁹

Several trends suggest that water supply in the American West is becoming more limited and variable. First, precipitation has decreased. Parts of the West have become drier over the past fifty years. From 1959 to 2008, average annual precipitation in the United States increased about 5%, but many areas in the West experienced a decrease in annual precipitation. Arizona and the Pacific Northwest, for example, have become noticeably drier. Second, droughts have increased. Due to changes in precipitation, parts of the West have experienced more droughts over time and others less. Data from roughly the last fifty years indicates that drought has been on the increase in more areas than it has been on the decline. Data from roughly the last fifty years indicates that drought has been on the increase in more areas than it has been on the decline.

³⁵ See id.

³⁶ ONE THIRD OF THE NATION'S LAND, *supra* note 18, at 33.

³⁷ *Id.* (emphasis in original).

See CTR. OF THE AM. WEST, supra note 31, at 22–27.

³⁹ DONALD WORSTER, RIVERS OF EMPIRE: WATER, ARIDITY, AND THE GROWTH OF THE AMERICAN WEST 7 (1985); see also A. Dan Tarlock & Sarah Bates, Western Growth and Sustainable Water Use: If There are No 'Natural Limits,' Should We Worry About Water Supplies?, 38 ENVIL. L. REP. (ENVIT. L. INST.) 10,582, 10,583 (2008); A. Dan Tarlock, Western Water Law and the Challenge of Climate Disruption, 48 ENVIL. L. 1, 11–12 (2018).

 $^{^{40}}$ See, e.g., U.S. GLOB. CHANGE RESEARCH PROGRAM, GLOBAL CLIMATE CHANGE IMPACTS IN THE UNITED STATES 27, 30 (Thomas R. Karl et al. eds., 2009), https://perma.cc/M7HK-YX7U.

⁴¹ *Id.*

⁴² See id. at 30.

⁴³ Id. at 12, 32-33, 43.

⁴⁴ *Id.* at 33, 43.

⁴⁵ *Id.* at 27.

drought in the Northeast has become less common. ⁴⁶ Third, precipitation is expected to continue decreasing. Recent research focused on the period between 2020–2039 projects a decrease in precipitation for large portions of California, Nevada, Utah, and Oregon, and virtually all of Arizona and New Mexico. ⁴⁷ Regions at lower latitudes, in particular, are expected to get drier, while the Pacific Northwest and Northern Rockies are projected to get wetter. ⁴⁸

Given these water supply trends, historic water resource allocations in the American West may not be sustainable over the long term. Since the United States Geological Survey started collecting water data in 1950, irrigated agriculture has accounted for most of the water used in the West (about 75%). Basic human needs (drinking, cooking, bathing, washing, sanitation, and lawn and garden irrigation) account for about 11% of water use, while the remaining 14% is split among mining, livestock, and thermoelectric power production. Beyond these diverse out-of-stream water uses, the past several decades have seen a shift in scientific and public appreciation for the value of water flowing in its river of origin. "Environmental" or "instream" flows offer a myriad of values, ranging from commercially profitable recreation (boating and fisheries) and critical ecosystem services to protection of tribal fishing rights, endangered species habitat, and less tangible aesthetic values.

Federal lands are essential to western water management for one simple reason: the headwaters of the West's major rivers and streams originate on federal land, and federal lands play an important role in recharging groundwater. Federal land management policies impact both the quantity and quality of water delivered to downstream users, along with the flows needed for environmental values and services, and long-term groundwater management. Although state law generally governs water allocation across the West, the Endangered Species Act and other federal laws are increasingly affecting regional water management decisions, as in the Columbia River basin where several salmon runs are now federally

 $^{^{46}}$ Id. at 43 (illustrating increasing and decreasing drought patterns across the United States).

 $^{^{47}}$ Sujoy B. Roy et al., Tetra Tech inc., Evaluating Sustainability of Projected Water Demands Under Future Climate Change Scenarios 13 & fig.6 (2010).

⁴⁸ See id.

 $^{^{49}\,}$ Joan F. Kenny et al., U.S. Geological Survey, Estimated Use of Water in the United States in 2005, at 2, 23 (2005).

⁵⁰ See id. at 5 fig.1.

 $^{^{51}}$ See Lawrence J. MacDonnell, Environmental Flows in the Rocky Mountain West: A Progress Report, 9 WYO. L. REV. 335, 352, 354, 358, 384–85 (2009) (discussing the benefits of environmental and instream flows).

⁵² Id. at 375, 384.

⁵³ MacDonnell, *supra* note 51, at 353, 364, 384 (discussing the role of federal land managers in negotiating agreements to protect instream flows and water quality); Coggins et al., *supra* note 4, at 427.

⁵⁴ Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2012).

protected.⁵⁵ As a result, the federal land management agencies and the states must work together to manage the region's dwindling water supplies.

The U.S. Forest Service's "Forests to Faucet" program reinforces the link between land use and water availability.⁵⁶ The agency is mapping land areas most important to surface drinking water and documenting "the role forests play in protecting these areas." This assessment lays the groundwork for identifying watersheds where a payment for watershed services project may be an option for financing conservation and management on forest lands. Already Denver Water has entered into a partnership with the U.S. Forest Service to accelerate efforts to improve forest and watershed conditions.⁵⁸ "As the water provider to 1.4 million people in the Denver metropolitan area, Denver Water directly depends on healthy forests and watersheds." 59 Most of the water in its primary collection and delivery infrastructure comes from snowpack and streams on national forest lands. 60 Denver Water is therefore matching the U.S. Forest Service's \$16.5 million investment, providing a total of \$33 million for forest treatment and watershed protection projects over a five-year period in priority watersheds critical to the area's water supply. 61

Fifty years ago, the PLLRC opened its water chapter by explaining that public lands play a critical role assuring water for the western states. ⁶² It then offered recommendations designed to regulate stream flows, maintain water quality, and ensure a sustained water supply to downstream users. ⁶³ Today, these same public lands—particularly national forests—are more critical than ever to the region's water supply, for municipal consumption and agricultural production as well as environmental concerns and recreational activities that were scarcely acknowledged in 1970. ⁶⁴ Moreover, improving the link between public land management and water supplies for multiple uses not only builds upon a core objective in the Forest Service's Organic Act ⁶⁵—"securing favorable conditions of water flows" —but also

⁵⁵ MICHAEL C. BLUMM, SACRIFICING THE SALMON: A LEGAL AND POLICY HISTORY OF THE DECLINE OF COLUMBIA BASIN SALMON 323 (2002); Michael C. Blumm et al., *Still Crying Out For a "Major Overhaul" After All These Years—Salmon and Another Failed Biological Opinion on Columbia Basin Hydroelectric Operations*, 47 ENVIL. L. 287, 289 (2017).

 $^{^{56}~}$ See Forests to Faucets, U.S. Forest Serv., https://perma.cc/84NX-QND9 (last visited Feb. 16, 2019).

⁵⁷ *Id.*

 $^{^{58}}$ Watershed Protection & Management, Denver Water, https://perma.cc/2BGB-SWNT (last visited Feb. 16, 2019).

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ See id.

⁶² See One Third of the Nation's Land, supra note 18, at 141.

⁶³ *Id.* at 141, 150–51.

⁶⁴ See Sarah Bates, Bridging the Governance Gap: Emerging Strategies to Integrate Water and Land Use Planning, 52 Nat. Res. J. 61, 64–66, 75–77 (2012) (discussing the importance and increase in consumption of national forest water supplies due to steady population growth in the West).

⁶⁵ Forest Service Organic Administration Act of 1897, 16 U.S.C. §§ 473–482, 551 (2012).

⁶⁶ 16 U.S.C. § 475.

reinforces the need to coordinate land use and water management decisions at the federal, state, and local levels. ⁶⁷ In short, land management is water management.

C. Energy Development: Growing, Fragmented, and Controversial

The public lands are a storehouse for diverse energy resources critical to the nation's economy and security. These energy sources include coal, oil, natural gas, and uranium, as well as renewable wind, solar, geothermal, and hydropower. With current consumption patterns, the nation's energy fuel use is as follows: coal at 18% (30% of electricity generation); natural gas at 32% (32% of electricity generation); oil at 28% (1% of electricity generation); nuclear at 10% (20% of electricity generation); and renewables at 13% (17% of electricity generation). However, the domestic use of coal for electricity production is rapidly declining. Not only is coal a major source of greenhouse gas emissions, but new technologies—horizontal drilling and hydraulic fracturing—have unlocked vast quantities of natural gas and oil that are relatively cheap under existing market conditions and, in the case of natural gas, have a much lower carbon footprint. Moreover, new large-scale solar and wind projects are coming on line, helping to reduce carbon emissions and dependence on fossil fuels.

The federal public lands produce approximately half of the nation's coal, much of it coming from Wyoming's Powder River Basin. A Nearly 37 million acres of federal land is leased for oil and gas production, with over 12 million of those acres actually producing oil and gas, generating roughly billion dollars for the United States Treasury in lease and royalty payments. Since the United States entered the atomic age, uranium prospecting and mining have become time-honored traditions on the public

⁶⁷ See Bates, supra note 64, at 63.

⁶⁸ See, e.g., An All of the Above Energy Approach, Bureau of Land Mgmt., https://perma.cc/4EQT-S9K3 (last visited Feb. 16, 2019).

 $^{^{69}\;}$ U.S. Total Energy Statistics, U.S. Energy Info. Admin., https://perma.cc/23AF-4F4Z (last updated Aug. 2, 2018).

⁷⁰ Use of Coal, U.S. Energy Info. Admin., https://perma.cc/3KS2-KNMV (last updated July 13, 2018).

⁷¹ Where Greenhouse Gases Come From, U.S. ENERGY INFO. ADMIN., https://perma.cc/4YTZ-3WRA (last updated July 20, 2018).

Natural Gas and the Environment, U.S. ENERGY INFO. ADMIN., https://perma.cc/W2SX-DHQR (last updated Aug. 22, 2018) (noting that burning natural gas "results in fewer emissions of nearly all types of air pollutants and carbon dioxide (CO2) than burning coal," and outlining the "advances in drilling and production technologies").

⁷³ See Energy Explained: Renewable Energy Sources, U.S. ENERGY INFO. ADMIN., https://perma.cc/BJ5J-XNDX (last updated July 13, 2018) (noting that "renewable energy sources more than doubled from 2000 to 2017"); see also COGGINS ET AL., supra note 4, at 613 (discussing the current and potential use of public lands for solar and wind projects).

⁷⁴ See Average U.S. Coal Mining Productivity Increases as Production Falls, U.S. ENERGY INFO. ADMIN. (Mar. 7, 2018), https://perma.cc/HGN6-QA54.

⁷⁵ See COGGINS ET AL., supra note 4, at 552. Including the 6 million acres producing oil and gas offshore, federal lands generate more than \$12 billion for the federal treasury. *Id.*

lands. ⁷⁶ According to the Bureau of Land Management (BLM), it manages 19 million acres with solar potential and 20 million acres with wind potential. ⁷⁷ And the federal lands are cross-hatched with transmission lines conveying electrical power from distant power plants to major urban centers, with more on the drawing board. ⁷⁸

Environmental concerns overlay energy development activities on the public lands. These concerns include: leasing and project siting decisions that can adversely impact wildlife, water, air quality, recreation, and other resources; extraction techniques, such as hydraulic fracturing, that raise water quality and consumption issues as well as air pollution concerns; reclamation practices that raise similar concerns as well as toxic clean-up problems; and greenhouse gas emissions that have prompted climate change adaptation and mitigation measures as well as a recent "leave it in the ground" movement.⁷⁹ To address these energy-related environmental concerns, the Obama Administration adopted several key policies, including the BLM's Master Lease Planning process to evaluate oil and gas leasing decisions in the context of the larger landscape.80 the Council on Environmental Quality's (CEQ) guidance on addressing greenhouse gas emissions in federal agency National Environmental Policy Act of 1969⁸¹ (NEPA) documents,⁸² and the preparation of comprehensive NEPA documents, like the Final Programmatic Environmental Impact Statement (PEIS) for Solar Energy Development in Six Southwestern States, to properly site solar energy projects on southwestern public lands. 83

An assortment of laws governs energy development on public lands. At the resource level, these laws include: the Federal Coal Leasing

⁷⁶ See Tom DiChristopher, Nuclear Wasteland: The Explosive Boom and Long, Painful Bust of American Uranium Mining, CNBC (Aug. 4, 2018), https://perma.cc/8X8X-5GNS.

⁷⁷ Solar Energy, BUREAU OF LAND MGMT., https://perma.cc/9UFB-C3YK (last visited Feb. 16, 2019); Wind Energy, BUREAU OF LAND MGMT., https://perma.cc/5NL7-3MZL (last visited Feb. 16, 2019).

⁷⁸ See, e.g., James A. Kuiper et al., U.S. Dep't of Energy, Electricity Transmission, Pipelines, and National Trails: An Analysis of Current and Potential Intersections on Federal Lands in the Eastern United States, Alaska, and Hawaii, at ix fig.ES.1, x fig.ES.2, 34 fig.5.3, 35 fig.5.4 (2014), https://perma.cc/92N2-676Q.

⁷⁹ Moreover, energy development can also impinge on tribal homelands and sacred cultural sites. For a recent example, see the long-standing dispute and litigation over oil and gas leasing in the Badger-Two Medicine area along the Rocky Mountain Front in Montana. *See* Solenex LLC v. Jewell, 334 F.Supp.3d 174, 179 (D.D.C. 2018).

 $^{^{80}~}$ See, e.g., Bureau of Land Mgmt., Moab Master Leasing Plan and Draft Resource Management Plan Amendments/Draft Environmental Impact Statement for the Moab and Monticello Field Offices, 1-1 to 1-2 (2015).

^{81 42} U.S.C. §§ 4321–4370h (2012).

⁸² See generally Revised Draft Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews, 79 Fed. Reg. 77,802 (Dec. 24, 2014).

⁸³ BUREAU OF LAND MGMT., U.S. DEP'T OF ENERGY, FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (PEIS) FOR SOLAR ENERGY DEVELOPMENT IN SIX SOUTHWESTERN STATES 1 (2012), https://perma.cc/2AJC-S8BQ; see also David J. Hayes, Leaning on NEPA to Improve the Federal Permitting Process, 45 Envtl. L. Rep. (Envtl. L. Inst.) 10,018, 10,018–22 (2015).

Amendments Act of 1975⁸⁴ (FCLA): the Surface Mining Control and Reclamation Act of 1977⁸⁵ (SMCRA) (coal); the amended Mineral Leasing Act of 192086 (MLA) and the Energy Policy Act of 200587 (EPA) (oil and gas; oil shale); the General Mining Law of 1872⁸⁸ (GML) (uranium); the amended Federal Power Act⁸⁹ (FPA) (hydropower); and the nation's wind and solar resources are being developed under the Federal Land Policy and Management Act's (FLPMA's) right-of-way provisions. 91 Other laws inject environmental concerns into the energy development process: NEPA, the Endangered Species Act of 1973⁹² (ESA), Clean Water Act⁹³ (CWA), Clean Air Act⁹⁴ (CAA), Safe Drinking Water Act of 1974⁹⁵ (SDWA), Comprehensive Environmental Response, Compensation, and Liability Act of 1980⁹⁶ (CERCLA), the Migratory Bird Treaty Act⁹⁷ (MBTA), and FLPMA's withdrawal provision.98 In addition, the agencies are using the National Forest Management Act of 197699 (NFMA) and FLPMA's planning provisions¹⁰⁰ to make front-end leasing decisions. Further, Congress has adopted several place-based laws designed to address specific energy development concerns, such as the Wyoming Range Legacy Act of 2008, 101 which withdrew 1.2 million acres in the Bridger-Teton National Forest from future mineral leasing and permitted existing leases to be acquired by conservation organizations and retired. 102

The 2016 election of President Donald Trump has prompted a dramatic shift in national energy policy to one promoting "energy dominance," ¹⁰³

^{84 30} U.S.C. §§ 201–209 (2012).

^{85 30} U.S.C. §§ 1201–1328 (2012).

^{86 30} U.S.C. §§ 181–287 (2012).

⁸⁷ Pub. L. No. 109–58, 119 Stat. 594 (2005) (codified primarily in scattered sections of 42 U.S.C.)

⁸⁸ Ch. 152, 17 Stat. 91 (1872) (codified as amended in scattered sections of 30 U.S.C. (2012)).

^{89 16} U.S.C §§ 791a–828c (2012).

⁹⁰ Federal Land Policy Management Act of 1976, 43 U.S.C. §§ 1701–1787 (2012); U.S. BUREAU OF LAND MGMT., THE FEDERAL LAND POLICY AND MANAGEMENT ACT OF 1976, at 65 (2014).

 $^{^{91}\,}$ Competitive Processes, Terms, and Conditions for Leasing Public Lands for Solar and Wind Energy Development and Technical Changes and Corrections, 81 Fed. Reg. 92,122, 92,125–26 (Dec. 19, 2016) (to be codified at 43 C.F.R. pts. 2800 and 2880).

⁹² 16 U.S.C. §§ 1531–1544 (2012).

⁹³ Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2012).

⁹⁴ 42 U.S.C. §§ 7401–7671q (2012).

^{95 42} U.S.C. §§ 300f–300j (2012).

⁹⁶ 42 U.S.C. §§ 9601–9675 (2012).

 $^{^{97}~}$ 16 U.S.C. §§ 703–712 (2012).

^{98 43} U.S.C. § 1714 (2012).

 $^{^{99}}$ 16 U.S.C. §§ 472a, 521b, 1600, 1611–1614 (2012) (amending Forest and Rangeland Renewable Resources Planning Act of 1974, Pub. L. No. 93-378, 88 Stat. 476 (1974)).

^{100 16} U.S.C. § 1604 (national forest planning); 43 U.S.C. § 1712 (BLM planning).

¹⁰¹ S. 2229, 110th Cong. (2008).

¹⁰² Omnibus Public Land Management Act of 2009, Pub. L. 111-11, § 3201-03, 123 Stat. 1128 (2009); see also Tax Relief and Health Care Act of 2006, Pub. L. 109-432, § 403, 120 Stat. 3050 (2006) (similar legislation for Montana's Rocky Mountain Front).

¹⁰³ See Timothy Cama, Trump Vows to Create 'American Energy Dominance', HILL (June 29, 2017), https://perma.cc/EK3H-F6WP ("With these incredible resources, my administration will

which has significant implications for the public lands. 104 Indeed, as the presidency has changed hands from one political party to another during the past thirty years, energy policy has swung from full speed development during Republican administrations to more of a go-slow approach during Democratic administrations. 105 True to form, the Trump Administration has embarked upon an accelerated energy development program while seeking to expedite environmental reviews and to revise energy-related conservation policies. For example, the Administration has rescinded President Obama's climate change executive orders and the CEQ's NEPA greenhouse gas guidance, 106 expedited coal and oil and gas leasing across the public lands, 107 sought to open off-shore areas to oil and gas leasing, 108 modified the boundaries of a southern Utah national monument to facilitate access to local coal deposits, 109 and proposed revisions to the methane gas rule designed to limit emissions from oil and gas drilling activities. 110 Moreover, Congress has opened the Arctic National Wildlife Refuge to oil and gas leasing¹¹¹ and is considering legislation that would weaken NEPA and the ESA, 112 in part to expedite energy leasing and development on the public lands.113

seek not only the American energy independence that we've been looking for so long, but American energy dominance.").

- ¹⁰⁴ See Michael C. Blumm & Olivier Jamin, *The Trump Public Lands Revolution: Redefining* "the Public" in Public Land Law, 48 ENVIL. L. 311, 316 (2018).
- 105 See, e.g., William R. Childs, Energy Policy and the Long Transition in America, ORIGINS (2011), https://perma.cc/NH3C-QGX5 (discussing the "long transition" of energy policy in the United States, characterized by a slow transition to new sources of energy and environmental sensibilities, in light of a historical practice of deregulation and the recent movement to energy independence).
 - ¹⁰⁶ Exec. Order No. 13783, 82 Fed. Reg. 16,093, 16,094 (Mar. 31, 2017).
- 107 See Memorandum from Deputy Dir., Policy & Programs, Exercising Authority of the Dir. of the Bureau of Land Mgmt., to All Field Officials (Jan. 31, 2018), https://perma.cc/G9DB-2B4H ("This Instruction Memorandum (IM) sets out the policy of the Bureau of Land Management (BLM) to simplify and streamline the leasing process to alleviate unnecessary impediments . . . and to ensure quarterly oil and gas lease sales are consistently held in accordance with the Mineral Leasing Act (30 U.S.C. § 226), Executive Order 13783, and Secretary Order 3354.").
- 108 Press Release, U.S. Dep't of the Interior, Secretary Zinke Announces Plan For Unleashing America's Offshore Oil and Gas Potential (Jan. 4, 2018), https://perma.cc/J2G4-NS38 (explaining that the "Draft Proposed Program considers nearly the entire U.S. Outer Continental Shelf for potential oil and gas lease sales"); BUREAU OF OCEAN ENERGY MGMT., 2019–2024 NATIONAL OUTER CONTINENTAL SHELF OIL AND GAS LEASING: DRAFT PROPOSED PROGRAM 12 (2018).
- ¹⁰⁹ Proclamation No. 9682, Modifying the Grand Staircase-Escalante National Monument, 82 Fed. Reg. 58,089, 58,093 (Dec. 8, 2017); see also Charles F. Wilkinson, Fire on the Plateau: Conflict and Endurance in the American Southwest 323–25 (1999) (discussing conflicts prior to designation).
- ¹¹⁰ Waste Prevention, Production Subject to Royalties, and Resource Conservation, 83 Fed. Reg. 7,924, 7,938 (Feb. 22, 2018) (to be codified at 43 C.F.R. pts. 3160 and 3170).
- 111 Individual Tax Reform and Alternative Tax Minimum, Pub. L. No. 115-97, 131 Stat. 2054 (2017); see also Elizabeth Kolbert, Will the Tax Bill Finally Defeat the Arctic National Wildlife Refuge?, NEW YORKER (Dec. 20, 2017), https://perma.cc/Y7P5-XNCA (suggesting that the bill is economically over-optimistic and that the habitat loss would be catastrophic).
- ¹¹² H.R.J. Res. 5515, 115th Cong. §§ 2842(3), 2851 (2018) (enacted); see also Letter to Congress: Remove Anti-Environmental Riders from the NDAA, CLEAN WATER ACTION (July 2,

The intersection between the nation's ever-escalating energy needs, the substantial role the public lands play in supplying those needs, and interrelated nature—conservation and environmental—protection concerns present enormous complexities and political challenges. Thus far, these challenges are mostly being addressed piecemeal through targeted amendments to existing laws and conflicting administrative policies. Plainly, this approach does not make sense in the twenty-first century when the nation faces accelerating energy demands, serious climate change and other environmental problems, and ongoing national security concerns—all suggesting the obvious need for a comprehensive policy overhaul.

