



AP PHOTO/M. MOORE

# America's Forgotten Forests

A Vision for Revitalizing Rural Economies Through Restoration

---

By Adam Fetcher   March 2017

Center for American Progress



# America's Forgotten Forests

A Vision for Revitalizing Rural Economies  
Through Restoration

---

By Adam Fetcher   March 2017

# Contents

- 1 Introduction and summary**
- 4 The future of public lands policy in a new political environment**
- 7 Fix wildfire funding**
- 9 Invest in natural infrastructure**
- 13 Create a rural resurgence by unleashing forests' full economic potential**
- 16 Open new markets through products sourced from healthy forests**
- 19 Infuse transparency and local collaboration into forest management**
- 21 Find ways to be more efficient and shift the U.S. Forest Service's approach**
- 21 Conclusion**
- 25 About the author**
- 26 Endnotes**



# Introduction and summary

After years of neglect, U.S. forest policy needs a reboot. Smart people have had trouble seeing national forests for their immense untapped potential to energize the U.S. economy sustainably. Rather than prioritize the restoration of forest health, policymakers have prioritized the blunt exploitation of national forests for timber sales. Meanwhile, voters have grown conditioned to expect little value from national forests beyond a few jobs in the timber industry. The United States has set an awfully low bar for national forests, which make up a full 30 percent of the nation's federal public lands, and with U.S. Forest Service resources so badly misallocated, it is not even clear that existing dismal expectations for timber production are being met.

If policymakers focus in on forest landscapes for their unique attributes among public lands, however, they can set aside the false choice between healthy ecosystems and a healthy economy and embrace both simultaneously to achieve an expansive set of new values for all Americans. As assets, forests carry outsized and unrealized potential to provide big returns to taxpayers in the form of new jobs for rural communities, innovative new markets for wood products, big new investments in forest infrastructure, and a growing recreation economy, among others. This report aims to illuminate common ground in a policy environment that has been immobilized by unnecessary polarization. If policymakers on both sides of the aisle can rethink and modernize the approach to managing these valuable lands, all Americans will benefit.

The policy recommendations described in this report include responsible timber harvest but also put the focus on forest restoration as a pathway to all kinds of additional positive outcomes, many of which would create American jobs, including:

- Attracting private investment in forest infrastructure
- Unlocking new markets for forest products

- Spurring the powerful outdoor economy
- Providing greater access for hunting, fishing, and recreation across the country
- Protecting lives and property and saving money by reducing the risk of wildfire
- Providing clean water to communities at lower costs

These outcomes would be especially beneficial to rural communities hit hardest by economic downturn and globalization.

At the present moment, however, U.S. forest policy remains fixated on delivering a single utilitarian output above all others: timber. The U.S. Forest Service has prioritized timber in recent decades for several reasons, including big timber's large influence in Congress and the Forest Service's management by the U.S. Department of Agriculture, or USDA, which exists to support farmers—a culture of industry servitude that naturally seeps into the management of national forests. This narrow focus is holding the U.S. economy back.

The Forest Service has certainly placed a larger emphasis on ecological restoration in the past 25 years, but the agency's long-term focus tells a different story. Since World War II, the measure of success for 193 million acres of national forests has largely been the number of board feet they produce—even as timber markets have increasingly moved overseas.<sup>1</sup>

Such a heavy focus on timber, however, was not the original intention. The National Forest System was created in 1891 with the passage of a pair of laws—the Land Revision and Forest Reserve Acts—that were solidly rooted in the need to protect watersheds in order to prevent devastating floods and ensure reliable water supplies.<sup>2</sup> Notably, neither of these pieces of legislation explicitly authorized the use or development of resources on reserved lands.<sup>3</sup> Indeed, reserved forests were first placed under management by the U.S. Department of the Interior to, in the words of then-Interior Secretary John Noble, “preserve the fauna, fish and flora of our country, and become resorts for the people seeking instruction and recreation.”<sup>4</sup>

That didn't last. Big timber's influence on the Forest Service grew significantly through the middle of the 20th century as the agency's personnel and appropriations expanded. It increasingly began looking to foresters to help set policy, and because revenues generated from logging shone brightest for appropriators, the focus on timber narrowed over time.<sup>5</sup>

Today, the Forest Service's mission remains: "To sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations."<sup>6</sup> And many within the Forest Service have tried to adapt to modern realities and begin adopting a model that prizes a broader definition of value stemming from healthy forests, especially in the years under the Obama administration. But political pressure, Congressional inaction, and a constrictive budget arrangement in the face of growing wildfire needs have so far kept these efforts from affecting the broad-scale evolution required to realize new benefits. Even timber sales function inefficiently in national forests.<sup>7</sup>

Put simply: Americans are getting fleeced by our current U.S. forest policy. It is time for policymakers to change their thinking.

# The future of public lands policy in a new political environment

As with almost every issue on the doorstep of the White House, it is hard to predict how President Donald Trump will approach public lands policy. His secretary of the interior, Ryan Zinke, a former congressman from Montana, appears to be a champion of outdoor recreation and opposed a provision in the Republican Party platform that advocated for the sell-off of public lands. Zinke has been skittish about tying human influence to climate change, however.<sup>8</sup> Trump's nominee to lead the USDA, former Georgia Gov. Sonny Perdue (R), received timber industry backing and is seen as a champion of logging interests.<sup>9</sup>

Some clues suggest that Trump may be friendlier to conservation than traditional Republican orthodoxy. In remarks in *Field & Stream* at the January 2016 Shooting, Hunting, and Outdoor Trade Show in Las Vegas, Trump appeared to reject GOP proposals for transferring ownership of federal lands to the states: "I don't like the idea because I want to keep the lands great, and you don't know what the state is going to do. ... We have to be great stewards of this land. This is magnificent land."<sup>10</sup> However, he later seemed to waver on this position after being attacked by conservatives.<sup>11</sup>

Trump and his adult sons, Eric and Donald Jr., also seek to be authentic champions of hunters and anglers, which could signal openness to reforms in public lands policy that provide greater access for recreation. At a recent media summit organized by the Teddy Roosevelt Conservation Partnership, Donald Trump Jr. said that he wants to be a "loud voice" for preserving public lands access for sportsmen.<sup>12</sup> He is involved with several hunting advocacy groups, including a lifetime membership with Backcountry Hunters and Anglers, which works specifically to protect public lands for recreation.<sup>13</sup> Donald Jr. has promised to push his father on behalf of sportsmen.

Backcountry sports are popular with white working-class Americans—many of whom live in rural areas—who largely voted for Trump and will be a significant focus point for both the GOP and the Democratic Party moving forward.<sup>14</sup>

According to U.S. Census data, hunting participation grew 9 percent and fishing participation 11 percent from 2006 to 2011.<sup>15</sup> Participation in both sports is concentrated and growing fastest in regions carried by Trump and other Republicans in the election: Mountain, North Central, and South Central states. As outdoor recreation seems to be important to his base, Trump would be wise to focus on strengthening the outdoor recreation economy during his presidency.

On the other hand, Trump also specifically promised to increase timber jobs in Oregon during his presidential campaign.<sup>16</sup> It remains to be seen whether he will keep that promise, but the Trump administration has already shown favor toward big-money interests—especially oil and gas. Before he took office, Trump promised to roll back all of President Barack Obama’s major climate policies, and he has remained committed to that goal.<sup>17</sup> Trump’s closest associates and key cabinet selections, including Perdue and Zinke, seem to demonstrate strong commitments to extractive industries. The Trump administration has even taken steps to scrub government websites of references to climate change.<sup>18</sup>

Based on campaign and White House statements to date, Trump’s attention as president seems most concerned with the following priorities:

- Creating jobs for working-class Americans, especially those living in rural communities
- Investing in the country’s “crumbling” infrastructure<sup>19</sup>
- Growing American businesses
- Reforming government to get a better deal for taxpayers<sup>20</sup>

Smarter forest policy would hit all four priorities and more: It would provide tremendous support for rural economies hit hardest by recession and globalization; pave the way for cheaper and more sustainable natural clean water infrastructure; spur new markets for forest products that create U.S. jobs in the timber industry and beyond; and give business-minded officials a set of major new opportunities for financial innovation and taxpayer savings.

