Divided Lands: State vs. Federal Management in the West

by Holly Fretwell and Shawn Regan

Property and Environment Research Center (PERC)
Bozeman, Montana

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Introduction

There is a great divide in the United States. Land in the East is mostly privately owned, while nearly half of the land in the West is owned by the federal government. In recent years, several western states have passed, introduced, or considered resolutions demanding that the federal government transfer much of this land to state ownership.[1] These efforts are motivated by local concerns over federal land management, including restrictions on natural resource development, poor land stewardship, limitations on access, and low financial returns.

The resolutions reflect a sentiment in many western states that state control will result in better public land management. To date, however, there has been little research comparing the costs of state and federal land management. Most existing studies assume that the costs of federal land management would be the same under state management and do not consider the different management goals, regulatory requirements, and incentive structures that govern state and federal lands.

The purpose of this report is to compare state and federal land management in the West. In particular, we examine the revenues and expenditures associated with federal land management and compare them with state trust land management in four western states: Montana, Idaho, New Mexico, and Arizona. These states, which encompass a wide range of landscapes, natural resources, and land management agencies, allow for a robust comparison. Our analysis will help explain why revenues and expenditures may differ between state and federal land agencies and explore some of the implications of transferring federal lands to the states.

We find that state trust agencies produce far greater financial returns from land management than federal land agencies. In fact, the federal government often loses money managing valuable natural resources. States, on the other hand, consistently generate significant amounts of revenue from state trust lands. On average, states earn more revenue per dollar spent than the federal government for each of the natural resources we examined, including timber, grazing, minerals, and recreation.

Why It Matters

There are several reasons why a comparison between state and federal land management is important:

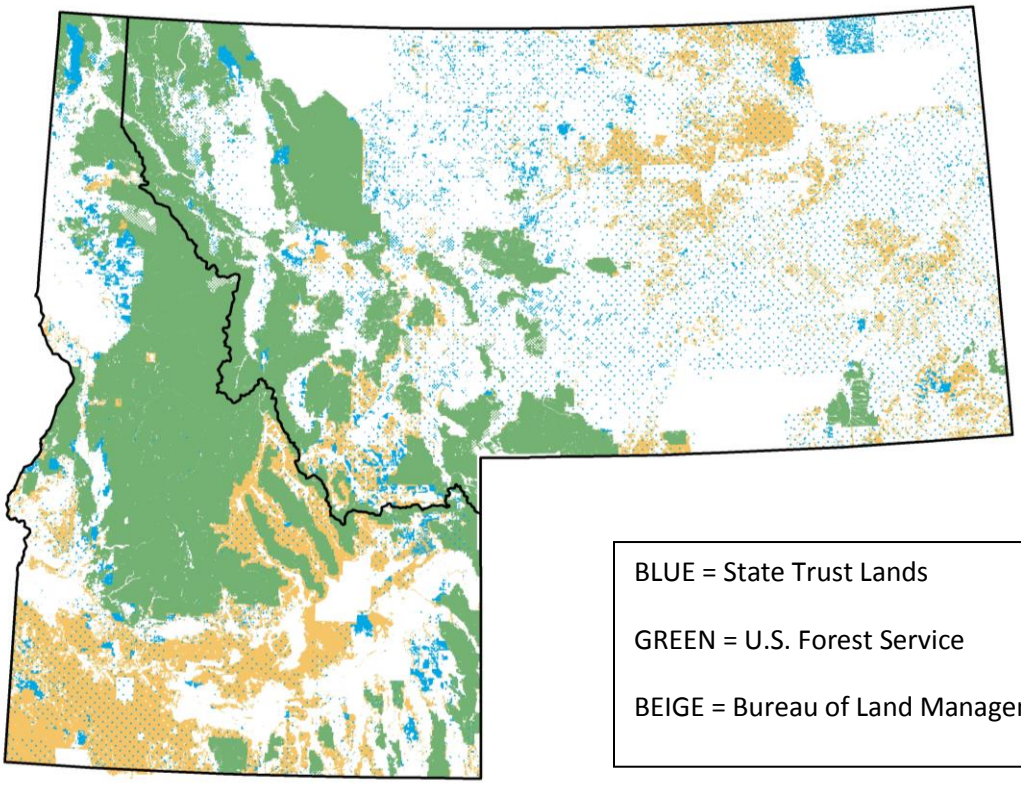
- In order to understand the possible implications of transferring federal lands, we must first assess how state and federal lands are currently managed. This allows us to address the primary concerns over the proposed transfer, namely how much it might cost for states to manage the lands and how public land management might change under state control. Comparing state and federal land agencies is a critical first step to answering both of these questions.

- State trust lands, the most common form of state-owned land in the West, are not well understood. Yet these lands play an important role in many western communities, and they could play an even larger role if federal lands were transferred to state control. As such, the management practices and fiscal performance of state trust lands should be closely examined.

- By nearly all accounts, our federal lands are in trouble, both in terms of fiscal performance and environmental stewardship. Understanding how alternative management models work can provide useful insights into how federal land management might improve. State trust land agencies have implemented several resource management techniques that are worth careful consideration, regardless of one's position on the proposed transfer of public lands.

It is important to note that the existing proposals do not aim to transfer all federal lands. National parks, national monuments, and designated wilderness areas are excluded and would remain under federal ownership. The proposals focus primarily on federal multiple-use lands, which include most of the lands managed by the U.S. Forest Service and the Bureau of Land Management. As a result, our analysis focuses on these multiple-use lands, as well as state trust lands that are managed for similar purposes.