Besides energy resources, the public lands account for other important mineral resources, including gold, silver, copper, platinum, and molybdenum. 115 These mineral resources—usually referred to as "hardrock minerals" and occasionally as "strategic minerals"—are generally governed by the Mining Law of 1872, 116 which opens the public lands to exploration and development without a prior permit or lease or any royalty payment obligations. Under the law, miners making a valuable mineral discovery obtain a protected property interest in the minerals. 117 Although the Mining Law of 1872 has been modified over the years, the basic framework remains in place despite repeated calls for reform.¹¹⁸ In fact, the 1970 PLLRC report advanced several reform proposals designed to integrate environmental concerns into the law and to ensure the government a meaningful financial return, 119 but Congress has yet to significantly alter the law, except to halt the patenting system through an annual appropriations rider. 120 Notwithstanding the growing number of conflicts over mining activity on the public lands, mining continues to occupy a preferred position on these lands, presenting the fundamental question of whether the agencies should have the authority to identify and place sensitive areas off-limits to mining activity.

 $^{2018),\,} https://perma.cc/TUK2-VR9P$ (highlighting the environmentally detrimental provisions of the bill).

¹¹³ See generally Notice of Intent to Prepare an Environmental Impact Statement for the Coastal Plain Oil and Gas Leasing Program, Alaska, 83 Fed. Reg. 17,562 (Apr. 20, 2018).

¹¹⁴ See discussion infra Part V.A.

 $^{^{115}\,}$ Nat'l Mining Ass'n, Facts About Coal and Minerals 7 (2016), https://perma.cc/W5GJ-2R83 (stating the BLM manages land with as much as 60% of the nation's hardrock mineral estate).

^{116 30} U.S.C. §§ 21–54 (2012).

 $^{^{117}\;}$ Belk v. Meagher, 104 U.S. 279, 283–84 (1881); United States v. Coleman, 390 U.S. 599, 600 & n.1 (1968).

¹¹⁸ See Roger Flynn, The 1872 Mining Law as an Impediment to Mineral Development on the Public Lands: A 19th Century Law Meets the Realities of Modern Mining, 34 LAND & WATER L. REV. 301, 302–05 (1999) (noting that the central tenet of the Mining Law has remain unchanged despite significant changes in mining practices on public lands). See generally Sam Kalen, An 1872 Mining Law for the New Millennium, 71 U. COLO. L. REV. 343, 353–54, 396, (2000) (outlining the history of the 1872 Mining Law, subsequent amendments, and significant case law).

See One Third of the Nation's Land, supra note 18, at 121–38.

 $^{^{120}~}$ See Kalen, supra note 118, at 353–80 (describing the changes to the patenting system of the 1872 Mining Law).

D. Ascendant Recreational and Environmental Values

Not counting Alaska, nearly 40% of the federal lands are devoted primarily to conservation purposes and enjoy some form of legal protection. National parks, wilderness areas, and other public lands and waters are driving, at least in part, robust economic growth, urban development, and a high quality of life in the American West. The region's rapidly growing population has increased demand for access to public lands to support an ever-expanding array of recreational uses that often result in crowding, conflict, and loss of "natural" experiences.

The American West is well known as a recreational mecca. Wide-open spaces, wild mountains and rivers, and the abundance of public lands provide a variety of recreational opportunities for residents and visitors. While the West's recreational roots are primarily in hunting, fishing, and mountaineering, outdoor recreation has now grown into a full-blown, multifaceted industry that seems to offer something for everyone. Recreation and tourism on federal public lands support faster rates of job growth and are correlated with higher levels of per capita income in most western state economies. The Outdoor Industry Association calculates that it contributes \$887 billion annually to the nation's economy, which creates 7.6 million domestic jobs. Recognizing these realities, Congress has officially added outdoor recreation expenditures to the country's gross domestic product calculation.

During the 1960s, Congress adopted several national laws, including the seminal Wilderness Act of 1964, which reflected the nation's growing appreciation of outdoor recreation. Following publication in 1962 of the Outdoor Recreation Resources Review Commission's highly influential report, Congress adopted the Wild and Scenic Rivers Act (1968), the National Trails System Act 1968, and the Land and Water Conservation Fund Act of 1965, designed specifically to conserve natural areas, water resources, and cultural heritage sites, and to provide additional recreation

¹²¹ Robert B. Keiter, *Toward a National Conservation Network Act: Transforming Landscape Conservation on the Public Lands into Law*, 42 Harv. Envil. L. Rev. 62, 138 (2018). If the Alaska public lands are also counted, then more than 49% of the public lands enjoy a level of legal protection for conservation purposes. *Id.*

¹²² See Headwaters Econ., supra note 12, at 17–20.

¹²³ Id.

 $^{^{124}}$ Outdoor Indus. Ass'n, The Outdoor Recreation Economy 1–6 (2017), https://perma.cc/FD3G-T6TY.

 $^{^{125}\,}$ Outdoor Recreation Jobs and Economic Impact Act of 2016, Pub. L. No. 114-249, 130 Stat. 999 (2016).

¹²⁶ 16 U.S.C. §§ 1131–1136 (2012).

¹²⁷ U.S. OUTDOOR RECREATION RES. REVIEW COMM'N, OUTDOOR RECREATION FOR AMERICA (1962); see also Bureau of Outdoor Recreation, U.S. Dep't of the Interior, The 1965 Survey of Outdoor Activities (1972).

^{128 16} U.S.C. §§ 1271-1287 (2012).

¹²⁹ 16 U.S.C. §§ 1241–1251 (2012).

¹³⁰ Land and Water Conservation Act of 1965, Pub. L. No. 88-578, 78 Stat. 897 (1965).

opportunities.¹³¹ Other laws soon followed, including NEPA, the ESA, FLPMA, and NFMA, all reinforcing the mounting importance of environmental values on public lands.¹³² More recently, in 2000, the U.S. Forest Service adopted a roadless area rule,¹³³ effectively dedicating 60 million acres of un-roaded national forest lands to wildlife conservation, watershed protection, and non-motorized recreation.¹³⁴

The PLLRC's 1970 report identified outdoor recreation as a growing concern. Several of its recommendations, including the protection of "nationally significant" lands and new recreation fees, have been implemented. The national wilderness preservation system, for example, has expanded to nearly 110 million acres, most of which is located in the western states. Since 1960, the national park system has expanded from 27 million acres to more than 84 million acres, while park visitation has soared from 168 million visitors in 1970 to more than 330 million in 2017. Although opinions differ over whether the demand for outdoor recreation will continue to increase rapidly and whether children are more or less engaged in nature-based activities, recreational pressures have clearly intensified, creating conflicts and raising environmental concerns.

In fact, recreational and environmental values not only compete with more traditional development-oriented uses of federal lands, but they can also conflict with each other, particularly passive and active recreational uses. Snowmobiling and other off-road vehicle uses not only compete with backcountry skiers, mountain bikers, and hikers, but also create ecological impacts. ¹³⁹ Unregulated off-road-vehicle use, for example, heavily impacted the desert tortoise population in the Mojave Desert, contributing to its listing under the Endangered Species Act. ¹⁴⁰ The demand for recreation among fishers, rafters, and others on the West's waterways creates congestion, changes the experience, impacts stream corridors, and has prompted permit

¹³¹ SAMUEL TRASK DANA & SALLY K. FAIRFAX, FOREST AND RANGE POLICY: ITS DEVELOPMENT IN THE UNITED STATES 213–25 (Marian F. Provenzano ed., 2d ed. 1980).

¹³² Dana & Fairfax, *supra* note 131, at 241–42, 261–64, 327–46.

¹³³ See 36 C.F.R. §§ 294.20–249.49 (2018); Special Areas; Roadless Area Conservation, 66 Fed. Reg. 3,244, 3,245 (Jan. 12, 2001) (codified at 36 C.F.R. pt. 249); U.S. FOREST SERV., FOREST SERVICE ROADLESS AREA CONSERVATION: FINAL ENVIRONMENTAL IMPACT STATEMENT VOLUME 1, at ES-1 (2000).

^{134 66} Fed. Reg. at 3,245.

¹³⁵ See One Third of the Nation's Land, supra note 18, at 206–08.

¹³⁶ See Wilderness, U.S. FOREST SERV., https://perma.cc/CG75-SSVY (last visited Feb. 16, 2019).

¹³⁷ MARGARET WALLS ET AL., THE STATE OF THE GREAT OUTDOORS: AMERICA'S PARKS, PUBLIC LANDS, AND RECREATION RESOURCES 17–18 (2009); Annual Visitation Highlights, NAT'L PARK SERV., https://perma.cc/2D2V-3W5H (follow "for download" hyperlink) (last visited Feb. 16, 2019).

 $^{^{138}}$ See, e.g., WALLS ET AL., supra note 137, at 5–7 (concluding that visits to federal lands "are holding steady at best").

¹³⁹ See generally Michael J. Yochim, Yellowstone and the Snowmobile: Locking Horns over National Park Use (2009).

 $^{^{140}\,}$ Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Mojave Population of the Desert Tortoise, 55 Fed. Reg. 12,178, 12,178 (Apr. 2, 1990) (codified at 50 C.F.R. pt. 17).

requirements and other rules to mitigate conflicts.¹⁴¹ Elsewhere, recreational use can conflict with Native American "sacred places," such as rock climbing at Devil's Tower National Monument.¹⁴²

By any standard, recreational and related environmental values have ascended to a position of prominence across the American West and now play a major role in federal land management. Moreover, organizations like the Outdoor Industry Association, the Rocky Mountain Elk Foundation, Trout Unlimited, and other national and regional conservation groups have become influential constituencies intent on promoting recreational values and interests on the public lands. Hese same values also influence the management of local, state, and private lands, and should prompt citizens, stakeholders, and agency officials to better coordinate management efforts across jurisdictions, specifying what types of recreational uses should be allowed where and when.

E. Climate Change: A New and Uncertain Context

When the PLLRC published its final report in 1970, climate change was not mentioned. Today, climate change may be the most significant threat confronting the nation's public lands and resources. Greenhouse gases are warming the world, which will dramatically alter ecosystems and ecological processes, including water cycles, wildfire events, and wildlife habitat. For the public lands, a warmer climate will likely reduce the annual snowpack, meaning an earlier seasonal run-off that will impact water supplies and coldwater fish habitat during the summer months. Recent warm temperatures have already sparked widespread bark beetle infestations on western forests, killing thousands of trees and increasing the likelihood of catastrophic wildfire events, thus transforming these forests into carbon

 $^{^{141}}$ See Christina Kakoyannis & George H. Stankey, Assessing and Evaluating Recreational Uses of Water Resources: Implications for an Integrated Management Framework 22–23, 30–31, 33–35 (2002).

 $^{^{142}}$ See Lloyd Burton, Worship and Wilderness: Culture, Religion, and Law in the Management of Public Lands and Resources 130 (2002).

¹⁴³ A recent report by the Center for Western Priorities argues that winning candidates in the 2018 election in the American West advocated for public lands to gain support among an emerging "outdoor voting bloc." See Jennifer Rokala, Winning the West: Election 2018 (2019). The 2019 Conservation in the West Poll, directed by the Colorado College State of the Rockies Project, reports that 70% of the people polled view themselves as "outdoor recreation enthusiasts." See 2019 Conservation in the West Poll, Colo. C., https://perma.cc/SR6S-6T2Y (last visited Feb. 16, 2019).

¹⁴⁴ See, e.g., Who We Are, OUTDOOR INDUSTRY ASS'N, https://perma.cc/66TU-NV5G (last visited Feb. 16, 2019); see also RMEF Mission Statement & Fast Facts, ROCKY MOUNTAIN ELK FOUND., https://perma.cc/Z9S6-L5L7 (last visited Feb. 16, 2019); About TU, TROUT UNLIMITED, https://perma.cc/AV73-HV2U (last visited Feb. 16, 2019).

¹⁴⁵ Walls et al., *supra* note 137, at 4, 35.

¹⁴⁶ Christopher B. Field et al., *North America, in* Climate Change 2007: Impacts, Adaptation and Vulnerability 617, 619–20 (Martin Parry et al. eds., 2007); *see also* Stephen Saunders et al., Hotter and Drier: The West's Changed Climate iv–vii (2008).

¹⁴⁷ SAUNDERS ET AL., *supra* note 146, at 7, 32.

emitters rather than carbon sinks. ¹⁴⁸ Since the mid-1980s, the western fire season has increased by a remarkable seventy-eight days, ¹⁴⁹ while large fires are burning much longer than before. ¹⁵⁰ Two of the worst fire seasons on record have occurred during the past three years. ¹⁵¹ Increased temperatures will also impact wildlife habitat, prompting some animals to shift northward or up-gradient, initiating additional ecological changes and perhaps extinction in some cases. Several models predict that the already arid Southwest will experience a significant temperature increase, ¹⁵² while Alaska is presently seeing the effects of climate change in the form of melting permafrost, rising sea levels, retreating glaciers, and more wildfires. ¹⁵³ In such a destabilized world, resource management laws and policies built on the assumption of a stable climate may no longer be tenable. ¹⁵⁴

To effectively address climate change impacts, most observers agree that public land management policies and strategies will need to focus on mitigation and adaptation. ¹⁵⁵ Mitigation generally involves reducing the level of carbon emissions. ¹⁵⁶ Expansive solar, wind, and geothermal projects are already going forward on the public lands, ¹⁵⁷ while climate change activists are aggressively seeking to reduce fossil fuel production—coal, oil, gas, and oil shale projects—on these same lands. ¹⁵⁸ But solar, wind, and geothermal projects can produce troubling environmental impacts, leaving a large footprint on the landscape or causing bird losses in the case of wind turbines. ¹⁵⁹ And new transmission lines needed to transport energy from these green energy project sites to distant cities can fragment the landscape. ¹⁶⁰ Adaptation strategies seek to ameliorate the impacts associated

 $^{^{148}}$ Id. at 21–22.

¹⁴⁹ Id. at 19-20.

¹⁵⁰ A.L. Westerling et al., Warming and Earlier Spring Increase Western U.S. Forest Wildfire Activity, 313 Sci. 940, 941 (2006).

¹⁵¹ See Total Wildland Fires and Acreage (1926-2017), NAT'L INTERAGENCY FIRE CTR., https://perma.cc/7KKZ-TAGF (last visited Feb. 16, 2019).

¹⁵² Gregg Garfin et al., Southwest, in CLIMATE CHANGE IMPACTS IN THE UNITED STATES 462, 463–64 (J. M. Melillo et al. eds., 2014), https://perma.cc/T295-TWLA.

¹⁵³ F. Stuart Chapin III et al., *Alaska, in* CLIMATE CHANGE IMPACTS IN THE UNITED STATES 514, 516, 519 (J. M. Melillo et al. eds., 2014), https://perma.cc/AU2E-F8EA. *See generally* Patrick Gonzalez et al., *Disproportionate Magnitude of Climate Change in United States National Parks*, Envtl. Res. Letters, Sept. 24, 2018, https://perma.cc/QK49-AKG6 (discussing climate change impacts on national parks).

¹⁵⁴ Robin Kundis Craig, "Stationarity is Dead"—Long Live Transformation: Five Principles for Climate Change Adaptation Law, 34 HARV. ENVIL. L. REV. 9, 14–15 (2010); John D. Leshy, Federal Lands in the Twenty-First Century, 50 NAT. RES. J. 111, 113–14, 116 (2010).

¹⁵⁵ Craig, *supra* note 154, at 68.

¹⁵⁶ Leshy, *supra* note 154, at 153.

¹⁵⁷ See Bobby Magill, Federal Rule Set to Speed Renewables on Public Lands, CLIMATE CENTRAL (Sept. 2, 2016), https://perma.cc/FZL6-N8P8.

 $^{^{158}}$ See Keep It in the Ground, GREENPEACE, https://perma.cc/466J-RM9D (last visited Feb. 16, 2019).

¹⁵⁹ See, e.g., Wind Turbines, U.S. FISH & WILDLIFE SERV., https://perma.cc/HN6F-7NNJ (last updated Apr. 18, 2018) ("The most comprehensive and statistically sound estimates show that bird deaths from turbine collisions are between 140,000 and 500,000 birds per year.").

¹⁶⁰ MELINDA HARM BENSON & ROBIN KUNDIS CRAIG, THE END OF SUSTAINABILITY 176–77 (2017).

with a destabilized climate, with the objective of promoting ecological resilience as a management goal. Among other things, new adaptation strategies will require place-based scientific research and monitoring, landscape-scale planning, and a willingness to work across jurisdictional boundaries. To meet biodiversity conservation goals, land managers may need to rethink the current network of national parks, wildlife reserves, and other preserved lands as species' habitat needs shift. They will certainly need to promote greater connectivity between existing reserves, and they may need to assist species to migrate or disperse to more suitable habitat—all of which would involve much more active and interventionist management strategies. In the species of the promote greater connectivity between existing reserves, and they may need to assist species to migrate or disperse to more suitable habitat—all of which would involve much more active and interventionist management strategies.

Although Congress has yet to take any decisive action on climate change, the Obama Administration prompted land managers to address climate change in their planning and decision processes. For example, Secretary of the Interior Sally Jewell issued an order calling for coordinated landscape-scale mitigation planning to curtail climate change impacts on the department's lands and resources. The revised national forest planning rules require forest managers to examine how climate change may affect ecological integrity. And President Obama issued a memo on natural resource mitigation that instructed federal agencies to establish a net conservation benefit goal in approving projects and activities on public lands. Moreover, recent court decisions have ruled that the agencies must address carbon emissions in their NEPA analyses of proposed coal mines and other projects on public lands. But with the election of President Trump, the term "climate change" has been banished from agency vocabularies, while several Obama-era climate policies, including its much

¹⁶¹ See Robert L. Glicksman, Ecosystem Resilience to Disruptions Linked to Global Climate Change: An Adaptive Approach to Federal Land Management, 87 NEB. L. REV. 833, 837 (2009).

¹⁶² Leshy, *supra* note 154, at 124–30.

¹⁶³ See Vicky J. Meretsky et al., New Directions in Conservation for the National Wildlife Refuge System, 56 BIOSCIENCE 135, 136 (2006) ("Factors such as extinctions and climate change may prevent refuge managers from reaching historic conditions, even when these are defined to include some level of anthropogenic impact." (citations omitted)).

¹⁶⁴ Leshy, *supra* note 154, at 125–30.

 $^{^{165}\,}$ Sec'y of the Interior, Order No. 3330, Improving Mitigation Policies and Practices for the Department of the Interior 3 (2013).

 $^{^{166}~36~\}mathrm{C.F.R.}~\S~219.8(a)~(2017).$

 $^{^{167}}$ Memorandum of November 3, 2015: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment, 80 Fed. Reg. $68{,}743,\,68{,}743$ (Nov. 6, 2015).

¹⁶⁸ Compare Mont. Envtl. Info. Ctr. v. U.S. Office of Surface Mining, 274 F. Supp. 3d 1074, 1094 (D. Mont. 2017), modified in part, 2017 WL 5047901 (D. Mont. 2017) (agency failed to analyze the effects of emissions), and High Country Conservation Advocates v. U.S. Forest Serv., 52 F. Supp. 3d 1174, 1187 (D. Colo. 2014) (agency failed to analyze the effects of emissions), with High Country Conservation Advocates v. U.S. Forest Service, No. 17-CV-03025-PAB, 2018 WL 3804099, *20, *22 (D. Colo. 2018) (rejecting NEPA greenhouse gas emissions analysis claim). Cf. Greater Yellowstone Coal. v. Servheen, 665 F.3d 1015 (9th Cir. 2011) (requiring climate change related analysis in an ESA delisting decision).

heralded Climate Action Plan, have been reversed. 169 Nevertheless, the day of reckoning over climate change impacts lurks, and the federal land management agencies will ultimately have to adjust to this new and uncertain reality.

F. The Science of Ecology: Compelling a Paradigm Shift

During the last fifty years, our knowledge of natural systems has increased dramatically, with profound implications for management of public lands. Where scientists once believed that natural systems approached a desired equilibrium or "climax" state, they now understand that ecosystems are in a constant state of flux subject to dynamic and often unpredictable change. 170 No longer does the "balance of nature" metaphor represent a viable management goal;¹⁷¹ rather, given the uncertainties of ecological change, management goals should be framed in terms of resilience and risk assessment, requiring adaptive management protocols that allow land managers to monitor and adjust their strategies in response to the actual on-the-ground changes. 172 With improved scientific knowledge, we also recognize that healthy ecosystems provide important "ecosystem services," helping to purify air and water, detoxify waste, renew soil fertility, control pests, and regulate climate. 173 Moreover, recent advances in satellite mapping, monitoring protocols, data analysis, computer modeling, and genetics enable scientists and managers to better understand complex ecosystems and their role in the larger landscape. 174

As a result, resource managers must manage across conventional boundaries at large enough scales to account for the dynamic nature of ecological systems. During the 1990s, the public land agencies embraced the concept of ecosystem management to promote biodiversity conservation and to allow natural processes—fire, floods, predation, and the like—a larger role on the landscape. Since then, climate change concerns have forced resource managers to further expand their perspective to the landscape scale. Whether the management objective is framed in terms of

¹⁶⁹ Madison Park, 6 Obama Climate Policies that Trump Orders Change, CNN (Mar. 28, 2017), https://perma.cc/ZVB2-VNYU; Blumm & Jamin, supra note 104, at 348–63.

¹⁷⁰ DANIEL B. BOTKIN, DISCORDANT HARMONIES: A NEW ECOLOGY FOR THE TWENTY-FIRST CENTURY 191–92 (1992).

¹⁷¹ Id.

¹⁷² BENSON & CRAIG, supra note 160, at 174; Fikret Berkes, Shifting Perspectives on Resource Management: Resilience and the Reconceptualization of "Natural Resources" and "Management," 9 MAST 13, 19–21 (2010).

¹⁷³ NATURE'S SERVICE: SOCIETAL DEPENDENCE ON NATURAL ECOSYSTEMS 3, 5 (Gretchen Dailey ed., 1997); James Salzman et al., *Protecting Ecosystem Services: Science, Economics, and Law*, 20 STAN. ENVIL. L.J. 309, 310 (2001).

¹⁷⁴ See Rachel A. Neugarten et al., Tools for Measuring, Modeling, and Valuing Ecosystem Services: Guidance for Key Biodversity Areas, Natural World Heritage Sites, and Protected Areas 1–3 (2018).

 $^{^{175}~}See$ Robert B. Keiter, Keeping Faith with Nature: Ecosystems, Democracy, and America's Public Lands 65–66 (2003); James R. Skillen, Federal Ecosystem Management: Its Rise, Fall, and Afterlife 1 (2015).

ecosystem management or large landscape conservation, federal land managers are now increasingly obliged to coordinate with their neighbors in order to accomplish ecological integrity, resiliency, and resource sustainability goals. The Numerous examples of these initiatives are evident across the federal agencies: Landscape Conservation Cooperatives; The Pacific Northwest Forest Plan; the revised 2012 National Forest System Land Management Planning rules; the BLM's now-repealed Master Lease Planning process; and the multiagency Path of the Pronghorn migration route project in western Wyoming and related wildlife corridor management initiatives. Other examples of landscape-scale conservation are arising organically, driven by grass-roots initiatives, such as the Malpai Borderlands Initiative, the Roundtable on the Crown of the Continent, the Yellowstone to Yukon Conservation Initiative, and many others. Further, drawing upon conservation biology

¹⁷⁶ MATTHEW MCKINNEY ET AL., LARGE LANDSCAPE CONSERVATION: A STRATEGIC FRAMEWORK FOR POLICY AND ACTION 33 (2010) (emphasizing the need for more coordination).

¹⁷⁷ COMM. ON THE EVALUATION OF LANDSCAPE CONSERVATION COOPERATIVES ET AL., A REVIEW OF THE LANDSCAPE CONSERVATION COOPERATIVES 9–10 (2016).