This report makes the following recommendations for creating a smarter U.S. forest policy:



- Fix funding for fighting wildfires to address skyrocketing costs and boost investments in fire suppression activities.
- Invest in natural infrastructure, such as forest restoration and watershed protection.
- Create a rural resurgence by unleashing forests' full economic potential.
- Open new markets through products sourced from healthy forests.
- Infuse transparency and local collaboration into forest management.
- Find ways to be more efficient and shift the U.S. Forest Service's approach by moving the agency under the U.S. Department of the Interior.

The bottom line is that Americans must demand far more from federal forest policy. This report outlines a series of principles designed to guide policymakers and administration officials who seek to turn U.S. forests into powerhouses of economic productivity for all Americans, as well as deliver cleaner air and water—without the need for new regulations.

# Fix wildfire funding

Since the 1980s, wildfires have become more frequent, hotter, and more intense, especially in the West.<sup>21</sup> The consequence of this trend is clear: The financial cost of fighting wildfires is skyrocketing year by year with no end in sight. The public health and safety costs of wildfires near American communities—such as salary costs for thousands of firefighters—also add up quickly.

One might assume that the federal government pays for the worst wildfire disasters the same way it funds recovery from other devastating natural disasters such as hurricanes and tornadoes, yet this is not the case. Instead, the U.S. Forest Service receives a rigid annual budget containing a set amount for wildfires, defined by a formula and appropriated with no flexibility to draw down additional resources in the case of an especially bad year. When fires rage, the Forest Service must transfer funds from other critical programs to pay for fire suppression.

Now, however, every year is an especially bad year for wildfires, exacerbated by worsening climate change.<sup>22</sup> This means that the Forest Service must redirect a higher and higher percentage of its fixed annual budget for fire suppression activities. In 1991, for example, firefighting activities required just 13 percent of the Forest Service's annual budget; today, fires eat up more than 60 percent.<sup>23</sup>

This backwards equation further compounds the problem by draining dollars away from exactly the type of activities that would help prevent catastrophic wildfires in the first place—for example, vegetation and watershed management. This area of the Forest Service's work focuses on restoring forests to protect clean water resources, limit the spread of invasive species, protect critical habitat, use healthy forests for sustainably-harvested timber and other products, and more—all of which lower the risk of wildfire. In 2015, \$700 million was siphoned away from these and other key areas because of the increased need for firefighting funding.<sup>24</sup> Staffing resources have swung dramatically toward fire programs in recent years as well.<sup>25</sup> Other depleted areas of Forest Service responsibility, if fully funded, would infuse rural communities across the country with job opportunities, access for hunting and fishing, and more.<sup>26</sup>

Put simply, robbing wildfire prevention activities to pay for wildfire response does nothing to reduce the number of catastrophic wildfires. “The Forest Service is becoming the Fire Service,” former Secretary of Agriculture Tom Vilsack wrote in an op-ed. “The problem will only get worse unless Congress acts to change how wildfire suppression is funded.”<sup>27</sup>

Fixing how the government pays for wildfire management is—among other things—a matter of commonsense fiscal responsibility. Less than 2 percent of wildfires require 30 percent of the Forest Service budget.<sup>28</sup> This staggering number will decrease over time if policymakers can fix the problem and invest in preventing fires before they create massive damage, endanger public health and safety, and produce enormous back-end costs.

Thankfully, Congress has options. A 70-member coalition, which includes several industry groups, has presented concrete recommendations.<sup>29</sup> The proposed fix would involve treating the worst 1 percent of wildfires as natural disasters, similar to catastrophic hurricanes, tornadoes, or earthquakes. Federal agencies would be able to draw funds from a special disaster account dedicated to combating extreme fires—freeing up the men and women of the Forest Service to get to work on their many other critical responsibilities.

“It’s not often you see us and the Sierra Club on the same letter,” said one forest industry leader who signed onto the funding fix.<sup>30</sup> Indeed, the forest industry largely supports a funding fix for a simple reason: Business benefits from a more efficient Forest Service able to thin tree stands and lower the risk of major fires.

Congress should act on the recommendations of this coalition and give the Forest Service the tools it needs to use taxpayer dollars responsibly, protect property and human life, and rebuild America’s forests as an engine to support rural communities rather than endangering them.

# Invest in natural infrastructure

The Trump administration has promised to push for a large infrastructure bill early on—a proposal that is being met with some resistance among Republicans hesitant to approve new spending.<sup>31</sup> However, infrastructure investment also represents a rare area of bipartisan support during a period of historic divisiveness in U.S. politics. Real near-term momentum on this issue could be possible.<sup>32</sup>

Access to clean drinking water is one such infrastructure area in which Republicans and Democrats could collaborate. Especially in the West, where more and more land is being developed, clean drinking water is an economic imperative.<sup>33</sup> Conveyance and filtration systems that are used to capture, clean, and move public drinking water are nearing their life expectancy across the country; replacing them could cost more than \$1 trillion over the next 25 years.<sup>34</sup>

Instead of building new water treatment plants, legislators should look to improve existing natural infrastructure to deliver clean water to communities at significantly less cost. Although protecting water quality was a founding reason for the creation of the Forest Service, many people today do not realize the role that forests play in ensuring and delivering clean drinking water. Twenty percent of America's drinking water originates in national forests and reaches at least 124 million Americans.<sup>35</sup>

Restoring forests helps improve water quality and quantity, increase crop yields, reduce flooding, and improve resilience—among all kinds of other benefits.<sup>36</sup> Natural, or “green,” infrastructure projects, which include planting trees and restoring watersheds rather than building new water treatment facilities, save public and private money.<sup>37</sup> Furthermore, forest restoration can be done more quickly and cost-effectively than building conventional “gray” infrastructure, which must be rebuilt over and over again; it also results in decreased regulatory risks and lower operations and maintenance costs.

Public-private natural infrastructure projects are already gaining traction in several cities. For example, in Denver, the city's water utility recognized a shared interest with the Forest Service in forest restoration and entered into an innovative partnership in which Denver Water will match the government's \$16.5 million investment in forest restoration and watershed protection activities over five years in watershed areas vital to Denver's threatened water supply.<sup>38</sup> Meanwhile, global investments in watershed protection grew 11.8 percent on average from 2013 to 2015, reaching \$25 billion in 2015.<sup>39</sup>

Successfully adding natural infrastructure to the nation's infrastructure solutions toolkit may require applying conventional infrastructure measures to develop a better understanding of budgetary costs and benefits—but in doing so, the returns are becoming clear. Seven cities in the United States avoided between \$725,000 and \$300 million in annual water treatment costs and between \$25 million and \$6 billion in capital costs by making investments to protect and manage watersheds providing water supplies to cities.<sup>40</sup>

Of course, forest restoration delivers many other values as well, including recreation opportunities, wildlife habitat protection, rural income drivers, avoided costs of firefighting, avoided damage to homes from fire and post-fire flooding, carbon sequestration, regional climate adaptation, and more.