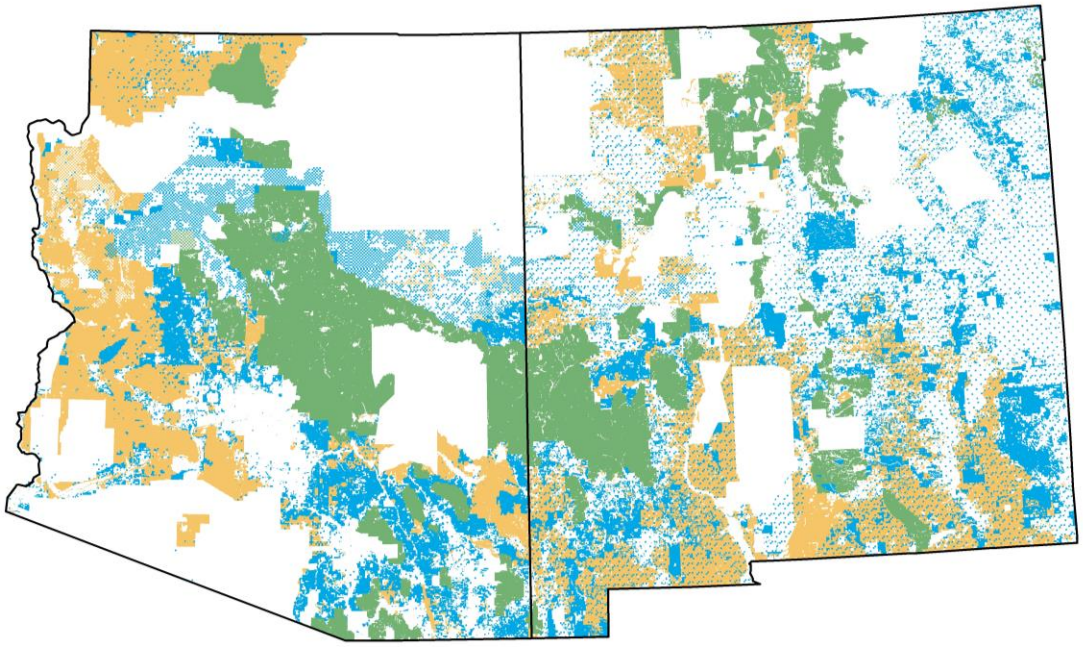
Overview of State and Federal Lands



BLUE = State Trust Lands

GREEN = U.S. Forest Service

BEIGE = Bureau of Land Management



Public lands are a defining feature of the western landscape. The vast majority of the public lands in the West are controlled by the Forest Service and the Bureau of Land Management. Together, these two agencies control nearly 90 percent of all federal lands in the West, totaling more than 300 million acres. This portion of the federal estate is managed for multiple uses, including timber harvesting, livestock grazing, energy development, and outdoor recreation.

These federal multiple-use lands have enormous potential to generate revenues for the public good. Yet federal land agencies lose taxpayers nearly $2 billion per year, on average.

Table 1
The Cost of Land Management: Federal vs. State (annual average 2009-2013)

	Revenue	Expenses	Revenue per Dollar Spent	Net Revenue
Federal Multiple-Use Lands	$5,261,863,132	$7,216,610,309	$0.73	-$1,954,747,177
State Trust Lands	$239,921,512	$16,540,387	$14.51	$223,281,126

Note: Data are adjusted to 2013 dollars. Federal multiple-use lands include lands managed by the U.S. Forest Service and the Bureau of Land Management. BLM data includes Office of Natural Resource Revenues (ONRR) revenues. State trust land data includes Montana, Idaho, New Mexico, and Arizona.

By comparison, states are controlling costs and generating substantial revenues from state trust lands. Like federal multiple-use agencies, state agencies lease land for grazing and mineral development, as well as manage timber and recreation resources on 40 million acres of state trust lands in the West. Unlike federal agencies, however, states earn a profit. From 2009 to 2013, the four states we examined—Montana, Idaho, New Mexico, and Arizona—earned a combined average of $14.51 for every dollar spent managing state trust lands. During that same period, the federal land agencies lost money, generating only 73 cents for every dollar it spent managing federal lands.

Not only do federal land agencies earn far less than state agencies, they outspend states by a wide margin on a per-acre basis. Federal land expenditures are more than six times higher per acre than state expenditures. Moreover, state trust lands generate ten times more revenue per full-time employee than federal land agencies.

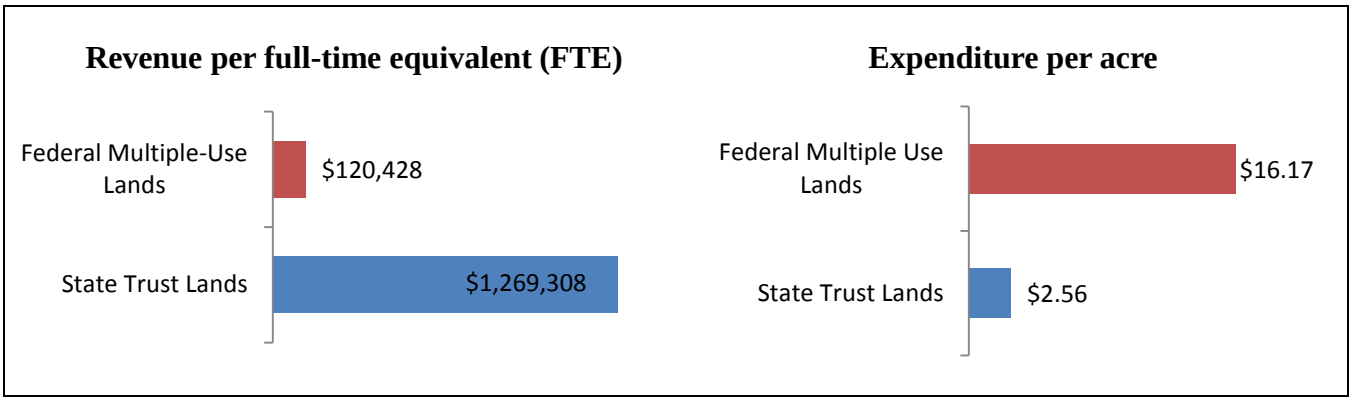
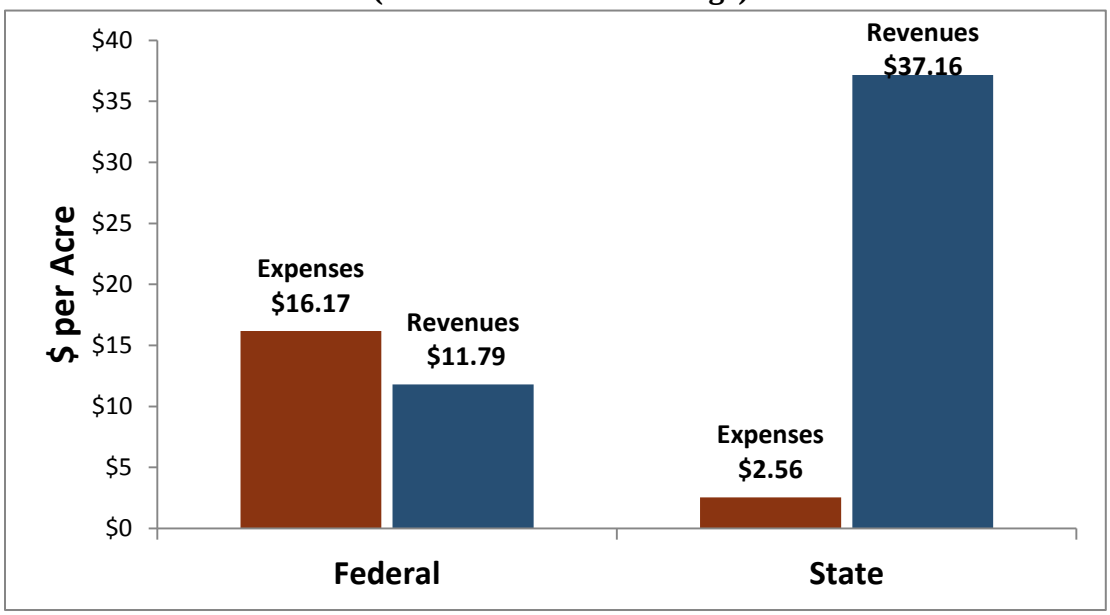