¹⁷⁸ *Welcome*, Cooperative Ecosystem Stud. Units Nat'l Network, https://perma.cc/3KPG-3GPL (last visited Feb. 16, 2019).

¹⁷⁹ The Northwest Forest Plan is derived from two key documents. See U.S. Forest Serv. & Bureau of Land Mgmt., Record of Decision for Amendments to Forest Serv. And Bureau of Land Mgmt. Planning Documents Within the Range of the Northern Spotted Owl (1994); see also U.S. Forest Serv. & Bureau of Land Mgmt., Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Related Species Within the Range of the Northern Spotted Owl (1994).

¹⁸⁰ See 36 C.F.R. § 219.1 (2014) (stating that the purpose of Forest System planning is "to guide the collaborative and science-based development, amendment, and revision of land management plans that promote the ecological integrity of national forests and grasslands and other administrative units of the NFS").

¹⁸¹ See Resource Management Planning, 81 Fed. Reg. 89,580, 89,580 (Dec. 12, 2016), repealed by Pub. L. No. 115-12, 131 Stat. 76 (2017).

¹⁸² See Keiter, Toward a National Conservation Network Act, supra note 121, at 113 (stating that "the Park Service, Forest Service, the BLM, state of Wyoming, and several private landowners have collaborated to establish the Path of the Pronghorn migration corridor that facilitates the . . . seasonal antelope migration").

¹⁸³ See KEITER, KEEPING FAITH WITH NATURE, supra note 175, at 155 (providing an overview of the Malpai Borderlands Initiative and concluding that it "represent[s] a new breed of consensus-based, landscape-level resource management initiatives designed to restore range ecosystems to a more sustainable condition").

¹⁸⁴ See Welcome!, ROUNDTABLE CROWN CONTINENT, https://perma.cc/U648-M8WW (last visited Feb. 16, 2019) (describing the Roundtable on the Crown of the Continent as an "ongoing forum" that provides independent agencies and organizations "an opportunity to exchange ideas, build relationships, and explore opportunities to work together").

¹⁸⁵ See Matthew McKinney et al., Regionalism in the West: An Inventory and Assessment, 23 PUB. LAND & RESOURCES L. REV. 101, 108 (2002) (explaining the Yellowstone to Yukon Conservation Initiative as a "multi-national initiative[]... defined by watersheds that cut across international boundaries").

¹⁸⁶ For a more comprehensive review of this trend, see, e.g., MATTHEW MCKINNEY & SHAWN JOHNSON, CTR. FOR NAT. RES. & ENVIL. POLICY, LARGE LANDSCAPE CONSERVATION IN THE ROCKY MOUNTAIN WEST: AN INVENTORY AND STATUS REPORT 33 (2013); *Network Overview*, NETWORK FOR LANDSCAPE CONSERVATION, https://perma.cc/A2LB-MLBS (last visited Feb. 16, 2019) (providing a comprehensive overview of the landscape conservation initiatives in the North America).

principles, scientists have urged expanding and connecting protected areas (national parks, wilderness areas, and the like), and using the "3rs" criteria—representativeness, redundancy, resilience, and restoration—to guide these efforts. ¹⁸⁷

These advances in ecosystem science and related administrative initiatives are helping to fuel similar reform efforts related to habitat and ecosystem restoration. Over time, substantial tracts of public land have been damaged by natural and human causes, including exotic species invasions, unreclaimed mining sites, toxic waste discharges, catastrophic wildfires, insect-borne diseases, poor timber harvest practices, livestock overgrazing, and deferred maintenance. The resource damage includes stream and river degradation, wildlife habitat loss, and air and water quality impairment. Such degradation also impacts human safety, community well-being, and economic opportunities. To help address these problems, a "restoration economy" is emerging to support investments in local and landscape-scale efforts to ensure functioning ecosystems and a sustainable, resilient resource base. 191

Taken together, the goals of ecosystem management and restoration are quite different from the resource development and multiple-use goals that guided federal land policy and management in the nineteenth century and for most of the twentieth century. 192 To achieve these newer resource management goals, the federal agencies must look beyond their own jurisdictional boundaries, and they will need additional tools and incentives to promote interagency cooperation. But despite widespread agreement on the basic scientific principles of ecosystem management and restoration, and despite the mounting challenges presented by climate change and ecological uncertainty, any meaningful legal and policy revisions will also require political acceptance. And that acceptance must be grounded in the broader social, economic, and cultural changes afoot that are gradually yet inevitably altering how the public values the West's federal lands and their resources, as manifested in the citizen-driven, place-based initiatives that are fostering meaningful changes in public land management policies and priorities. 193

¹⁸⁷ See Keiter, Toward a National Conservation Network Act, supra note 121, at 90–91, n.176 (discussing the "3rs" criteria and suggesting a fourth "r"—restoration).

¹⁸⁸ See Keiter, Keeping Faith with Nature, supra note 175, at 12–14, 128.

¹⁸⁹ *Id.* at 142.

¹⁹⁰ *Id.* at 149.

¹⁹¹ See Max Nielsen-Pincus & Cassandra Moseley, Economic and Employment Impacts of Forest and Watershed Restoration in Oregon 12 (Ecosystem Workforce Program Briefing Paper No. 24, 2010); see also Todd BenDor et al., Estimating the Size and Impact of the Ecological Restoration Economy, PLOS ONE, June, 2015, at 1, 11.

¹⁹² See Keiter, Keeping Faith with Nature, supra note 175, at 73 (comparing these management approaches).

 $^{^{193}}$ See infra notes 280–284 and accompanying text for more about place-based citizen initiatives.

G. Tribal Governments: Sharing Knowledge and Management Responsibilities

Fifty years ago, Native Americans were rarely involved in public land and resource management decisions. Indeed, the 1970 PLLRC report barely mentions Native Americans, and no Native American served on either the Commission or the Advisory Council. Still largely controlled by a paternalistic federal government, Native American people were just embarking on their own civil rights struggle, one founded on tribal sovereignty, self-determination, treaty rights, cultural sensitivity, and sacred site access claims. Over time, Congress responded with a series of laws, including the Indian Civil Rights Act of 1968, 194 the Native American Graves Protection and Repatriation Act of 1990, 195 and the Tribal Self Governance Act of 1994. 196 which acknowledge tribal sovereignty and extend important rights to tribal members. 197 The courts have responded too by upholding tribal treaty rights, perhaps most notably in the so-called "Boldt decisions." which confirmed tribal fishing rights on the Columbia River. ¹⁹⁸ In 1994, President Clinton directed federal agencies to "respect Indian tribal selfgovernment and sovereignty, honor tribal treaty and other rights, and strive to meet the responsibilities that arise from the unique legal relationship between the Federal Government and Indian tribal governments." With these expanded legal rights, the tribes have assumed a more prominent role on the public lands and as natural resource managers.

Although originally occupying much of the West, Native Americans were regularly dispossessed of their ancestral lands and relegated to reservations once the early white settlers arrived and once the federal government began creating forest reserves and national parks.²⁰⁰ Many Indian reservations are proximate to federal lands, raising common resource management concerns for the tribes and federal land managers, especially where treaty rights extend onto federal public lands or where sacred sites or cultural resources are located on these same lands.²⁰¹ Laws like NEPA and

¹⁹⁴ 25 U.S.C. §§ 1301–1304 (2012).

¹⁹⁵ 18 U.S.C. § 1170 (2012); 25 U.S.C. §§ 3001–3013 (2012).

¹⁹⁶ 25 U.S.C. §§ 5361–5368 (2012).

 $^{^{197}~}See$ Charles Wilkinson, Blood Struggle: The Rise of Modern Indian Nations 205, 268 (1st ed. 2005).

¹⁹⁸ See Roberta Ulrich, Empty Nets: Indians, Dams, and the Columbia River 147–48, 151 (1st ed. 1999).

¹⁹⁹ Executive Order 13,175, Consultation and Coordination with Indian Tribal Governments, 65 Fed. Reg. 67,249, 67,250 at Sec. 3(a) (Nov. 9, 2000). *See generally* Presidential Memorandum: Government-to-Government Relations with Native American Tribal Governments, 59 Fed. Reg. 22,951 (May 4, 1994).

²⁰⁰ See Kristen A. Carpenter, Real Property and Peoplehood, 27 Stan. Envil. L.J. 313, 558–59 (2008).

²⁰¹ See Martin Nie, The Use of Co-Management and Protected Land-Use Designations to Protect Tribal Cultural Resources and Reserved Treaty Rights on Federal Lands, 48 NAT. RESOURCES J. 585, 588–89 (2008) (providing an example of "one of several places, state and nationwide, where a Native Nation possesses reserved treaty rights on a national forest").

the National Historic Preservation Act (NHPA)²⁰² provide neighboring tribal governments and members an opportunity to participate in federal agency decision processes to assert their own rights and interests.²⁰³ In several instances, tribes have successfully pressed their claims; examples include the Devil's Tower National Monument climbing regulations to address Native American spiritual concerns,²⁰⁴ and the NHPA-based Traditional Cultural District designation at the behest of the Blackfeet tribe in the Badger-Two Medicine area on the Lewis and Clark National Forest.²⁰⁵ These shared resource management concerns also create more formal collaborative planning and decision-making opportunities and have even prompted co-management proposals, as in the case of Badlands National Park²⁰⁶ and the recent intertribal Bears Ears National Monument initiative.²⁰⁷ Moreover, the Indian reserved water rights doctrine gives tribes a prominent role in water management decisions that often involve nearby federal lands.²⁰⁸

While Native American tribes have chronically suffered from poverty and limited resources, many tribes have made substantial legal, economic, and political progress over the last fifty years. Tribal governments are now an important political force in several western states, and many tribes have blended traditional and modern expertise to manage natural resources that meets or even exceeds federal and state capacity. Several tribes have also established energy, timber, tourism, and related businesses, thus becoming vibrant and self-sustaining sovereign entities with legitimate expectations to participate in public land management decisions that affect tribal interests.

H. A Paradoxical Federal-State Relationship

The western states have long sought to free themselves from entanglements with the federal government while continuing to receive federal financial support.²¹¹ An intermittent call to "denationalize" federal lands has persisted since the 1970s, highlighting recurrent federal-state

²⁰² Provisions now contained under National Park Service and Related Programs (Title 54), Pub. L. No. 113-287, § 3001, 128 Stat. 3094 (2014).

²⁰³ Executive Order 13,175, 65 Fed. Reg. 67,249, 67,250 (Nov. 9, 2000).

²⁰⁴ See BURTON supra note 142, at 129–30.

²⁰⁵ Joseph L. Sax & Robert B. Keiter, *The Realities of Regional Resource Management: Glacier National Park and Its Neighbors Revisited*, 33 Ecology L. Q. 233, 274 (2006).

 $^{^{206}~}$ See Robert B. Keiter, To Conserve Unimpaired: The Evolution of the National Park Idea 134–38 (2013).

²⁰⁷ Sarah Krakoff, Public Lands, Conservation, and the Possibility of Justice, 53 HARV. C.R.-C.L. L. REV. 213, 214 (2018).

²⁰⁸ See Winters v. United States, 207 U.S. 564, 564 (1908); Richard B. Collins, *The Future Course of the Winters Doctrine*, 56 U. COLO. L. REV. 481, 483 (1985).

²⁰⁹ See generally Brett Kenney, Tribes as Managers of Federal Natural Resources, NAT. RESOURCES & ENV'T, Summer 2012, at 1, 1–4.

²¹⁰ See, e.g., Lynn Armitage, 2016 Hot List: Native Businesses, Indian Country Today (July 25, 2016), https://perma.cc/X2YC-322N.

 $^{^{211}\,}$ Daniel Kemmis, This Sovereign Land: A New Vision for Governing the West 45–46, 53 (2001).

tensions over public land policy. According to Daniel Kemmis, "[F]or as long as there have been public lands in the West, there has been western opposition to national ownership and management." This resistance played out in different ways from 1900 through the 1960s, emerged again in the 1970s under the banner of the "Sagebrush Rebellion," then in the 1990s as the "county supremacy movement," and most recently as the federal lands "transfer movement."

The ideological rationale underlying this sustained call to transfer ownership of the federal lands has been remarkably consistent: local people should have substantial authority over these lands because they use them regularly and understand them better than anyone else. Notwithstanding the powerful legal, political, and economic arguments against the transfer of federal lands to states, this movement does not appear to be going away any time soon. 16

The PLLRC was clear about its views: federal policy should shift from disposal of federal lands to retention of these lands. The PLLRC also recommended that, if federal lands were not part of the local tax base, some form of compensation should be offered to local governments to make up for the presence of nontaxable land within their jurisdictions. In response, Congress adopted the FLPMA, which provided that "the public lands be retained in Federal ownership, unless... disposal of a particular parcel will serve the national interest." At the same time, Congress passed the Payments in Lieu of Taxes Act²²⁰ (PILT) in 1976 to compensate counties based on federal acreage, and later adopted the Secure Rural Schools and Communities Self-Determination Act of 2000²²² to reflect new economic conditions and changing values related to public lands, most notably the substantial reductions in timber harvest levels. Because these programs

²¹² *Id.* at 56.

²¹³ Id. at 45–46.

²¹⁴ See John C. Ruple, The Transfer of Public Lands Movement: The Battle to Take "Back" Lands That Were Never Theirs, 29 Colo. Nat. Resources, Energy & Envil. L. Rev. 1, 3–4 (2018) (providing a critical review of the recent transfer movement); John Freemuth, A Happy Combination? Great Interests, Particular Interests, and State-Federal Conflicts over Public Lands, 48 Publius 454, 454–55 (2018).

²¹⁵ Ruple, *supra* note 214, at 44.

²¹⁶ For a review of the legal arguments for and against the so-called transfer movement, see generally Robert B. Keiter & John Ruple, Wallace Stegner Ctr. for Land, Res. & the Env't, The Transfer of Public Lands Movement: Taking the 'Public' Out of Public Lands (2015); Kristina Alexander et al., Cong. res. serv., Federal Land Ownership: Constitutional Authority and the History of Acquisition, Disposal, and Retention (2007); John D. Leshy, Unraveling the Sagebrush Rebellion: Law, Politics, and Federal Lands, 14 U.C. Davis L. Rev. 317 (1980); John D. Leshy, Are U.S. Public Lands Unconstitutional?, 69 Hastings L.J. 499 (2018).

²¹⁷ See One Third of the Nation's Land, supra note 18, at 48.

²¹⁸ *Id.* at 63.

²¹⁹ 43 U.S.C. § 1701(a)(1) (2012).

²²⁰ Now codified at 31 U.S.C. §§ 6901–6907 (2012).

²²¹ *Id.*

²²² Pub. L. No. 106-393, 114 Stat. 1607 (2000).

²²³ Secure Rural Schools and Community Self-Determination Act of 2000: Hearing Before the Subcomm. on Pub. Lands and Forests of the S. Comm. on Energy and Nat. Res., 106th Cong.

require periodic renewal, how this important financial commitment is continued will directly affect county budgets, economic opportunity, and forest health in public land counties across the country.²²⁴

Although most federal-state public land conflicts are framed in terms of who has authority over specific land use or resource development decisions, the truth has always been more paradoxical. Noted historian Bernard DeVoto summarized this long-standing paradox, albeit with considerable cynicism, by characterizing the sentiments of many westerners with a memorable quip: "get out and give us more money."

1. Limited Agency Resources and Capacity

As public land management agencies respond to the myriad resource management challenges confronting them, their capacity is limited by shifting priorities, decreasing resources, and loss of institutional memory. To take one example, wildfire management presents the agencies with an extraordinarily complex problem, one that has seen federal law and policy vacillate during the past fifty years. After initially extinguishing all wildfires during the first half of the twentieth century, federal policy shifted during the late 1960s to allow some fires to burn unchecked in more remote areas, recognizing that fire played an important ecological role on the landscape. But during the 1990s, as fires intensified and caused more damage, particularly in the so-called wildland-urban interface, this policy was revised to reduce the likelihood of catastrophic blazes and to suppress fires that threatened private property. Consequently, the cost of fighting wildfires has increased dramatically with severe budget ramifications for the land management agencies. 228

In the case of the U.S. Forest Service, firefighting costs are plainly limiting the agency's capacity to achieve its statutory multiple use mission. According to an August 2015 agency report, wildfire management costs accounted for 16% of its annual appropriated budget in 1995, but today these

^{(2005) (}statement of Ed Shepard, Assistant Director, Renewable Resources and Planning, Bureau of Land Management).

 $^{^{224}}$ M. Lynne Corn, Cong. Res. Serv., PILT (Payments in Lieu of Taxes): Somewhat Simplified 17–18 (2015). According to this recent Congressional Research Service report, Congress faces a number of critical decisions regarding these programs. The options, according to the report, include:

⁽¹⁾ approve PILT funding through future extensions of mandatory spending (either temporary or permanent); (2) fund PILT through annual appropriations bills; (3) provide full funding or reduce the payments, perhaps through the annual appropriations process or by changing the PILT formula; and (4) add or subtract any lands to the list of those now eligible for PILT payments.

Id. at Summary.

²²⁵ BERNARD DEVOTO, THE WESTERN PARADOX: A CONSERVATION READER 61 (Douglas Brinkley & Patricia Nelson Limerick eds., 2000).

²²⁶ Robert B. Keiter, *The Law of Fire: Reshaping Public Land Policy in an Era of Ecology and Litigation*, 36 ENVTL. L. 301, 308–13 (2006).

²²⁷ See id. at 310.

²²⁸ See id. at 315-16.

costs exceed 50% of its annual budget.²²⁹ The U.S. Forest Service has also seen "a corresponding shift in staff, with a 39 percent reduction in all non-fire personnel."²³⁰ The report estimates that:

Left unchecked, the share of the budget devoted to fire in 2025 could exceed 67 percent, equating to reductions of nearly \$700 million from non-fire programs compared to today's funding levels. That means that in just 10 years, two out of every three dollars the Forest Service gets from Congress as part of its appropriated budget will be spent on fire programs. As more of the agency's resources are spent each year... to protect lives, property, and natural resources from catastrophic wildfires, fewer funds are available to support other agency work—including the very programs and restoration projects that reduce the fire threat. ²³¹

Moreover, these exorbitant fire expenditures affect the agency's ability to meet its multiple-use and other obligations, which include protecting watersheds and cultural resources, maintaining recreational programs and infrastructure, sustaining ecosystem services, conducting necessary research, and providing technical assistance to local communities and others.

The growing wildfire problem also highlights the need for better coordination between the land management agencies and local communities. Research by Headwaters Economics notes that wildfires pose a significant and growing risk to those communities that allow development in the wildland-urban interface, defined as forested land within 500 meters of forested public land.²³² The report explains: "Since 1990, the average number of structures burned from wildfires has more than tripled," with as many as 5,000 structures burned in recent years.²³³ To reduce this growing wildfire risk, it recommends revising land-use policies and practices to require close coordination for land use planning purposes among federal, state, and local governments.²³⁴

The ability of public land management agencies to respond to wildfires and other resource management issues is further constrained by the loss of institutional memory. In 2008, the United States Office of Personnel Management predicted that roughly one-third of public land managers would be retiring by 2013, while a similar number would be eligible for retirement but would likely remain in the workforce. ²³⁵ More recently, Secretary Zinke

 $^{^{229}\,}$ U.S. Forest Serv., The Rising Cost of Wildfire Operations: Effects on the Forest Service's Non-Fire Work 2 (2015).

²³⁰ Id.

²³¹ *Id.*

²³² HEADWATERS ECON. ET AL., SUMMIT COUNTY, COLORADO: RECOMMENDATIONS FOR POLICIES AND REGULATIONS RELATED TO REDUCING COMMUNITY WILDFIRE RISK 1 (2015); ECONOMIC PROFILE SYSTEM (EPS), A PROFILE OF DEVELOPMENT AND THE WILDLAND-URBAN INTERFACE 1 (2015).

²³³ HEADWATERS ECON. ET Al., supra note 232, at 1.

²³⁴ *Id.* at 5; U.S. Dep't of Agric., U.S. Forest Serv., Wildfire, Wildlands, and People: Understanding and Preparing for Wildfire in the Wildland-Urban Interface 9 (2013).

²³⁵ Nat'l Advisory Bd., *Policy Report 6: A Federal Public Lands Agenda for the 21st Century*, 30 Pub. Land & Resources L. Rev. 1, 31 (2009).

has effectively forced the retirement of several senior executives in the United States Department of the Interior (Department) by requiring them to either move to a new position or resign. Likewise, Zinke's proposal to "reorganize" the Department includes a commitment to "downsize" by 4,000 jobs—in large part by dismissing more than 15% of employees who have reached retirement age. 237

This inevitable change in personnel presents both a problem and an opportunity. On the downside, many long-time managers and staff are achieving beneficial on-the-ground results through effective leadership, coordination, and oversight. This capacity only comes with years of experience and by building trust with diverse constituencies. On the upside, the need to replace established managers with the next generation of leaders presents an opportunity to recruit, educate, and retain a cadre of new, effective public land managers who are equipped with the broad array of professional skills necessary to manage people and nature in the twenty-first century. These skills include collaborative leadership, public participation, conflict resolution, basic technical and scientific knowledge, and the ability to think across disciplinary, jurisdictional, cultural, and other boundaries to facilitate innovative solutions to unforeseen problems.

J. A Briar Patch of Laws, Policies, and Institutions

The laws governing the public lands have accumulated over the years and are serving to generate considerable conflict and controversy, often leaving public land managers without clear guidance when making natural resource decisions. Several of these laws were passed coincident with the 1970 PLLRC report, including the NEPA (1969), ESA (1973), NFMA (1976), and FLPMA (1976). Reflecting broader social and economic changes, these laws stand in stark contrast to the older laws—sometimes referred to as the "Lords of Yesterday"—that still govern water, mining, logging, and grazing on western public lands.²³⁸

Since the 1970s, however, Congress has made few sweeping changes in the prevailing legal structure. In fact, most of the changes have either involved national park and national wildlife refuge legislation or short term riders—like the 1995 Salvage Logging rider—designed to achieve political objectives of the moment, ²³⁹ or place-based bills, like the Southern Nevada Public Land Management Act²⁴⁰ or the Rocky Mountain Front Heritage Act. ²⁴¹ But there are exceptions, namely the Healthy Forests Restoration Act of

²³⁶ One of the most high-profile cases of this trend is the "forced" premature retirement of Yellowstone National Park Superintendent Dan Wenk. See Former Yellowstone Chief Slams Secretary Zinke's Ousting of Respected Yellowstone Superintendent, WESTWISE, https://perma.cc/67FW-QG9U (last visited Feb. 16, 2019).

²³⁷ Carl Segerstrom, A New Structure for the Interior Department Takes Shape, HIGH COUNTRY NEWS (Feb. 21, 2018), https://perma.cc/3K4Q-4JCE.

²³⁸ For more on the "Lords of Yesterday," see Wilkinson, *supra* note 17, at 3–27.

²³⁹ See Keiter, Keeping Faith with Nature, supra note 175, at 105–08.

²⁴⁰ Pub. L. No. 105-263, 112 Stat. 2343 (1998).

²⁴¹ Pub. L. No. 113-291, 128 Stat. 3292 (2014).