If Congress were to put its weight behind natural infrastructure as part of a broader infrastructure bill, not only would it lower the cost of the overall package, but it would also leverage the country's national forests to send a wide range of benefits to America's rural communities hit hardest by economic downturn and globalization. Investments in natural resources show higher job-creation potential—about 20 jobs per \$1 million invested in recreation and up to 33 jobs per \$1 million invested in environmental restoration—than comparable investments in other sectors, including energy, transportation, and water management.<sup>41</sup>

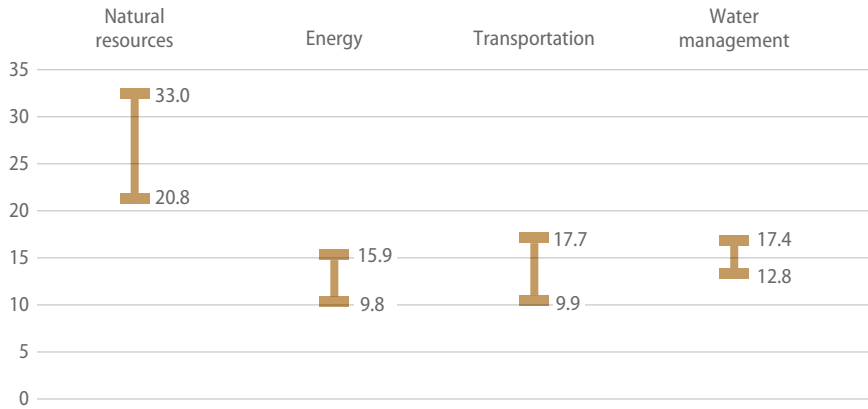
The Forest Service's 2012 Planning Rule laid the groundwork to better value and protect ecosystem services on 193 million acres of national forests.<sup>42</sup> In 2015, the Obama administration issued guidance to federal agencies to incorporate natural infrastructure into decision-making.<sup>43</sup> California and other states have also formally recognized forests as water infrastructure.<sup>44</sup>



FIGURE 1

## Number of direct and indirect jobs created per \$1 million invested, by sector

Investments in natural resource management—including restoration and recreation—create more jobs than investments in other infrastructure



Sources: U.S. Department of the Interior, *The Department of the Interior's Economic Contributions – Fiscal Year 2011* (2012), available at [https://www.doi.gov/sites/doi.gov/files/migrated/ppa/upload/2011-Econ-Report-FINAL-07\\_09\\_2012.pdf](https://www.doi.gov/sites/doi.gov/files/migrated/ppa/upload/2011-Econ-Report-FINAL-07_09_2012.pdf); Todd K. BenDor and others, "Defining and evaluating the ecological restoration economy," *Restoration Ecology* 23 (3) (2015): 209–219, available at <http://dx.doi.org/10.1111/rec.12206>; Robert Pollin, James Heintz, and Heidi Garrett-Peltier, "How Infrastructure Investments Support the U.S. Economy: Employment, Productivity and Growth" (Amherst: Political Economy Research Institute, University of Massachusetts Amherst, 2009), available at <http://www.peri.umass.edu/publication/item/295-how-infrastructure-investments-support-the-u-s-economy>.

## Ideas to promote natural infrastructure investment

By incorporating innovative approaches to natural infrastructure into an infrastructure bill, Congress could not only cut costs and create rural jobs but also pave the way for creative ideas to bring private finance to the table. Such innovation would additionally reduce the burden on taxpayers for infrastructure improvements. A few ideas include:

**Establish a federal credit assistance program to fund watershed restoration projects**, similar to the Transportation Infrastructure Finance and Innovation Act.<sup>45</sup> This plan would allow smaller towns and cities that may otherwise not have access to capital to engage in their own forest infrastructure projects—expanding the benefits further to forest-edge communities most in need of an economic boost.

**Create a green infrastructure bank to provide debt financing to forest watershed restoration projects and other types of natural infrastructure.** Unlike state revolving funds, which traditionally provide loans for water infrastructure improvements and have relatively strict limitations on the level of risk they can accept, a green infrastructure bank could finance more innovative projects with expected but not necessarily guaranteed cash flows. It would also be governed federally, providing a single set of rules to stakeholders across the country and increasing certainty in an emerging area. Furthermore, if run by financial experts within the U.S. Department of the Treasury, the bank could offer innovative financial structures, such as loan guarantees or subordinated positions, to attract private investors with reduced risk. This way, the money would not need to be allocated or recouped, making Congress' role easier.

**Promote participating agreements with cities and utilities that incentivize restoration activities on National Forest land.** Investments in watershed protection are growing, but are limited by the availability of partners and suitable projects. Legislation such as the Wyden Amendment has helped promote watershed-focused projects, and interest from private investors is starting to take shape in the form of new financing—called forest resilience bonds—that attract private capital through “pay-for-performance” agreements. Pay-for-performance agreements share risk between utilities and private investors, encouraging investors to pay upfront restoration costs and saving public funds by rewarding investors based on the measurable environmental gains at the end of the bond. Encouraging these partnerships with municipalities and utilities delivers better water and rural jobs in the restoration economy.

**Encourage targeted investments that protect water for communities who depend on national forest land.** The Forest Service's 2012 planning rule and the Forests to Faucets program highlight the importance of national forests as sources of clean water for cities.<sup>46</sup> These sources can be improved and protected through restoration. Investments in this field are growing, but utilities and organizations interested in restoration need better information on where actions have the greatest impact in order to commit to financing. Improving the models and research to identify restoration sites that provide the greatest return on investment for drinking water supplies would help the Forest Service and affected communities use their resources more effectively.

# Create a rural resurgence by unleashing forests' full economic potential

In a time of growing wealth inequality, modernizing the Forest Service presents an enormous opportunity to help rebalance the U.S. economy—especially in rural areas that have been left behind. It is not enough to promise more logging jobs, as President Trump has; the timber market has largely gone global. Congress and the Trump administration should instead invest in the outdoor economy. By investing in the growing recreation economy, policymakers could create jobs in rural communities and beyond.

Overall, outdoor recreation generates \$646 billion in consumer spending each year and directly supports 6.1 million jobs.<sup>47</sup> This is a resilient, thriving industry: From 2005 to 2011, even during the Great Recession, the outdoor economy grew 5 percent annually.<sup>48</sup> Indeed, Americans currently spend more on outdoor recreation than they do on pharmaceuticals, automobiles and parts, or household utilities.<sup>49</sup>

National forests are some of the most valuable areas for outdoor recreation. These lands attract more than 170 million people a year who hunt, fish, hike, camp, boat or raft, ride horses, ski and snowboard, drive snowmobiles and all-terrain vehicles, and engage in many other outdoor activities.<sup>50</sup> Visitors spend an estimated \$11 billion a year in communities within 50 miles of national forests, supporting more than 143,000 jobs.<sup>51</sup> Nearly 3 million Americans have forest-related jobs in fields including forest management, outdoor recreation, and the forest products industry, according to the Forest Service.<sup>52</sup> When compared with forestry and logging, which employed less than 40,000 people in the United States in 2015, it is clear that the future of America's forests is broader than just harvesting board feet.<sup>53</sup>

Communities that serve as gateways for visitors to national forests and other public lands are predominantly rural—and rural counties with federal lands or protected federal lands consistently perform better economically in population, employment, per capita income growth, and personal income than those without.<sup>54</sup>

## Thriving rural forest gateways

**Northeast Minnesota:** Each year hundreds of thousands of visitors flock to the Superior National Forest in and around Ely, Minnesota, home to the Boundary Waters Canoe Area Wilderness. Formerly reliant on the boom-and-bust cycles of the mining industry, Ely now sits at the center of a sustainable \$900 million tourism and recreation economy, driven largely by the national forest that supports 17,000 jobs in northeast Minnesota.<sup>55</sup> Ely's thriving downtown features dozens of bustling outfitters and retailers, restaurants, hotels and, increasingly, new businesses founded by entrepreneurs seeking proximity to world-class outdoor recreation in a resurgent rural community.<sup>56</sup>