Figure 1
Federal-State Land Management: Expenses and Revenues per Acre
(2009-2013 annual average)



These results suggest that as states consider the possibility of transferring federal lands, they must carefully consider how the lands would be managed if the transfer were to occur. Would the lands be managed more like state trust lands or federal multiple-use lands? A direct transfer of lands to the states under similar rules and regulations as federal lands is unlikely to result in lower costs or higher revenues. On the other hand, if the transferred lands are managed like state trust lands, their fiscal performance may improve, but land management practices and existing rights could be affected in important ways.

Think of it this way: Imagine you are the CEO of an organization considering whether to acquire another company. What facts would you want to consider? You would study the

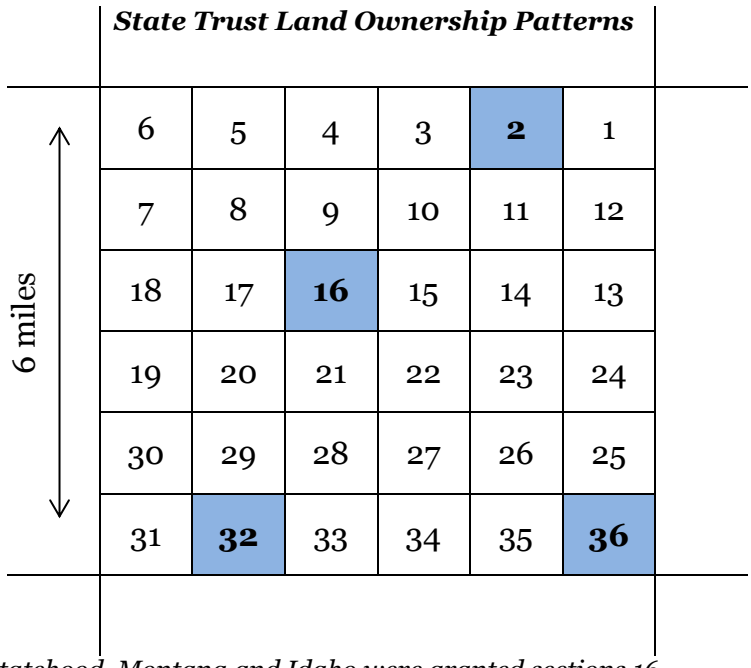
company's financial statements to understand its revenues and expenditures. You would need to know what regulations apply and what potential liabilities exist. You might also consider whether the company aligns with your organization's goals and mission. All of this information would be important to determine the viability of a takeover. Likewise, a close comparison of the costs and revenues associated with federal and state land management, as well as the different management practices and policy objectives, can provide important insights into the implications of transferring federal lands under different scenarios.

The rest of our analysis provides a more detailed summary of the financial performance of federal and state land agencies and provides several explanations for the disparities between them. But first, we begin by examining state and federal land agencies in greater detail.

State Trust Lands

State trust lands are the most common form of state-owned land in the West. Trust lands are the result of land grants made by the federal government to western states, mostly at the time of statehood, for the purpose of generating revenue to support schools and other public institutions.[2] The land grants usually consisted of several one-square-mile sections in each township, creating a checkerboard pattern of state trust lands throughout the West.[3] Although some states initially sold off many of these lands to provide much-needed revenue for schools, nearly 40 million acres of state trust lands remain scattered across western states today.

Similar to a fiduciary trust, state trust lands operate under a legal requirement that the land must be managed for the long-term financial benefit of a specific beneficiary. Public schools are the designated beneficiary for most state trust lands, but some trust lands also support universities, hospitals, and other public institutions. As such, parents, teachers, school administrators, and other representatives of the beneficiaries can hold the state agencies responsible to ensure that trust lands are used to generate long-term financial returns.



At statehood, Montana and Idaho were granted sections 16 and 36. New Mexico and Arizona were granted sections 2, 16, 32, and 36. State trust lands have occasionally been sold or exchanged, but remnants of this checkerboard pattern remain across much of the West today.

State trust lands earn revenues from a variety of activities, including timber harvesting, grazing, mineral extraction, commercial development, recreation, and conservation. In general, the revenues generated from

trust lands are distributed to the trust beneficiaries, with a small portion used to cover the state trust agency's expenditures.[4] The agencies are required to generate revenues into perpetuity, which ensures long-term management for sustainable production. Land sales are also authorized under certain conditions. However, the revenue from land sales must be deposited into a permanent fund along with the proceeds from nonrenewable resources such as oil, gas, and minerals. The permanent fund generates interest payments that are then distributed to the beneficiaries, ensuring that land sales and nonrenewable resource extraction continue to generate financial returns for the trust in perpetuity.

The trust mandate to generate a financial return creates a close connection between expenditures and revenues. State trust lands have beneficiaries, similar to shareholders, who have a claim on "profits." This direct connection between earnings and beneficiaries is an important feature of state trust land management, and one that distinguishes state trust lands from federal lands.

Federal Multiple-Use Lands

The Forest Service and the Bureau of Land Management control more than 300 million acres in the western United States. The vast majority of these lands are open to multiple-use management, which requires the agencies to manage for a combination of resource uses that best meet the needs of the American people.[5]

The federal multiple-use mandate differs considerably from the trust mandate that governs state trust lands. Federal land management is based on legislative rule, budget appropriations, and a public input process. Unlike state trust agencies, federal land agencies are not required to generate revenues sufficient to cover their costs. Instead, Congress appropriates the bulk of federal land budgets. Federal land managers often have little or no incentive to generate more revenues or control their costs because the proceeds generally cannot be retained by the agency. As a result, the connection between revenues, beneficiaries, and long-term stewardship is unclear or missing on federal lands.