2003, 242 which established a new federal wildland fire policy focused on forest restoration and fire prevention in the wildland-urban interface zone, 243 the 2005 Energy Policy Act 244 that sought to expedite oil and gas exploration across the public lands, 245 and the Collaborative Forest Landscape Restoration Program 246 that promotes forest ecosystem restoration through collaborative, science-based processes. 247 As a consequence, the multiple-use lands overseen by the U.S. Forest Service and the BLM are governed by a diverse assortment of old and new laws that have created a conflicting maze of legal mandates, property rights, and environmental requirements.

However, the decision-making process on public lands has changed dramatically since the 1970 PLLRC report.²⁴⁸ Beginning with the passage of NEPA in 1970 (and following the PLLRC's recommendation), citizens have been invited into agency decision-making processes to help define issues, articulate "desired future conditions," and comment on the potential environmental impacts of major federal actions. 249 The FLPMA and NFMA legislation, enacted in 1976, creates additional opportunities and expectations for public participation in public land management decision making.²⁵⁰ The Administrative Procedures Act (1946),²⁵¹ Federal Advisory Committee Act (1972), and a host of executive orders and administrative rules further guide agency decision-making processes and opportunities for public participation and collaboration. Although this framework has promoted a more open and transparent process, it raises important questions over the role of local versus national input, professional scientific information versus local or "traditional" knowledge, centralized versus decentralized decision making, and the role of collaborative decision making. Thus, just as the substantive goals of public land management are under question, agency decision-making processes are being challenged by competing visions and diverse expectations.

In this setting, reform activity during the past several decades has largely come through administrative initiatives, reflecting the policy priorities of the presidential administration then in power. The Clinton Administration, for example, used the President's authority under the Antiquities Act²⁵² to establish more than a dozen large-scale national

 $^{^{242}}$ 16 U.S.C. §§ 2103b, 6501, 6502, 6511–6518, 6531, 6551–6556, 6571–6578, 6591, 6591a–6591d (2012).

²⁴³ See id.; see also Keiter, The Law of Fire, supra note 226, at 344–48.

 $^{^{244}~}$ 42 U.S.C. $\S~15801$ et seq (2005).

 $^{^{245}}$ See id.

 $^{^{246}\,\,}$ Omnibus Public Land Management Act, Pub. L. No. 111-11, 123 Stat. 991 (2009).

²⁴⁷ See id.

²⁴⁸ For an introduction to this topic, see Pub. Policy Research Inst., Univ. of Mont., The Legal Framework for Cooperative Conservation 6–7 (2006); Center for Nat. Res. & Envil Policy, Univ. of Mont., Public Participation: Lessons Learned Implementing the 2012 US Forest Service Planning Rule 6–8 (2015); Mark Squillace, *Meaningful Engagement in Public Lands Decision-Making*, 59 Rocky Mt. Min. L. Inst. 21-1 (2013).

²⁴⁹ Squillace, *supra* note 248, at 21-6 to 21-7.

²⁵⁰ See 16 U.S.C. § 1612 (2012); 43 U.S.C. § 1738(e) (2012).

²⁵¹ 5 U.S.C. §§ 551–559, 701–706, 1305, 3344, 4301, 5335, 5372, 7521 (2012).

²⁵² Antiquities Act of 1906, 54 U.S.C. §§ 320301–320303 (2012).

monuments, adopted new rules reforming livestock grazing and mining policies, undertook several ecosystem-based planning initiatives (including the Northwest Forest Plan, the Sierra Nevada Forest Plan Amendment Process, and the short-lived Interior Columbia Basin Ecosystem Management Project), conceived an ESA "no surprises" policy and the national forest roadless area rule, and sought to revise the NFMA planning rules.²⁵³ The second Bush Administration pursued a Healthy Forests Reform Initiative, promoted oil and gas leasing across the public lands, and tried to unravel many of the Clinton era reforms, including the NFMA planning rules and key provisions in the Northwest Forest Plan, with limited success. 254 For its part, the Obama Administration promoted alternative energy development, introduced a new Master Lease Planning process for oil and gas development, adopted its own national forest planning rule revisions, and fostered the large landscape conservation concept in both the Interior and Agriculture departments.²⁵⁵ The Trump Administration, in turn, has reversed several key Obama-era policies, reduced the size of two Utah national monuments, and pursued an aggressive fossil fuel development agenda.256

Given that Congress has the final say on public land law and policy, these administrative initiatives have not resolved the fundamental underlying tensions between development and environmental protection or between federal versus state authority. In fact, during the past several presidential administrations, federal land management policy has swung radically back and forth—or yo-yoed—between a strong commitment to conservation and environmental protection to a quite different commitment to accelerated energy development and resource use. Many observers, therefore, perceive a need for greater clarity and precision in the form of new legislative direction that would capture and reflect the fundamental changes that have occurred since the last PLLRC issued its report in 1970.²⁵⁷

K. A More Prominent Judicial Role

Since the early 1970s, litigation has proliferated across the federal public lands, with the courts now playing a significant role in shaping public land policy. The Supreme Court's seminal 1972 *Sierra Club v. Morton*²⁵⁸ standing decision recognized environmental harm could be judicially redressed and opened the federal courthouse doors.²⁵⁹ Since then, litigants

²⁵³ John D. Leshy, *The Babbitt Legacy at the Department of the Interior: A Preliminary View*, 31 ENVTL. L. 199, 208, 214, 218, 221 (2001).

²⁵⁴ Robert B. Keiter, *Breaking Faith with Nature: The Bush Administration and Public Land Policy*, 27 J. LAND, RES., & ENVTL. L. 195, 202, 208, 215, 219 (2007).

²⁵⁵ See Elizabeth Shogren, Obama's Lasting Legacies in the West, High Country News (Dec. 26, 2016), https://perma.cc/N2TE-W5JH.

²⁵⁶ Blumm & Jamin, *supra* note 104, at 312–14.

²⁵⁷ See KEMMIS, supra note 211; Robert B. Keiter, Public Lands and Law Reform: Putting Theory, Policy, and Practice in Perspective, 2005 UTAH L. REV. 1127, 1164, 1208–10 (2005).

²⁵⁸ 405 U.S. 727 (1972).

²⁵⁹ *Id.* at 734.

have turned to the federal courts to advance a dizzying array of NEPA, ESA, NFMA, FLPMA, CWA, and other claims linked to the 1970s-era environmental laws, often securing injunctions to block logging projects, oil and gas leasing decisions, new mine proposals, and livestock grazing permits. In several instances, court rulings have prompted profound changes on the public lands, perhaps most notably across the Pacific Northwest forests where the northern spotted owl's presence effectively ended large-scale commercial logging. In other instances, Bush-era reform initiatives, such as its revised NFMA planning rules and proposed revisions to the Northwest Forest Plan, were blocked by the courts. Simply put, environmental litigation has become a staple on the public lands, and the federal courts are now a regularly employed forum to challenge unwelcome public policies and decisions.

But public land litigation is not limited to the environmental movement. Industry, western states and counties, property rights advocates, and assorted other interest groups have also turned to the federal courts to pursue policy reform objectives. With the Supreme Court reinvigorating the Fifth Amendment Takings Clause, ²⁶³ industry and other commodity users of the public lands have advanced property right-based litigation claims in opposition to new environmentally-driven regulatory requirements. ²⁶⁴ State's rights proponents, drawing upon Supreme Court Tenth Amendment and Commerce Clause rulings that have limited the scope of federal power on state sovereignty grounds, are considering litigation designed to transfer the public lands from federal to state ownership. ²⁶⁵ The state of Utah is engaged in massive litigation over so-called R.S. 2477 right of way claims across federal lands that could reshape local management policies and practices. ²⁶⁶ Numerous lawsuits were also litigated over Clinton-era environmental reforms, including the U.S. Forest Service's roadless area rule and BLM's

²⁶⁰ See generally COGGINS ET AL., supra note 4.

²⁶¹ KEITER, KEEPING FAITH WITH NATURE, *supra* note 175, at 80–126; KATHIE DURBIN, TREE HUGGERS: VICTORY, DEFEAT & RENEWAL IN THE NORTHWEST ANCIENT FOREST CAMPAIGN 93–94 (Mary Anne Stewart ed., 1996).

²⁶² Citizens for Better Forestry v. U.S. Dep't of Agric., 632 F. Supp. 2d 968, 970 (N.D. Cal. 2009); Nw. Ecosystem All. v. Rey, 380 F. Supp. 2d 1175, 1181 (W.D. Wash. 2005); Pacific Coast Fed. Of Fishermen's Ass'ns v. Nat'l Marine Fisheries Serv., 482 F. Supp. 2d 1248, 1255 (W.D. Wash. 2007).

²⁶³ See, e.g., Lucas v. S.C. Coastal Comm'n, 505 U.S. 1003, 1031–32 (1992); Dolan v. City of Tigard, 512 U.S. 374, 394–95 (1994); Ark. Fish & Game Comm'n v. United States, 568 U.S. 23 (2012).

²⁶⁴ See, e.g., Baley v. United States, 134 Fed. Cl. 619, 659–80 (2017); Casitas Mun. Water Dist. v. United States, 543 F.3d 1276, 1286–88 (Fed. Cir. 2008); Scott Timber Co. v. United States, 44 Fed. Cl. 170, 179–81 (1999).

²⁶⁵ Kevin Frazzini, *States and Federal Government at Odds Over Public Lands*, NAT'L CONF. St. Legislatures (Nov. 4, 2015), https://perma.cc/M99N-CM9X.

 $^{^{266}}$ See, e.g., S. Utah Wilderness All. v. Bureau of Land Mgmt., 425 F.3d 735, 740–43 (10th Cir. 2005); Kane Cty., Utah v. United States, 772 F.3d 1205, 1209 (10th Cir. 2014).

rangeland reform regulations, 267 but these cases generally proved unsuccessful. 268

With public interest groups proliferating and ongoing polarization over public land policies, the judiciary will continue to play a prominent role overseeing new policies and initiatives. Indeed, with the courthouse doors now open broadly, every major policy initiative, revision to administrative regulations, or environmental-impact-statement-based decision involving sensitive lands is potentially subject to challenge in the courts. In short, the courts have become the final arbiter of whether the public land agencies have stayed within their legal authority and followed the procedural requirements of the APA, NEPA, the Federal Advisory Committee Act, and other such laws, a fact that is not likely to change. Nonetheless, often finding themselves in a legally ambiguous, no-win situation, federal agency officials have called for legal reform, ²⁶⁹ but the underlying hyper-partisan political climate has largely stymied any such effort.

L. Collaboration: The Emerging Forum of First Resort

In the closing narrative of its 1970 report, the PLLRC anticipated the need to adapt the existing legal and institutional system in the face of inevitable change. Though some of the Commission's prescriptions designed to improve efficiency and effectiveness—for example, merging the U.S. Forest Service with the Department of the Interior into a new Department of Natural Resources—have not been adopted, other farsighted recommendations have been implemented. The Commission's proposal to place greater emphasis on regional administration of public land programs is being pursued through the Landscape Conservation Cooperatives and initiatives like the Northwest Forest Plan and the recent federal-state Sage Grouse Initiative. The Commission's endorsement of public land citizen advisory boards is reflected in the BLM's Resource Advisory Councils and the U.S. Forest Service's Collaborative Forest Landscape Restoration Program.

Wyoming v. U.S. Dep't of Agric., 661 F.3d 1209, 1220 (10th Cir. 2011); Pub. Lands Council v. Babbitt, 529 U.S. 728, 738 (2000).

²⁶⁸ See, e.g., Wyoming, 661 F.3d at 1220 (showing an unsuccessful challenge to Clinton-era environmental reforms); Pub. Lands Council, 529 U.S. at 738 (same).

²⁶⁹ U.S. FOREST SERV., THE PROCESS PREDICAMENT: HOW STATUTORY, REGULATORY, AND ADMINISTRATIVE FACTORS AFFECT NATIONAL FOREST MANAGEMENT 7–10 (2002).

²⁷⁰ See One Third of the Nation's Land, supra note 18, at 281–89.

 $^{^{271}}$ Id. at 281–84.

²⁷² See About Landscape Conservation Cooperatives, Landscape Conservation Coop. Network, https://perma.cc/7499-Z9JY (last visited Feb. 16, 2019); U.S. Dep't of Agric. et al., Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl 1, 4 (1994); Dep't of the Interior et al., Greater Sage-Grouse Conservation and the Sagebrush Ecosystem: Collaborative Conservation at Work 6, 10–12 (2016).

²⁷³ See About RAC, BUREAU OF LAND MGMT. https://perma.cc/8H4R-6A7Z (last visited Feb. 16, 2019) (providing an example of the BLM's Resource Advisory Councils); see also Collaborative Forest Landscape Restoration Program Overview, U.S. FOREST SERV., https://perma.cc/6S9W-

These measured proposals and resulting policy changes provide important guidance for contemplating additional reforms as the twenty-first century moves forward. In fact, the changes presented above have prompted regular calls to revise and adapt the existing legal and institutional system governing public land management.²⁷⁴ The menu of options for revising the system includes employing landscape or ecosystem scale planning,²⁷⁵ consolidating land ownership patterns through exchanges and sales,²⁷⁶ privatizing federal lands and resources,²⁷⁷ establishing fiduciary trust management arrangements,²⁷⁸ and adopting clear resource management priorities and standards.²⁷⁹

Another promising option involves citizen-driven, place-based collaborative efforts, which have been effectively addressing problems related to federal lands and resources through facilitative or collaborative leadership. Since the 1990s, "coalitions of the unalike" have emerged in diverse watersheds and bioregions throughout the American West, seeking common ground to share a healthy landscape in specific places.²⁸⁰ The first generation of these organic, citizen-driven, place-based partnerships "coalesced primarily around watershed protection management."281 These efforts have now broadened to address issues such as species reintroduction, timber and rangeland management, and habitat protection. Specific examples include the Blackfoot Challenge, 282 the Malpai Borderlands Group,²⁸³ and the Coalition to Protect the Rocky Mountain Front.284

87MC (last visited Feb. 16, 2019) (providing an example of the Forest Service's Collaborative Forest Landscape Restoration Program).

²⁷⁴ See Kemmis, supra note 211, at xii-xiii (providing a good starting point on this topic); see also Martin Nie, The Governance of Western Public Lands: Mapping Its Present and Future 5–8 (2008).

 $^{^{275}}$ For a history and review of this idea, see KEITER, KEEPING FAITH WITH NATURE, *supra* note 175, at 48; McKinney & Johnson, *supra* note 186, at 2, 6, 13–18; and Skillen, *supra* note 175, at 6–7.

²⁷⁶ James R. Rasband & Megan Garrett, *A New Era in Public Land Policy? The Shift Toward Reacquisition of Land and Natural Resources*, ROCKY MOUNTAIN. MIN. L. INST., Aug. 2007, at 1–3.

²⁷⁷ About Us, Prop. & Env't Res. Ctr., https://perma.cc/KU9J-34TE (last visited Feb. 16, 2019) (providing the best source of theory and practice on privatizing public resources is the Property and Environment Research Center). For starters, see Robert H. Nelson, Charter Forests: A New Management Approach for National Forests 21–22 (2015).

²⁷⁸ See Joseph Little et al., Uncharted Territory – The Charter Forest Experiment on the Valles Caldera National Preserve: An Initial Economic and Policy Analysis, 45 NAT. RESOURCES J. 33, 34–35 (2005); Melinda Harm Benson, Shifting Public Land Paradigms: Lessons from the Valles Caldera National Preserve, 34 VA. ENVIL. L.J. 1, 1–6 (2016).

²⁷⁹ See Martin Nie & Emily Schembra, *The Important Role of Standards in National Forest Planning, Law, and Management,* 44 Envtl. L. Rep. (Envtl. L. Inst.) 10,281, 10,281 (2014).

²⁸⁰ KEMMIS, *supra* note 211, at 123, 127.

²⁸¹ *Id.* at 127.

 $^{^{282}}$ Elaine Caton, $\it Blackfoot$ $\it Swan$ $\it Update,$ Blackfoot Challenge (June 12, 2012), https://perma.cc/GCZ2-XJC3.

²⁸³ Conservation Action, Malpai Borderlands Group, https://perma.cc/P5MJ-S3C3 (last visited Feb. 16, 2019).

 $^{^{284}\,}$ History of Conservation, Save the Front, https://perma.cc/2DCG-5FYF (last visited Feb. 16, 2019).

Beyond solving local problems and working with federal resource agencies, these collaborative groups have also prepared place-based legislation to guide national forest management.²⁸⁵ Attracted by this organic approach to governance, Congress and the agencies have tried to integrate the theory and methods of collaboration into various laws and administrative rules, such as the Collaborative Forest Landscape Restoration Act²⁸⁶ and the U.S. Forest Service's 2012 planning rule.²⁸⁷ These types of experiments, however, have met with mixed success, in part because they are integrated into a legal and institutional system that is still largely a top-down, expert-driven centralized bureaucracy.²⁸⁸

Nevertheless, an important lesson from these organic, place-based initiatives is a new style of leadership. Regardless of who catalyzes, convenes, and coordinates such collaborative initiatives, it is increasingly evident that the "leaders" must have the "collaborative" or "facilitative" ability to empower people with diverse interests to shape a shared vision around common values, and the capacity to bridge differences and nourish relationships. ²⁸⁹ Such collaborative leaders create legitimacy, credibility, and capacity by broadening participation and sharing decision-making responsibility (which is different than sharing or abdicating decision-making authority). ²⁹⁰ In fact, research suggests that managers throughout the public land agencies are moving away from the traditional roles of technical expert and decision maker to assume a broader, more effective role as convener, stakeholder, and partner. ²⁹¹

III. PUBLIC LAND LAW REVIEW COMMISSIONS: HISTORY AND IMPACT

Of course, change has come before to the federal public lands, prompting important revisions to the governing laws, policies, and

²⁸⁵ This recent trend arguably began with the Herger-Feinstein Quincy Library Group Forest Recovery Act, Pub. L. No. 105-277, 112 Stat. 2681 (1998), and includes several notable examples and proposals, including but not limited to the Steens Mountain Cooperative Management and Protection Area Act, Pub. L. No. 106-399, 144 Stat. 1655 (2000); the Rocky Mountain Front Heritage Act, Pub. L. No. 113-291, 128 Stat. 3292 (2014); and the Forest Jobs and Recreation Act of 2013, S. 37, 113th Cong. (2013), a bill sponsored by Montana Senator John Tester to implement two place-based legislative proposals created by diverse coalitions. For a critical review of this trend, see Martin Nie & Michael Fiebig, *Managing National Forests Through Place-based Legislation*, 37 Ecology L.Q. 1 (2010).

 $^{^{286}~}$ 16 U.S.C. § 7303 (2009); $see\,\mathrm{Nie}\,\&\,\mathrm{Fiebig},\,supra\,\mathrm{note}\,285,\,\mathrm{at}\,1.$

²⁸⁷ 36 C.F.R. § 219 (2017).

²⁸⁸ Matthew McKinney, Comment, *Whither Public Participation in Federal Land Management? Replicating Homegrown Innovations in Shared Problem Solving*, 48 ENVTL. LAW REP. (ENVTL. L. INST.) 10,015, 10,029 (2018).

²⁸⁹ See David Chrislip et al., Collaborative Leadership: How Citizens and Civic Leaders Can Make a Difference 146 (1994). On collaborative conservation, see generally Across the Great Divide: Explorations in Collaborative Conservation and the American West (Philip Brick et al. eds., 2d ed., 2001); Stitching the West Back Together: Conservation of Working Landscapes 49 (Susan Charnley et al. eds., 2014).

²⁹⁰ Chrislip et al., *supra* note 289, at 146.

²⁹¹ See Julia M. Wondolleck & Claire M. Ryan, What Hat Do I Wear Now? An Examination of Agency Roles in Collaborative Processes, 15 NEGOTIATION J. 117, 130 (1999).

institutions. During the past 140 years, the United States has convened four commissions to examine federal public land laws. Each commission engaged experts and policy makers from various fields; studied the general operation of the public land system; drafted detailed reports; and submitted recommendations for change to the President and Congress. Though similar in function and form, substantial differences exist between each of these commissions. What follows highlights the origins, structures, functions, processes, politics, activities, and outcomes of the first three commissions and then reviews the impact and legacy of the most recent commission, whose work has heavily influenced public land policy for the past fifty years. The experiences of these past commissions can help inform whether a new commission or policy review is in order.

A. A Brief History of Public Land Law Commissions

1. John Wesley Powell's Public Land Commission: 1879–1881

With passage of the Sundry Civil Appropriations Bill on March 3, 1879, Congress established the first commission to investigate federal public land laws. ²⁹² According to historian Paul Gates, Congress created the Public Land Commission (1879 Commission) to address the widespread abuse of these laws and to deal with the confusion caused by inconsistent implementation of them throughout different regions of the West. ²⁹³

John Wesley Powell, head of the Geographic and Geologic Survey of the Rocky Mountain Region, was the primary catalyst behind this first public land law commission.²⁹⁴ In 1878, after more than ten years exploring and studying the nation's western lands, Powell published his famous "Report on the Lands of the Arid Region of the United States."²⁹⁵ Powell's report advocated "a complete revolution in the system of land surveys, land policy, land tenure, and farming methods in the West, and [denied] almost every cherished fantasy and myth associated with the [West]."²⁹⁶ It was distributed to reform-oriented members of the administration, and soon found its way into the hands of Congress's scientific arm, the National Academy of Sciences (the Academy).²⁹⁷

When Congress requested the Academy to make recommendations regarding the western land surveys, the Academy largely deferred to Powell,

 $^{^{292}}$ Wallace Stegner, Beyond the Hundredth Meridian: John Wesley Powell and the Second Opening of the West 303–04 (1953).

 $^{^{293}\,}$ Paul W. Gates & Robert W. Swenson, Pub. Land Law Review Comm'n, History of Public Land Law Development 422 (1968).

²⁹⁴ For biographical information on Powell, see generally Donald Worster, A River Running West: The Life of John Wesley Powell (2001); Stegner, Beyond the Hundredth Meridian, *supra* note 292.

²⁹⁵ Worster, *supra* note 294, at 10; John Wesley Powell, Report on the Lands of the Arid Region of the United States, with a More Detailed Account of the Lands of Utah (1879).

²⁹⁶ STEGNER, BEYOND THE HUNDREDTH MERIDIAN, *supra* note 292, at 212.

²⁹⁷ *Id.* at 233.

not only including his land survey recommendations (all of which had been ignored by Congress), but also suggesting that a commission be convened to study and codify the public land laws.²⁹⁸ Once convened, Congress formally charged the 1879 Commission to 1) codify existing land laws, 2) recommend a system for the classification of public lands, 3) develop a substitute surveying method based on the classification system, and 4) recommend the best methods for disposing of the public lands "to actual settlers."²⁹⁹ Over a four-month period, the 1879 Commission visited all the western states, collecting most of its information from a questionnaire it circulated among "land officers, miners, lumbermen, stock raisers, real estate dealers and, indeed, representatives of most elements interested in administering, buying, and selling, as well as exploiting the lands."³⁰⁰

The 1879 Commission's final report was submitted to the President and Congress in separate parts between 1880 and 1881.³⁰¹ It contained a comprehensive history of the public land laws as well as a wide range of recommendations relating to surveying methods, land classification, and disposal of the public lands, most of which echoed the observations and proposals in Powell's Arid Region Report and the Academy's original report to Congress. At the time, the final reports constituted the most comprehensive review of the public lands ever completed by the federal government.

