

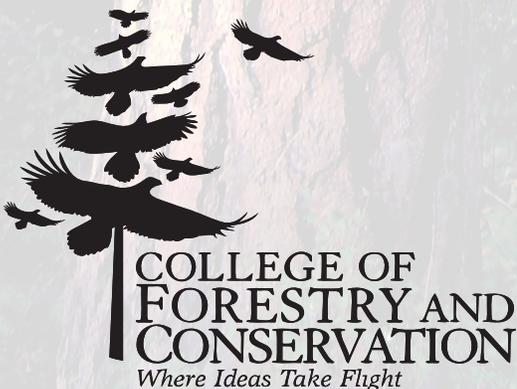
# National Forests Policy Assessment

Report to Montana Senator Jon Tester

James Burchfield and Martin Nie

College of Forestry and Conservation  
The University of Montana

Missoula, Montana  
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The University of  
**Montana**

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## **Preface**

In January 2008 Senator Jon Tester of Montana requested that University of Montana's College of Forestry and Conservation initiate an outside and independent assessment of selected issues facing the USDA Forest Service (USFS). The purpose of this initial report is to meet the Senator's request for an immediate analysis of selected policy issues and provide a set of policy recommendations. The authors are solely responsible for its content. It draws from our academic research and professional experience in National Forest management.

The authors recognize, however, that this report is only a partial examination. We hope it will lead to a more comprehensive examination of forest policy in the future. We propose assembling a steering committee and diverse team of forest management professionals and law/policy specialists (organized into working groups) in 2009 that would analyze an agreed upon set of issues and problems related to forest management. We believe that only through a rigorous and detailed study of these issues by inclusive and diverse points of view can we fairly analyze the problems faced by the USFS and what should be done about them.

## Introduction

This initial assessment of major challenges facing the Forest Service addresses institutional and contextual issues. First, we sketch the political-legal context of National Forest management. We then briefly review why National Forests will become increasingly important in the Twenty First Century and discuss some of the problems faced by the U.S. Forest Service (USFS) in managing them. This is followed by a selected list of seven policy recommendations, substantive and process-based, that we hope will be considered by the Senator and other decision makers. Our findings and recommendations are summarized below:

- **Lawmakers should reinvest in the protection and management of National Forests and fund the USFS at levels commensurate with its responsibilities.**
- **There is broad-based national and state-level support for administratively protecting inventoried roadless areas and these lands should be protected accordingly.**
- **The 2008 forest planning regulations fail to find an appropriate balance between adaptability and enforceable standards and should be rewritten.**
- **Private land development adjacent to National Forests is an increasing problem that must be systematically confronted via an assortment of policy approaches and tools, from fully-funded land acquisition programs to landscape-level planning initiatives.**
- **Forest restoration begins with comprehensive transportation planning that identifies and funds upgrading, maintenance, or decommissioning forest roads.**
- **Legal standards must play an essential role in National Forest management. Increasing conflict and uncertainty has led to alternative methods of conflict resolution, including place-based (forest-specific) legislative proposals. Several questions need to be answered before these approaches are replicated elsewhere. Their formation should be as transparent and inclusive as found in existing decision making processes.**
- **A comprehensive assessment of National Forest policy and management by an inclusive set of interests and perspectives should be initiated in 2009.**

This report's analysis and recommendations are founded upon a core set of values and beliefs. First, we are unwavering in our support of federal lands

and the National Forests. Our federal lands heritage provides a wealth of benefits that should be celebrated, safeguarded, and managed for the public interest. Second, we deeply respect the work and commitment of the U.S. Forest Service and recognize the great challenge of managing the public's land in a pluralistic democracy. Finding "the greatest good for the greatest number" is no easy task. Third, we want to find forest policy solutions that protect the National Forests and sustainable communities. Trade-offs are unavoidable. But common ground has been uncovered in the past and can be broadened in the future.

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## Political-Legal Framework

Three laws are critical to understanding what the USFS does and how it is supposed to do it: the Organic Administration Act of 1897 (Organic Act), the Multiple Use Sustained Yield Act (MUSYA) of 1960, and the National Forest Management Act (NFMA) of 1976. These laws, along with overarching statutes such as the Administrative Procedures Act (APA), the National Environmental Policy Act (NEPA), and the Endangered Species Act (ESA), provide the basic legal framework in which the USFS manages 193 million acres of federal forests and grasslands.

The 1897 Organic Act states in part that "No national forest shall be established, except to improve and protect the forest within the boundaries, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States."<sup>1</sup> This broad mandate establishes an ongoing but productive tension because some interests emphasize the "protect" and "water flows" provisions while others highlight the "supply of timber" component.<sup>2</sup>

Added to the Organic Act is the Multiple Use Sustained Yield Act of 1960 (MUSYA). Through MUSYA Congress formally articulated the multiple use mission of the Service: "That it is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes."<sup>3</sup> The Act defines multiple use as thus:

"The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the

productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.”<sup>4</sup>

This statutory language shows that there is relatively little in MUSYA directing or constraining forest managers, and its flexibility has been used by the USFS over the years to defend everything from designating 58.5 million acres as protected roadless areas to proposing an 8.7 billion board foot timber sale in the Tongass National Forest in Southeast Alaska.<sup>5</sup>

High profile conflicts on Montana’s Bitterroot National Forest and West Virginia’s Monongahela National Forest triggered what eventually became the National Forest Management Act (1976). It is primarily a planning-based statute calling for interdisciplinary forest planning processes and opportunities for public participation. It provided stronger protection of non-timber resources. Important prescriptions are found in the Act, including clearcutting guidelines and restrictions on timber harvesting,<sup>6</sup> and a mandate to “provide for diversity of plant and animal communities,”<sup>7</sup> among other enforceable standards.

NFMA’s implementing regulations have historically provided additional substantive and procedural obligations, such as implementing NFMA’s diversity mandate by ensuring “wildlife viability.”<sup>8</sup> The rewriting of these regulations has been controversial, with the 2000, 2005, and 2008 versions legally challenged by commodity and environmental interests.<sup>9</sup> Because NFMA did not answer some central questions about the appropriate balance and intensity of uses on National Forests, conflict has shifted to the regulatory and planning arenas.

From the Organic Act through NFMA, the USFS has fought for maximum levels of administrative discretion and Congress has largely obliged. And while discretion once gave the Service unencumbered authority to manage federal forest lands without much challenge, it now leads to numerous lawsuits and administrative appeals because many interest groups believe that USFS’s actions are inconsistent with Congressional direction.

There remain core differences of opinion as to how the National Forests are required and ought to be managed. The Executive branch, members of Congress, and the judiciary<sup>10</sup> have different answers at different times. These strong disparities of opinion can have a debilitating effect on the USFS, whose personnel also differ on what uses should be prioritized by the agency.<sup>11</sup>

The open-ended nature of these laws also leaves the USFS susceptible to Executive-level pendulum swings, with the agency being whipsawed back

and forth depending on who controls the White House. The intractable nature of several forest policy conflicts—from the roadless rule to forest planning regulations—can be partly understood in this context, as one Administration negates the workings of the last. These abrupt changes in policy direction make it difficult for USFS personnel who are responsible for implementing these executive-based initiatives and goals, and leave the agency open to criticism that it is without direction and a clear sense of purpose.<sup>12</sup>

The USFS is bounded by dozens of other laws and regulations as well, and these obligations have had a tremendous impact on the agency and its constituents.<sup>13</sup> The USFS makes “analysis paralysis” and “the process predicament” central to its case that the agency is forced to do more paperwork than on-the-ground forest management.<sup>14</sup> The argument goes that while MUSYA and NFMA might give the Service some discretion in theory, it is lost upon the thick layering of other laws and regulations.<sup>15</sup> There is some truth to this claim, for both Congress and the agency’s own implementing regulations have added enormous procedural and analytical obligations.