A portion of revenues from federal lands are shared with states, counties, and local governments. Payments are also made in lieu of state or local property taxes, which are not collected from federal lands. However, such revenue-sharing disbursements have become less reliable in recent years as resource production declines on many federal lands, and Congress has not provided consistent funding for payments in lieu of taxes

A Closer Comparison

By examining the total revenues and expenses from each land agency, we find that states consistently generate revenues that exceed their costs. On average, the states we examined earned $14.51 for every dollar they spent on state trust land management from 2009 to 2013. While the amounts that states generated varied significantly—Idaho earned $2.80 for every

dollar spent, while New Mexico earned $41—each state produced a financial return from its state trust lands.

Table 2
The Cost of Land Management: Federal vs. State (2009-2013 annual average)

	Revenue	Expenses	Revenue per Dollar Spent
U.S. Forest Service	$571,781,109	$5,708,126,237	$0.10
Bureau of Land Management	$4,690,082,024	$1,508,484,072	$3.11
Montana	$107,610,838	$12,443,132	$8.65
Idaho	$66,033,347	$23,572,154	$2.80
New Mexico	$554,218,262	$13,516,608	$41.00
Arizona	$231,823,603	$16,629,652	$13.94

Note: Data adjusted to 2013 dollars. BLM data includes Office of Natural Resource Revenues (ONRR) onshore mineral revenues.

The federal government, on the other hand, often loses money on federal lands. The Forest Service generated just 10 cents in revenue for every dollar it spent from 2009 to 2013. The Bureau of Land Management, however, earned a financial return of $3.11 for every dollar spent, primarily from mineral leases.

Federal land expenditures are often considerably larger when compared to state trust land expenditures. There are several explanations for this:

- Federal budgets are typically allocated on a use-it-or-lose-it basis. Congress appropriates funds by various expenditure divisions. Money that is not used in each fiscal year is often deemed unnecessary and may not be reappropriated in subsequent budgets. This encourages agency personnel to fully spend budgeted resources.

- Federal land managers have little incentive to cut costs or increase revenues because they are not required to generate revenues in excess of expenditures. Furthermore, many of the revenues generated are deposited in the U.S. Treasury and are not available for agency expenditure.

- Overlapping regulations require excessive planning for many activities on federal lands. Each federal law requires additional administrative procedures which now include processes such as comprehensive planning, public input, and environmental impact analysis.

Of course, each state and federal land agency is different. New Mexico obtains the majority of its revenue from mineral leases, while Idaho generates most of its revenue from timber sales.

The Forest Service generates more revenue from timber than any other resource, while more than 90 percent of BLM revenues are derived from mineral development. Moreover, some revenue-generating activities that occur on state lands do not exist on federal lands. Arizona, for example, earns most of its revenue from land sales and commercial leases. In the following sections, we make more direct comparisons between federal and state land management by examining how each agency manages specific resources.

Timber

The Forest Service and BLM manage more than 100 million acres of timberland in the United States, yet both agencies lose money on their vast timber resources. Simply put, these losses are the result of high management costs and low revenues. From 2009 to 2013, the Forest Service generated 32 cents for every dollar it spent on timber management, while the BLM received 38 cents per dollar spent.

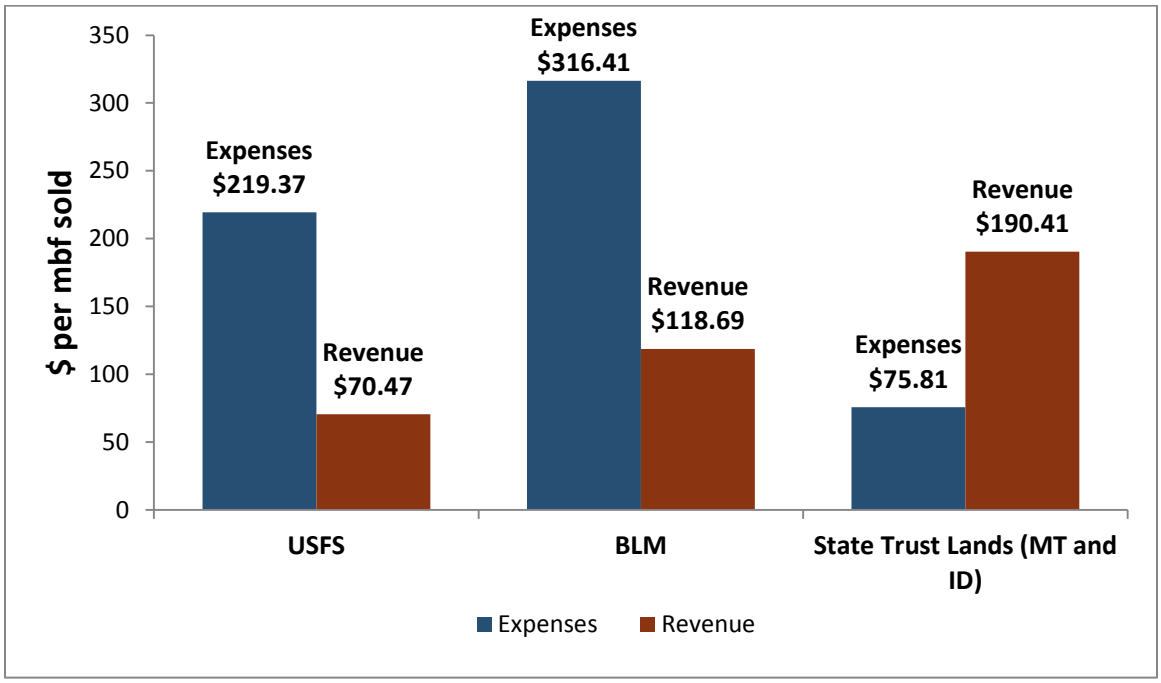
Table 3
The Cost of Timber Management: Federal vs. State (2009-2013 annual average)

	Revenue	Expenses	Revenue per Dollar Spent	Net Revenue per mbf sold
U.S. Forest Service	$181,719,687	$565,664,914	$0.32	$-148.90
BLM	$28,239,188	$75,278,587	$0.38	$-197.71
Montana	$9,479,033	$6,013,601	$1.58	$60.80
Idaho	$52,022,745	$18,473,180	$2.82	$126.13
State Trust Lands (Averaged)	$30,750,889	$12,243,391	$2.51	$114.60

Note: Data adjusted to 2013 dollars. There is no commercial timber harvesting on state trust lands in New Mexico or Arizona. State Trust Lands are the annual averages from Montana and Idaho. * Mbf = thousand board feet.