**Southwest Oregon:** In five counties surrounding Medford, Oregon, forest restoration activities have created jobs at twice the rate of comparable investments in coal and three times that of investments in oil or natural gas.<sup>57</sup> These restoration activities contributed between \$97.3 million and \$125.1 million in economic output from 2000 to 2009.<sup>58</sup> Eighty percent of restoration investments have remained in the local communities where projects are located, which also spurs growth among rural Oregon businesses such as plant nurseries and companies that supply heavy equipment or rock and gravel.<sup>59</sup>

President Trump and some members of Congress have promised to lift what they characterize as restrictions on the timber industry in order to spur rural economic growth. In particular, H.R. 3650 and H.R. 2316 would hand control over millions of national forest acres to the states, with an explicit emphasis on timber production.<sup>60</sup> But federal oversight ensures consideration of all economic, environmental, and other factors—such as public input and recreation value—in forest management decision-making. Circumventing the federal environmental review process and its robust requirements for public comment would limit citizens' ability to speak for themselves and narrow the focus on timber even further, leaving rural communities even more vulnerable to the timber industry's significant volatility.<sup>61</sup>

Instead, recreation favors sustainable, self-sufficient rural economies. Counties in the West with more than 30 percent of their land under federal protection have shown that they can increase jobs at a rate four times faster than counties with no federal lands.<sup>62</sup> Furthermore, by empowering small towns and cities to build their own thriving economies around nearby public lands, most new revenue remains in the community to build further local prosperity.

In December, President Obama signed the Outdoor Recreation Jobs and Economic Impact Act of 2016 into law, which directs the U.S. Bureau of Economic Analysis to measure and analyze the full effects of the outdoor economy on the U.S. economy.<sup>63</sup> Significantly, the law was passed with unanimous bipartisan support in the Republican-controlled House and Senate.<sup>64</sup>

Creating an official set of measurements of the growing power of recreation to contribute to a healthy economy is an important first step, but if the Trump administration and Congress are serious about creating working-class jobs in rural communities, they should go further in taking deliberate steps to leverage the recreation power of America's forests so that the output benefits all Americans. Possibilities include:

- **Make it easier to get outdoors** by passing legislation such as the Recreation Not Red-Tape Act that reduces permit wait times, increases access to public lands—with commonsense protections for especially sensitive landscapes—and overall makes recreation a priority for public land use.<sup>65</sup>
- **Support small businesses in the recreation economy** by engaging local chambers of commerce and local governments to better promote existing ways to effectively support successful small businesses in rural areas through the Small Business Administration or the USDA Rural Development program.
- **Protect public lands access for hunters and anglers** by opposing the transfer of federal lands to states that is being championed by some congressional leaders—a dangerous and irresponsible plan unpopular with hunting and fishing advocates and a majority of Westerners, to name a few.
- **Fully fund the Land and Water Conservation Fund**, a highly successful program that has helped strengthen national forests by protecting important habitats, acquiring inholdings, and increasing access to public lands for sportsmen and women. The program is based on a simple concept that a small portion of royalties from offshore oil and gas development should be invested in public lands and outdoor recreation projects for all Americans. Despite Congress' intent to invest \$900 million into the program every year, the actual funding has fallen woefully short, leaving rural communities across the country with unmet needs.<sup>66</sup>



# Open new markets through products sourced from healthy forests

In the past few decades the timber market has gone global, just like almost every other industry. The forest products trade balance entered the 1990s with a surplus but deteriorated into a substantial deficit by the end of the decade.<sup>67</sup> President Trump’s focus on simply bringing back timber jobs, therefore, is not a long-term solution. Instead, Congress and the Trump administration should incentivize innovative types of harvests here at home that help keep forests healthy and producing multiple values for the American economy—specifically, by supporting the development of new markets that will increase the economic viability of sustainable harvests.

While building construction has conventionally depended on concrete and steel, it could present an interesting new opportunity for a sustainable timber market. According to the Green Building Council, the construction industry produces as much as 39 percent of all carbon emissions in the United States.<sup>68</sup> These emissions are increasing as the economy continues to improve and development moves forward at a steady rate across the country. Clearly, industry leaders in building construction need sustainable solutions. Why not make tall buildings out of wood?

An emerging construction material called cross-laminated timber treats wood so that it is stronger and more sustainable than traditional construction materials—with the added benefit of being fire resistant as well.<sup>69</sup> Interest in mass timber projects, or construction using cross-laminated timber, is growing among architects, developers, and engineers. Mass timber is considered the vanguard of construction technology and it is already inspiring new cottage industries in a wide range of fields related to building design and construction to support it.<sup>70</sup>

Even better, mass timber construction requires a byproduct of forest restoration activities—material otherwise considered low-value or even waste. Cross-laminated timber is made up of smaller pieces of “less-than-perfect wood”—such

as the material removed when forests are thinned to promote ecosystem health and reduce fire risk.<sup>71</sup> When layered together in alternating directions, these pieces combine to create a stronger product with a cross-hatching wood grain pattern.<sup>72</sup> Restoration, of course, also promotes all kinds of other benefits, including reduced fire risk and healthier watersheds.

If policymakers in the Trump administration and Congress were to encourage businesses to thin national forests, rather than cut them down completely, and make a profit by selling the resulting product, the timber market could pay for restoration and all the additional values it brings. This could be done by providing a tax credit that only applies to the sale of trees smaller than a certain diameter and other biomass used in mass timber construction. One timber industry source expressed enthusiastic support for mass timber's potential but also emphasized the need to create incentives for the harvest of small-diameter trees.<sup>73</sup>

Mass timber construction projects also face a number of burdensome bureaucratic hurdles at various levels of government. Policymakers should also take action to ease building codes and support other policies that would pave a better path for mass timber construction, making it an easier choice for developers.<sup>74</sup>

Fostering growth in this new market would put more people to work in the timber industry and return forests to health. These jobs would emerge largely in rural communities where a workforce could be mobilized for dual harvest and restoration activities. Currently, only one timber mill in the United States is certified to make the kind of cross-laminated timber used in mass timber construction. Increased demand could therefore create new factory jobs as well.<sup>75</sup>

Other forms of new forest products also warrant exploration—notably, the advancement of the bio-based economy, including biomass, an energy source created by burning wood to generate electricity or convert energy to liquid fuels or gases.<sup>76</sup> Biomass energy is not without controversy because of carbon dioxide emissions, regional discrepancies in biomass availability, and high costs compared with other renewables, but it could provide another source of revenue for America's forests if requirements for sustainable harvest were enforced, leaving forests healthy and absorbing even more carbon dioxide. Next-generation renewable fuels and bio-based technologies contribute \$369 billion to the U.S. economy each year and support 4 million jobs; investments in research and potential subsidies for producers could help build this part of the energy sector.<sup>77</sup>

Former Secretary of Agriculture Tom Vilsack took some steps to champion innovation in forest products through programs such as the Forest Products Laboratory. If Congress and the Trump administration aim to help industry gain strength for the long term, they would be smart to give these programs more concerted attention. The bottom line is that new timber jobs can be created in the United States by fostering new markets for forest products that require thriving ecosystems, while also gaining all the additional benefits of restoration.

# Infuse transparency and local collaboration into forest management

The headquarters of land management agencies, based in Washington, are not well-equipped to make the best possible decisions at the local level. Moreover, complex forest ecosystems are not bound by lines drawn on a map delineating federal owners from state or private ownership. A far greater emphasis on the grass-roots level is needed in order to effectively manage forests for maximum benefit.