But there is another way of looking at this issue. It is time to fully recognize the cumulative nature of our federal land and environmental laws. Previous Congresses meant to protect our federal lands and environment by providing legally-binding substantive standards and more commonly, extensive analytical/procedural requirements (e.g., NEPA). Environmental protection through extensive analysis and procedure—to require that agencies “look before they leap” in other words—is by Congressional design.

Finding efficiencies in the decision making process should be encouraged. But the USFS should not view their legal obligations as inconvenient procedural hurdles that must be overcome, but rather a set of precautionary tools that lead to more inclusive and environmentally-sound decisions. These laws should be viewed as goals, not constraints.

## **Problem Statement**

The following section provides an overview of some core problems and challenges facing National Forest management. It also demonstrates why the National Forests will become increasingly important—ecologically and socially—in the future. A limited set of recommendations then follow. Several recommendations address the problems outlined below. But more importantly, the following section demonstrates the need for a comprehensive assessment of National Forest law and policy, and we conclude the report by making this case.

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The National Forests face unprecedented pressures and challenges in the Twenty First Century. Human population growth and technological advancement shrink wide open spaces. Global climate change extends summer seasons, propelling large, intense wildfires and burgeoning insect infestations. Competing interests intensify demands for fresh water, threatening protracted struggles for life's most vital resource. Invasive species relentlessly expand their range, simplifying ecosystems and displacing native species. The crisis on the nation's public lands can no longer be ignored.

## Scope of Key Problems

***Global Climate Change:*** The consequences of global climate change will usher in several decades of ecological and social transformation. Estimates from the Intergovernmental Panel on Climate Change (IPCC) and the U.S. Climate Change Science Program (CCSP) predict increases in temperature in North America in the Twenty First Century of between 3.6 and 7.2 degrees F with abnormally higher frequencies of heat waves and hot days and nights.<sup>16</sup> Forest environments will respond to climate change along multiple dimensions, with significant shifts in plant species compositions, habitat types, and successional pathways in forest development. Extreme weather events accompanying climate change, such as floods, windstorms, and high temperature droughts, will also affect forest biota as well as associated National Forest infrastructure such as roads and bridges. Since fire regimes within forests respond directly to altered temperature and precipitation distribution, increased fire activity is anticipated across North America. The increase of forest areas burned in wildfires will overshadow the effects of climate change on species distribution as fire will become the major vector for vegetation change.<sup>17</sup>

Forest management responses to climate change and high levels of atmospheric carbon remain in their infancy. Forest ecosystems, as major consumers of carbon dioxide and storehouses of carbon, will have a significant role in broad scale efforts to reduce the impacts of greenhouse gases on climate. The Oregon Forest Resource Institute recommends three strategic responses for forest management in the face of climate change: mitigation, adaptation, and conservation.<sup>18</sup> Each strategy would advance multiple management interventions with a general goal of increasing carbon sequestration capacity. This could be accomplished via increasing forest areas, protecting forests from major disturbances (such as fires), and storing carbon in a spectrum of wood fiber products. A more aggressive commitment by the Forest Service to sustain or expand forest cover in the U.S. on public and private lands will set a powerful example for an integrated societal response to the threats accompanying climate change.

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**Population Pressure on Forestlands:** The National Forests are magnets for human populations. Low elevation locations in the dry pine zone proximate to National Forests attract incoming residents and second-home purchasers. This exurban expansion into the Wildland Urban Interface (WUI) has profound impacts on forest use demands and the capabilities of local governments to supply necessary services. The historic pattern of frequent, low-intensity fires in many parts of the WUI causes a dilemma for fire suppression personnel, as these fires need to be extinguished to protect human lives and property, often at great cost and high risk to suppression personnel. The human pressure on the land base also fragments important seasonal wildlife habitats and linkage zones for native wildlife populations that find their strongholds on National Forests.<sup>19</sup> Residential developments inserted into prime wildlife habitat create multiple forms of human-wildlife conflicts: predation by wildlife on domestic pets and livestock, increased collisions between cars and large wildlife, and direct displacement of wildlife from forage areas or winter ranges.

Demand for residential and recreational properties also affects the decisions of other landowners with lands adjacent to National Forests. Major private timberland owners, such as Plum Creek Timber Company, now view their land holdings as opportunities for real estate developments as well as a base for wood products. The demand for real estate by a new cadre of purchasers has changed the calculus of stockholders of land-holding timber companies, who have reorganized their enterprises as Real Estate Investment Trusts (REIT's) and Timber Investment Management Organizations (TIMO's). The long term ecological characteristics of many forested landscapes will change, as divestitures of private timberlands adjacent to lakes, streams, or other scenic areas will continue as rational economic choices.

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Private-land development and the divestment of corporate timberlands to subdivision and development is a significant challenge to National Forest management. To understand just how big a challenge, consider the following statistics:

The U.S. population is expected to increase by more than 120 million people over the next 50 years.<sup>20</sup>

Between 1982 and 2001, 34 million acres of open space were developed (the size of Illinois), approximately four acres per minute or 6,000 acres per day.<sup>21</sup>

From 1990-2000, experts estimate that 60 percent of all new housing units in the U.S. were built in the WUI, and by 2000, about 38 percent of housing units overall were located in the WUI.<sup>22</sup>

Between 1982 and 1997, over 10 million acres of forest lands were convert-

ed to houses, buildings, lawns, and pavement, with another 26 million acres projected to be developed by 2030. All together (1982-2030), the total loss of forests will be close to the size of Georgia.<sup>23</sup>

Total forest area is projected to decrease by roughly 23 million acres by 2050.<sup>24</sup>

Forty four million acres of private forests could see sizable increases in housing density by 2030.<sup>25</sup>

As much as 12-15 million acres of industrial timberland in the U.S. could be transferred out of industry ownership by 2011.<sup>26</sup>

The ability to sustain forestlands in the face of accelerated human demands for residential development begs for a more integrated public policy framework that moves beyond a single-purpose patchwork of laws and regulations affecting land use. A simple reserve strategy of representative samples of forests that ignores the aggregate effects of widespread forest fragmentation cannot adequately sustain or conserve forests, as forestlands can be perpetuated only through a balanced allocation across the continuum of uses.<sup>27</sup>

**Fire:** Wildfire suppression responsibilities have overwhelmed the Forest Service in the past decade. The fires of 2007 absorbed approximately half of the entire agency's annual budget. Both the acreage burned and costs of suppression have risen dramatically since 2000, with some fires so extensive that they forced the creation of a new size category of large fires exceeding 250,000 acres. Statistics from 2007, the second costliest fire season on record, demonstrate the magnitude of the wildfire issue.<sup>28</sup>

Wildfire acres reported to National Interagency Coordination Center(NICC): 9.32 million

Federal cost for fire suppression for the 2007 calendar year: \$1.8 billion

Approximate number of total wildfires: 85,000

Number of "significant" fires (>100 acres) reported to NICC: 1,284

Even though wildfire detection, suppression efficiency, firefighter safety, and fire behavior predictions have made substantial advances via improved technology and refinements in incident management, the scale of the problem remains daunting. The growth of human settlements in the WUI complicates suppression priorities and forces higher cost measures to provide security for rural residents. Fuel treatments to improve suppression capacity must necessarily account for fuel patterns on intermingled owner-

ships, yet fuel reduction practices among private owners confront significant barriers—the cost of treatments and low perception of risk among WUI landowners prevent widespread adoption.<sup>29</sup> Fuel treatment programs on public lands integrated with incentives for private land owner action have made some progress through the implementation of the National Fire Plan and the creation of Community Wildfire Protection Plans (CWPP), but limited available funding and constrained capacity among state and local government field staff (who advise landowners on treatment options) mitigate against more comprehensive fuel reduction.