Not surprisingly, given Powell's significant influence on the 1879 Commission's work and report, its proposals were largely ignored by Congress. Nonetheless, the 1879 Commission catalyzed passage of the General Land Law Revision Act of 1891, so which granted the President authority to establish forest reserves. This legislation reflected a notable departure from previous public land policy, signaling the closing of the disposal policy era in favor of the retention of public lands.

2. Gifford Pinchot's Public Lands Commission: 1903–1905

Twenty-two years after the original 1879 Commission's report, a second commission was convened to examine public land law. Because the 1879 Commission's recommendations were mostly disregarded, abuses continued to mount under the very laws the 1879 Commission had recommended be repealed, most notably the Timber and Stone Act, the Desert Land Act, and the Homestead Act. By 1903, the West was experiencing extensive resource exploitation and unprecedented population growth, creating a dire

 $^{^{298}}$ Worster, supra note 294, at 424–25.

²⁹⁹ S. Rep. No. 58-188, at 3 (1905).

³⁰⁰ Mark B. Lambert, Public Land Commissions: Historical Lessons and Future Considerations 17 (2003) (unpublished Master's Degree Thesis, Environmental Studies, Univ. of Montana), https://perma.cc/Q3XH-DM5F.

³⁰¹ *Id.* at 15.

³⁰² Lambert, supra note 300, at 17.

³⁰³ General Land Law Revision Act of 1981, ch. 561, 26 Stat. 1096 (1891).

³⁰⁴ Id.

³⁰⁵ Lambert, *supra* note 300, at 20–21.

situation on the public lands.³⁰⁶ According to the standard public land law textbook,

the public supply of farmland had all but disappeared; private irrigation was but a drop in the bucket; western grazing lands were in poor condition; wildlife resources were at historical lows; and timber resources were severely depleted. Scandal was endemic, reforms had been repeatedly thwarted, and the trend toward large holdings and monopoly grew.³⁰⁷

Just as John Wesley Powell played a singular role in creating the 1879 Commission, Gifford Pinchot, then chief of the Bureau of Forestry and widely regarded as the foremost architect of radical revision in public land policy, was primarily responsible for catalyzing the Public Lands Commission created in 1903 (1903 Commission). Drawing upon his personal friendship with President Theodore Roosevelt, Pinchot encouraged him to create a commission to report upon the condition, operation, and effect of the present land laws, and to recommend such changes as are needed to effect the largest practicable disposition of the public lands to actual settlers who will build permanent homes upon them, and to secure in permanence the fullest and most effective use of the resources of the public lands."

President Roosevelt asked Congress to create the commission, realizing that it had a better chance of long-term success if it enjoyed congressional support.³¹¹ After Congress refused his request, Roosevelt used his executive powers to create the 1903 Commission in late October, 1903.³¹² He appointed just three members, including Pinchot.³¹³ Because Congress refused to appropriate any funds for the 1903 Commission, the Commission members used their respective staffs, primarily in the Bureaus of Plant Industry and Forestry and the Reclamation Service, to gather data, prepare reports, and provide general support.³¹⁴ The 1903 Commission members traveled throughout the public land states and met with governors, land boards, public officials, and private citizens.³¹⁵ Hearings were held in the West and in Washington, D.C.³¹⁶ Besides submitting questionnaires to selective groups, the 1903 Commission also spent considerable time on the public lands themselves.³¹⁷

³⁰⁶ See S. REP. No. 58-188, at XI (1905).

³⁰⁷ COGGINS ET AL., supra note 4, at 119.

 $^{^{308}}$ For biographical information on Gifford Pinchot, see generally Char Miller, Gifford Pinchot and the Making of Modern Environmentalism (2004).

³⁰⁹ COGGINS ET AL., supra note 4, at 120.

³¹⁰ S. Rep. No. 58-188, at 3 (1905).

 $^{^{311}}$ Lambert, *supra* note 300, at 22.

 $^{^{312}}$ Id. at 22–23.

³¹³ *Id.* at 23.

³¹⁴ *Id.*

³¹⁵ Id.

³¹⁶ Id.

³¹⁷ Id.

Beginning in 1904, the 1903 Commission delivered its recommendations to Congress and the President. Its report included six major recommendations that would have increased federal control over public lands and shifted federal policy from disposal of public lands to retention and scientific management. The recommendations were once again largely disregarded by Congress, whose western members were generally hostile due to the report's content and the fact that it was driven by Pinchot, who by then was despised in some circles for his role in the rapid expansion of forest reserves. The 1903 Commission was not seen as an impartial body objectively assessing the public land laws, but rather as a Pinchot-inspired vehicle to further institutionalize his views and push his proposals through Congress.

Although the 1903 Commission's immediate impact was limited, Congress approved transferring the Forest Reserves from the Department of the Interior to the Department of Agriculture in 1905, achieving one of Pinchot's long-standing goals. According to some observers, it also played a significant role in the eventual transformation of public land law by increasing public awareness and understanding of the public lands, natural resource exploitation, and the growing conservation movement. 323

3. Herbert Hoover's Committee on the Conservation and Administration of the Public Domain: 1930–1931

The reasons given to establish a third public land commission were similar to those given for the two earlier commissions. In 1930, the chief problem was unregulated grazing on the federal lands that had not been set aside as forest reserves or for other purposes. ³²⁴ As the rangelands rapidly deteriorated in the face of a prolonged drought, Congress was unable to reach agreement on how to deal with the situation, and the problem continued to worsen. ³²⁵

President Herbert Hoover responded by advocating creation of another public land commission. The Republican majorities in both houses passed a bill in April 1930 establishing the Committee on the Conservation and Administration of the Public Domain (the Committee). The Committee was mandated to advise the President and Congress on five fronts: 1) the future disposition of the unreserved public lands and a

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318 S. Rep. No. 58-188 (1905).
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 $^{^{319}}$ Lambert, supra note 300, at 22.

³²⁰ Id.

³²¹ See Gates & Swenson, supra note 293, at 578.

³²² Dana & Fairfax, *supra* note 131, at 81–82.

³²³ *Id.* at 82–85.

³²⁴ Lambert, supra note 300, at 22.

 $^{^{325}\,}$ Roy M. Robbins, Our Landed Heritage: The Public Domain, 1776–1970, at 411–12 (2d ed. 1976).

³²⁶ Id. at 413.

³²⁷ See Dana & Fairfax, supra note 131, at 139.

program to regulate grazing resources; 2) conservation of water resources; 3) conservation of subsurface mineral resources; 4) conservation of timber resources and changes to the national forest system; and 5) changes in the administration of natural resources to produce greater efficiency in their conservation.³²⁸

President Hoover's underlying motivation for establishing this third commission, at least in part, was his interest in transferring the unreserved public lands to state ownership. By this time, the U.S. Forest Service and the National Park Service had established credible and widely-supported systems to manage national forests and national parks. However, the public lands outside these systems received little attention or funding and remained largely forgotten. Consequently, they suffered from overgrazing, and the responsible agencies had no authority to employ the emerging field of range science to improve livestock management on these unreserved public lands. The property of the state of the property of the

President Hoover appointed a twenty-two-member committee, including representatives from federal government agencies, natural resource professions, and the political and journalism communities. One-half of the nominations were recommended by the governors of the eleven western states. He Committee was chaired by James A. Garfield, who had previously served as Secretary of Interior during the final two years of Theodore Roosevelt's presidency. After breaking into sub-groups, the Committee members toured the public lands, where they held hearings and met with individuals tied to federal, state, and local government and various interested organization.

In January 1931, the Committee submitted its final report to President Hoover, who enthusiastically transmitted it to Congress. The report set forth twenty recommendations, most conspicuously the recommendation—consistent with Hoover's policy objectives for the public domain—"that all unreserved federal land be transferred to the states, with subsurface mineral rights reserved to the federal government." The Committee also recommended "that each state possessing national forest land within its borders create a board to determine which forest lands should remain in . . . the national forest system and which should be transferred to the

³²⁸ COMM. ON THE CONSERVATION AND ADMIN. OF THE PUB. DOMAIN, 72ND CONG., REP. OF THE COMM. ON THE CONSERVATION AND ADMIN. OF THE PUB. DOMAIN 1 (1932) *reprinted in* Granting Remaining Unreserved Public Lands to States Before the S. Comm. on Pub. Lands and Surveys, 72nd Cong. (1932) [hereinafter Report of the Committee].

³²⁹ Dana & Fairfax, *supra* note 131, at 138–39.

 $^{^{330}}$ *Id.* at 96.

³³¹ *Id.* at 138-39.

³³² William D. Rowley, *Historical Considerations in the Development of Range Science, in* FOREST AND WILDLIFE SCIENCE IN AMERICA: A HISTORY 230, 230–31 (Harold K. Steen ed. 1999).

³³³ Lambert, *supra* note 300, at 30–31.

³³⁴ *Id.*

³³⁵ *Id.* at 30.

³³⁶ *Id.* at 31.

³³⁷ Id.

³³⁸ Id.

states; that private ownership be the objective and final use of the unreserved lands; and that the President be granted authority to reorganize and consolidate the executive bureaus concerned with the administration of public land laws." ³³⁹

The Committee's recommendations were met with reactions ranging from skepticism to outright opposition. For different reasons, the Departments of Interior and Agriculture, along with western state governors, opposed the transfer of federal lands to the states. Memorably, Utah's governor observed Ithe States already own, in their school land grants, millions of acres of this same kind of land, which they can neither sell nor lease, and which is yielding no income. Why should they want more of this precious heritage of desert? Conservationists opposed nearly every recommendation, citing their belief in the value of a central authority over the public lands and the need for uniform standards and procedures. Some of the larger livestock associations supported transferring the public domain lands to the states, while smaller stock operators believed any such transfer would result in monopoly arrangements.

Like the two previous public land commissions, the Committee's recommendations were largely ignored and generated no immediate results. Nevertheless, the Committee's work confirmed that many Americans no longer supported widespread disposal of public lands, and highlighted a clear future policy choice: Congress should either accept responsibility for managing public lands to prevent their degradation, or it should give the land and resources to those who would manage them. Not long after the committee completed its work, Congress passed the Taylor Grazing Act of 1934, authorizing the Department of the Interior to begin actively managing most of the unreserved public lands in the lower forty-eight states.

B. Wayne Aspinall's Public Land Law Review Commission: 1964–1970

The Public Land Law Review Commission of 1964–1970 (PLLRC or Commission) completed the most comprehensive review of federal land law, policy, and management to date.³⁴⁹ Unlike the three previous commissions, the catalyst for the PLLRC was not about land and resource degradation, the

³³⁹ *Id.*; REPORT OF THE COMMITTEE, *supra* note 328.

³⁴⁰ Lambert, *supra* note 300, at 31; *see* Dana & Fairfax, *supra* note 131, at 139.

³⁴¹ Dana & Fairfax, *supra* note 131, at 139–40.

 $^{^{342}}$ Id. at 139.

³⁴³ See Lambert, supra note 300, at 32; DANA & FAIRFAX, supra note 131, at 139.

³⁴⁴ Lambert, supra note 300, at 32.

³⁴⁵ *Id.* at 33.

³⁴⁶ JAMES R. SKILLEN, THE NATION'S LARGEST LANDLORD: THE BUREAU OF LAND MANAGEMENT IN THE AMERICAN WEST 38 (2006).

³⁴⁷ Taylor Grazing Act, 43 U.S.C. §§ 315, 315a–315o (2012)

^{348 43} U.S.C. § 315; James R. Skillen, Congress And The Next Public Land Commission, FOREST HIST, TODAY, Spring/Fall 2009, at 38.

³⁴⁹ Skillen, *supra* note 348, at 38.

merits of land disposal versus retention, or the lack of managerial authority. Rather, the premise of the PLLRC was that most, if not all, federal lands were likely to remain in national ownership. Therefore, the statutes governing these lands and resources should be carefully reviewed and refined to minimize conflicts and contradictions, and to ensure effective management based on scientific and other knowledge. The underlying problem was not the lack of statutory authority, but that the hundreds of existing statutes contained inconsistent substantive and procedural mandates. The need for greater uniformity and clarity was obvious.

1. Origins, Purpose, Scope, and Structure

During the early 1960s, people were beginning to value federal public lands for leisure and recreation, in addition to mining, timber harvesting, and livestock grazing. An increase in population in the American West amplified this trend. However, most of the existing public land laws were designed to promote and support resource development and thus were inadequate to address emerging recreational uses and associated preservation demands. Moreover, the body of law governing the federal public lands included 5,000 or more statutes that had been promulgated over 175 years, making any attempt to revise and update the existing legal and institutional system a complex, complicated task. These laws were widely viewed by agency officials and even President Kennedy as uncoordinated, fragmented, inconsistent, and rife with conflicting mandates.

Well aware of the increasing call for legal reform, Congress considered—but never passed—pieces of reform legislation in every session from 1947 to 1964, including several bills that would have created a public land law review commission. The politics of integrating the newer recreational and conservation uses alongside the traditional commodity uses of federal lands resulted in gridlock. Meanwhile, the federal land management agencies were utilizing their existing statutory discretion to create new programs, such as the U.S. Forest Service's administrative wilderness designations, to meet new recreation and preservation demands.

³⁵⁰ See Lambert, supra note 300, at 35.

 $^{^{351}}$ James Muhn & Hanson R. Stuart, U.S. Dep't of the Interior, Opportunity and Challenge: The Story of BLM 104–06 (1999).

 $^{^{352}\,}$ See Threats to Wilderness from Overuse, WILDERNESS, https://perma.cc/DQ7X-J75B (last visited Feb. 16, 2019).

 $^{^{353}}$ Lambert, supra note 300, at 35–36.

 $^{^{354}}$ Id. at 35.

³⁵⁵ Letter from President Kennedy to Wayne Aspinall, in Committee on Interior and Insular Affairs, *Public Land Law Review Commission: Background and Need*, 88th Cong., 2d sess., 1964, Committee Print 39, 121.

³⁵⁶ Lambert, supra note 300, at 36.

³⁵⁷ Id.

³⁵⁸ *Id.* For a review of federal land management agency recreation policies during the 1960s, see U.S. Dep't. of Interior, Bureau of Outdoor Recreation, *Federal Outdoor Recreation Programs* (1967), https://perma.cc/T7X9-CRK2.

The PLLRC emerged from this confluence of conflicting and inadequate laws, congressional gridlock, and federal agency activity. The Public Land Law Review Commission Act of 1964 (PLLRC Act) became possible only after it was linked with the Wilderness Act of 1964. In one of the great compromises in American natural resource politics, Congressman Wayne Aspinall, a Democratic Representative from Colorado and the Chairman of the powerful House Interior and Insular Affairs Committee, agreed to allow President Kennedy's Wilderness Act to pass if Kennedy would support creation of a commission to examine, among other things, the relative balance of power between the legislative and executive branches over federal land management.

The PLLRC Act directed the Commission to study existing policy relative to retention, management, and disposition of the public lands; to examine the tension between legislative and executive authority; to compile data to clarify various demands on public lands; and to recommend modifications in law, regulation, policy, and practice. Congress and the President jointly appointed an eighteen-member Commission, which then unanimously selected its nineteenth member as chair: Representative Wayne Aspinall. Has twenty-five-person core staff and a twenty-five-person advisory council (agency officials and representatives of various interest groups) plus state gubernatorial representatives were appointed to assist the Commission. The Commission convened eleven national and regional hearings; heard testimony from over 900 people; produced thirty-nine reports; and held nineteen meetings to identify problems, consider options, and make recommendations.

After six years of work, the PLLRC released its final report in 1970. Entitled *One Third of the Nation's Land*, the report set forth seventeen general recommendations that were derived from 137 "major" recommendations on legislative and administrative changes, including several "consensus" recommendations as well as "separate views" on other recommendations.³⁶⁷ In brief, the PLLRC recommended continued federal ownership of most existing federal lands; targeted disposals of some lands; systematic classification of the lands to maximize their best use; revision of executive withdrawal authority; more active agency management policies; new statutory guidelines governing resource use, including environmental

³⁵⁹ Lambert, *supra* note 300, at 37.

³⁶⁰ Act of September 19, 1964, Pub. L. No. 88-606, 78 Stat. 982 (1964).

³⁶¹ Dana & Fairfax, *supra* note 131, at 209–13.

³⁶² MATTHEW McKinney & John Ruple, Alternative Approaches to Natural Resources Study Commissions, Ctr. for Nat. Res. & Envil. Policy, Univ. of Mont. 2 (2015), https://perma.cc/5MTA-R6QL; Lambert, *supra* note 300, at 37–38.

³⁶³ MCKINNEY & RUPLE, supra note 362, at 2.

³⁶⁴ *Id.*

³⁶⁵ *Id.*

³⁶⁶ *Id.*

³⁶⁷ See generally ONE THIRD OF THE NATION'S LAND, supra note 18 (outlining the Commission's recommendations for new management policies regarding our nation's public lands).

protection provisions; transfer payments to the states hosting federal lands; and consolidation of the existing land management agencies.³⁶⁸

The natural resource development community largely endorsed the report, particularly its assertion that "wholesale retention in Federal ownership" was not a sound policy.³⁶⁹ Noting a series of contradictory statements throughout the report, scholars differ on whether the report emphasized "retention" or "disposal" of the public lands.³⁷⁰ Coggins, Wilkinson, and Leshy, editors of a seminal public land law casebook, believe that "The [PLLRC] Report of 1970, addressing one of the fundamental issues throughout the history of public land policy, found that retention, not disposition, of federal lands should be the guiding principle for the future."³⁷¹ On the other hand, Dana and Fairfax, who wrote a widely regarded history of the public lands, argue that "the commission appeared to favor disposition over retention wherever justifiable," and that the report was therefore entirely oriented "toward commodity users."³⁷²

By contrast, the conservation and environmental community objected to the report's emphasis on regional and local authority over public land decision making, its call for reviewing and reconsidering land within national monuments and forests for disposal, and its general emphasis on maximizing commercial uses on public lands. The federal land management agencies were disappointed that the PLLRC did not clearly confirm a policy of retention and management, and objected to recommendations that sought to shift management authority and discretion to either Congress or state and local governments. The public mostly disregarded the report, seeing it as driven more by political agendas rather than a public outcry for solutions to public land problems.

In the final analysis, Dana and Fairfax concluded "there was a brief cry of horror from most conservationists and preservationists, and then silence.

³⁶⁸ *Id.* at 1–7.

³⁶⁹ Jerome C. Muys, *The Unfinished Agenda of the Public Land Law Review Commission*, Paper No. 4 Pub. Land Law (Rocky Mtn. Min. L. Found. 1992) [hereinafter Muys, *The Unfinished Agenda*].

³⁷⁰ This is an important observation in light of the current debate over the transfer of federal lands to states. See Logan Glasenapp, Collaborative Federalism: The Sage Grouse Solution to the Sagebrush Rebellion, 8 ARIZ. J. ENVTL. L. & POLY 1, 8 (2017); see also Charles Conklin, PLLRC Revisited: A Potpourri of Memories, 54 DENVER L.J. 445, 454 (1977) (discussing how the language utilized in the report can elicit various interpretations).

 $^{^{371}\,}$ George Cameron Coggins et al., Federal Public Land and Resources Law 9 (4th ed., 2001).

³⁷² DANA & FAIRFAX, supra note 131, at 233.

³⁷³ For a summary of responses to the report by conservation and environmental groups, see generally Hamilton K. Pyles, What's Ahead for Our Public Lands? A Summary Review of the Activities and Final Report of the Public Land Law Review Commission (1970); Dana & Fairfax, *supra* note 131, at 235.

³⁷⁴ Dennis Rapp, Comments on 'Commissions and Public Land Policies: Setting the Stage for Change', 54 Denver L.J. 651 (1977).

³⁷⁵ Lambert, *supra* note 300, at 52.

It was unnecessary to criticize the report or to elaborate its themes because the recommendations were being ignored by almost everyone."³⁷⁶

2. Impact and Legacy

The actual impact and legacy of the PLLRC is mixed. On one hand, it completed the most comprehensive review of federal public land and resource law to date.³⁷⁷ On the other hand, many of its recommendations were contradictory,378 leading to different interpretations and making it difficult to implement many of the recommendations.³⁷⁹ To illustrate this confusion, Congressman Aspinall introduced a bill in 1971, at the beginning of the ninety-second Congress, to implement the PLLRC's general policy goals and recommendations consistent with his interest in facilitating resource development and disposal of public lands.³⁸⁰ At the same time, Senator Henry Jackson (D-WA), also a member of the PLLRC, introduced a bill to implement many of the PLLRC's recommendations as interpreted by the conservation community.³⁸¹ After Aspinall was defeated during his reelection bid in 1972 (by a primary candidate running on an environmental agenda), Jackson's bill became the principal vehicle to implement at least some of the PLLRC's recommendations.³⁸² It was ultimately passed as FLPMA, which continues to serve as one of the key laws governing federal public land and resources today. 383

Although some observers question the PLLRC's impact, ³⁸⁴ Jerome Muys, who served as its General Counsel, asserts that "Congress... implemented the vast bulk of the Commission's recommendations." In fact, consistent with the PLLRC's recommendations, Congress soon adopted FLPMA, the Federal Coal Leasing Amendments Act of 1975, ³⁸⁶ NFMA, the Payment in Lieu of Taxes Act of 1976, ³⁸⁷ the Outer Continental Shelf Lands Act

³⁷⁶ DANA & FAIRFAX, supra note 131, at 235.

³⁷⁷ Skillen, *supra* note 348, at 38.

³⁷⁸ The report, for example, promoted widespread retention of public lands on the one hand, while also recommending the disposal of national monuments on the other. *See generally* Charles Conklin, *PLLRC Revisited: A Potpourri of Memories*, 54 DENVER L.J. 454 (1977).

³⁷⁹ See Conklin, supra note 370, at 454.

³⁸⁰ Muys, The Unfinished Agenda, supra note 369.

 $^{^{381}\,}$ R. McGreggor Cawley, Federal Land, Western Anger: Sagebrush Rebellion and Environmental Politics 37 (1993).

³⁸² Lambert, *supra* note 300, at 56–57.

³⁸³ Muys, *The Unfinished Agenda*, *supra* note 369.

³⁸⁴ See, e.g., DAVID A. CLARY, TIMBER AND THE FOREST SERVICE 175 (John G. Clark et al. eds., 1986) (discussing how certain economic and environmental groups were unsatisfied with the Commission's impact).

³⁸⁵ Jerome Muys, *The Public Land Law Review Commission's Impact on the Federal Land Policy and Management Act of 1976*, 21 ARIZ. L. REV. 301, 307 (1979) [hereinafter Muys, *The PLLRC's Impact*].

³⁸⁶ Pub. L. No. 94-377, 90 Stat. 1083 (1975).

³⁸⁷ Pub. L. No. 94-565, 90 Stat. 2662 (1976). The PLLRC report argued that if federal public lands were never to become part of the local tax base, some compensation should be offered to local governments (generally counties) to make up for the presence of non-taxable land within

Amendments of 1978,³⁸⁸ and the Public Rangelands Improvement Act of 1978.³⁸⁹ Several PLLRC recommendations were also administratively implemented, taking on regulatory force and effect.³⁹⁰

Although the PLLRC prompted adoption of several enduring laws and policies, it did not resolve many of the longstanding tensions surrounding federal public land policy. Intense debate persists over disposal or transfer of federal lands to states; the relative balance of resource development, conservation, and preservation; and the appropriate roles of Congress and the executive branch—issues that have been part of the narrative of federal land law, policy, and governance almost from the very beginning. Perhaps it is unrealistic to expect that these underlying tensions will ever be resolved in any permanent manner given the dynamic nature of American society and politics.