These high costs and low revenues are especially striking when compared with timber management on state trust lands. Taken together, Montana and Idaho earned $2.51 for every dollar spent on timber management from 2009 to 2013. During that same period, the states earned an average of $114 .60 per thousand board feet (mbf) sold, while the Forest Service lost $148.90 per mbf sold and the BLM lost $197.71 per mbf sold.

Figure 2
Timber Management: States Show Profit (annual average 2009-2013)



Note: Data are adjusted to 2013 dollars. BLM timber is amount offered.

The high costs of federal timber management are largely the result of multiple laws and regulations that require several layers of planning. The National Forest Management Act requires each national forest to prepare comprehensive, long-term management plans.[6] The National Environmental Policy Act requires federal agencies to analyze and predict any potential environmental impacts from proposed management actions on federal lands.[7] When threatened or endangered species protected by the Endangered Species Act are present, federal agencies must ensure that management actions such as timber harvesting do not harm protected species or their habitat.

Public input is also part of the timber planning and evaluation process. Parties that submit project comments gain standing to object to or litigate agency decisions. If resource conditions change during the lengthy time period between appeals and decisions, as they often do, the process begins again, inviting ample opportunities to postpone management actions.

"Analysis paralysis," "gridlock," and the "Gordian knot" are all terms used by former Forest Service chiefs to describe the lengthy planning process that hampers the ability of forest managers to actively manage federal forests.[8] "The Process Predicament," a 2002 Forest Service report, describes how these obstacles can prevent effective forest management:

> The Forest Service is so busy meeting procedural requirements, such as preparing voluminous plans, studies, and associated documentation, that it has trouble fulfilling its historic mission: to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations.[9]

The process predicament is one reason the Forest Service often conducts below-cost timber sales, which generate less revenue than it costs the agency to sell the timber. Although such federal laws are intended to inform decision makers and engage various stakeholders, they often stall necessary agency actions and increase the cost of managing federal timberlands.

Like the federal government, states also carry out environmental assessments, create timber plans, and allow for public input. However, our data suggest that state trust agencies are able to do so at much lower cost than the federal government—and with far less conflict. The guiding documents for state forest plans tend to be less voluminous, less prescriptive, and harder to appeal than their federal counterparts.[10] Despite this fact, there is no evidence that state forest management results in greater impacts to forest health, water quality, or other environmental factors than federal timber management.[11]

Federal forests are not only managed for timber, but also for other purposes such as fish and wildlife habitat and watershed protection. Nonetheless, timber management is often necessary to maintain healthy forests. In 2011, the amount of dead and dying timber on Forest Service lands was about eight times higher than harvest levels. That figure is closer to a one-to-one ratio on other public and private lands.[12] Increased forest density and mortality raises the risk of insect infestation, disease, and large wildfires, which can further increase the costs of federal forest management.

Grazing

When it comes to grazing, the story is much the same. Federal expenses are high and revenues are low compared to the states. From 2009 to 2013, the Forest Service generated 10 cents for every dollar spent on rangeland management, while the BLM generated 14 cents for every dollar spent.[13] State trust lands, by contrast, earned an average of $4.89 per dollar spent on rangeland management.

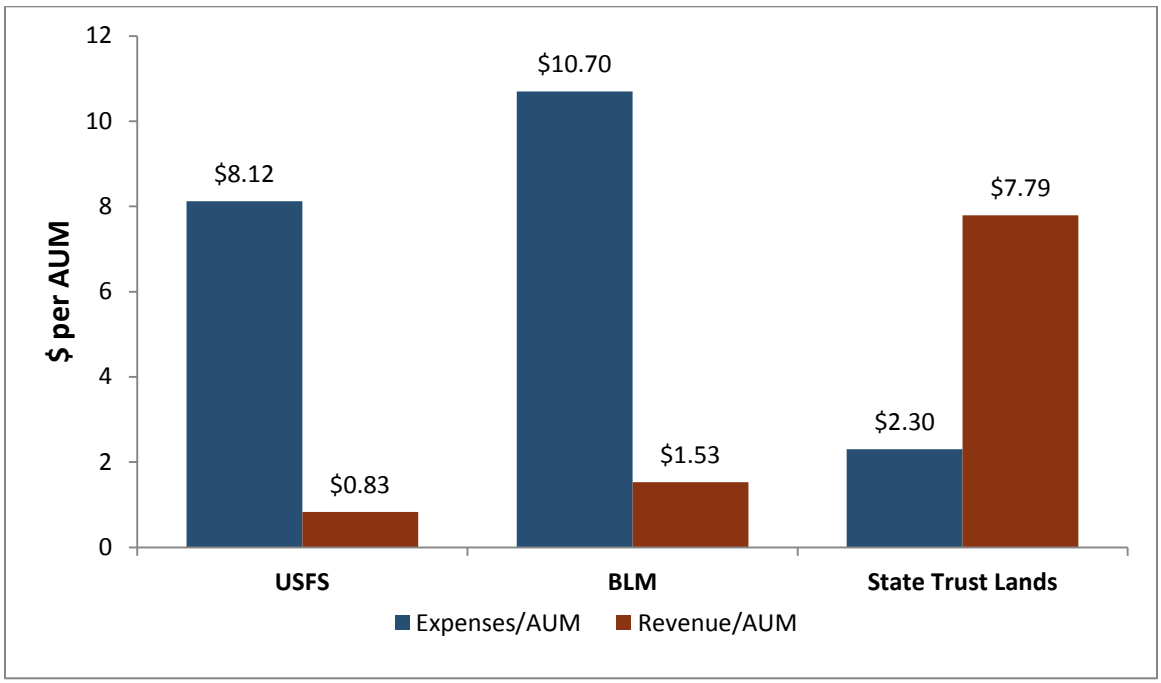
Table 4
The Cost of Grazing: Federal vs. State (annual average 2009-2013)

	Revenue	Expenses	Revenue per Dollar Spent	Revenue per Acre of grazing land
U.S. Forest Service	$5,738,466	$55,808,212	$0.10	$0.06
BLM	$13,039,887	$91,249,453	$0.14	$0.08
Montana	$7,990,322	$1,596,173	$5.01	$1.94
Idaho	$1,715,411	$1,264,582	$1.36	$0.95
New Mexico	$6,204,218	$485,484	$12.78	$0.72
Arizona	$2,601,249	$439,921	$5.91	$0.31
State Trust Lands (Averaged)	$4,627,800	$946,540	$4.89	$1.63*

Note: Data adjusted to 2013 dollars. The expense data for Montana and Arizona includes expenses associated with agriculture as well as grazing on state trust lands. * Data from Montana and Idaho only.