Global warming will continue to drive more extreme conditions in the nation's fire adapted ecosystems. Forest areas have fewer months of snow cover and more time to dry during increasingly hot summers. The very effectiveness of suppressing fires over the past century also generated new risks. Many forest types increased their relative tree density and available fuel, making it difficult to control Twenty First Century wildfires.<sup>30</sup> Simultaneously, the ascendance of ecological awareness has recognized that wildfires are essential to forests – for regeneration, recycling nutrients, and creating habitat for numerous wild species.<sup>31</sup> Yet the conscious application of fire, whether natural- or human-caused, for restorative, ecosystem benefits presents a difficult conundrum. The smoke, uncertainty, and potential for harm are so pervasive that “let burn” strategies are unlikely to receive support among nearby residents. The net result is that wildfires for the foreseeable future will be frequent, large, and costly. The post fire environment will become a far larger part of management than planned timber sales or other vegetative treatments.

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Wildfire impacts extend well beyond burned areas with employees of the Forest Service commonly pulled from normal duties to be able to support emergency activities. Resources that could be dedicated to other programs or services have been drawn to the urgent responsibilities associated with wildfire management, prolonging the sequencing or completion of critical responsibilities in environmental assessment, monitoring, planning, or project development. Until new patterns of budgeting, staffing, and workforce assignments are developed, wildfire will continue to absorb the capacity of the Forest Service to do its job.

**Water:** Forests play vital roles in regulating the water cycle. In addition to consuming water for their own growth, forests create above-and below-ground conditions for water storage, circulate water vapor back to the atmosphere, and regulate the amount and timing of water yield. Approximately 60 million Americans get their water from sources on National Forests,<sup>32</sup> providing the largest single source of water in the United States. The creation of the early forest reserves under the 1897 Organic Administration Act identified a foundational purpose for federally protected forests as locations

to protect and enhance water supplies, reduce flooding, and secure favorable conditions of water flow.

Since National Forests frequently occupy the upper reaches of watersheds, they bear a special responsibility to maintain water quality. Clear mountain streams have become iconic symbols of protected public lands. Water quality faces threats from disparate causes such as air pollution, acid mine drainage, and sedimentation from human-caused disturbances. Extensive areas burned by wildfires also experience temporary changes in water quality and delivery. Forest managers direct particular attention to areas of high road density where erosive forces can be accelerated. Managing the location, design, density, and maintenance of roads will remain a top priority of the Forest Service in sustaining water quality.

***Forest Health: Insects, Diseases, and Invasive Species:*** Insects and other pathogens play critical roles in forest ecosystem processes with both damaging and beneficial effects. Changes in global climate have allowed some insect populations to expand rapidly, and these outbreaks can cause widespread tree mortality. Lodgepole pine forests in the West have been suffering from an outbreak of the native mountain pine beetle for the last five years (their impact in British Columbia has been massive, affecting over 21 million acres).<sup>33</sup> These same beetles in conjunction with an introduced pathogen, white pine blister rust, have nearly wiped out whitebark pine, a high-elevation species that supplies a critical food supply for species such as the grizzly bear. Spruce beetles caused extensive forest damage in Alaska in the 1990's. Many introduced (non-native) insects present defoliation and mortality problems across the United States: the gypsy moth, the hemlock wooly adelgid, and emerald ash borer have been particularly troublesome in parts of eastern forests. Biological controls and other integrated programs of prevention might reduce the expansion of some specific insect populations, but insects will remain major architects in forest composition. The question of the salvage of forests affected by insects and pathogens will remain a central debate in both practical and ecological terms.

Non-native plant species have had marked impacts on forests and grasslands - from kudzu in the South to spotted knapweed in the West. These invasive species, sometimes called "a catastrophic wildfire in slow motion," present an ongoing threat to biodiversity and native plant associations, and their impacts cost the American public billions of dollars each year.<sup>34</sup> Cooperative programs among federal, state, and local governments are strained to keep up with the expansion of non-native invasives, especially in mixed ownership settings. The lack of an effective national early warning system hinders efforts to control expansion.<sup>35</sup>

***Recreation and Access:*** Americans visit the National Forests in large num-

bers. Viewing activities, such as sightseeing, wildlife viewing, or visiting scenic or historic sites have the highest level of participation, followed by water-based activities such as swimming, boating, and fishing.<sup>36</sup> The growth of visitor use generates continuous debate about the limits of acceptable change to environmental assets. To help cover costs in providing recreation opportunities, a user fee program has been operating for several years on more developed recreation sites on National Forests to inject money into field-level facilities and maintenance. Some constituencies object to these fees, yet even with additional revenues from these direct collections, trail maintenance, facility infrastructure, and interpretation services suffer from years of backlog.

The most virulent controversy in recreation management is the allocation of motorized recreation use across public lands. The Forest Service has undertaken a nationwide exercise in “travel management planning” to designate motorized use opportunities in each National Forest by December 2009. A proportion of local residents and visitors to National Forests view road closures as an affront to their ability to enjoy desirable recreation experiences, while others find their expectations for “quiet use” violated by motorized users, and point toward noise, soil damage, and the spread of invasive weeds from motorized users as unacceptable disruptions. The extensive nature of Forest Service roads and trails challenges an understaffed law enforcement program to control inappropriate behaviors. The design of enjoyable, safe recreation opportunities for both motorized and non-motorized users will continue to stir controversy, since there are evident incompatibilities when both types of recreation use occur simultaneously.

## Policy Recommendations

### 1. Reinvesting in Our National Forests

The U.S. should reinvest in our National Forests and the agency responsible for managing them. The USFS must be funded at responsible levels in the future. Increasing demands are being placed upon the USFS while it is provided a diminishing budget that goes disproportionately to fighting fire.<sup>37</sup>

It often appears that the agency is set up to fail because of inadequate funding for particular activities, from mandated environmental analyses to restoration projects, among others. Take NEPA and other analytical obligations, for example. Much attention has been placed on the burdens imposed by NEPA and the time it takes to meet this and other statutory mandates. But it is quite unfair to criticize the Service for untimely completion of NEPA documents when the agency does not have adequate resources that could expedite the process. Lawmakers have provided numerous procedural protec-

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tions for federal lands and resources, and they should ensure that the USFS has the resources necessary to fulfill these responsibilities.

Restoration projects provide another example. Not all of these projects should have to pay their own way. Currently, in many situations, restoration projects are paid for through the harvesting of commercial timber, often under stewardship contracting authority.<sup>38</sup> While this tool is a positive development, it does not relieve Congress or the Executive of their responsibility to invest in our National Forests and their restoration. Bundling restoration projects that have widespread support with controversial timber sales will perpetuate unnecessary conflict and mire the agency in appeals and lawsuits.

Monitoring programs should be prioritized and adequately funded in the future. The 2008 planning regulations emphasize the strengths of a more adaptive approach to forest management.<sup>39</sup> We agree with the agency, and a significant amount of supporting scholarly and professional research, that adaptive management is advantageous in some situations.<sup>40</sup> Monitoring is a key component of any adaptive approach and there is widespread agreement that more of it should be done by the agency and multi-party teams. But there is a history of unfunded monitoring programs and monitoring-related line items are often the first cut by decision makers. If an adaptive approach to forest management is embraced by the agency in the future, a mandated and fully funded monitoring program must follow suit. Such a program could not only improve the science of forest management, but also build trust in the agency and reduce some types of science-based political conflict.

Unmanaged recreation is also identified as a core threat to the National Forests by the USFS.<sup>41</sup> We agree and applaud the agency for finally addressing this issue. Politically-charged allocation decisions are currently being made in several travel management plans. Without clear congressional guidance on the issue, the travel planning approach is probably the best way to proceed. But travel planning must be accompanied by a better funded enforcement program. Without requisite enforcement, expensive and time-consuming travel planning processes will do little to protect the National Forests or resolve increasing conflicts among users. We hope that lawmakers, like the USFS, will commit themselves to this issue.