The Obama administration took serious steps to champion greater collaboration on forest management at the grassroots level between the Forest Service and farmers, ranchers and other private landowners, local governments, and other key partners to make the most of the nation's forests. But these programs need more resources and the political will to permanently change the Forest Service role from top-down manager to convener of many local stakeholders with the best technical expertise and ground-level knowledge.<sup>78</sup>

The best example of this approach is the Regional Conservation Partnership Program, or RCPP, created under the 2014 Farm Bill, which promotes collaboration among diverse groups of partners at the local level. This collaboration provides proactive conservation assistance for private landowners and producers, helping them derive greater value from their forests by keeping them intact. The program acts as a force multiplier—not only championing more sophisticated locally driven forest management strategies but expanding the financial pot as well.<sup>79</sup> The USDA has invested \$1.2 billion into the RCPP over five years and has asked partners to commit an equal amount, creating an overall \$2.4 billion investment in this innovative approach.

Collaborative grassroots projects such as the RCPP work in ways that directly support the prosperity of the American people. Supported by \$2.7 million from the Forest Service, Blue Mountains Forest Partners is a forest collaborative in Grant County, Oregon, comprised of elected officials, representatives from the forest

products sector, local and regional conservation organizations, business owners, landowners, and tribal and federal land management agencies. After a local logging mill announced plans to close in 2012 due to lack of log supply in the Malheur National Forest—an outcome that would have had devastating economic effects on the community—the cooperative worked with the Forest Service, the mill’s owners, and Oregon elected officials and conservation groups to develop a coordinated strategy to secure a sustainable supply of logs and keep the mill open.<sup>80</sup>

Positive, mutually-agreeable outcomes, repeated in several areas as this approach has gained steam in recent years, show that flexible but goal-oriented collaboration among stakeholders that understand local dynamics can ensure that a wide range of priorities are met through the collaborative approach allowed through the RCPP.<sup>81</sup>

In the coming months and years, USDA leadership under the Trump administration would be smart to continue to expand investments in innovative programs such as the RCPP that bring together public and private landowners and initiate forest restoration initiatives that will make American lands more resilient, improve the quality of life in rural communities, and spur local economies.

Congress can support this work by allocating more resources to the USDA and the Forest Service for collaborative forest management, especially the Natural Resources Conservation Service’s Conservation Innovation Grants, which support conservation on agricultural lands.<sup>82</sup> Current budget levels will provide \$25 million for these efforts, but far more is needed to effectively address pressing natural resource concerns through this grassroots-oriented model.

The Forest Service should also take concerted steps to retrain its regional and local workforce to refocus on customer service and citizen engagement—thereby institutionalizing a culture where supporting local communities is a top priority. In the face of extremely low confidence in government, the Forest Service has a special opportunity to engage proactively in a positive manner in rural communities.<sup>83</sup> Through better public education, greater forest access, and collaborative management, the American public will become better informed about—and benefit from—the enormous economic values driven by healthy forests.



# Find ways to be more efficient and shift the U.S. Forest Service's approach

When President Obama announced his proposal to “reform, reorganize, and consolidate” parts of the U.S. government in early 2012, he left a glaring omission: the confounding split in the nation’s land management agencies.<sup>84</sup> The majority of America’s public lands are managed by the U.S. Department of the Interior, which includes the U.S. National Park Service, the U.S. Bureau of Land Management, the U.S. Fish and Wildlife Service, and the Bureau of Indian Affairs, among other supporting agencies that provide services related to public lands stewardship. Yet the Forest Service, with a mission involving stewardship of taxpayer-owned forests, is part of the USDA, which works primarily at the service of farmers and other private landowners and producers. The dominance of timber among Forest Service priorities no doubt has been exacerbated because the USDA is so focused on serving the interests of the agriculture industry, true to the department’s original purpose.

This structure curbs the Forest Service’s ability to adapt to a modern environment. In the past few decades, as timber has increasingly become an international commodity, new urgent needs for forest productivity have emerged. Healthy forests are increasingly valuable not only for their ability to foster clean water supplies that can support a growing urban population but also for their ability to sequester carbon, house disappearing species that are vital to ecosystems, and provide outdoor recreation opportunities that grow the booming recreation economy. All of these gains, however, are under threat from U.S. forest policy that blindly prioritizes timber industry interests and allows devastating wildfires to proliferate under an unsustainable budget structure—leaving all other forest benefits off the table.

Meanwhile, the Interior Department has honed significant expertise in managing its stable of agencies adept at providing all kinds of value to taxpayers from public lands: conservation, resource extraction, recreation, public health benefits, and more. The Interior Department has also made strong strides toward methods to better measure success in multiple areas, not just one antiquated measure such as number of board feet per acre.

It makes little sense that one cabinet department manages a national park while another manages a national forest right next door. Wildlife does not know the difference—and public landowners, state and local governments, businesses both large and small, and other federal agencies are forced to interface with this complex web of federal responsibilities.

The Interior Department can also create immediate synergy through close proximity with other lands agencies, which would benefit the nation's growing need to plan overarching management objectives and strategies at the landscape level first and then defer local management to local stakeholders. For example, huge duplicity currently exists between the Interior Department and the Forest Service; a single management structure and resource pool would assist with information sharing, alignment of objectives, and many more benefits.

Having two completely separate entities for such similar land management work is confusing and a bad use of taxpayer resources. A major corporation would never tolerate such a glaring inefficiency. Transforming the Forest Service through the kind of modernization called for in this report would be far easier if its place in the organizational chart fell under the Interior Department.

In late January, reports surfaced that Interior Secretary Ryan Zinke had floated this very proposal to Congress, where it was met with significant skepticism.<sup>85</sup> He appeared to reaffirm his intentions in an address to Interior Department employees a few weeks later.<sup>86</sup>

If the Trump administration is serious about making government work for Americans and saving taxpayer money, the president and Congress should follow Zinke's advice and make the Forest Service part of the Interior Department. This would be a difficult and politically charged reorganization effort. But bold action could provide significant efficiencies, generating taxpayer savings over time and lessening appropriations needs, especially if the wildfire funding issue is fixed as well.

# Conclusion

U.S. forest policy has been consistently overlooked and forgotten by policymakers and the public. But that need not limit policymakers' significant ability to reform government and provide far greater value from forests than the nation typically gets now.

The truth is that America's forests are not living up to their full potential. Right now, Americans are getting a bad deal from their 193 million acres. The good news is that Congress has the power to change course and make it possible for the country to derive a tremendous set of real values from national forests—and, by extension, private and state forests as well.

It may not be easy. Modernizing U.S. forest policy will require a sharp eye for fiscal responsibility; a willingness to make hard choices in the name of better governance; an interest in drawing new streams of revenue from forests that will put people to work in rural communities; and an ability to defer to people on the ground who know the land best. It will require championing those who hunt, fish, hike, and camp in national forests and help drive a \$646 billion outdoor economy. And it will also require some of the country's best financial minds to think creatively about how to help forests energize new markets, attracting investment and fostering industries that thrive when forests are healthy.

More than anything else, though, modernization of U.S. forest policy will require a major shift in how policymakers and the public view success. Healthy forests produce far greater benefits to the American economy than struggling forests damaged by low expectations and lack of vision. Therefore, success in modern forest management must be defined through the sharp lens of forest restoration—the root of every benefit contained in this paper's proposals, if adopted. The nation can no longer allow timber dominance to sap its ability to deliver real value from forests to American taxpayers.

To redefine success, the government will need a new system for measuring the additional types of value that forests can deliver beyond timber production. Some of those values—such as attracting new investment in watershed infrastructure, more abundant clean water, preventing catastrophic wildfires, or putting people to work in the recreation economy—can be defined in relatively clear economic terms. Others—such as conserving wildlife habitat, sequestering carbon, or creating a more collaborative, grassroots-oriented model of forest management—are not so easy to quantify.