During that time, the Forest Service and BLM spent an average of $9.55 per animal unit month (AUM), while the states spent $2.30 per AUM.[14] At the same time, the average federal return per AUM is only $1.22 compared to the state average of $7.79 per AUM.

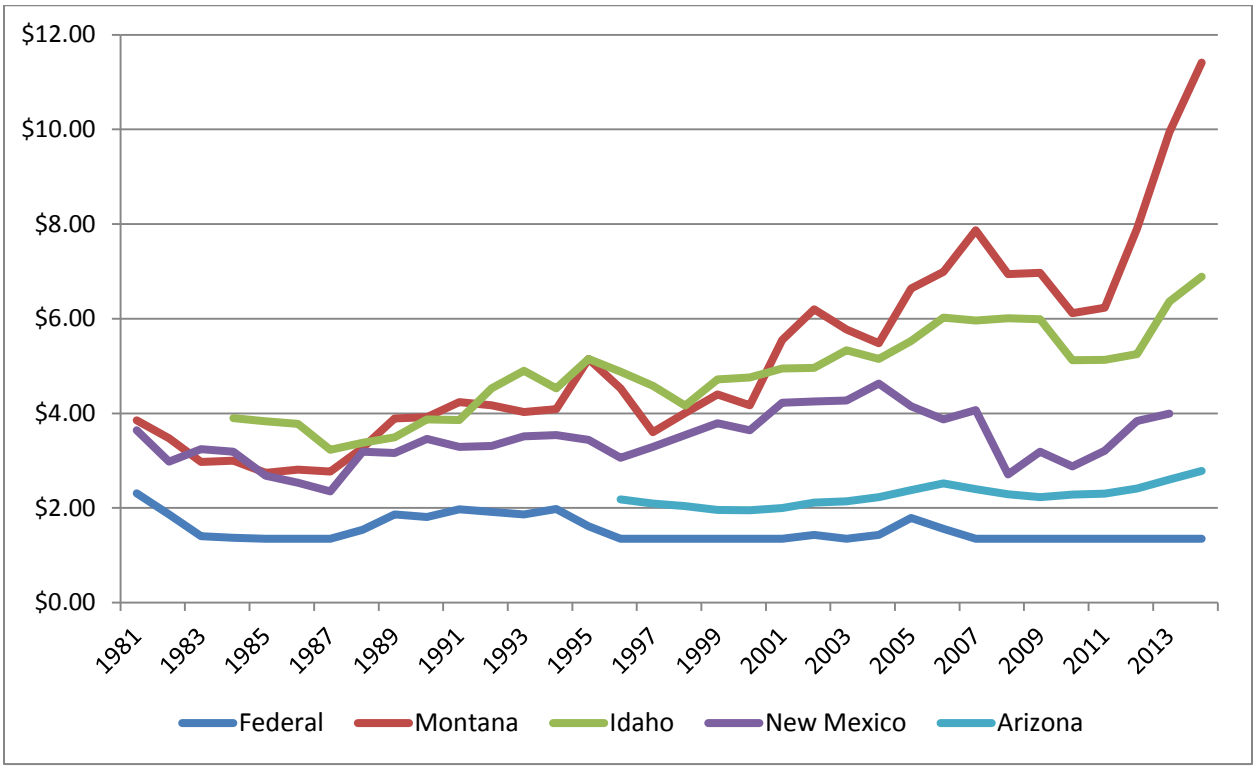
Figure 3
The Cost of Grazing: Federal Expenses High, Revenue Low (2009-2013 annual average)



Note: State Trust Lands are averaged from Montana and Idaho. AUM data is not available from Arizona or New Mexico.

One explanation for this disparity is that the states charge higher prices for grazing than the federal government. The federal grazing fee in 2014 was $1.35 per AUM, the minimum amount the government is allowed to charge by law.[15] For several decades, the federal grazing fee has remained at or near this minimum level. The minimum grazing fees on state trust lands range from $2.78 per AUM in Arizona to as high as $11.41 per AUM in Montana, depending on location and forage quality. Lease rates on state trust lands can often be higher than these minimum fee levels, however, because states are generally required to award grazing leases on a competitive basis to the highest bidder.[16] States also do not require grazing permit holders to own "base properties," which are used in the federal grazing system to determine grazing privileges without competitive bidding.[17]

Figure 4
Federal vs. State Grazing Fees (Price per AUM)



To enhance revenues, states also capitalize on alternative uses of grazing leases such as conservation. In 1996, New Mexico awarded a grazing lease to Forest Guardians, an environmental group that outbid a rancher for a 644-acre grazing parcel. But the group did not use the lease for grazing. Instead, they removed the livestock and restored a riparian area to provide wildlife habitat. Several other states, including Montana, Idaho, and Arizona, now allow conservation leasing of trust lands.[18] On the federal side, however, current laws and regulations prohibit the Forest Service and BLM from leasing federal rangelands for non-grazing uses such as conservation.[19]

Beyond costs and revenues, there is an indication that the federal grazing system may be resulting in poor rangeland conditions. According to the BLM, more than 21 percent of BLM grazing allotments are not meeting or making significant progress toward meeting the agency's own standards for land health.[20] Although no similar land health data are available for state trust lands, this data suggest that, by its own measures, the federal grazing system may be achieving neither financial nor environmental success.

Minerals

Minerals are the only resource that generates a positive financial return under federal management.[21] From 2009 to 2013, mineral production from federal lands earned taxpayers $19.76 for every dollar spent.

Table 6
Minerals: Federal vs. State (2009-2013 annual average)

	Revenue	Expenses	Revenue per Dollar Spent
All Federal Lands	$4,413,338,743	$223,367,859	$19.76
Montana	$59,988,493	$957,347	$62.66
Idaho	$3,479,576	$501,570	$6.94
New Mexico	$533,447,123	$2,592,115	$205.80
Arizona	$25,852,473	$459,012	$56.32
State Trust Lands	$155,691,916	$1,127,511	$138.08

Note: Data adjusted to 2013 dollars. Federal land revenue data include all onshore federal mineral receipts reported by the Office of Natural Resource Revenues, Forest Service, and BLM. Federal land expenditure data includes all Forest Service and BLM mineral expenses.

While this amount may appear substantial when compared to federal timber or grazing revenues, it is significantly less than what states earn on average from mineral leases. During the same period, the return from mineral production on state trust lands was $138.08 per dollar spent. There is, however, significant variation in mineral returns by state. For instance, New Mexico generated $205.80 for every dollar spent, while Idaho earned $6.94 per dollar spent.