We also agree with the USFS that the loss of open space and private timberlands to development and subdivision is a significant threat. But we are perplexed why popular programs designed to deal with this issue, like the Forest Legacy program, have decreasing budgets.<sup>42</sup> Comprehensive research by the USFS and its Research Stations, among others, have carefully analyzed the degree to which private forest lands are being lost to development and the short and long-term implications of this trend. Lawmakers should confront this problem in more aggressive fashion.

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Of course, there are limits to how much land can be saved through full (fee simple) and partial acquisition (easements), and such programs do not preclude the need for comprehensive local land use planning. But acquisition programs are an important tool that must be used to solve immediate problems and they deserve prioritization. We also hope that Congress will renew the debate over the insufficient funding of the Land and Water Conservation Fund and/or pursue new approaches to conservation acquisition.<sup>43</sup>

## **2. Roadless Area Protection**

Perhaps the most controversial issue in the National Forest system is management of inventoried roadless areas. Their future has been a constant source of conflict since the 1920s and they continue to generate a disproportionate amount of public interest, administrative appeals, and litigation. Protecting roadless lands through administrative rule(s) or legislation<sup>44</sup> will remove one of the biggest sources of conflict and controversy in National Forest management.

Protecting roadless areas will assist meeting other USFS obligations, such as the Organic Act's watershed provision<sup>45</sup> and the protection of ESA-listed species,<sup>46</sup> among other mandates. Their protection also will help shift public and agency attention to roaded landscapes that can be restored and/or provide other multiple uses. We believe that protecting inventoried roadless areas makes good ecological, political, and financial sense.<sup>47</sup>

The question of *how* to make the roadless decision is also controversial and fraught with litigation. Correctly or not, the 2001 roadless rule<sup>48</sup> was perceived by some interests as a top-down administrative approach that did not consider seriously enough state and local concerns. In its stead was promulgated a "state petitions rule" allowing states to petition the federal government for how they would like roadless lands within their states managed.<sup>49</sup> The state petitions rule was set aside by a District Court in California,<sup>50</sup> but the USFS continues to consider state proposals petitioned through the Administrative Procedures Act.<sup>51</sup>

Almost every state participating in the state petitions process, including those that challenged the state petitions rule in court, requested roadless area protection. California, New Mexico, Oregon, and Washington initially sued the federal government to enjoin the state petitions rule and reinstate the 2001 rule (Montana was amicus curiae in support). Virginia, North Carolina, South Carolina, New Mexico, and California submitted petitions requesting comprehensive protection of roadless areas in their states,<sup>52</sup> and Colorado is currently seeking roadless area protection as well.<sup>53</sup>

Montana has not submitted a state petition, but its Attorney General has

fled amicus in favor of the 2001 roadless rule, largely because of its widespread support among Montanans.<sup>54</sup> Montana Governor Brian Schweitzer, like several other Governors, has expressed concerns about the state petitions rule and the costly burdens it places on the state.<sup>55</sup> But Schweitzer clearly recognizes the “vital role” roadless areas play in Montana: “Our cities and towns depend on these areas for clean drinking water. They provide both irrigation water and grazing lands for our farmers and ranchers, and critical spawning areas for our blue ribbon trout fisheries. Hunting, outfitting, hiking, horsepacking, camping, wildlife watching, and all sorts of family recreation flourish in Montana’s unroaded lands.”<sup>56</sup> Several counties in Montana, including those with substantial roadless areas, have also expressed support for roadless area protection.<sup>57</sup>

Input solicited during these rulemakings make it clear that there is broad-based support, from the top-down and bottom-up, for roadless area protection in Montana and beyond.

Of course, when it comes to inventoried roadless areas, federal wilderness designation must be part of the conversation. In Montana, the interim management of inventoried roadless areas and wilderness study areas<sup>58</sup> has been controversial, partly because of their temporary protection and indeterminate status. While their administrative designation would provide a degree of protection, some management conflicts will persist until Congress, and Montana’s delegation, decide the fate of these lands through federal wilderness legislation. We believe that the time is ripe to focus on additional wilderness designations in Montana.

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### **3. Forest Planning**

We are sympathetic with the problems and challenges faced by National Forests using the 1982 planning regulations. There is widespread agreement, inside and outside the agency, that there are fundamental problems with the type of “rational comprehensive” planning as traditionally implemented by the USFS. But the answer to this problem is not to relieve the agency of legally binding prescriptions. Rather it is to find a more appropriate balance between adaptable planning and enforceable standards.

We believe the 2008 forest planning regulations<sup>59</sup> fail to secure this balance and should be rewritten by the next Executive Administration. There are four major problems with these regulations:

(1) They unnecessarily maximize agency discretion by removing substantive environmental protections and standards. NFMA was designed to reign in agency discretion by providing clearer standards and enforceable checks on the USFS. Meeting these legal standards has proven difficult for the agency

at times. But the solution to this problem is better implementation with requisite institutional support (e.g., funded monitoring programs), not the removal of such standards.

(2) The regulations mistakenly exclude forest plans from NEPA.<sup>60</sup> To contend that the agency is complying with NEPA by using NEPA's categorical exclusion provision is objectionable. Forest plans make choices, such as such as setting desired conditions, designating special areas, suitability determinations, and wilderness recommendations. However preliminary, such choices set National Forests on a particular trajectory and should be subject to full NEPA review.

(3) By removing forest plans from NEPA decision making, an increasing amount of work and analysis will be pushed to the forest project level, and several of these projects will likely be categorically excluded from NEPA as well. Also, this approach will create inefficiencies by making it harder to tier projects to meaningful plans. The 2008 planning approach will also make it harder to provide the type of landscape level and cumulative effects analysis as should be found in a forest plan.<sup>61</sup>

(4) Because forest plans under the 2008 regulations are strategic, aspirational, and non-decision making in nature, they increase public confusion and uncertainty about the future direction of National Forests.

We are concerned about USFS implementation and avoidance of NEPA, at the planning and project levels. Over the last eight years, the USFS has excluded forest plans, forest planning regulations, and an increasing number of vegetative management projects from NEPA review.<sup>62</sup> Taken together, these piecemeal actions have collective consequences. Categorical exclusions are a useful tool but they have been overused by the USFS.

NEPA should be fully embraced by the agency and viewed as a constructive and collaborative way in which more informed and acceptable decisions can be made. Our National Forests face unprecedented challenges and uncertainties in the future. Perhaps at no other time in the nation's history is there a need for the type of precautionary and informed decision making that NEPA requires.

We suggest that the next Administration convene another Committee of Scientists to revisit the issue of forest planning.<sup>63</sup> Their analysis will be facilitated because it will have the benefit of using information gathered during the 2000, 2005, and 2008 rulemakings. We hope that a more acceptable balance can be found between adaptability and meaningful standards. If no such group is convened we recommend that the 2000 forest planning regulations be reinstated.<sup>64</sup> The agency could also use the rulemaking process to

solicit proposals in how best to plan. It is our hope that during this solicitation period divergent groups will collaborate and offer constructive proposals that will be considered by the agency.

## **4. National Forest Management & Private Land Development**

The USFS considers the loss of open space to be a core threat to National Forests and Grasslands.<sup>65</sup> This threat is particularly acute in Montana because of rapid subdivision in the wildland urban interface and the divestment of Plum Creek corporate timberlands. Implications for the state and its counties are significant in terms of timber supply, state wildlife management, public lands access, infrastructure and maintenance costs, and fire-fighting costs, among others.

We recommend that Congress and the USFS prioritize and confront this problem and use a variety of policy approaches and tools to do so. Enforcement of governmental regulations, land acquisition and conservation easements (e.g., Land and Water Conservation Fund, Forest Legacy, Farm Bill provisions, etc.), private land use planning and zoning, tax and incentive-based approaches, among other strategies should be synergistically and more aggressively used in the future.