But that said, the PLLRC report, along with enactment of NEPA, is credited with altering the trajectory of federal public land and resources policy. By as explained by several astute observers, the report seemed to advocate old, out-of-date values and thus reflected a step backward in light of NEPA and the emerging environmental movement. By most accounts, the PLLRC report helped bring about the end of Aspinall's political career in Congress, which, in turn, signaled the end of an era and the rise to power of new values in public land management.

IV. EXAMINING THE CASE FOR ANOTHER PUBLIC LAND COMMISSION

On the eve of the fiftieth anniversary of *One Third of the Nation's Land*, is it time to consider convening a fifth commission? The mixed history of the four commissions outlined above necessarily poses the question whether a new commission would help to improve the current situation. The arguments for and against such a commission rest on important legal, scientific, political, and other considerations that we address here, ³⁹⁴ while also suggesting an alternative comprehensive review strategy.

their jurisdictions. The PLLRC recommended, "payments [in lieu of taxes] should not represent full tax equivalency." ONE THIRD OF THE NATION'S LAND, supra note 18, at 4.

³⁸⁸ 43 U.S.C. §§ 1344–1355, 1801, 1802, 1841–1845, 1862–1866 (2012).

³⁸⁹ Pub. L. No. 95-514, 92 Stat. 1803 (1978); Robert B. Keiter, *Public Lands and Law Reform: Putting Theory, Policy, and Practice in Perspective*, 2005 UTAH L. REV. 1127, 1222 (2005).

³⁹⁰ Muys, *The PLLRC's Impact*, *supra* note 385, at 308.

³⁹¹ Michael C. Blumm & Lorena M. Wisehart, *The Underappreciated Role of the National Environmental Policy Act in Wilderness Designation and Management*, 44 Envtl. L. 323, 333–34, 337–38 (2014).

³⁹² See, e.g., CAWLEY, supra note 381, at 28; DANA & FAIRFAX, supra note 131, at 235.

³⁹³ Dana & Fairfax, *supra* note 131, at 235.

³⁹⁴ These arguments draw on Lambert, *supra* note 300, at 58–73; Keiter, *Public Lands and Law Reform, supra* note 389, at 1222–26; Martin Nie, The Governance of Western Public Lands: Mapping Its Present and Future 258–61 (2008); Skillen, *supra* note 348, at 37–39.

A. Arguments for Another Commission

Since the last commission convened during the late 1960s, the legal landscape governing the public lands has changed dramatically. Even before the PLLRC released its final 1970 report, Congress had adopted two critically important new laws, namely the Wilderness Act of 1964, which injected an entirely new protective designation into the development versus preservation debate on the public lands, and the National Environmental Policy Act of 1970, which imposed new environmental analysis and public involvement requirements on the agencies. In 1973, soon after the Commission released its report, Congress adopted the Endangered Species Act, placing a new and unforeseen priority on species conservation along with a rigorous interagency consultation process.³⁹⁵ Three years later, Congress drew upon the work of the Commission and adopted two foundational statutes that now govern planning and management on national forest and BLM lands: the National Forest Management Act of 1976 and the Federal Land Policy and Management Act of 1976. Over the years, the courts have rigorously enforced these new laws, imposing previously unknown limitations and obligations on the public land agencies, including elevating endangered species and wilderness protection across the public lands.³⁹⁷ However, Congress overlaid these newer laws on older laws that established quite different priorities and, in some instances, conveyed property rights to public land resources. 398 Reconciling these overlapping and often-conflicting legal mandates has challenged both the agencies and the courts.

These various laws, in turn, have generated additional legal obligations that have substantially changed the way the public land agencies address their resource management responsibilities.³⁹⁹ A myriad of regulations, planning processes, court decisions, and executive orders, though seeking to clarify and implement these newer statutory objectives, have produced

³⁹⁵ Endangered Species Act: A History of the Endangered Species Act of 1973, U.S. FISH & WILDLIFE SERV., https://perma.cc/SD7H-6P4T (last updated Nov. 1, 2017).

³⁹⁶ The NFMA, of course, can also be traced directly to the clearcutting controversy that plagued the national forests during this period. W. Va. Div. of Izaak Walton League v. Butz, 522 F.2d 945 (4th Cir. 1975) (holding that clearcutting of trees violated the Forest Service Organic Administration Act of 1897's plain language); see also Charles F. Wilkinson & H. Michael Anderson, Land and Resource Planning in the National Forests, 64 Or. L. Rev. 1, 40–42 (1985); DANA & FAIRFAX, supra note 131, at 225–29, 316–18.

³⁹⁷ See, e.g., Thomas v. Peterson, 753 F.2d 754, 755–56 (9th Cir. 1985) (enjoining a Forest Service project for failure to analyze effects on endangered species); Parker v. United States, 448 F.2d 793, 795–97 (10th Cir. 1971) (enjoining timber sale contracts until President and Congress had opportunity to consider wilderness protection for public lands contiguous with designated Primative Area protected under the Wilderness Act).

³⁹⁸ See, e.g., Belk v. Meagher, 104 U.S. 279, 283–84 (1881) (explaining that a mining claim on public lands is a property interest of the holder); Nat. Res. Def. Council, Inc. v. Berklund, 609 F.2d 553, 558–59 (D.C. Cir. 1979) (holding that, once an applicant satisfies the coal leasing requirements to mine under the Mineral Leasing Act of 1920, the federal government does not have discretion to deny a permit).

³⁹⁹ See generally, e.g., U.S. FOREST SERV., THE PROCESS PREDICAMENT, supra note 269.

mixed results. In short, the ongoing challenges facing federal land management do not originate in any single law or regulation, but rather from the cumulative and often conflicting nature of these legal developments. An ew public land commission could help untangle this briar patch of law and policy, determine whether these laws can realistically be fit together, and clarify policy priorities and implementation processes, including effective public participation, intergovernmental coordination, and collaborative planning options.

Secondly, since the PLLRC released its report, our knowledge about the social and ecological systems underlying natural resources policy and management has evolved considerably. Among other things, the disciplines of ecology and conservation biology have emerged, providing insights that are slowly being incorporated into the laws and policies governing the public lands. 401 The socio-economic character of the American West no longer resembles the one prevailing fifty years ago, and we are now better able to understand the full social, cultural, and economic implications of natural resource management decisions. 402 Unheard of in the 1960s, ecosystem management and adaptive management concepts have compelled resource managers to move beyond a focus on resource outputs and conventional notions of preservation and multiple-use, which represented the organizing principles of the PLLRC's work. 403 As the role of public participation in agency decision processes has expanded, new and different constituencies are now engaged with public land issues, while new collaborative processes have emerged as a fruitful avenue for addressing local resource management issues.404

A new commission would be useful to address the implications of these changes. It could assess whether the existing legal and institutional systems governing federal land enables managers to work across jurisdictional boundaries and to embrace and plan for uncertainty. Although the U.S. Forest Service and the BLM pay lip service to working across large landscapes, they are still legally required to prepare jurisdiction-specific resource management plans. Given the innovative experiments in large landscape conservation emerging throughout the country, a new commission could help translate this vision to action, perhaps by endorsing a pilot projects strategy or identifying other incentives for the agencies to create comprehensive plans for shared landscapes. A new commission might also explore the merits of integrating traditional indigenous knowledge into

⁴⁰⁰ See id. at 10–12; see also Jacqueline Vaughn & Hanna J. Cortner, George W. Bush's Healthy Forests: Reframing the Environmental Debate 14 (2005).

⁴⁰¹ See supra notes 171–172 and accompanying text.

⁴⁰² See supra notes 17-19 and accompanying text.

¹⁰³ See supra notes 11–12, 17–19 and accompanying text.

⁴⁰⁴ See supra notes 248–249 and accompanying text.

⁴⁰⁵ Forest and Rangeland Renewable Resources Planning Act, 16 U.S.C. § 1604(a), (f)(1) (requiring forest plans for "units" or "each unit" of the national forest system); FLPMA, 43 U.S.C. § 1712(a) (requiring land use plans for "tracts or areas for the use of the public lands," defined as lands managed by the BLM, 43 U.S.C. § 1702(e)).

⁴⁰⁶ See supra notes 176–187 and accompanying text.

decision making and management, 407 and the legal and institutional changes necessary to do this.

Third, a new commission could foster an informed, deliberative dialogue on the future challenges facing federal public lands, such as climate change. Although Congress may not be in a position to reform federal land and resource policy any time soon, a new commission could facilitate badly needed dialogue among diverse interests and agencies. It could generate credible, fact-based information on current problems, help clarify the purpose, place, and priority of existing laws and policies, and generate fresh insights that could improve planning and resource management.

If skillfully conceived and facilitated, a bipartisan commission could forge sufficient common ground among diverse constituent groups to identify the principal problems plaguing the agencies and compile a set of concrete proposals for debate once the political atmosphere improves. At the very least, a commission would clarify potential points of agreement and disagreement among diverse interests. It could also identify existing options for flexibility and experimentation to improve agency processes and decision outcomes. The increasingly robust collection of community-based collaborative processes suggests that diverse interests can reach agreement and solve place-based problems. A new commission could build on these success stories and seek to integrate—to the degree possible—the "secret sauce" shared by these citizen-driven, place-based collaborative working groups into the existing legal and institutional structure.

B. Arguments Against a Commission

Several powerful arguments, however, cut against convening another public land commission. First, the current level of political polarization and partisanship at the national level—in general as well as on public land issues—is not conducive to convening a bipartisan commission to dispassionately examine federal land and resource law. Policy makers and constituent groups have become quite ideologically entrenched, with notable segments of the resource development community advocating for the transfer of federal lands to states and the conservation community playing defense through the courts and elsewhere. At the national level, there simply seems to be very little interest in solving problems through dialogue and deliberation.

Further, a new commission would not start with a blank political slate. The continued existence of the General Mining Law of 1872, for example, makes clear that many laws and policies have deeply committed

 $^{^{407}\;\;}See\;supra$ notes 201–208 and accompanying text.

⁴⁰⁸ KEMMIS, *supra* note 211, at 128–39 (arguing that it is difficult, if not impossible, to integrate organic, home-grown collaborative problem-solving into the existing legal and institutional system).

⁴⁰⁹ See Keiter, Public Lands and Law Reform, supra note 389, at 1222–26; Lambert, supra note 300, at 80–81.

constituencies and remarkable inertia. 410 Recent efforts to reform NEPA and the ESA have revealed constituents on all sides prepared to defend the status quo. 411 These realities suggest that reform proponents must be careful about what they are requesting. Even if a new public land commission was created in good faith, one never knows where it might lead and what it might recommend. The unintended consequences may be less desirable than the status quo.

Second, the history of public land commissions is mixed and has often been driven by partisan agendas. Given today's political climate, it is hard to imagine that a fifth public land commission would not become a vehicle to advance partisan positions. Very few, if any, interest groups are likely to trust that Congress or the current Administration has the political good will to rise above partisan considerations to complete a genuinely independent review of federal land law and policy. A public land commission, whether established by Congress or convened by the Trump Administration, may not command sufficient respect to give its proposed solutions legitimacy in today's political climate.

Many constituents, particularly those participating in community-based collaborative groups, may be reluctant to ask Congress and the administration to address issues they are effectively resolving, notwithstanding the challenges presented by the existing legal and institutional system. These constituents may have little interest in joining a national public land law dialogue, preferring instead to focus on solving problems and improving the quality of life in their watersheds and communities. Simply put, the hyper-partisan political atmosphere engulfing public land law and policy may make it impossible to convene and sustain a representative and respected public land commission.

Third, because public land law and policy has become so complicated, a new review commission would need to rely on experts in the field while securing public acceptance of its work product. Expert commissions, however, no longer command the same level of respect and acceptance that was once the case. In this era of social media, "fake news," and general suspicion of expertise, whether scientific, professional, or academic, a commission could find its hard-earned work product rejected out of hand, as occurred several times in the past. Although expert knowledge and experience might be critical to understanding and addressing many of the problems plaguing public land policy, the ever-present question of values—as reflected in the resource development versus preservation debate—will inevitably influence any set of recommendations that might emerge from

 $^{^{\}rm 410}~$ John D. Leshy, The Mining Law: A Study in Perpetual Motion 358, 370 (1987).

⁴¹¹ See, e.g., H.R. 717, 115th Cong. (2018) (Endangered Species Act); H.R. 6345, 115th Cong. (2018) (Endangered Species Act); H.R. 6106, 115th Cong. (2018) (National Environmental Policy Act).

⁴¹² See, e.g., Lambert, supra note 300, at 58–73.

 $^{^{413}}$ See Tom Nichols, The Death of Expertise: The Campaign Against Established Knowledge and Why It Matters 2–3, 5 (2017); Al Gore, The Assault on Reason 284 (2017).

⁴¹⁴ See Lambert, supra note 300, at 58–73.

such a commission. These realities could well doom an expert-based commission from the outset.

V. ALTERNATIVES TO ANOTHER PUBLIC LAND COMMISSION

Given the arguments against another conventional public land commission, are there other alternatives that merit consideration? The default, of course, is to muddle through and rely upon crisis-driven legislation and administrative actions that are unlikely to advance a more integrated vision of federal land policy for the twenty-first century. Alternatively, is it possible to imagine a comprehensive review convened and supported outside the political realm yet representative of the many diverse interests attached to the public lands? Such an approach could alleviate the partisanship and related political rhetoric that would inevitably accompany a politically constituted commission. It could bring the necessary interests together for a more forthright dialogue geared toward identifying real problems and examining a full array of potential solutions by minimizing political posturing and maximizing collaborative problem-solving.

With these concerns in mind, the alternatives to another public land commission seem to revolve around three approaches that are not mutually exclusive. The challenge, in each case, is whether the approach can generate recommendations that receive broad public support, integrate social and political values with scientific and technical considerations, render policy implementation easier to accomplish, and ultimately foster emergence of a new paradigm for federal public land and resources law, policy, and governance. As we shall see, these three approaches each hold out the possibility of advancing a reform agenda, albeit perhaps one more limited in scope and aspiration.

A. Muddle Through

First, we could stay the course. Given that federal land and resource issues are so complex and polarized, perhaps the best way to move forward is through incremental change and adaptation. Whether it occurs through administrative rule changes, such as the 2012 Forest Service planning rule, or through legislative provisions, such as the Healthy Forest Restoration Act or the Southern Nevada Public Land Management Act, this approach fosters change by addressing bits and pieces of federal land law, policy, and governance as political opportunities arise. Although this approach only promotes piecemeal change, such adaptations nevertheless represent improvements to the legal and institutional system governing federal land and resources. Three examples illustrate the efficacy of this approach to solving problems and facilitating change.

⁴¹⁵ See, e.g., Charles E. Lindblom, The Science of "Muddling Through," 19 Pub. Admin. Rev. 79, 80–81 (1959).

The first example is place-based legislation. ⁴¹⁶ In the spirit of place-based, collaborative problem-solving, diverse stakeholders come together to address multiple use and other conflicts with the goal of developing a legislative proposal for a particular national forest (or part of a national forest). ⁴¹⁷ Depending on the specific place, these stakeholders may address issues related to economic development, ecological restoration, wilderness designation, funding, and other matters. ⁴¹⁸ The catalysts for place-based legislation seem to emerge from a confluence of factors, including perceptions of agency gridlock, problems related to forest planning, unresolved roadless and wilderness issues, local economic concerns, and the efficacy of collaboration. ⁴¹⁹

Place-based collaborative initiatives have produced several legislative proposals that have gained congressional approval, though not without much work and, in several instances, accompanying controversy. In southern Utah, collaborative efforts resulted in passage of the Washington County Growth and Conservation Act of 2009, 420 which resolved festering wilderness designation, endangered species habitat, and local development issues around St. George, Utah, which was facing enormous growth pressures. 421 In northern Montana, a coalition of groups secured passage of the Rocky Mountain Front Heritage Act, 422 which created a new 200,000 acre Rocky Mountain Front Conservation Management Area, designated new wilderness lands, and addressed sensitive livestock grazing, motorized recreation, and mountain biking concerns. 423 In central Idaho, the commonly known Boulder-White Clouds Wilderness Act⁴²⁴ passed Congress in 2015 and established 275,000 acres of new wilderness lands, maintained existing motorized and mountain biking areas, and provided more than \$5 million in federal funds for local community development. 425 Earlier Quincy Library Group legislation, 426 designed to address growing wildfire and forest restoration concerns on three northern California national forests, met with sustained opposition, both before and after passage, from national

⁴¹⁶ See generally Nie & Fiebig, supra note 285.

⁴¹⁷ Id. at 46-48.

⁴¹⁸ Id. at 46, 48.

⁴¹⁹ *Id.* at 48.

 $^{^{420}}$ Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, $\S\S$ 1971–1983, 123 Stat. 991 (2009) (codified at 16 U.S.C. \S 346a-6); The General Plan of Washington County, Utah 2010, at 12–13 (2012), https://perma.cc/FJT7-255B.

⁴²¹ See THE GENERAL PLAN OF WASHINGTON COUNTY, UTAH 2010, supra note 420, at 13-15.

⁴²² Carl Levin and Howard P. 'Buck' McKeon National Defense Authorization Act for Fiscal Year 2015, Pub. L. No. 113-291, § 3065, 128 Stat. 3292, 3833 (2014) (codified at 16 U.S.C. § 539r (Supp. II 2012)); Michael Fiebig, *Celebrating Passage of the Rocky Mountain Front Heritage Act*, Am. RIVERS (Jan. 30, 2015), https://perma.cc/KZ5K-M2DA.

⁴²³ S. Rep. No. 113-177, at 1–9 (2014).

⁴²⁴ Sawtooth National Recreation Area and Jerry Peak Wilderness Additions Act, Pub. L. No. 114-46, § 101, 129 Stat. 476, 477 (2015) (codified at 16 U.S.C. § 1132 (Supp. IV 2012)).

⁴²⁵ Keith Ridler, *President Signs Legislation Creating New Idaho Wilderness*, ASSOCIATED PRESS, Aug. 7, 2015, https://perma.cc/U5QZ-SHR7.

⁴²⁶ Herger-Feinstein Quincy Library Group Forest Recovery Act, Pub. L. No. 105-277, § 401, 112 Stat. 2681-305, 2681-305 (1998) (codified at 16 U.S.C. § 2104 (2012)).

environmental groups who complained of not being included in the collaborative process and questioned the underlying ecological premises for the bill. 427 More recently, a collaborative effort to resolve wilderness, timber, and off-road vehicle controversies on Montana's Beaverhead-Deerlodge National Forest failed in the face of pressure from wilderness advocates who argued that the resulting legislative proposal did not encompass sufficient wilderness acreage and established troublesome timber harvesting quotas that set a bad precedent. The lessons from these examples are evident: such processes must be carefully conceived and implemented to include all potentially affected interests; they will often involve prolonged bargaining and false starts; and they are subject to being derailed by opponents dissatisfied with the substantive compromises that inevitably accompany such an approach. 429

Another example illustrating this incremental approach is the work of the Western Governors' Association (WGA). Established in 1984, the WGA represents the Governors of nineteen Western states and three U.S. territories in the Pacific.⁴³⁰ The association serves as "an instrument of the Governors for bipartisan policy development, information exchange and collective action on issues of critical importance to the Western United States."⁴³¹ The WGA regularly convenes policy dialogues, conducts research, and otherwise seeks to identify solutions to federal land and natural resource issues. Recently, it has catalyzed and convened policy dialogues on species conservation and the ESA, ⁴³³ national forest and rangeland management, drought management, as geg grouse conservation, energy development, water management, wildland fire management, and

⁴²⁷ KEITER, KEEPING FAITH WITH NATURE, *supra* note 175, at 281–84; SARAH PRALLE, BRANCHING OUT, DIGGING IN: ENVIRONMENTAL ADVOCACY AND AGENDA SETTING 186–89, 194–201 (2006).

⁴²⁸ See Nie & Fiebig, supra note 285, at 23–31; Ted Fellman, Collaboration and the Beaverhead-Deerlodge Partnership: The Good, the Bad, and the Ugly, 30 Pub. Land & Resources L. Rev. 79, 97 (2009).

⁴²⁹ *Id.* at 103-06.

 $^{^{430}}$ Luca De Stefanis, $W\!estern$ Governors' Association, OR. EXPLORER, https://perma.cc/5LV7-7XBZ (last visited Feb. 16, 2019).

⁴³¹ *Id.*

⁴³² See id.

⁴³³ W. Governers' Ass'n, WGA Species Conservation and the Endangered Species Act Initiative Year Two Recommendations 1, https://perma.cc/4Q9J-DFRU.

⁴³⁴ W. GOVERNERS' ASS'N, WESTERN GOVERNORS' NATIONAL FOREST AND RANGELAND MANAGEMENT INITIATIVE: THE CHAIRMAN'S INITIATIVE OF MONTANA GOVERNOR STEVE BULLOCK 4 (2017), https://perma.cc/AK2C-7AYF.

⁴³⁵ Hearing Before the S. Comm. on Energy and Nat. Resources, 113th Cong. 74-75 (2013) (written testimony of the Western Governors' Association); Written Testimony of the Western Governors' Association, Western Governors' Association (2013) https://perma.cc/6JSW-V35C (last visited Feb. 16, 2019).

⁴³⁶ Letter from John Hickenlooper, Governor, St. of Colo., & Brian Sandoval, Governor, St. of Nev., to Hon. Jason Weller, Chief, Nat. Res. Conservation Serv. (Mar. 25, 2014), https://perma.cc/CX6P-K5LZ.

⁴³⁷ W. GOVERNORS' ASS'N, 10-YEAR ENERGY VISION: GOALS & OBJECTIVES 6 (2013), https://perma.cc/Q64M-XEZD.

wildlife corridors. 440 Although the WGA's efforts have yet to result in many examples of successful congressional legislation, the group's credibility and political standing has shined a spotlight on these issues, identified viable options for addressing them, and built important relationships that could make a difference in the political arena. 441 In at least one instance, the WGA's wildlife corridors initiative has brought public attention to this matter, prompted crucial research, and helped in establishing the much-heralded Path of the Pronghorn wildlife corridor in western Wyoming, which safeguards what is often described as the longest migration route in the lower forty-eight states. 442

The third example is to identify and integrate best practices into existing laws and institutions, thereby reforming the current system slowly and incrementally. In 2009, Congress authorized the Collaborative Forest Landscape Restoration Program (CFLRP), which embodies principles of ecosystem management and collaborative problem-solving. The CFLRP statutory goals are to create a limited number of projects to accelerate restoration on high-priority landscapes, support economic stability in rural communities, and reduce the risk and associated costs of catastrophic wildfire. An advisory committee oversees implementation of the program and selects projects based on these goals and criteria. Projects are also selected on the strength of their collaborative capacity, demonstrated first and foremost by the mix of individuals and organizations that prepared the proposals. The CFLRP seems to have created the right set of incentives for people with diverse needs and interests to come together and forge a common vision and strategy. According to the program's five-year report,

 $^{^{438}\,}$ W. Governors' Ass'n, Policy Resolution 2018-08: Water Resource Management in the West 1 (2018), https://perma.cc/Z4MS-X7FR.