New Mexico generates the vast majority of its revenues from mineral resources on state trust lands. In 2013, the state earned more than $554 million in mineral revenue, primarily from oil and gas leases. This revenue provides significant support for public schools, universities, and hospitals.

Revenues from mineral development on state trust lands are generally deposited into each state's permanent fund, which is held in perpetuity with interest payments distributed annually to trust beneficiaries. This ensures that nonrenewable resource development on state trust lands continues to generate long-term financial returns to trust beneficiaries. For states with significant mineral resources, such as New Mexico, the balance of the permanent fund exceeds $1 billion.

It is important to note that comparing state and federal minerals management is complicated. On the federal side, the BLM is the agency that oversees the federal mineral estate. The Office

of Natural Resources Revenue, however, collects and redistributes most federal mineral revenues to various state and federal accounts. On the state side, some trust land agencies manage all aspects of mineral development, while others assign responsibilities such as enforcement of environmental regulations, bond requirements, and on-site inspection to other state offices. Tabulating the full costs of mineral management, therefore, requires additional analysis to provide a robust state-federal comparison.

There is, however, plenty of evidence that federal minerals management is not generating a fair return for U.S. taxpayers. In 2007, the Government Accountability Office found that the U.S. government receives one of the lowest shares of revenue from oil and gas production in the world.[22] The GAO also compared the federal government's financial returns to states such as Colorado, Wyoming, California, and Texas and found that each state received a higher share of the value from oil and gas production on state lands than the federal government receives from oil and gas production on federal lands.

One reason for these lower returns is that the federal government does less to encourage development of its oil and gas leases than states do.[23] Many states require lessees to pay escalating rental rates on nonproducing leases throughout the term of the lease. This encourages faster development of oil and gas resources, which generates revenue from royalty payments, as well as increases revenue from nonproducing leases. Federal onshore lease rental rates currently increase from $1.50 per acre for the first five years to $2 per acre for the last five years. States, however, typically increase rental rates to a much greater extent. New Mexico, for instance, doubles its rental fee for the second half of its 10-year leases if the leases have not begun producing.

Many states also structure leases to reflect the likelihood of oil and gas production, which encourages faster development and produces greater financial returns. Montana and New Mexico, for instance, issue shorter leases and require higher royalty payments for leases that are in or near known oil and gas deposits, while offering longer leases and lower royalty payments in areas that are more speculative. Federal leases are limited to a 10-year primary lease term and a fixed royalty rate of 12.5 percent, regardless of the likelihood of development. Royalty rates on state trust lands are often higher, ranging from 16.67 percent in Montana to 18.75 percent in New Mexico.[24] The GAO estimates that the federal government could generate an additional $1.7 billion in revenue over ten years if it increased onshore royalty rates and rental rates on nonproducing leases.[25]

While state trust agencies have clear beneficiaries to hold state land managers accountable, the federal government does not have established procedures for periodically assessing the performance of its oil and gas leasing system.[26] In fact, the federal government cannot provide reasonable assurance that the public is collecting its legal share of revenue from federal oil and gas resources. As a result, in 2011 the GAO listed federal oil and gas management as an area at high risk of fraud, waste, abuse, and mismanagement.[27]

Recreation

Recreation is an increasingly popular activity on federal lands, but it is still a money loser for the federal government. From 2009 to 2013, annual earnings from recreation totaled 28 cents for every dollar spent by the Forest Service and 20 cents for every dollar spent by the BLM. These low earnings suggest that recreationists are not paying their way on federal lands.

Table 7
Recreation: Federal vs. State (annual average 2009-2013)

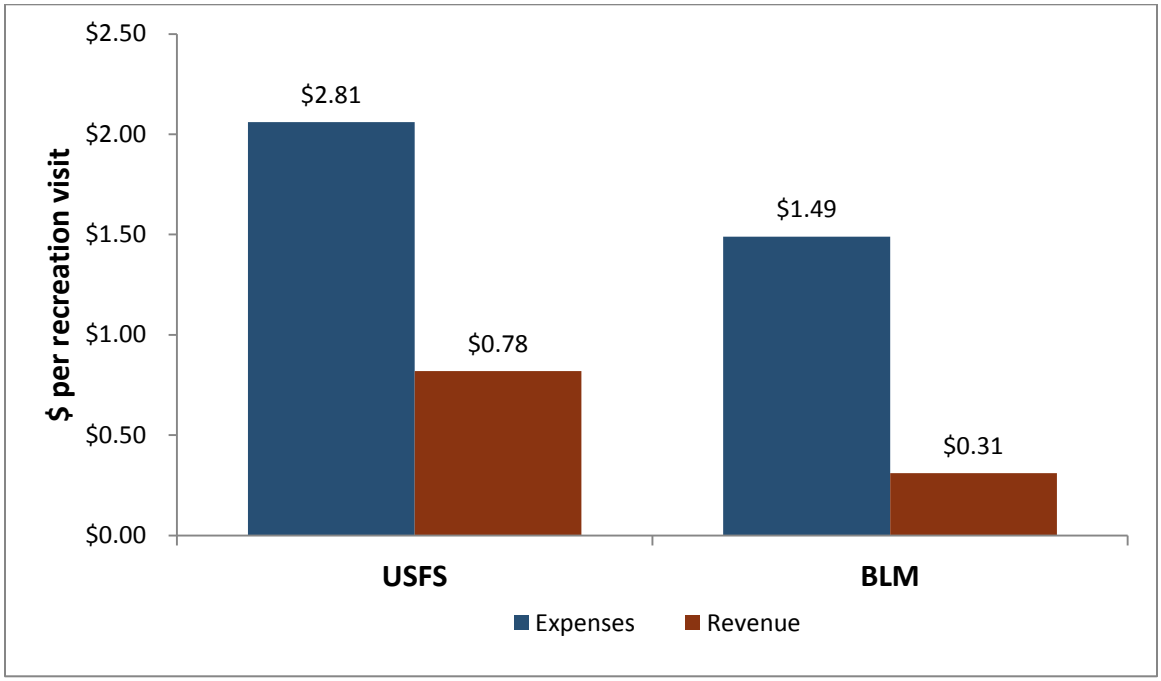
	Revenue	Expenses	Revenue per Dollar Spent
USFS	$130,086,271	$465,984,985	$0.28
BLM	$17,900,454	$87,370,266	$0.20
Montana	$1,119,052	$177,294	$6.31
Idaho	$348,006	$36,584	$9.51
State Trust Lands (MT and ID average)	$733,529	$106,939	$6.86

Note: Data are adjusted to 2013 dollars. Recreation revenue and expenditure data are not available from New Mexico and Arizona.