It is also imperative that the USFS address private land development in its forest planning process. There is ample historical precedent for the USFS to consider what is happening outside its jurisdiction and respond accordingly on National Forests. If the agency fails to consider the larger landscape when making decisions, we should expect a growing number of interests to challenge it politically and legally using an assortment of laws to do so, from the ESA to NEPA's cumulative effects analysis requirement.<sup>66</sup>

The agency must adopt a landscape-level view situating National Forest management in its wider context. The USFS should carefully consider what is happening on adjacent private lands and make corresponding adjustments on the National Forests. When ecosystem goods and services found on private lands are diminished, there is a more prominent need to compensate for such losses on federal lands.

## **5. Forest Restoration**

Increasing public attention has been directed to the idea of forest restoration to ensure that forest ecosystems can continue to supply the public with a combination of goods and services while sustaining natural ecological processes and functions. Forest restoration is often conflated with the con-

*If the agency fails to consider the larger landscape when making decisions, we should expect a growing number of interests to challenge it politically and legally using an assortment of laws to do so.*

cept of “healthy forests,” and even within the Healthy Forests Restoration Act of 2003 (HFRA) the term “restore” appears not only within the title but among the purposes of the Act.<sup>67</sup> However, the major thrust of HFRA aims “at protecting communities, watersheds, and certain other at-risk lands from catastrophic wildfire.”<sup>68</sup> Thus, even though the goals of forest restoration activities can be quite broad, the focus of forest restoration projects frequently returns to a relatively narrow objective of treating forest fuels.

Ecological restoration is defined by the Society for Ecological Restoration as “the process of assisting in the recovery of an ecosystem that has been degraded, damaged, or destroyed.”<sup>69</sup> The problem with a focus on forest fuel treatments emerges from an expectation that altering the structure and distribution of vegetative and downed woody material in *all* forest types will create “healthier” forest ecosystems. Recent ecological research indicates that there are, indeed, forest zones where there is a solid ecological basis for treating fuels for both fire-mitigation and restoration purposes - most notably in the low-elevation, dry Ponderosa pine forests that typically characterize the WUI. However, these zones occupy a minority of National Forest lands of the West. In other higher elevation fire regimes or zones that receive more moisture, mechanical thinning or other common fuel treatments can do more harm than good.<sup>70</sup> Forest restoration treatments will need to avoid a myopic, “one-size fits all” prescription and dedicate the necessary ground-based investments in assessing other alternative actions—or non-actions—to meet restoration objectives.

Central to any long term strategy for forest or watershed restoration is the management of the approximately 386,000 miles of National Forest system roads. Each of the “four threats” to the National Forests enumerated by former Chief Dale Bosworth in 2003—fire and fuels, invasive species, forest fragmentation, and unmanaged recreation—links to roads, and they clearly present a major source of sediment and soil erosion from forested watersheds.<sup>71</sup> Although the Forest Service has set up a Roads Analysis Procedure to make more informed decisions related to future road systems,<sup>72</sup> the disposition of current roads, either via upgrading, decommissioning, or revised maintenance scheduling, will remain a significant planning challenge. At the landscape level roads present a more significant agent of change than clearcuts, with the distribution of roads a more important determinant of landscape fragmentation than other cited problem attributes such as road density.<sup>73</sup> The ability to restore forests and watersheds must confront the National Forest transportation system head-on, accounting for the many public and administrative interests associated with access to public lands and weighing the direct and indirect environmental costs.

*The ability to restore forests and watersheds must confront the National Forest transportation system head-on.*

Restoration cannot be achieved through half-steps or isolated manipulations of a few infrastructure elements, since effective treatments will require the

enablement of natural ecological processes to persist over a landscape scale.<sup>74</sup> Helpfully, these natural processes are self-reinforcing and self-regulating, such that investments to remove current barriers to system function will provide long term payoffs. As demands for critical resources such as clean water and secure wildlife and fish habitat grow, restoration efforts that begin sooner rather than later will provide the greatest environmental and social benefit as well as the least overall cost.

## **6. Conflict Resolution**

In a pluralistic democracy conflict over National Forest management is certain. There will always be disagreement about the proper allocation of federal land resources and values. Some interests want more wilderness and wildlife, others more board feet of timber, and still others more motorized recreational opportunities. Finding the appropriate balance of uses is an inherently dynamic, subjective, and political process. Many of these conflicts, however, are exacerbated by the ways in which they are governed. It is our hope that future debate will include more deliberation and transparency than has been offered in the past. Significant issues deserve an open public process and exchange of ideas and not be advanced using questionable methods and strategies.

### **Litigation**

Litigation often characterizes conflict over forest management and its use has received a great deal of attention by Congress and the public.<sup>75</sup> To “fix” this problem, various statutory and regulatory reform measures have been proposed, from rewriting bedrock environmental laws to exempting additional activities from environmental analysis. Undoubtedly, litigation should be used as a strategy of last resort. We prefer more collaborative and less adversarial approaches to resolving conflicts. But the rule of law and its enforcement must play an essential role in National Forest management.

Citizen suit enforcement of environmental law often facilitates the use of less adversarial conservation strategies, from collaborative conservation to land acquisition. Environmental law provides the necessary incentive for more powerful interests to collaborate and sets the parameters of negotiation. If lawmakers weaken or undermine these legal standards, other approaches to conservation also will be impacted.

The enforcement of environmental laws, like the ESA for example, likely figure in land owner decisions to sell land or development rights for conservation purposes.

Enforceable legal standards also can be consistent with a more adaptive approach to forest management, as currently prioritized by the USFS. Not only will such standards provide the goals and objectives of experimentation, but they can ensure that adaptive management (and monitoring) is taken seriously by the agency, and not just simply used as political cover and a way to avoid making tough decisions.

Our support of environmental law is clear. But there is a need, as discussed below, for a comprehensive examination of how such laws fit and fail to fit together, and how the goals and objectives expressed in these laws can be more efficiently realized. We hope that such a study will help find a more constructive path to take in the future.

## **Place-based Legislation**

There is a great deal of confusion regarding the future of National Forest management. Forest planning, for example, has proceeded in intermittent fashion because of litigation, the result of which is still unknown. Furthermore, the 2008 planning regulations, if upheld by the courts, provide little resolution of key issues because new forest plans are merely “strategic and aspirational” in nature and do not generally bind the agency to a future course of action.

This level of uncertainty has led many divergent interests to seek more permanent ways of resolving long-standing conflicts. There are several places in Montana and elsewhere where groups are negotiating their differences and seeking forms of “place-based legislation.”<sup>76</sup> There are significant variations to this approach, with some consistent and others inconsistent with existing forest plans. But they generally combine wilderness designation, restoration objectives, and methods to secure a more predictable flow of timber for local sawmills, among other provisions, in a legislative package to be considered by Congress.

This method of governance is a significant departure from National Forest law and management. In comparison to other federal land systems, the USFS has a unified mission and mandate which generally encompasses all National Forests. The National Park and National Wildlife Refuge systems, on the other hand, are characterized by place-specific enabling legislation with special provisions that are given priority over their respective organic acts. Federal wilderness laws are similar in that they often contain place-specific prescriptions, going beyond the framework provided in the 1964 Wilderness Act, in how these areas are to be managed. Each federal land system has its strengths and weaknesses to consider. But careful thought should be given before proceeding with a similar disaggregated approach to National Forest management.

It is beyond the purview of this report to fairly analyze the substantive details of each place-based proposal. But we offer some suggestions regarding related processes and budgets. First, we should bear in mind a history of forest management that has been dominated by Congressional appropriations. In some cases agency budgets drive land management decisions

as much as laws and forest plans. While legislation will protect federally designated wilderness, undesignated lands will be subject to appropriations absent the use of other financial tools like stewardship contracting, and this tool should not be overused. The lesson, then, is to appreciate the limits of legislation in this context and the uncertainties inherent in congressional appropriations.