Congress should instruct the Department of Agriculture to prepare new analysis that will instruct how these values can best be measured, benchmarked over time, and communicated effectively to the public. Once this analysis is complete, Congress should then rewrite the Forest Service budget to account for each new value in addition to timber production. Reforming the budget itself would provide certainty to bureaucrats and create strong accountability for the implementation of a modern set of forest priorities.

These proposals leave much more to consider, but they can provide a strong starting point for members of Congress and officials in the Trump administration eager to give the American people a better deal. Forestry is an ancient endeavor, but the United States need not stay mired in the past when there is so much potential in the future.

---

## About the author

**Adam Fetcher** is a writer and consultant based in Minneapolis. He serves as communications adviser and speechwriter for Patagonia, the outdoor clothing company, and was formerly Patagonia's director of global public relations and communications. Fetcher was press secretary for the U.S. Department of the Interior during the Obama administration, in addition to several other government and Obama campaign roles. He serves on the Board of Directors for the Boundary Waters Trust and Northeastern Minnesotans for Wilderness.

---

## Acknowledgements

The author would like to thank Ryan Richards, Nicole Gentile, Emily Haynes, Chester Hawkins, Alex Kapitan, Katherine Downs, Lauren Vicary, and several interview subjects who gave their time and expertise in contribution to this paper.



---

## Endnotes

- 1 Naomi Heindel, "From Clearcuts to Ecosystem Management: The Forest Service and the Environmental Movement," Stevens Historical Research Associates, September 12, 2014, available at <http://www.shraboise.com/2014/09/91214-from-clearcuts-to-ecosystem-management-the-forest-service-and-the-environmental-movement/>.
- 2 James Muhn, "Early Administration of the Forest Reserve Act: Interior Department and General Land Office Policies, 1881–1897," In Harold K. Steen, ed., *The Origins of the National Forests: A Centennial Symposium* (Durham, NC: Forest History Society, 1992), available at [http://www.foresthistory.org/Publications/Books/Origins\\_National\\_Forests/sec17.htm](http://www.foresthistory.org/Publications/Books/Origins_National_Forests/sec17.htm).
- 3 Amanda D. Rodewald, "Our National Forests Weren't Designed Just for Timber," *The Hill*, July 21, 2016, available at <http://thehill.com/blogs/pundits-blog/energy-environment/288659-our-national-forests-werent-designed-just-for-timber>.
- 4 Muhn, "Early Administration of the Forest Reserve Act."
- 5 Michael Frome, *The Forest Service* (New York: Praeger, 1971).
- 6 U.S. Forest Service, "What We Believe," available at <https://www.fs.fed.us/about-agency/what-we-believe> (last accessed March 2017).
- 7 Randal O'Toole, "Reforming the Forest Service," Downsizing the Federal Government, July 12, 2016, available at <https://www.downsizinggovernment.org/agriculture/forest-service>.
- 8 Eric Wolff and Esther Whieldon, "Interior Pick Zinke on Climate Change: 'I Don't Believe It's a Hoax,'" *Politico*, January 17, 2017, available at <http://www.politico.com/story/2017/01/ryan-zinke-interior-climate-change-233703>.
- 9 Georgina Gustin, "Sonny Perdue, Trump's Agriculture Pick, Could Roll Back Forest Protections," *InsideClimate News*, February 7, 2017, available at <https://insideclimatenews.org/news/06022017/sonny-perdue-georgia-usda-agriculture-secretary-national-forest-service-climate-change>.
- 10 Reena Flores, "Donald Trump: Don't Hand Federal Lands to States," CBS News, January 23, 2016, available at <http://www.cbsnews.com/news/donald-trump-dont-hand-federal-lands-to-states/>.
- 11 Tay Wiles, "Trump met with a leader of the land transfer movement," *High Country News*, October 17, 2016, available at <http://www.hcn.org/articles/trump-met-with-a-leader-of-the-land-transfer-movement>.
- 12 Joshua Zaffos, "How Will Trump Act on Conservation and Public Lands?" *High Country News*, June 28, 2016, available at <http://www.hcn.org/articles/presidential-campaigns-offer-sneak-peeks-of-conservation-priorities>.
- 13 Phil Taylor, "Trump's Son Woos Sportsmen, Covets Top Job at Interior," *E&E News*, May 12, 2016, available at <http://www.eenews.net/stories/1060037104>.
- 14 National Shooting Sports Foundation, "A Portrait of Hunters and Hunting License Trends: National Report" (2010), available at <http://nssf.org/PDF/HuntingLic-Trends-NatlRpt.pdf>.
- 15 U.S. Fish and Wildlife Service and Bureau of the Census, *2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* (U.S. Department of the Interior and U.S. Department of Commerce, 2011), available at <https://www.census.gov/prod/2012pubs/fhw11-nat.pdf>.
- 16 Hal Bernton, "Northwest Towns Expect New Timber Jobs Under Trump: How That Might Happen," *Seattle Times*, November 20, 2016, available at <http://www.seattletimes.com/business/economy/how-will-mill-jobs-return-to-this-trump-county-in-washington-state/>.
- 17 Coral Davenport, "With Trump in Charge, Climate Change References Purged From Website," *The New York Times*, January 20, 2017, available at [https://www.nytimes.com/2017/01/20/us/politics/trump-white-house-website.html?\\_r=0](https://www.nytimes.com/2017/01/20/us/politics/trump-white-house-website.html?_r=0).
- 18 Ibid.
- 19 Melanie Zanona, "Trump: Nation's Infrastructure Can Be Fixed 'Only By Me,'" *The Hill*, June 22, 2016, available at <http://thehill.com/policy/transportation/284532-trump-nations-infrastructure-can-be-fixed-only-by-me>.
- 20 Gregory Korte, "Through Executive Order, Trump Aims to Make Government 'Less Wasteful,'" *USA Today*, March 13, 2017, available at <http://www.usatoday.com/story/news/politics/2017/03/13/through-executive-order-trump-aims-make-government-less-wasteful/99127294/>.
- 21 Anthony Leroy Westerling, "Wildfires in the West Have Gotten Bigger, More Frequent and Longer Since the 1980s," *Phys.org*, May 27, 2016, available at <https://phys.org/news/2016-05-wildfires-west-bigger-frequent-longer.html>.
- 22 Chelsea Harvey, "Climate Change Has Been Making Western Forest Fires Worse for Decades, Study Says," *The Washington Post*, October 10, 2016, available at [https://www.washingtonpost.com/news/energy-environment/wp/2016/10/10/climate-change-has-been-making-western-forest-fires-worse-for-decades-study-says/?utm\\_term=.145b09fe1a0b](https://www.washingtonpost.com/news/energy-environment/wp/2016/10/10/climate-change-has-been-making-western-forest-fires-worse-for-decades-study-says/?utm_term=.145b09fe1a0b).
- 23 Dina Fine Maron, "Charting a Course for the U.S. Forest Service's Response to Climate Change," *Scientific American*, August 9, 2010, available at <https://www.scientificamerican.com/article/charting-a-course-for-the-us-forest-services-response-to-climate-change/>.
- 24 U.S. Forest Service, *The Rising Cost of Wildfire Operations: Effects on the Forest Service's Non-Fire Work* (U.S. Department of Agriculture, 2015), available at <https://www.fs.fed.us/sites/default/files/2015-Fire-Budget-Report.pdf>.
- 25 Nidhi Thakar, "Putting Out the Fire: 3 Reasons Why President Obama's Proposed Reforms to the Wildfire Budget Are Critical for Our Public Lands," Center for American Progress, May 13, 2014, available at <https://www.americanprogress.org/issues/green/news/2014/05/13/89616/putting-out-the-fire-3-reasons-why-president-obamas-proposed-reforms-to-the-wildfire-budget-are-critical-for-our-public-lands>.
- 26 Tom Vilsack, "The Cost of Fighting Wildfires Is Sapping Forest Service Budget," *Seattle Times*, August 4, 2015, available at <http://www.seattletimes.com/opinion/the-cost-of-fighting-wildfires-is-sapping-forest-service-budget/>.