⁴³⁹ W. GOVERNORS' ASS'N, POLICY RESOLUTION 2016-06: WILDLAND FIRE MANAGEMENT AND RESILIENT LANDSCAPES 1 (2016), https://perma.cc/XL2F-PEET.

⁴⁴⁰ Letter from David Ige, Governor, St. of Haw., & Doug Burgum, Governor, St. of N.D., to Brian Steed, Acting Dir., Bureau of Land Mgmt. & Vicki Christiansen, Interim Chief, U.S. Forest Serv. (Sept. 26, 2018), https://perma.cc/F6GY-T62X.

 $^{^{441}}$ See Ongoing Initiatives, Western Governor's Ass'n, https://perma.cc/4T2X-9K53 (last visited Feb. 16, 2019).

⁴⁴² See David N. Cherney, Securing the Free Movement of Wildlife: Lessons from the American West's Longest Land Mammal Migration, 41 Envtl. L. 599, 599 (2011).

⁴⁴³ This narrative is adapted from McKinney, *supra* note 288, at 10,024–25.

 $^{^{444}~}See$ Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, \$ 4003, 123 Stat. 991, 1141, 1144 (2009).

⁴⁴⁵ *Id.* § 4001.

⁴⁴⁶ *Id.* § 4003(e).

⁴⁴⁷ Id. § 4003(d)(2).

⁴⁴⁸ The accomplishments include more than 1.4 million acres treated to reduce the risk of catastrophic fire; more than 84,570 acres of forest lands treated to achieve healthier conditions through timber sales; more than 1.33 million acres improved for wildlife habitat; more than 73,600 acres treated for noxious weeds and invasive plants; more than 1,256 million board feet of timber volume sold; more than \$661 million in local labor income; and an average of 4,360 jobs per year. CFLRP projects have also attracted new partners and built community relationships, leveraging more than \$76 million in matching funds. By most metrics, the CFLRP seems to be a good example of how to integrate the "secret sauce" of collaborative governance

the ten pilot projects have helped to reduce wildfire risks over more than 1.4 million acres, improved more than 1.3 million acres of wildlife habitat, and generated an average of more than 4,300 jobs annually.⁴⁴⁹

Another illustration of integrating best practices into the existing legal and institutional system is the U.S. Forest Service's revised planning rule. In 2012, after working through a multiparty collaborative process, the agency adopted new administrative rules to guide the process for revising and updating land management plans. According to the Federal Advisory Committee on Implementation of the 2012 Land Management Planning Rule, the 2012 planning rule is the first significant update to U.S. Forest Service planning in thirty years. Among other things, it incorporates commonly accepted principles of public participation, sound science, adaptive management, and ecosystem management. Moreover, it directs the agency to consider such new concerns as climate change, wildland fire, ecosystem services, ecological restoration, connectivity opportunities, and the like in the planning process.

Research on the impact of the 2012 planning rule demonstrates that it has provided the Forest Service with the legal and institutional space to experiment with innovative approaches to public engagement and shared problem solving. Not all of the national forests currently updating their land management plans under the 2012 planning rule have taken advantage of this opportunity. Nevertheless, realizing that these experiments are not perfect and that their final impact remains to be seen, the Forest Service has moved beyond the conventional public engagement approaches as defined in the National Forest Management Act and NEPA. Service has moved beyond the conventional public engagement approaches as defined in the National Forest Management Act and NEPA.

into the existing legal and institutional framework governing public land management. U.S. Forest Serv., U.S. Dep't of Agric., Collaborative Forest Landscape Restoration Program 5-Year Report, FY 2010-2014, at 2 (2015) [hereinafter Collaborative Forest Landscape Restoration Program]; see also R. Patrick Bixler & Brian Kittler, Pinchot Inst. for Conservation, Collaborative Forest Landscape Restoration: A Meta-analysis of Existing Research on the CFLR Program 1 (2015).

- 449 COLLABORATIVE FOREST LANDSCAPE RESTORATION PROGRAM, *supra* note 448, at 2, 15.
- ⁴⁵⁰ See National Forest System Land Management Planning, 36 C.F.R. § 219 (2017).
- 451 For a review of the collaborative process used to shape the 2012 planning rule, see *Collaboration & Public Involvement*, U.S. FOREST SERV., https://perma.cc/22EV-VD8U (last visited Feb. 16, 2019).
 - 452 U.S. FOREST SERV., A CITIZEN'S GUIDE TO FOREST PLANNING (2016).
- 453 The revised rule directs the U.S. Forest Service to "engage the public . . . early and throughout the planning process . . . using collaborative processes where feasible and appropriate," as well as the full spectrum of tools for public engagement. 36 C.F.R. $\S~219.4(a)(1)~(2017)$.
 - $^{454} \ \textit{Id.} ~\S\S~219.1, 219.3, 219.12.$
 - 455 *Id.* § 219.8.
- ⁴⁵⁶ See McKinney, supra note 288, at 10,024–26; CTR. FOR NAT. RES.& ENVIL. POLICY, UNIV. OF MONT., PUBLIC PARTICIPATION: LESSONS LEARNED IMPLEMENTING THE 2012 U.S. FOREST SERVICE PLANNING RULE 4 (2015).
 - ⁴⁵⁷ McKinney, *supra* note 288, at 10,026.
- ⁴⁵⁸ *Id.* It is important to note that even when the Forest Service provides multiple opportunities for meaningful public participation in the decision-making process, some individuals and organizations may still be compelled to challenge both the process and the

In 2016, the BLM undertook similar reforms to its resource management planning process (commonly known as BLM Planning 2.0), ⁴⁵⁰ but Congress rescinded its new rule less than a year later. ⁴⁶⁰ Although the BLM remains committed to revising its planning rules, its remains to be seen what direction these revisions may take.

Although the muddling through approach has proven effective in solving specific problems, usually place-based ones, it does not provide an opportunity to address the larger suite of problems besetting federal land and resource management. It tends to focus on discrete issues and problems that seem ripe for resolution and thus are likely to result in consensus recommendations.461 While such an approach can, through piecemeal reforms, bring important new strategies to the fore, it also limits the quest for more comprehensive or visionary solutions to systemic problems. When the focus is on solving specific problems or place-based controversies, the participants are not likely to view their efforts in the broader context, to concern themselves with identifying overarching legal or institutional shortcomings, to address the need for systemic uniformity, or to be interested in examining potential alternatives to the existing system. In sum, the muddling through approach is unlikely to provide a framework for tackling and resolving the array of legal, policy, and governance issues that have arisen on the public lands during the past fifty years. 462

B. Foster Experiments or Pilot Projects

A second alternative to another conventional public land commission is to foster experiments or pilot projects. ⁴⁶³ During the 1990s, several observers called for a series of pilot projects or experiments in governance as a way to promote more innovative and effective approaches to federal land and resources management. ⁴⁶⁴ In 1999, a broad-based group of participants met in Colorado Springs to test the hypothesis that collaborative processes could and should be more effectively integrated into NEPA decision-making processes. ⁴⁶⁵ Among other things, they called for pilot projects to test the possibilities and limits of collaboration, including the degree to which

outcomes through administrative appeals and litigation. See, e.g., Perry Backus, Conservation Groups Plan to Sue Flathead Forest over Road Management, MISSOULIAN (Nov. 19, 2017), https://perma.cc/7C8R-B34K. For more on this general topic, see supra note 259 and accompanying text.

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 $^{^{459}~}See\,43$ C.F.R. pt. 1601.0-1 (final rule approved Nov. 22, 2016).

⁴⁶⁰ Trump Signs Resolution to Repeal BLM Planning 2.0 Rule, SABIN CTR. FOR CLIMATE CHANGE L. (Mar. 27, 2017), https://perma.cc/X4GM-Y4R7 (last visited Feb. 16, 2019); Blumm & Jamin, supra note 104, at 338–41.

⁴⁶¹ See Lindblom, supra note 415, at 80.

⁴⁶² *Id.*

 $^{^{463}}$ This narrative is adapted from McKinney, supra note 288, at 10,027.

 $^{^{464}\,}$ KEMMIS, supra note 211, at 143–44 provides an excellent review and critique of these various proposals.

⁴⁶⁵ McKinney, *supra* note 288, at 10,027.

decision-making authority might be vested in collaborative groups. ⁴⁶⁶ In the late 1990s, a different group, referred to as the Forest Options Group, suggested a collaborative governance option where a local board of directors would write a national forest plan and hire the forest supervisor. ⁴⁶⁷ The participants would be required to follow all environmental laws, but would be allowed to depart from internal agency procedures for the purposes of making management decisions. ⁴⁶⁸

Yet another broad-based group, meeting in 1995 at the Lubrecht Forest outside Missoula, Montana, recommended creating a new Region 7 of the U.S. Forest Service. 469 The original Region 7 was absorbed into two other regions in 1966, and the regions were never renumbered, so there has not been a Region 7 for decades. 470 The new Region 7 was envisioned as a "virtual region" consisting of a diverse portfolio of pilot or experimental forests. 471 Like the other proposals, it included an opportunity for management plans to be written and implemented by a local collaborative group. 472 More recently, Professor Robert Nelson has called for a series of "charter forests." Much like charter schools, the key principle governing the charter forest concept is "freedom with accountability." According to Nelson, "Charter forests would be freed from the centralized administration of the Forest Service, and management would devolve to autonomous forests capable of more creative and locally responsive management."

The common theme in these various pilot project proposals is that changes to policy and practice would be implemented in diverse locations on a limited geographical scale on select federal lands and then closely monitored to measure public benefits. Final evaluation of these experiments, based on monitoring results, public comment, and other factors, would determine whether the tested policies and approaches might be expanded system-wide. To a limited degree, this type of experimentation is occurring through the Forest Service's stewardship contracting program, the Collaborative Forest Landscape Restoration Program, and the BLM's now-defunct Master Lease Planning process.⁴⁷⁶ Further reform, therefore, might

⁴⁶⁶ Id.

⁴⁶⁷ See The Second Century Report: A Report to the American People by the Forest Options Group: Executive Summary, FOREST OPTIONS GRP. (Jan. 6, 2019), https://perma.cc/WX95-2PA7.

⁴⁶⁸ See The Second Century Report: A Report to the American People by the Forest Options Group: The Forest Options Group Proposal, Forest Options Grp. (Oct. 22, 2018), https://perma.cc/UFQ5-EBVH.

⁴⁶⁹ Daniel Kemmis, *Public Lands: Better Policies from Better Politics, in* Conservation for a New Generation: Redefining Natural Resources Management 48, 53, 55 (Richard L. Knight & Courtney White eds., 2009).

⁴⁷⁰ DAVID E. CONRAD, THE LAND WE CARED FOR... A HISTORY OF THE FOREST SERVICE'S EASTERN REGION 39 (1997).

⁴⁷¹ Kemmis, *supra* note 469, at 55.

⁴⁷² *Id.*

⁴⁷³ ROBERT H. NELSON, CHARTER FORESTS: A NEW MANAGEMENT APPROACH FOR NATIONAL FORESTS 2 (2015).

⁴⁷⁴ Id. at 5.

⁴⁷⁵ Id. at "To The Reader."

⁴⁷⁶ McKinney, *supra* note 288, at 10,024–27.

proceed by building on these experiments and creating a more robust portfolio of pilot projects around the most compelling issues facing federal land managers, namely wildfire, water, habitat loss, and climate change.

The limitation on this reform approach is that experiments in public land governance require either the President or Congress—or both—to create the legal and institutional space to experiment with different models of governance. Although this reform strategy enjoys evident support, Congress and the Trump Administration are currently more focused on rolling back President Obama's environmental achievements, promoting energy development on public lands, and transferring decision-making power, if not outright ownership, to the states through various mechanisms. The present political environment, in short, is not conducive to vigorous expansion of the pilot project concept.

C. Explore Alternative Natural Resource Commission Models

Another alternative to a conventional public land commission is to explore the role of public universities, philanthropic foundations, and other sectors of society to catalyze and convene public processes to examine natural resource law, policy, and governance. This type of approach, built upon independent, decision-relevant research designed to inform the public dialogue, ensures a degree of independence from political pressures that gives credibility to its recommendations. To illustrate variations on this approach, this Subpart highlights three examples and explains their origin, purpose, composition, and outcomes.

1. Western Water Policy Review Advisory Commission: 1995–1998

In 1992, Congress authorized a presidential advisory commission to examine western water policy.⁴⁷⁹ After some delay, the Department of the Interior chartered the commission in 1995 to complete a comprehensive review of federal activities that influence water allocation and use in the nineteen western states.⁴⁸⁰ The commission also examined the legal and institutional framework governing water management, including the role and

⁴⁷⁷ Id. at 10,028.

⁴⁷⁸ *Id.* ("It is important to emphasize that these calls for a portfolio of experiments in public land governance are completely different than ongoing efforts to transfer federal lands to the states."). *Id.* For a review of the legal arguments for and against the so-called transfer movement, see Keiter & Ruple, *supra* note 216, at 2–8; see also Peter Michael et al., Report of the Public Lands Subcommittee, Western Attorneys General Litigation Action Committee, Conference of Western Attorneys General 47 (2016) (providing a detailed legal analysis of the topic and concluding that forcing the transfer of federal public land to states via litigation or congressional legislation stands little chance of succeeding in the courts based on previous court cases and rulings).

⁴⁷⁹ W. Water Policy Review Advisory Comm'n, Water in the West: Challenge for the Next Century 1-2 (1998).

⁴⁸⁰ *Id.* at i–iii, 1-2, 1-4 to 1-6.

performance of the responsible federal agencies. 481 The commission included twelve members of Congress (the ranking majority and minority members of the committees with the greatest jurisdiction over water), the Secretaries of the Army and Interior, and eight citizens appointed by the President. 482 The commission was staffed by two executive directors and Bureau of Reclamation employees, while the Interior Department provided administrative resources.483

The commission accomplished its work over twenty-four months through "public meetings, research, symposia, and the assistance of experts."484 It sought the opinions of people affected by western water policies through a series of public meetings and workshops across the West. 485 The commission established an extensive mailing list, sending newsletters and the draft report to approximately 3,000 individuals and organizations. 486 In addition, the commission contracted for a series of reports consistent with its mandate, including basin studies that explored how various needs, interests, laws, policies, and practices play out in individual basins. 487

Notably departing from past commissions, all of the citizen appointees lived and worked in the West, and all but one of the commission's meetings were held in the West. 488 Moreover, the chair of the commission and its executive director were affiliated with public universities in the West, and the commission drew heavily upon the work of academic experts.⁴⁸⁹ The commission stimulated a robust, informed dialogue on western water policy; captured the status of the region's water problems and the pressures driving change in water management; documented how policies are evolving in response to population growth and a shifting economy; and identified critical future needs with respect to tribal water requirements, riparian and aquatic ecosystems, agricultural practices, and federal coordination.490

Although no single solution emerged for all of these complex challenges, the central theme that surfaced was for the federal government to support watershed and basin innovation, representing a shift towards stakeholder involvement and coordination of agencies along hydrologic rather than political lines. 491 This organizing theme did not contemplate "the creation of federal commissions in each basin."492 Rather, it endorsed the organic emergence of watershed and basin initiatives throughout the West

 $^{^{481}}$ Id. at i.

⁴⁸² *Id.* at 1-2.

⁴⁸³ *Id.* at iv–v.

⁴⁸⁴ *Id.* at i, iv, xi.

⁴⁸⁵ See id. at xi.

⁴⁸⁶ *Id.* at 1-6.

⁴⁸⁷ See id. at i.

See id. at iii, xi.

See id. at iii-v.

⁴⁹⁰ Id. at i.

⁴⁹¹ Id.

⁴⁹² Id.

as effective forums to integrate multiple needs, interests, and federal programs at different spatial scales. 493 Reflecting its sensitivity to the diverse interests involved, all of the commission's recommendations were presented explicitly "within a framework that respected existing property rights in water." 494

2. Pew Oceans Commission: 2000–2003

The Pew Oceans Commission illustrates the leadership role that philanthropic foundations can play in prompting and coordinating a comprehensive review of natural resource law, policy, and governance. More than thirty years after the Stratton Commission's 1969 report on ocean policy and governance, the Pew Charitable Trust recognized that the state of our oceans and coasts had changed dramatically. While some problems identified thirty years ago remained, new environmental, economic, and policy challenges had emerged, all of which exceeded the capacity of the existing governance arrangements. New knowledge about the complexity of marine ecosystems and the need to maintain diversity and resilience in these natural systems further underscored the need for action.

In response, the Pew Charitable Trust convened the Pew Oceans Commission, a bipartisan, independent group of eighteen American leaders, to chart a new course for the nation's ocean policy. Its mandate was "to identify policies and practices necessary to restore and protect living marine resources in U.S. waters and the ocean and coastal habitats on which they depend." The Commission was also directed to raise public awareness of the manifold threats to marine biodiversity and to stress the important economic role that ocean and coastal resources played in the nation's economy. On the protect of the

The Commission was composed of diverse leaders with backgrounds in science, fishing, conservation, government, education, business, and philanthropy. The created four committees charged with reviewing governance, fishing, pollution, and coastal development issues. It also recruited leading scientists to help investigate these issues, including marine aquaculture, invasive species, ocean zoning, climate change, science, and

⁴⁹³ See id.

⁴⁹⁴ Id.

⁴⁹⁵ The Stratton Commission was a congressionally-chartered group to review ocean policy. See William J. Merrell et al., *The Stratton Commission: The Model for a Sea Change in National Marine Policy*, 14 Oceanography, no. 2, 2001, at 11.

⁴⁹⁶ LEON E. PANETTA, PEW OCEANS COMM'N, AMERICA'S LIVING OCEANS: CHARTING A COURSE FOR SEA CHANGE viii (2003). The same concerns over the health of the oceans convinced Congress in 2000 to establish a U.S. Commission on Oceans to review ocean law and policy. *See infra* note 511 and accompanying text.

⁴⁹⁷ W. WATER POLICY REVIEW ADVISORY COMM'N, supra note 479, at i.

⁴⁹⁸ *Id.* at ix.

⁴⁹⁹ Id.

⁵⁰⁰ Id.

⁵⁰¹ *Id.*

education, and to prepare reports on them based on the best available scientific information. $^{502}\,$

Over the course of more than two years, the Commission engaged in a national dialogue on ocean issues. This dialogue included fifteen regional meetings as well as various public hearings and workshops to hear from those who lived and worked along the coasts. The Maine to Hawaii, Alaska to the Gulf of Mexico, the Commission heard from countless citizens, scientists, government officials, fishermen, tourism operators, and business leaders. In addition, the Commission held a series of twelve focus groups with fishermen. Simply put, the Commission was deeply committed to learning from people across the country living, working, and recreating along the coasts and to supplementing that knowledge with high quality scientific information.

In 2003, the Commission published its final report, including recommendations "to ensure healthy, productive, and resilient marine ecosystems for present and future generations." Among other things, it argued that the nation must change its present perspective and embrace "an ethic of stewardship and responsibility toward the oceans." It bluntly asserted that "we must treat our oceans as a public trust." In 2005, the Pew Oceans Commission joined forces with the U.S. Commission on Oceans (established by Congress in 2000 and appointed by President George W. Bush in 2001)⁵¹¹ to unify their efforts and advance their overlapping and complementary recommendations. Significantly, both commissions recommended establishing new marine protected areas, and President Bush and President Obama each designated new marine national monuments during their presidencies. Moreover, in 2013, President Obama issued Executive Order 13,547 to establish a national ocean policy with a strong federal coordinating role and a framework for implementing coastal and

⁵⁰² *Id.*

⁵⁰³ *Id.*

⁵⁰⁴ Id.

⁵⁰⁵ *Id.*506 *Id.*

⁵⁰⁷ Id

⁵⁰⁸ *Id.* The Pew Commission report predated the U.S. Commission on Oceans report by a year, evidently seeking to influence that body's final conclusions and recommendations. See *infra* note 512 and accompanying text.

W. WATER POLICY REVIEW ADVISORY COMM'N, *supra* note 479, at x.

⁵¹⁰ Id.

⁵¹¹ Oceans Act of 2000, Pub. L. 106-256, 114 Stat. 644 (2000); Presidential Ocean Commission Panelists Named, ASCRIBE NEWS, June 18, 2001, available at 2001 WL 2887530, at *1.

 $^{^{512}}$ Exec. Order No. 13,366, 69 Fed. Reg. 76,591, 76,591 (Dec. 17, 2004); U.S. COMM'N ON OCEAN POLICY, AN OCEAN BLUEPRINT FOR THE 21ST CENTURY 55 (2005), https://perma.cc/XN4K-H6CO.

⁵¹³ See Proclamation No. 8031, 71 Fed. Reg. 36,443 (June 26, 2006) (establishing the Northwestern Hawaiian Islands Marine National Monument, later renamed Papahanaumokuakea Marine National Monument); Proclamation No. 8337, 74 Fed. Reg. 1,577 (Jan. 6, 2009) (establishing the Rose Atoll Marine National Monument); Proclamation No. 9,496, 81 Fed. Reg. 65,159 (Sept. 15, 2016) (establishing the Northeast Canyons and Seamounts Marine National Monument).

marine spatial planning overseen by an Interagency National Oceans $\operatorname{Council.}^{514}$

3. ESA @ 30 Project: 2001–2006

To celebrate the thirtieth anniversary of the ESA, Professor Dale Goble from the University of Idaho and other scholars and practitioners coordinated a systematic evaluation of the Act. The objective of the ESA @ 30 Project, as it was known, was to engage policy makers, those impacted by the ESA, and those charged with its implementation to identify ways to improve its effectiveness. The project began in late 2001 when Professor Goble hosted a meeting to explore the merits of this idea. Housed at the Bren School of Environmental Science and Management, University of California, Santa Barbara, the organizers agreed to two guiding principles at the outset: all of the information and analyses of the ESA should be scientifically rigorous; and the dialogue should engage the full spectrum of interests and perspectives on the ESA.

The organizers invited a select group of nearly thirty scholars and practitioners—including biologists, economists, geographers, land-use planners, natural resource lawyers, philosophers, and policy analysts—to a two-day meeting in November 2002 to discuss the ESA. The organizers also invited four individuals who had played significant roles in the evolution of the ESA. The discussion was focused around three broad questions: What have we learned from the ESA's successes and failures?; what are we seeking to protect and why?; and how can we maintain biological resources and services on the working landscape? The second services are selected as services are selected as selected as selected group of nearly thirty scholars and practically selected and played significant roles in the evolution of the ESA. The discussion was focused around three broad questions: What have we learned from the ESA's successes and failures?; what are we seeking to protect and why?; and how can we maintain biological resources and services on the working landscape?

In the aftermath of this initial meeting, the participants prepared 40 papers designed to address these three questions from diverse disciplinary perspectives.⁵²³ Once the papers were peer reviewed, they provided the analytical basis for a subsequent November 2003 conference held in Santa

⁵¹⁴ Exec. Order No. 13,547, 75 Fed. Reg. 43,023, 43,027 (July 19, 2010). For more on this ocean planning effort, see Robin Kundis Craig, *An Historical Look at Planning for the Federal Public Lands: Adding Marine Spatial Planning Offshore*, J. Energy & Envill. L. 1 (Winter 2015). President Trump, however, has rescinded the Obama order and refocused national ocean policy on economic rather than ecological concerns. Exec. Order No. 13,840, 83 Fed. Reg. 29,431 (June 19, 2018).