Though several controversial issues could be resolved through legislation, others are not so amenable to law and policy. For instance, trends in domestic demand for timber and a glut of international supply is perhaps beyond the reach of legislation. This means that the USFS and lawmakers should be cautious in making promises to various interests and rural communities that they cannot keep.

If place-based forest legislation is used more broadly there is also the question of what forests are likely to receive full funding in the future. How will future funding demands for place-based laws be reconciled with other responsibilities in the Washington and Regional Offices? Will senior congressional delegations be more successful in securing funding for place-based laws within their states? These funding issues need to be carefully considered before the approach is replicated on a larger scale.

How place-based laws are to be reconciled with National Forest planning is also a question that must be answered. Implementation problems have characterized the Herger-Feinstein (Quincy Library Group) Act,<sup>77</sup> a controversial place-based National Forest law, partly because the legislation competes with other Regional Forest responsibilities in the Sierra Nevada.

If the place-based legislative approach is used more often in the future it is important that such processes are as inclusive and transparent as possible. One approach is to ensure that the proposals are open to broad public participation via existing or newly created decision making processes. Precedent will be set if these proposals become law, and more place-based bills will follow. A full public vetting of these proposals, along with the safe harbor provided by national environmental laws, will help ensure that more partisan or unwise proposals, legislated “pilot projects,” or “charter forests” are not advanced in the future.

## **7. Comprehensive Review**

The problems and opportunities evident in National Forest management necessitate a comprehensive examination by a diverse range of interests and perspectives. With appropriate sideboards and a clearly defined charter, a large-scale study of National Forest law and management has the potential of providing enduring solutions to a wider-range of problems than discussed

in this report.

There are four major reasons why we recommend a comprehensive and well-represented examination of National Forest law and policy:

1. More than thirty years have passed since NFMA's enactment in 1976. New laws, planning processes, court decisions, executive orders, science, technology, fires, population growth, private land development, economic transitions, collaborative efforts, motorized recreation, and international trade deals, among other developments, are but a few reasons why it is time to revisit our National Forest laws and regulations in systematic fashion. Comprehensive assessments in other areas of environmental policy have recently taken place and National Forest policy deserves a similar revisit.<sup>78</sup>
2. A comprehensive and careful assessment is preferable to an Executive-dominated "shotgun approach" or predetermined congressional committee studies or task forces that are immediately questioned by opposing parties. A comprehensive approach might help us avoid unintended consequences that could result from a more partisan piecemeal tinkering of environmental/forest law.
3. We suspect that many of the problems facing the USFS do not originate in one single law or regulation but rather from their cumulative nature. The judiciary repeatedly recognizes the significance of this body of law and its impact on forest management, but other institutions often fail to do so.<sup>79</sup> A comprehensive assessment will help untangle this Gordian knot of laws and policies and examine how they fit and fail to fit together. The process will place forest management in its appropriate historical and legal context and explain the magnitude of these laws and their congressional design. It will also focus on how intersecting laws, such as the General Mining Law of 1872, impact National Forest management. Such an undertaking would ask whether or not it is the nature of these laws or their implementation by the USFS that is most problematic.
4. A comprehensive assessment will generate constructive dialogue and analysis among a broad cross-section of interests. It might uncover some common ground among various actors. Numerous collaborative efforts demonstrate that such agreements exist and that political institutions and legal parameters play an important role in their formation and implementation. The assessment will also help crystallize some of the core differences of opinion and force interests to speak with more clarity and vision. The process would provide the public and decision makers an accurate assessment of what has transpired since NFMA's enactment in 1976 and what lessons might be learned from its implementation.

For these reasons, we have proposed to organize a comprehensive study of forest policy and management and are now seeking Congressional funding and/or private financial support. Our proposed process (a more detailed overview on file with authors) includes assembling a diverse national-level steering committee

*A large-scale study of National Forest law and management has the potential of providing enduring solutions.*

that will collectively shape the study's focus and questions. Well-represented "policy teams" will then be responsible for answering these questions in a series of peer-reviewed reports that will be presented at a symposium. These teams will be charged with identifying areas of common interest and disagreement. Such an undertaking would provide valuable information to lawmakers and the USFS.

## Conclusion

The USFS is at a critical juncture. Never before has it faced so many daunting challenges. The last sixteen years, eight under President Clinton and eight under President Bush, seems to have left the agency in a state of suspended animation. Several Clinton-era rules have been rewritten by the Bush Administration, with many of them then set aside by the courts. Widespread confusion and uncertainty—from the management of roadless areas to forest planning—is the result.

The next Presidential Administration will be presented with a major historical moment. Public awareness of the environment has been piqued by global warming and rising energy costs, among other developments. Before launching into additional piecemeal solutions or shallow quick-fixes, there is now an opportunity to chart the course for a more vital, confident, and effective Forest Service.

We believe that our recommendations, if acted upon by lawmakers and the USFS, could move us beyond past conflicts so that we can confront a new class of challenging problems. To do so, lawmakers need to reinvest in our National Forests. These lands provide essential ecosystem goods and services, and we neglect them at our peril.

Undoubtedly, some people will disagree with our recommendations and see things much differently. We look forward to discussing these issues in more detail in a healthy debate. But hopefully, this initial assessment is just a start. A more comprehensive analysis by an inclusive set of interests is required if we are to find more durable and mutually agreeable solutions to National Forest management.

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## NOTES

1. Organic Administration Act of 1897, Act of June 4, 1897, ch. 2, 30 Stat. 11, 34-36 (codified as amended at 16 U.S.C. §§ 473-482, 551 (2000))
2. What Congress intended by the USFS Organic Act has been open to some interpretation throughout the years. Note that the language actually establishes three purposes for the National Forests, not just the commonly cited water flows and timber supplies. *See* United States v. New Mexico, 438 U.S. 696, 719-25 (1978) (Powell, J. dissenting in part) (highlighting Congressional intent, as embodied within the USFS Organic Act, to protect more than simply water flows and timber supplies).
3. 16 U.S.C. § 528 (2000)
4. 16 U.S.C. § 531 (2000)
5. *See* Special Areas, Roadless Area Conservation, Final Rule, 66 Federal Register 3244, 3246 (Jan. 12, 2001); and *Sierra Club v. Hardin*, 325 F. Supp. 99, 122-24 (D. Alaska 1971)
6. 16 U.S.C. §1604(E) (2000).
7. 16 U.S.C. 1600 §6 (3)(B) (2000)
8. The 1982 rule provided that “[f]ish and wildlife habitat shall be managed to maintain viable populations of existing native and desired non-native vertebrate species in the planning area.” 36 C.F.R. §219.19.
9. *See* American Forest and Paper Association v. Veneman, No. 1:01-cv-00871-GK (D.D.C.) (2000 forest planning regulations), *Citizens for Better Forestry v. USDA*, 481 F. Supp. 2d 1089 (N.D. Cal. 2007) (ruling the 2005 regulations in violation of the APA, NEPA, and ESA), and *Defenders of Wildlife, et al., v. Schafer, et al., no. C08-02326, Complaint* (N.D. Cal., filed May 6, 2008 (challenge to 2008 regulations).
10. For a revealing look at how differently members of the Ninth Circuit Court of Appeals view National Forest management *see* *The Lands Council et al., v. McNair*, 494 F. 3d 771 (9<sup>th</sup> Cir. 2007)
11. *See e.g.*, GENERAL ACCOUNTING OFFICE, FOREST SERVICE DECISION-MAKING: A FRAMEWORK FOR IMPROVING PERFORMANCE, GAO/RCED-97-71 (Apr. 1997). According to the GAO (p.5): “Strengthening accountability for performance within the Forest Service and improving the efficiency and effectiveness of its decision-making is contingent on establishing long-term strategic goals that are based on clearly defined mission priorities. However, agreement does not exist on the agency’s long-term strategic goals. This lack of agreement is the result of a more fundamental disagreement, both inside and outside the Forest Service, over which uses the agency is to emphasize under its broad multiple-use and sustained yield mandate and how best to ensure the long-term sustainability of these uses.”
12. *See e.g., id.*
13. *See* USDA FOREST SERVICE, SELECTED LAWS AFFECTING FOREST SERVICE ACTIVITIES (Apr. 2004) (providing an 810 page listing of these legal authorities)
14. USDA Forest Service, *The Process Predicament: How Statutory, Regulatory, and Administrative Factors Affect National Forest Management* (2002).
15. *See e.g., Conflicting Laws and Regulations: Gridlock on the National Forests, Oversight Hearing Before the Subcommittee on Forests and Forest Health of the Committee on Resources*, U.S. House of Representatives, 107<sup>th</sup> Cong. (December, 4, 2001), 5 (Statement of Dale Bosworth, Chief, USDA Forest Service) [hereinafter Gridlock Hearing]
16. NATIONAL SCIENCE AND TECHNOLOGY COUNCIL, SCIENTIFIC ASSESSMENT OF THE EFFECTS OF GLOBAL CHANGE ON THE UNITED STATES: A REPORT OF THE COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES (Washington, D.C.: 2008)
17. M.D. Flannigan, B.J. Stocks, and B.M. Wotton, *Climate Change and Forest Fires*, 262 SCIENCE OF THE TOTAL ENVIRONMENT 221 (2000)
18. OREGON FOREST RESOURCES INSTITUTE, FORESTS, CARBON, AND CLIMATE CHANGE: A SYNTHESIS OF SCIENCE FINDINGS (Portland, OR: 2006)
19. V.C., Radeloff, R.B. Hammer, S.I. Stewart, J.S. Fried, S.S. Holcomb, and J. F. McKeefry, *The Wildland-Urban Interface in the United States*, 15(3) ECOLOGICAL APPLICATIONS 799 (2005)
20. R.J. ALIG, ET AL., LAND USE CHANGES INVOLVING FORESTRY IN THE UNITED STATES: 1952—1997, WITH PROJECTIONS TO 2050. (Pacific Northwest Research Station, General Technical Report No. 587, 2003)
21. USDA Forest Service, *Four Threats to the Health of the Nation’s Forests and Grasslands*. Available at <http://www.fs.fed.us/projects/four-threats/> (last visited June 15, 2008) [hereinafter USFS Four Threats]
22. GOVERNMENT ACCOUNTABILITY OFFICE, WILDLAND FIRE MANAGEMENT: LACK OF A COHESIVE STRATEGY HINDERS AGENCIES’ COST CONTAINMENT EFFORTS, GAO-07-427T