- 27 Tom Vilsack, "Urgent Fix Needed for Forest Service Budget," *The San Diego Union-Tribune*, July 6, 2016, available at <http://www.sandiegouniontribune.com/opinion/commentary/sdut-wildfires-forest-service-budget-2016jul06-story.html>.
- 28 U.S. Forest Service, *The Rising Cost of Wildfire Operations*.
- 29 Partner Caucus on Fire Suppression Funding Solutions, "Coalition Makes Recommendations to Congress for a Comprehensive Fire Funding Fix," Press release, September 13, 2016, available at <http://www.nature.org/newsfeatures/pressreleases/more-than-70-organizations-make-recommendations-to-congress-for-a-comprehensiv.xml>.
- 30 Timber industry representative, phone interview with author, Minneapolis, Minnesota, February 21, 2017.
- 31 Kathryn A. Wolfe and Lauren Gardner, "Conservatives Vs. Trump's \$1 Million Infrastructure Plan," *Politico*, November 11, 2016, available at <http://www.politico.com/story/2016/11/conservatives-vs-trumps-infrastructure-plan-231221>.
- 32 Steven T. Dennis, "At Times, Trump May Tap Unlikely Ally in Congress: Chuck Schumer," *Bloomberg*, November 9, 2016, available at <https://www.bloomberg.com/politics/articles/2016-11-09/at-times-trump-may-tap-unlikely-ally-in-congress-chuck-schumer>.
- 33 Center for American Progress, "The Disappearing West," available at <http://www.disappearingwest.org> (last accessed March 2017).
- 34 Suzanne Ozment and others, "Protecting Drinking Water at the Source: Lessons From Watershed Investment Programs in the United States" (Washington: World Resources Institute, 2016), available at [http://www.wri.org/sites/default/files/Protecting\\_Drinking\\_Water\\_at\\_the\\_Source.pdf](http://www.wri.org/sites/default/files/Protecting_Drinking_Water_at_the_Source.pdf).
- 35 Juliet Eilperin, "Administration Issues Major Rewrite of Forest Rules," *The Washington Post*, January 26, 2012, available at ; U.S. Forest Service, *Collaborative Forest Landscape Restoration Program: 5-Year Report, FY 2010–2014* (U.S. Department of Agriculture, 2015), available at [https://www.fs.fed.us/restoration/documents/cflrp/CFLRP\\_5-YearReport.pdf](https://www.fs.fed.us/restoration/documents/cflrp/CFLRP_5-YearReport.pdf).
- 36 United Nations Environment Programme, "Green Infrastructure Guide for Water Management: Ecosystem-Based Management Approaches for Water-Related Infrastructure Projects" (2014), available at [http://www.unepdhi.org/-/media/microsite\\_unepdhi/publications/documents/unep/web-unep-dhigroup-green-infrastructure-guide-en-20140814.pdf](http://www.unepdhi.org/-/media/microsite_unepdhi/publications/documents/unep/web-unep-dhigroup-green-infrastructure-guide-en-20140814.pdf).
- 37 Jessica Lyons Hardcastle, "How to Reduce Water Management Expenses With Green Infrastructure," *Environmental Leader*, January 6, 2016, available at <https://www.environmentalleader.com/2016/01/how-to-reduce-water-management-expenses-with-green-infrastructure/>.
- 38 Denver Water, "From Forests to Faucets: U.S. Forest Service and Denver Water Watershed Management Partnership," available at <http://www.denverwater.org/SupplyPlanning/WaterSupply/PartnershipUSFS/> (last accessed February 2017).
- 39 Genevieve Bennett and Franziska Ruef, "Alliances for Green Infrastructure: State of Watershed Investment 2016" (Washington: Ecosystem Marketplace, 2016), available at [http://www.forest-trends.org/documents/files/doc\\_5463.pdf](http://www.forest-trends.org/documents/files/doc_5463.pdf).
- 40 Ozment and others, "Protecting Drinking Water at the Source."
- 41 Nicole Gentile and Jenny Rowland, "The Infrastructure of the Great Outdoors" (Washington: Center for American Progress, 2016), available at <https://www.americanprogress.org/issues/green/reports/2016/12/16/295190/the-infrastructure-of-the-great-outdoors/>.
- 42 U.S. Department of Agriculture, U.S. Forest Service, "National Forest System Land Management Planning: Final Rule" *Federal Register* 77 (68) (2012).
- 43 Li Zaidi, Tamara Dickinson, and Timothy Male, "Incorporating Natural Infrastructure and Ecosystem Services in Federal Decision-Making," *The White House*, October 7, 2015, available at <https://www.whitehouse.gov/blog/2015/10/07/incorporating-natural-infrastructure-and-ecosystem-services-federal-decision-making>.
- 44 Luke Hunt, "California Law Recognizes Meadows and Forests as Water Infrastructure," *American Rivers*, October 4, 2016, available at <https://www.americanrivers.org/2016/10/california-law-recognizes-meadows-forests-water-infrastructure/>.
- 45 U.S. Department of Transportation, "Transportation Infrastructure Finance and Innovation Act (TIFIA)," available at <https://www.transportation.gov/buildamerica/programs-services/tifia> (last accessed March 2017).
- 46 U.S. Forest Service, "Forests to Faucets," available at [https://www.fs.fed.us/ecosystemservices/FS\\_Efforts/forests2faucets.shtml](https://www.fs.fed.us/ecosystemservices/FS_Efforts/forests2faucets.shtml) (last accessed March 2017).
- 47 Outdoor Industry Association, "The Outdoor Recreation Economy" (2012), available at [https://outdoorindustry.org/pdf/OIA\\_OutdoorRecEconomyReport2012.pdf](https://outdoorindustry.org/pdf/OIA_OutdoorRecEconomyReport2012.pdf).
- 48 Ibid.
- 49 Ibid.
- 50 Erin Kelly, "Obama Administration Debating Care of U.S. National Forests," *Arizona Republic*, July 25, 2011, available at <http://archive.azcentral.com/news/articles/2011/07/25/20110725obama-administration-debating-care-us-forests.html>.
- 51 U.S. Forest Service, *National Visitor Use Monitoring Survey Results* (U.S. Department of Agriculture, 2015), available at [https://www.fs.fed.us/recreation/programs/nvum/pdf/508pdf2015\\_National\\_Summary\\_Report.pdf](https://www.fs.fed.us/recreation/programs/nvum/pdf/508pdf2015_National_Summary_Report.pdf).
- 52 U.S. Forest Service, "Indicator 6.36: Employment in U.S. forest products sector," available at <https://www.fs.fed.us/research/sustain/criteria-indicators/indicators/indicator-636.php> (last accessed March 2017).
- 53 U.S. Department of Labor Bureau of Labor Statistics, "Forestry and Logging: NAICS 113," available at <https://www.bls.gov/iag/tgs/iag113.htm> (last accessed March 21, 2017).
- 54 U.S. Department of Agriculture, "U.S. Forest Service Reports Visitors, Local Communities Receive Health, Economic Benefits from Visiting National Forests and Grasslands," Press release, July 19, 2013, <https://www.usda.gov/media/press-releases/2013/07/19/us-forest-service-reports-visitors-local-communities-receive-health-headwaters-economics>, "Federal Lands in the West: Liability or Asset?" (2017), available at <https://headwaterseconomics.org/public-lands/federal-lands-performance/>.