⁵¹⁵ THE ENDANGERED SPECIES ACT AT THIRTY: RENEWING THE CONSERVATION PROMISE xi-xiv (Dale D. Goble et al. eds., 2005) [hereinafter Renewing the Conservation Promise].

⁵¹⁶ Id.

⁵¹⁷ *Id.*

⁵¹⁸ *Id*.

⁵¹⁹ Id.

⁵²⁰ Id

⁵²¹ Id. (Michael J. Bean (Director of Wildlife Program, Environmental Defense), James L. Caswell (Administrator, Office of Species Conservation, State of Idaho), William J. Snape III (Vice President for Law and Litigation, Defenders of Wildlife), and Steven P. Quarles (Attorney, Crowell & Mooring, LLP)).

⁵²² Id.

⁵²³ Id.

Barbara.⁵²⁴ A group of nearly 100 individuals representing a varied cross-section of the interests impacted by the ESA—including NGO representatives from both the conservation and development communities as well as federal, state, and local governmental representatives—met to discuss the papers and share ideas. Several notable figures, such as former Interior Secretary Bruce Babbitt and Idaho Governor Dirk Kempthorne, also addressed the group.⁵²⁵

This second conference revealed a remarkable degree of consensus about potential ideas for changes to enhance the ESA's effectiveness. These ideas were further refined at a series of topical workshops coordinated by a four-person committee. Each workshop was hosted by a particular NGO, organized by agency personnel charged with responsibility for that topic, and included participants representing the diversity of interests and viewpoints on that particular topic. The workshops addressed such issues as habitat conservation plans, state-based wildlife programs, ESA one-stop shopping, and landowner incentives. Building on the points of consensus reached at the November 2003 conference, the workshops developed more detailed proposals.

To capture and share the information and recommendations from these various meetings, the project produced two books: *The Endangered Species Act at Thirty: Renewing the Conservation Promise* (2005) and *The Endangered Species Act at Thirty: Conserving Biodiversity in Human-Dominated Landscapes* (2006).⁵³¹ Further, the organizers gave a series of briefings to different groups that included congressional staffs, the U.S. Fish & Wildlife Service, the Western Association of Fish and Game Administrators, The Nature Conservancy, the American Farm Bureau Federation, National Cattlemen's Beef Association, Plum Creek Timber Company, Environmental Defense, National Wildlife Federation, and the Center for Biological Diversity.⁵³² Although Congress has remained deadlocked over ESA revisions, the project's recommendations to accelerate the listing process and to improve coordination with the states appear to have influenced recent agency practices.⁵³³ In any event, the ESA@30 Project

⁵²⁴ Id.

⁵²⁵ *Id.*

⁵²⁶ *Id.*

⁵²⁷ *Id.*

⁵²⁸ *Id.*

⁵²⁹ Id.

⁵³⁰ *Id.*

 $^{^{531}}$ See generally id.; The Endangered Species Act at Thirty: Conserving Biodiversity in Human-Dominated Landscapes (J. Michael Scott et al. eds., 2006).

Fig. 32 Renewing the Conservation Promise, *supra* note 515, at xi–xiv.

⁵³³ *Id.* at 297–99, 303–04. The project introduced the concept of "conservation reliant species," which is now being used by the U.S. Fish & Wildlife Service in evaluating species for listing and delisting under the Act. Author Robert Keiter's phone interview with Dr. Michael Scott, a principal organizer of the ESA@30 Project; *See* J. Michael Scott et al., *Conservation Reliant Species and the Future of Conservation*, 3 Cons. Ltrs. 91 (2010); *Endangered Species, Kirtlands Warbler Fact Sheet*, U.S. FISH & WILDLIFE SERV, https://perma.cc/ZJ5E-MZQ6 (last updated Oct. 10, 2018).

represents the most recent comprehensive review of the ESA, and its recommendations will undoubtedly inform future reform efforts.

These three reform initiatives share several critical attributes. They each undertook to review discrete natural resource problems—western water policy, ocean policy, and the ESA—with the support of experts and relevant background research, and by engaging in a structured dialogue with concerned constituencies to understand on-the-ground concerns and impacts. Thev produced highly credible written reports and recommendations subject to public scrutiny and further debate. Only one project was federally funded; the other two drew upon philanthropic and other funding sources, thus maintaining an important degree of independence that helped legitimize their conclusions. University researchers played important roles in each project, bringing academic rigor and knowledge to the task. Each commission kept its eye on the potential political ramifications of its work, well aware of its commitment to fomenting change. And each achieved a certain level of success, which suggests that narrowly focused efforts overseen by an independent entity can serve to promote meaningful legal and policy reforms, even in the most contentious realms.

D. Seeking a Path Forward

Given these various options, an expanded Wasatch Front Working Group recently endorsed the idea of a focused independent national policy dialogue. The participants agreed that, at this time, the last PLLRC does not represent a useful model for addressing today's federal public land law, policy, and governance problems. During the last PLLRC, Congress was both informed and engaged on public land issues, and the political climate was more cooperative and less adversarial—elements that simply do not exist today. The PLLRC was very well-funded over a period of several years, produced extensive reports, and was able to provide many opportunities for public engagement. The participants also agreed that the challenges facing public land management today are so complex and divisive as to be, collectively, unbounded when considered together. A meaningful comprehensive review would have to be so broad that it would likely cost

 $^{^{534}}$ See Univ. of Utah S.J. Quinney Coll. of Law et al., supra note 22, at 1–3. See Appendix 1 for the expanded list of people consulted.

Univ. of Utah S.J. Quinney Coll. of Law et al., supra note 22, at 2.

⁵³⁶ See id. at 16-19.

⁵³⁷ See id. at 20–22 (provides a timeline of the Commission over a period of several years and details the work products from varying years); see also Memorandum from Pat Field, Consensus Building Inst., et al., to Participants and Other Interested People (Apr. 16, 2016) (on file with the University of Montana) (summarizing the Spring 2018 Working Session addressing the future of federal public lands) [hereinafter Memorandum from Pat Field].

⁵³⁸ See Univ. of Utah S.J. Quinney Coll. of Law et al., supra note 22, at 8.

tens of millions, and still may not cover the full scope of public lands issues today. Further, the participants acknowledged that it is hard to predict the future with any certainty, particularly in light of the impacts of climate change. Sag And they noted that no matter how inclusive a comprehensive visioning process might aspire to be, it will inevitably miss certain stakeholders. Sag In sum, it was hard to see a path forward for an expansive initiative like the last PLLRC.

Instead, the expanded working group endorsed an alternate path forward. Rather than focus on a comprehensive review, the group concluded that it might be more effective to focus on issues or problems that are more bounded in scope and thus offer a clear opportunity to implement the outcomes of any process. They believed the issue under review must be ripe, people must be ready to address it, and appropriate data must be available to inform the process. The participants also agreed that any reform effort must articulate a clearly defined goal; focus on problem-solving; engage all stakeholders and sovereigns; frame the issue at the appropriate scale; create modest expectations; and seek marginal improvements. The patternate of the process of the pr

As a result, the participants are contemplating an independent-type commission, with the characteristics mentioned above, to address the topic of outdoor recreation on federal public lands. As noted, outdoor recreation has become the dominant use of public lands in the American West. Nearly 40% or roughly 150 million acres of the West's public lands are now set aside primarily for conservation and recreation purposes in the form of national parks, wilderness areas, wildlife refuges, national recreation areas, and the like. Various proposals call for placing additional acreage in a similar status, most of it with significant recreational use potential. In 2017, the national parks tallied more than 330 million visitors, while the national forests logged 148 million visits. Other areas also attracted increased numbers of visitors, including national wildlife refuges, BLM managed public lands, recreation areas, waterways managed by the United States Army Corps of Engineers, state parks, and local open space. In April 2018, Interior Secretary Zinke issued an order calling for greater recreation access

 $^{^{539}}$ *Id.* at 2.

⁵⁴⁰ *Id.* at 3.

⁵⁴¹ *Id.* at 10.

⁵⁴² Memorandum from Pat Field, *supra* note 537.

⁵⁴³ Id.

⁵⁴⁴ The following narrative is based in part on Rebecca W. Watson, Speech at the Wallace Stegner Center 23rd Annual Symposium: Western Playgrounds/Outdoor Recreation: Who Cares? (Mar. 15–16, 2018), https://perma.cc/X9Y4-ZYR9.

⁵⁴⁵ See supra notes 125–138 and accompanying text.

⁵⁴⁶ See Keiter, Toward a National Conservation Network Act, supra note 121, at 62–63.

⁵⁴⁷ See Economists Urge President Obama to Protect Federal Public Lands, HEADWATERS ECON. (Nov. 2011), https://perma.cc/76XQ-YSU9 (summarizing a letter from over 100 academics and economists proposing to increase federally protected lands).

⁵⁴⁸ See Sophie Quinton, With Outdoor Recreation Tourism Booming, Towns Pick Up the Tab for Squeezed US Forest Service, DENVER POST (Oct. 19, 2018), https://perma.cc/UB4A-8ZDB.

⁵⁴⁹ Watson, *supra* note 544 (discussing the increased visitation to the aforementioned sites).

on lands managed by the Department.⁵⁵⁰ By any measure, Americans have found the public lands, are recreating on them in large numbers, and are pursuing a diverse and sometimes conflicting array of recreational activities.

Recreation is also big business. Pursuant to the Outdoor Recreation Jobs & Economic Impact Act of 2016, ⁵⁵¹ the U.S. Bureau of Economic Analysis calculated the economic impact of outdoor recreation for the first time. ⁵⁵² At close to \$350 billion annually, outdoor recreation constitutes approximately 2% of the U.S. gross domestic product (GDP)—more than agriculture at 1%; more than mining and oil and gas development at 1.4%; and even more than legal services at 1.3% of GDP. ⁵⁵³ The outdoor recreation economy's 3.8% growth rate is faster than the growth rate of the overall economy at 2.8%. ⁵⁵⁴ In 2017, the Outdoor Industry Association, using slightly different methodology, calculated the economic impact of outdoor recreation at \$887 billion. ⁵⁵⁵ Either way, recreation is a significant and growing contributor to the nation's GDP. Moreover, the Outdoor Industry Association calculates that outdoor recreation accounts for more than 7 million domestic jobs. ⁵⁵⁶

As the population continues to grow in the urbanized West, recreational demand is accelerating, in part due to aggressive advertising and marketing by states and communities. Along with that growth comes disappointing behavior; conflict among different types of recreationists; and conflicts among recreation, wildlife, energy development, traditional tribal activities, and other federal land uses. This increase in recreational use of public lands also comes at a time when federal land management agency budgets have been flat or declining for twenty years. Each of the four land management agencies faces a "deferred maintenance" or "maintenance

See Press Release, U.S. Dep't of the Interior, supra note 108.

⁵⁵¹ Pub. L. No. 114–249, 130 Stat. 999 (2016).

⁵⁵² Bureau of Economic Analysis Releases for the First Time Prototype Statistics Measuring the Economic Effects of Outdoor Recreation, DEP'T OF COM. (Feb. 14, 2018), https://perma.cc/3SXX-4QRT.

⁵⁵³ Outdoor Recreation a Large and Growing Percentage of U.S. Economy, Outdoor Indus. ASS'N (Sept. 20, 2018), https://perma.cc/6GTN-XY6S; Frederick Reimers, Government Puts Outdoor Industry Size at \$373 Billion, Outside (Feb. 14, 2018), https://perma.cc/PJ3E-CXDH; Interactive Access to Industry Economic Accounts Data: GDP by Industry, Bureau Econ. ANALYSIS (Apr. 19, 2018), https://perma.cc/VW4L-9NHT (follow "Value Added by Industry" link; then follow "Value Added by Industry as a Percentage of Gross Domestic Product (A) (Q)").

⁵⁵⁴ Bureau of Economic Analysis Releases for the First Time Prototype Statistics Measuring the Economic Effects of Outdoor Recreation, supra note 552.

 $^{^{555}\,}$ Outdoor Indus. Ass'n, supra note 124, at 5.

⁵⁵⁶ *Id.* at 18.

⁵⁵⁷ See id. at 15 (showing spending on outdoor recreation in the West).

⁵⁵⁸ See, e.g., Scott G. Miller, Environmental Impacts: The Darkside of Outdoor Recreation, in Outdoor Recreation: Promise and Peril in the New West, at 1 (Nat. Res. Law Ctr., Univ. of Colo. Sch. of Law 1998) (describing the impact of outdoor recreation on wildlife).

⁵⁵⁹ See U.S. Forest Serv., Fiscal Year 2018 Budget Overview, at A-1 (2017) (showing the ten-year summary of appropriations to the Forest Service); U.S. Dep't of Interior, Budget Justifications and Performance Information Fiscal Year 2018, at Overview-2 (2018) (showing consistency of National Park Service budget for last three years).

backlog" challenge that collectively totals close to \$19 billion. 560 To put that figure into context, the BLM's annual budget is roughly \$1 billion. 561 In any event, it is a large number, and maintenance is an on-going, not one-time obligation. Moreover, there appears to be an emerging consensus within the public land constituencies that the time is ripe to address these problems and to provide the agencies with the necessary tools and resources to meet the outdoor recreation challenge. 562

This remarkable growth in outdoor recreation on federal public lands and the ensuing problems it has generated raise two principal questions. First, is sufficient land available and accessible for recreational use, or should we set aside additional acreage, perhaps with new designations, for recreation purposes? Some potential solutions include establishing designated recreational areas on federal lands, setting aside additional federal and other acreage primarily for recreational use, ensuring a secure funding source for the acquisition of new lands for recreational access and use, acquiring new recreational lands proximate to minority communities, and collaborating with corporate and other interests to invest in new recreational lands. Second, are we properly stewarding the lands now being used for recreational purposes, or can we identify and apply additional resources and management techniques to this task? Some possible solutions include visitation limitations, reservation systems, channeling uses, equipment taxes, promotional efforts to diversify recreational users, new fees, and enhanced public education efforts.

In response, the expanded Wasatch Front Working Group is contemplating a multi-year national policy dialogue to identify and advance strategies promoting more effective management of federal lands for recreation, including more sustainable, long-term sources of funding. The desired outcomes of this national policy dialogue may include, but would not be limited to 1) developing and promoting strategies to match federal, state, and private recreation management budgets with the growing demand for recreational opportunities; 2) documenting and sharing best practices and innovative tools to sustain diverse recreational uses on public lands; 3) providing education about recreation and outdoor ethics; 4) fostering interagency recreation management plans; 5) exploring options available for the designation of new and improved recreation-focused acreage. The dialogue

⁵⁶⁰ CAROL HARDY VINCENT, CONG. RESEARCH SERV., DEFERRED MAINTENANCE OF FEDERAL LAND MANAGEMENT AGENCIES: FY2007-FY2016 ESTIMATES AND ISSUES 7 fig.3 (2017).

⁵⁶¹ U.S. DEP'T OF THE INTERIOR, FISCAL YEAR 2018 INTERIOR BUDGET IN BRIEF, at BH-7 (2017), https://perma.cc/KH3T-FB9W.

⁵⁶² It has been more than thirty years since the last comprehensive review of outdoor recreation policy and practice in the United States. *See* George H. Siehl, *The Policy Path to the Great Outdoors: A History of the Outdoor Recreation Review Commissions* 21 (Res. for the Future DP 08-44, 2008).

 $^{^{563}\,}$ Wallace Stegner Ctr. For Nat. Res. & Envil. Policy et al., The Future of Federal Public Land and Resources: A Needs Assessment 6 (2017).

⁵⁶⁴ *Id.* at 5 (discussing the Wasatch Front Working Group's future objectives).

would be designed to include all stakeholders, ⁵⁶⁵ draw upon experts for data and analysis, engage in joint fact finding with all participants, and produce viable recommendations to improve recreation management on the public lands. ⁵⁶⁶ The ultimate goal would be to ensure adequate space and funding as well as effective tools to address the nation's mounting public land recreation problems. ⁵⁶⁷

VI. CONCLUSION

By any measure, the public lands are an essential dimension of the identity, character, and fabric of the American West. These extraordinary lands have shaped—and continue to shape—where and how people live on the landscape. But like everything else, change is afoot across the region's public lands, and these changes will affect the local quality of life and environment. As more people head westward, greater demands are being placed on the region's public lands and resources, for water, energy, wilderness, recreation, environmental values, and the like. Although some resource uses may be compatible, others are not. Along with the cumulative impact of escalating development pressures and climate change, it is becoming ever harder to manage these growing demands. Indeed, the margin of error seems to be getting smaller and smaller. And there is no reason to expect the pace of change to slow.

With change engulfing the West and its public lands, controversy and conflict have ensued. The competition between resource extraction, recreational, and wildlife conservation interests has prompted seemingly endless political fights and litigation, as well as efforts to find new ways to address these conflicts. Recurrent calls to replace federal ownership or management with state and local control have exacerbated tensions, as reflected in the recent armed standoffs in southern Nevada and eastern Oregon. The mounting level of conflict, fueled in large measure by the changes afoot, has placed obvious strains on the laws, policies, and institutions designed to govern the public lands. These strains seem to revolve around two intertwined concerns: the acceptable uses on public lands and agency decision-making processes. Because those who control the decision-making process determine what constitute acceptable uses,

 $^{^{565}}$ Id. A representative sample of organizations to consult during the "convening assessment" is presented in Appendix 2.

⁵⁶⁶ See id. at 4 (discussing the need to clarify management objectives).

 $^{^{567}}$ See id. at 15 (addressing the need to reform the budget process for public lands).

 $^{^{568}}$ *Id.* at 7; see also Outdoor Indus. Ass'n, supra note 124, at 16 (showing spending on outdoor recreation in the West).

⁵⁶⁹ WALLACE STEGNER CTR. FOR NAT. RES. & ENVIL. POLICY ET AL., *supra* note 563, at 7.

⁵⁷⁰ See Siehl, supra note 562, at 18 (discussing how partisanship delays addressing outdoor recreation at the national level); see also Keiter, The Law of Fire, supra note 226, at 332 (discussing the rise of environmental litigation especially regarding wildfires).

 $^{^{571}}$ See Strasser, supra note 20 (outlining the anti-federal sentiments inspiring the Nevada stand-off); see also Johnson, supra note 20 (describing the public land debate in the wake of the Malheur occupation).

additional clarity and flexibility in the legal system and the institutional structures governing these lands would better enable the responsible agencies to address the changes and challenges they face.

The fiftieth anniversary of *One Third of the Nation's Land* in 2020 provides a timely opportunity to take stock of the past, present, and future of federal public lands and resources. In the past, as we have seen, the public land commission has served as a principal vehicle for addressing change and conflict on the public lands. Although the track record of past commissions is mixed, the most recent PLLRC plainly helped to reshape the laws and policies prevailing across the western federal lands. With political buy-in and support, the commission was able to undertake a comprehensive review of the governing legal framework, giving its recommendations real credibility that resulted in many of them being eventually translated into important new laws and policies. Because the same conditions are not present in today's polarized political climate, it would be difficult at this moment to undertake a similar comprehensive review with an eye toward meaningful reform.

This should not stop us, however, from considering alternative approaches to legal, policy, and institutional reform. Although the strains associated with change and conflict are badly taxing the system, promising new innovative approaches to resource management are emerging organically, reflecting advances in scientific knowledge, pioneering placebased partnerships, and incremental legal and policy adaptations. These approaches seek to promote collaborative decision processes, interjurisdictional coordination, ecological sensitivity, and adaptive management strategies. We can continue muddling along with these types of piecemeal and place-based changes, or we can take more purposeful (and perhaps less comprehensive) steps toward reform, understanding that the lessons learned from pilot projects or more targeted reform efforts can pave the way for eventual systemic changes. The Wasatch Front Working Group, convinced that outdoor recreation has become a dominant use on public lands and that current recreation pressures are approaching the breaking point, is assessing whether a focused, broad-based dialogue on the laws and policies governing recreational use could produce meaningful reform proposals and improve on-the-ground management.⁵⁷² Given the effect that recreation inevitably has on other land uses, such a review could pave the way for additional review and reform efforts.

Public land management has evolved—and will continue to evolve—in a context defined by increasingly diverse and conflicted interests, complex institutional missions, and remarkable social, economic, and environmental changes. To ensure federal public land management is ready to meet the growing challenges of the twenty-first century, it is time to begin systematically analyzing the changes that have occurred and related implications, to critically examine the successes and shortcomings in current management approaches, and to develop thoughtful

WALLACE STEGNER CTR. FOR NAT. RES. & ENVIL. POLICY ET AL., supra note 563, at 3.

recommendations to reshape public land law, policy, and governance over the next several decades. In sum, it is time to contemplate the future and to envision what a new paradigm for the nation's irreplaceable public lands might look like.

Appendix 1

Participants, Wasatch Front Working Group

Initial Participants

- Robert Keiter, University of Utah (co-Principal Investigator)
- Matthew McKinney, University of Montana (co-Principal Investigator)
- William Barquin, Attorney General, Kootenai Tribe/Nation
- Dinah Bear, former general counsel, White House Council on Environmental Quality
- Anne Castle, former Assistant Secretary Water and Science, U.S. Department of the Interior
- Sally Collins, former Associate Chief, U.S. Forest Service
- Patrick Field, Consensus Building Institute (lead facilitator)
- John Leshy, Hastings School of Law/former solicitor, U.S. Dept. of the Interior
- Peter Pollock, Lincoln Institute of Land Policy
- John Ruple, University of Utah (lead researcher)
- Lynn Scarlett, The Nature Conservancy/former deputy secretary, U.S. Dept. of the Interior
- Rebecca Watson, former Assistant Secretary Lands and Minerals Management, U.S. Dept. of the Interior
- Charles Wilkinson, University of Colorado

Expanded List of People Consulted

- Sarah Bates, National Wildlife Federation
- Bret Birdsong, University of Nevada School of Law, Former Deputy Solicitor, U.S. Dept. of the Interior, Obama Administration
- Sharon Buccino, Natural Resources Defense Council
- Adam Cramer, Outdoor Alliance
- John Freemuth, Boise State University
- Steve Jester, Partners for Conservation
- Daniel Kemmis, Former Mayor of Missoula, Montana
- Brian Kittler, Pinchot Institute for Conservation
- Dirk Kramer, Murie Center

- Kevin Krasnow, Teton Science School
- Ashley Korenblat, Public Land Solutions
- Paul Larmer, High Country News
- Brecken Larson, Washburn School of Law
- Char Miller, Pomona College
- Jeff Mow, Glacier National Park
- Jim Ogsbury, Western Governors' Association
- Tom Oliff, Northern Rockies Landscape Conservation Cooperative
- Emily Olsen, National Forest Foundation
- Will Price, Pinchot Institute for Conservation
- Ray Rasker, Headwaters Economics
- Danya Rumore, Wallace Stegner Center for Land, Resources, and the Environment, University of Utah
- Mary Sexton, Former county commissioner and Director, Montana Department of Natural Resources and Conservation
- Jonathan Shuffield, National Association of Counties
- James Skillen, Calvin College
- Gary Tabor, Center for Large Landscape Conservation
- Jay Tanner, Partners for Conservation (Utah)
- Mary Wagner, Former Associate Chief, U.S. Forest Service
- Melyssa Watson, The Wilderness Society
- Chris Wood, Trout Unlimited