- (2007)
23. USFS Four Threats.
  24. *Id.*
  25. *Id.*
  26. NADINE E. BLOCK & V. ALARIC SAMPLE, INDUSTRIAL TIMBERLAND DIVESTITURES AND INVESTMENTS: OPPORTUNITIES AND CHALLENGES IN FORESTLAND CONSERVATION (Pinchot Institute, 2001).
  27. NATIONAL COMMISSION ON SCIENCE FOR SUSTAINABLE FORESTRY, FORESTS FOR TOMORROW: SUSTAINING THE VALUES, SERVICES AND PRODUCTS OF OUR NATION'S FORESTS FOR FUTURE GENERATIONS. (Washington, D.C.: National Council for Science and Environment, 2008)
  28. Independent Large Wildfire Cost Panel, *2007 U.S. Forest Service and Department of Interior Large Wildfire Cost Review: Assessing Progress Towards an Integrated Risk and Cost Fire Management Strategy* (Washington, D.C.: United States Department of Agriculture, 2008)
  29. T. Daniel, *Perceptions of Wildfire Risk*, in PEOPLE, FIRE, AND FORESTS: A SYNTHESIS OF WILDFIRE SOCIAL SCIENCE (T. Daniel, M.S. Carroll, C. Moseley, and C. Raish., eds., 2007)
  30. S.F. ARNO & S. ALLISON-BUNNEL, FLAMES IN OUR FOREST: DISASTER OR RENEWAL? (2002)
  31. J.K. AGEE, FIRE ECOLOGY OF PACIFIC NORTHWEST FORESTS (1996)
  32. USDA Forest Service, available at [www.fs.fed.us/biology/watershed/index.html](http://www.fs.fed.us/biology/watershed/index.html) (last visited June 11, 2008)
  33. B. Tkacz, B. Moody, and J.V. Castillo, *Forest Health Status in North America*, 7 THE SCIENTIFIC WORLD JOURNAL 28 (2007)
  34. *See e.g.*, D. Pimentel, L. Lach, R. Zuniga, and D. Morrison, *Environmental and Economic Costs Associated With Non-Indigenous Species in the United States*, 50 BIOSCIENCE 53 (2000)
  35. *See* USDA FOREST SERVICE, NATIONAL STRATEGY AND IMPLEMENTATION PLAN FOR INVASIVE SPECIES MANAGEMENT, FS-805 (2004)
  36. K.H. CORDELL, C.T. BETZ, AND G.T. GREEN, OUTDOOR RECREATION FOR 21<sup>ST</sup> CENTURY AMERICA (2004)
  37. *See e.g.*, *Proposed Fiscal Year 2008 Budget Request for the Forest Service: Hearing Before the S. Comm. On Energy and Natural Resources*, 110<sup>th</sup> Cong. (Feb. 28, 2007) (detailing multiple cuts to Forest Service non-fire budget)
  38. Pub. L. No. 108-7, §323 (2003), 16 U.S.C. §2104 (2000)
  39. National Forest System Land Management Planning Final Rule, 73 Fed. Reg. 21,468 (Apr. 21, 2008)
  40. *See e.g.*, COUNCIL ON ENVIRONMENTAL QUALITY, THE NATIONAL ENVIRONMENTAL POLICY ACT: A STUDY OF ITS EFFECTIVENESS AFTER TWENTY FIVE YEARS (Jan., 1997), 31-34; THE NEPA TASK FORCE REPORT TO THE COUNCIL ON ENVIRONMENTAL QUALITY, MODERNIZING NEPA IMPLEMENTATION (Sept. 2003), Ch. 4., [hereinafter NEPA Reviews], and COMMITTEE OF SCIENTISTS, SUSTAINING THE PEOPLE'S LANDS: RECOMMENDATIONS FOR STEWARDSHIP OF THE NATIONAL FORESTS AND GRASSLANDS INTO THE NEXT CENTURY (Washington, D.C.: USDA 1999), xix-xx, 108-111 [hereinafter COS Report]
  41. *See* Travel Management; Designated Routes and Areas for Motor Vehicle Use, 70 Fed. Reg. 68,264 (Nov. 9, 2005). Additional information available at <http://www.fs.fed.us/recreation/programs/ohv/> (last visited June 15, 2008)
  42. *See* USDA Forest Service, *Fiscal Year 2009 President's Budget: Budget Justification* (2008), at 7-20.
  43. The LWCF authorizes \$900 million annually, but the Congressional Research Service reports that annual appropriations have generally ranged between \$150-\$350 million over the past 20 years. Jeffrey Zinn, *Land and Water Conservation Fund: Current Status and Issues*, No. 97-792 (Congressional Research Service, 2002). The Conservation and Reinvestment Act (CARA) of 2000, H.R. 701, 106<sup>th</sup> Cong. (2000), was designed to deal with this problem. For debate and analysis of the bill and its alternatives *see Conservation and Reinvestment Act, Sen. Hearing Before the Comm. On Environment and Public Works*, 106<sup>th</sup> Cong. (May 24, 2000).
  44. Several bills have been introduced since the 2001 roadless rule's promulgation. *See e.g.*, The Save America's Forests Act, S. 1897, 109<sup>th</sup> Cong. (2005); and the Roadless Areas Conservation Act of 2006, S. 2364, 109<sup>th</sup> Cong. (2006).
  45. Inventoried roadless areas are found within 661 of the more than 2,000 major watersheds in the U.S. USDA FOREST SERVICE, FOREST SERVICE ROADLESS AREA CONSERVATION: FINAL