- 55 Explore Minnesota, "Tourism and Minnesota's Economy" (2017), available at <http://www.exploreminnesota.com/industry-minnesota/research-reports/researchdetails/download.aspx?id=8025>.
- 56 Dan Kraker, "Ely Calls a Truce Over Mining as Tourist Economy Booms," *Minnesota Public Radio*, August 2, 2016, available at <http://www.mprnews.org/story/2016/08/02/ely-minnesota-economy-tourism-copper-mining>.
- 57 Taylor Hesselgrave, Cathy Kellon, and Kristen Sheeran, "A Brief Economic Analysis of Watershed Restoration Investments: A Case Study of Southwestern Oregon" (Portland, OR: Ecotrust, 2012), available at [http://archive.ecotrust.org/www/downloads/Methods\\_for\\_Valuing\\_of\\_Watershed\\_Restoration\\_5-12.pdf](http://archive.ecotrust.org/www/downloads/Methods_for_Valuing_of_Watershed_Restoration_5-12.pdf).
- 58 Ibid.
- 59 Ibid.
- 60 *State National Forest Management Act of 2015*, H. Rept. 3650, 114 Cong., 1 sess. (2015), available at [https://www.congress.gov/bill/114th-congress/house-bill/3650/Self-Sufficient\\_Community\\_Lands\\_Act](https://www.congress.gov/bill/114th-congress/house-bill/3650/Self-Sufficient_Community_Lands_Act), H. Rept. 2316, 114 Cong., 1 sess. (2015), available at <https://www.congress.gov/bill/114th-congress/house-bill/2316/committees>.
- 61 Michael Goergen and others, "The State and Future of U.S. Forestry and the Forest Industry" (Washington: U.S. Endowment for Forestry and Communities, 2013), available at [http://www.usendowment.org/images/Forest\\_Sector\\_Report\\_-\\_FINAL\\_9.5.13.pdf](http://www.usendowment.org/images/Forest_Sector_Report_-_FINAL_9.5.13.pdf).
- 62 Outdoor Industry Association, "The Outdoor Recreation Economy."
- 63 *Outdoor Recreation Jobs and Economic Impact Act of 2016*, Public Law 114-249, 114th Cong., 2nd sess. (December 8, 2016), available at <https://www.congress.gov/bill/114th-congress/house-bill/4665>.
- 64 Matt Lee-Ashley, Claire Moser, and Michael Madowitz, "The Government Should Begin to Measure America's Powerful Outdoor Economy" (Washington: Center for American Progress, 2015), available at <http://www.americanprogress.org/issues/green/reports/2015/01/21/103062/the-government-should-begin-to-measure-americas-powerful-outdoor-economy/>.
- 65 Sen. Ron Wyden, "The Recreation Not Red-Tape Act," available at <https://www.wyden.senate.gov/priorities/recreation-act> (last accessed March 2017).
- 66 Land and Water Conservation Fund Coalition, "About LWCF," available at <http://www.lwcfcoalition.org/about-lwcf.html> (last accessed March 2017).
- 67 Roger A. Sedjo and David Bael, "The Impact of Globalization on the Forest Products Industry," Working Paper 2007-36 (Industry Studies Association, 2007), available at [http://isapapers.pitt.edu/151/1/2007-36\\_Sedjo.pdf](http://isapapers.pitt.edu/151/1/2007-36_Sedjo.pdf).
- 68 U.S. Green Building Council, "Buildings and Climate Change," available at <http://www.eesi.org/files/climate.pdf> (last accessed March 2017).
- 69 Kris Speckler, "5 Myths About Cross-Laminated Timber," *Building Design + Construction*, February 20, 2014, available at <https://www.bdcnetwork.com/5-myths-about-cross-laminated-timber>.
- 70 Kelsey Campbell-Dollaghan, "Can Timber Skyscrapers Really Help Save the Planet?" *Fast Company*, May 18, 2016, available at <https://www.fastcodesign.com/3059938/can-timber-skyscrapers-really-help-save-the-planet>.
- 71 Ibid.
- 72 Ibid.
- 73 Timber industry representative, phone interview with author, Minneapolis, Minnesota, February 21, 2017.
- 74 Clay Risen, "Mass-Timber Towers Become a Reality, One Additional Floor at a Time," *Architect Magazine*, June 8, 2016, available at [http://www.architectmagazine.com/technology/building-codes-mass-timber-towers-become-a-reality-one-additional-floor-at-a-time\\_o](http://www.architectmagazine.com/technology/building-codes-mass-timber-towers-become-a-reality-one-additional-floor-at-a-time_o).
- 75 Lee Cowan, "Living the High Life," *CBS News*, May 22, 2016, available at <http://www.cbsnews.com/news/living-the-high-life/>.
- 76 U.S. Energy Information Administration, "Biomass—Renewable Energy from Plants and Animals," available at [http://www.eia.gov/energyexplained/index.cfm/data/index.cfm?page=biomass\\_home](http://www.eia.gov/energyexplained/index.cfm/data/index.cfm?page=biomass_home) (last accessed March 2017).
- 77 Tom Vilsack, "Rural America Is Back in Business," USDA Results Blog, September 1, 2016, available at <https://medium.com/usda-results/results-ch7-bac6adea0994#vprf36siz>.
- 78 U.S. Department of Agriculture, "Fact Sheet: USDA Invests in Locally-Led Conservation Projects Through New Regional Conservation Partnership Program," Press release, October 16, 2015, available at <https://www.usda.gov/media/press-releases/2015/10/16/fact-sheet-usda-invests-locally-led-conservation-projects-through>.
- 79 National Resources Conservation Service, "Regional Conservation Partnership Program," available at <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/rcpp/> (last accessed March 2017).
- 80 Sustainable Northwest, "Blue Mountain Forest Partners," available at <http://www.sustainablenorthwest.org/what-we-do/success-stories/blue-mountain-forest-partners> (last accessed March 2017).
- 81 U.S. Department of Agriculture, "2016 RCPP Projects by State," available at <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/farmbill/rcpp/?cid=nrcseprd598407> (last accessed March 2017).
- 82 National Resources Conservation Service, "Conservation Innovation Grants," available at <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/cig/> (last accessed March 2017).
- 83 Gallup, "Confidence in Institutions" (2016), available at <http://www.gallup.com/poll/1597/confidence-institutions.aspx>.
- 84 The White House, "President Obama Announces proposal to reform, reorganize and consolidate Government," Press release, January 13, 2012, available at <https://obamawhitehouse.archives.gov/the-press-office/2012/01/13/president-obama-announces-proposal-reform-reorganize-and-consolidate-gov>.
- 85 Esther Whieldon, "Zinke Mulls Moving Forest Service to Interior," *Politico*, January 27, 2017, available at <https://www.politicopro.com/energy/story/2017/01/zinke-mulling-floating-transferring-forest-service-to-interior-145454>.
- 86 Corbin Hiar and Brittany Patterson, "Zinke Promises Reorganization, Fights Against Budget Cuts," *E&E News*, March 3, 2017, available at <http://www.eenews.net/stories/1060050924/print>.

---

## Our Mission

The Center for American Progress is an independent, nonpartisan policy institute that is dedicated to improving the lives of all Americans, through bold, progressive ideas, as well as strong leadership and concerted action. Our aim is not just to change the conversation, but to change the country.

## Our Values

As progressives, we believe America should be a land of boundless opportunity, where people can climb the ladder of economic mobility. We believe we owe it to future generations to protect the planet and promote peace and shared global prosperity.

And we believe an effective government can earn the trust of the American people, champion the common good over narrow self-interest, and harness the strength of our diversity.

## Our Approach

We develop new policy ideas, challenge the media to cover the issues that truly matter, and shape the national debate. With policy teams in major issue areas, American Progress can think creatively at the cross-section of traditional boundaries to develop ideas for policymakers that lead to real change. By employing an extensive communications and outreach effort that we adapt to a rapidly changing media landscape, we move our ideas aggressively in the national policy debate.

---

Center for American Progress