- ENVIRONMENTAL IMPACT STATEMENT, VOL. 1, at 1-1. (2000) [hereinafter Roadless EIS]
46. Inventoried roadless areas provide habitat or affect more than 220 federally threatened, endangered, and proposed species, and 1,930 sensitive species. *Id.*, at 1-1—1-2. Thus, protecting roadless areas from further development would help the USFS achieve the conservation goals made explicit by Congress in the ESA. As Congress made clear, one of the primary purposes of the ESA is “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved...” 16 U.S.C. § 1531(b) (2000).
  47. The 2000 Roadless EIS, at 1-5, shows the agency having an “\$8.4 billion backlog in deferred maintenance, road reconstruction, and bridge and culvert maintenance and replacement on the more than 386,000 miles in the Forest Transportation System.”
  48. Special Areas, Roadless Area Conservation, Final Rule, 66 Federal Register 3244, 3246 (Jan. 12, 2001)
  49. Special Areas; State Petitions for Inventoried Roadless Area Management; Roadless Area Conservation National Advisory Committee; Final Rule and Notice, 70 Fed. Reg. 25,654 (May 13, 2005).
  50. California, et al., v. U.S. Dept. of Agriculture, et al., 459 F. Supp. 2d. 874 (N.D. Cal. 2006)
  51. 5 U.S.C. §553(e) (2000) states that “each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.”
  52. Pamela Baldwin & Ross Gorte, *The National Forest System Roadless Areas Initiative* (Washington, D.C.: Congressional Research Service, 2006), 30-31 (providing a comprehensive review of the roadless rule(s) complicated chronology).
  53. Colorado roadless rule information available at <http://roadless.fs.fed.us/colorado.shtml> (last visited June 11, 2008)
  54. Amicus Curiae, Montana Attorney General Mike McGrath, California, et al., v. U.S. Dept. of Agriculture, et al., No. 05-03508 EDL (N.D. Cal., Feb. 24, 2006). The memorandum states that 17,429 Montanans participated in the 2001 Roadless NEPA process, and of those commenting, 11,654 favored even stronger roadless area protections than those proposed in the roadless draft environmental impact statement. *Id.*, at 5. For more detailed content analysis showing popular support for the 2001 roadless rule see USDA Forest Service, Content Analysis Enterprise Team, *Summary of Public Comment: Roadless Area Conservation Proposed Rule and DEIS* (2000).
  55. See Baldwin & Gorte, at 29-30, reviewing other Governors’ complaints.
  56. Letter to President of the United States, George W. Bush, from Governor of Montana, Brian Schweitzer (June 7, 2005) (on file with author)
  57. Letters to Governor Brian Schweitzer from several counties in Montana on file with authors.
  58. In Montana, nearly a million acres of roadless lands have been congressionally designated as wilderness study areas with different management prescriptions. See Montana Wilderness Study Act, Pub. L. No. 95-150 (1977). The interim management of these areas has been the source of some contention. See e.g., Montana Wilderness Association v. U.S. Forest Service, 146 F. Supp. 2d 1118 (D. Mont. 2001).
  59. The 2008 forest planning regulations, with few exceptions, are identical to the 2005 regulations.
  60. NEPA regulations define “major federal action” determining EIS eligibility to include “formal plans...which guide or prescribe alternative uses of federal resources, upon which future agency actions will be based.” 40 C.F.R. §1508.18(b)(2). The regulations also state that “[a]gencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts.” 40 C.F.R. §1401.2.
  61. See COS Report, at 25-34.
  62. The Government Accountability Office found that nearly three quarters of forest management projects were excluded from NEPA analysis. See GOVERNMENT ACCOUNTABILITY OFFICE, FOREST SERVICE: USE OF CATEGORICAL EXCLUSIONS FOR VEGETATION MANAGEMENT PROJECTS, CALENDER YEARS 2003 THROUGH 2005. GAO-07-99 (2006). See also *Management By Exclusion: The Forest Service Use of Categorical Exclusions from NEPA: Oversight Hearing Before the U.S. House Comm. On Natural Resources*, 110<sup>th</sup> Cong. (June 28, 2007) (focusing on the pervasive use of categorical exclusions by the USFS)
  63. NFMA states that the Secretary of Agriculture “shall appoint a committee of scientists who are not officers or employees of the Forest Service [and it] shall provide scientific and technical advice and counsel on proposed guidelines and procedures to assure that an effective interdisciplinary approach is proposed and adopted.” 16 U.S.C. §1604(h)(1) (2000). A Committee of Scientists was used in developing the 2000 regulations. See COS

- Report, and National Forest System Land and Resource Management Planning, 65 Fed. Reg. 67,514 (Nov. 9, 2000).
64. See 65 Fed. Reg. 67,514 (Nov. 9, 2000).
  65. Related documents available at <http://www.fs.fed.us/openspace/> (last visited June 12, 2008)
  66. Regulations define the requirement as an assessment of “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions...[and]...can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. §1508.).
  67. The Healthy Forests Restoration Act of 2003, Pub. L. 108-148, §2(6); 16 U.S.C. §6501 (2000), seeks “to protect, restore, and enhance forest ecosystem components – (A) to promote the recovery of threatened and endangered species; (B) to improve biological diversity; and (C) to enhance productivity and carbon sequestration.”
  68. Pub. L. 108-148 (2003)
  69. Society for Ecological Restoration International Science and Policy Working Group, *The SER International Primer on Ecological Restoration* (Tucson, AZ: Society for Ecological Restoration International, 2004)
  70. T.T., Schoennagel, T. Veblen, and W.H. Romme, *The Interaction of Fire, Fuels, and Climate Across Rocky Mountain Forests*, 54(7) BIOSCIENCE 661 (2004)
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  75. See e.g., Gridlock Hearing; and *Management Challenges on Montana’s National Forests*, Oversight Field Hearing before the U.S. House Comm. On Resources, 108<sup>th</sup> Cong. (July 2, 2003).
  76. See e.g., the Beaverhead-Deerlodge Partnership proposal, available at <http://www.bhdpartnership.org/> (last visited June 11, 2008), the Blackfoot Clearwater Landscape Stewardship Project proposal, available at <http://www.blackfootclearwater.org/> (last visited June 11, 2008), and the Northeast Washington Forestry Coalition (Colville National Forest) proposal, available at <http://www.newforestrycoalition.org/> (last visited June 11, 2008).
  77. See Pub. L. No. 105-277 (A), §101(e) (Title IV, §401). 16 U.S.C. §2104 note (2000)
  78. See Report of the Western Water Policy Review Advisory Commission, *Water in the West: The Challenge for the Next Century* (1998) (comprehensive review of western water policy); Dale D. Goble, J. Michael Scott, and Frank W. Davis, eds., *The Endangered Species Act at Thirty: Renewing the Conservation Promise* (Washington, D.C.: Island Press, 2006) and J. Michael Scott, Dale D. Goble, and Frank W. Davis, eds., *The Endangered Species Act at Thirty: Conserving Biodiversity in Human-Dominated Landscapes* (Washington, D.C.: Island Press, 2006) (comprehensive review of ESA); and NEPA Reviews. On a broader scale, several public land law review commissions have been conducted in the past. The most recent commission submitted its report in 1970, with several of its recommendations becoming law in the Federal Land Policy Management Act of 1976. See *One Third of the Nation’s Land: A Report to the President and to the Congress by the Public Land Law Review Commission* (Washington, D.C.: 1970).
  79. See e.g., *Seattle Audubon Society v. Lyons*, 871 F. Supp. 1291 (W.D. Wash. 1994). In this case a federal judge invoked the ESA, NEPA, NFMA, and FLPMA in endorsing an ecosystem management policy and the Northwest Forest Plan. The status quo was no longer tenable given this cumulative body of law.

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