The potential to generate revenue from recreation on federal lands remains largely untapped. Prior to 2004, most user fees collected from recreation activities on federal lands were deposited into the U.S. Treasury. This provided little incentive for agencies to develop fee collection sites or invest in fee collection services. However, federal land agencies are now allowed to retain a majority of their recreation fees to be used at the site where they are collected.[28] This provides agencies with better incentives to collect recreation fees, which can be used for resource improvements and other management activities on federal lands without relying entirely on congressional appropriations.

Nonetheless, despite its ability to generate and retain user fees, the federal government still loses money on recreation. The Forest Service spends $2.81 per recreation visitor and earns just 78 cents in return. In the case of the BLM, costs are $1.49 per recreation visitor, but agency earnings amount to only 31 cents per recreation visitor.[29]

Figure 6
Federal Recreation: Costs Exceed Revenues (2009-2013 average)



In contrast, a growing number of states are capitalizing on increased demands for recreational access to state trust lands. States generally allow public access for recreation on state trust lands and charge modest fees for recreation permits. Montana, for example, charges an annual fee of $10 per person or $20 per family for a permit to recreate on its trust lands. New Mexico and Arizona also charge similar recreation fees, earning additional revenue for trust beneficiaries while allowing access for recreation activities such as hiking, hunting, fishing, and camping.

Recreation on State Trust Lands				
State	Public access for recreation	Recreation permit or license required	Camping allowed	Hunting allowed
Montana	Yes, but not on lands leased for agriculture, residential, or commercial use.	Yes ($10/person, $20/family)	Yes, but additional license needed if camping more than two days on leased lands	Yes ($8/resident, $10/nonresident)
Idaho	Yes, unless it conflicts with other revenue-generating activities	No	Yes	Yes
New Mexico	Yes	Yes ($25/family)	Yes, with permission of surface lessee	Yes
Arizona	Yes, but not on lands leased for agriculture, mining, or commercial use.	Yes ($15/person, $25/family)	Yes	Yes
Source: Derived from applicable state trust agency websites.				

Historically, states relied on natural resource development to generate revenues from state trust lands. Today, increased demands for recreation access on state trust lands are creating new opportunities to provide additional revenue streams for state trust agencies. From 2009 to 2013, Montana earned an average of $6.31 for every dollar spent on recreation management, adding more than $5 million to its budget. While recreation may not generate as much total revenue as other traditional land uses, it allows trust managers to diversify trust revenues and accommodate new demands placed on trust assets.

Remarkably, states are able to generate financial returns from recreation despite the scattered, checkerboard patterns of state trust landownership in the West. Even though federal landownership is generally more consolidated—and therefore better suited to capitalize on dispersed recreational activities such as hiking, biking, and camping—federal multiple-use agencies consistently lose money on recreation. The revenue-generating potential of recreation on state trust lands would likely increase if state trust landholdings were to become more consolidated.

Other Land Uses

State trust land agencies allow several other revenue-generating land uses that are uncommon or nonexistent on federal lands. For instance, state trust lands can be leased for agricultural development, commercial development, and can even be sold under certain conditions.[30]

In some states, these other land uses make up a substantial portion of total state trust revenues. Arizona receives roughly half of its revenue from land sales and commercial development. More than one million acres of Arizona's trust lands are located near or within urban areas, making these forms of revenue generation particularly lucrative for state trust beneficiaries. In other states such as Montana, trust land sales seldom occur and make up a trivial amount of total state trust revenues. Although the BLM is also authorized to sell federal lands, such sales are relatively rare in recent history.[31]

Despite the perception that state trust lands are managed solely for resource extraction, conservation leasing of state trust lands is becoming increasingly common. In Montana, Idaho, Arizona, and New Mexico, state trust agencies can lease land to individuals and environmental groups for conservation purposes. Courts have repeatedly held that states' obligation to maximize revenues cannot preclude environmental groups from bidding on state trust lands.[32] Indeed, several environmental groups have won grazing leases for non-grazing conservation purposes. These lands are managed for resource preservation, viewshed protection, wildlife management, and other conservation uses without sacrificing lease revenue for trust beneficiaries.

The emergence of conservation leasing on state trust lands represents an important difference between state and federal land management. Unlike state trust lands, federal lands generally cannot be leased for conservation purposes. Instead, conservation on federal lands is accomplished primarily through regulatory restrictions or congressional designations such as parks or wilderness areas. In other words, conflicting demands on the federal estate are resolved through a political process rather than a market-like process of competitive bidding on state trust lands. This competitive bidding process on state trust lands forces groups to bear the costs of alternate land uses that must be foregone, regardless of whether the land is leased for resource extraction or viewshed protection.

Conservation leasing demonstrates an element of flexibility that is inherent in the trust management model. The "best interest of the trust" does not require trust managers to blindly maximize revenues from extractive industries or ignore new demands on trust resources. Trust managers must accommodate a variety of ever-changing resource demands, including environmental demands, that may be consistent with their fiduciary responsibilities for long-term resource stewardship.

As a result of this flexibility, state trust land agencies have largely avoided the same degree of interest-group domination that the Forest Service and BLM have historically experienced with

extractive industries. Even today, these interest groups work to ensure that most federal lease rates are low and uncompetitive. Unlike state trust agencies, federal land agencies have repeatedly avoided changes that would introduce more competition in the federal leasing process, allow for alternative land uses, or ensure a fair return for U.S. taxpayers.

Revenue Sharing

Another way to assess state and federal management is to compare the direct payments that states and local communities receive from the revenues generated on state and federal lands. State trust land revenues are shared directly with clearly defined beneficiaries such as schools, universities, and hospitals. Unlike state lands, federal lands are not managed for a defined set of beneficiaries, but a portion of federal land revenues are shared directly with the states and counties in which they are generated. Federal programs such as Payments in Lieu of Taxes (PILT), Secure Rural Schools, and the Mineral Leasing Act are designed to compensate local communities for property tax losses due to federal land ownership and to share revenues from natural resource extraction on nearby federal lands.

These federal revenue-sharing programs often contribute significant amounts of revenue to state and local budgets. But when these revenues are compared to the amount that state trust lands generate for their beneficiaries, it becomes clear that the direct payments from federal land management are far less when measured on a per-acre basis.

Montana

Federal	State
26,921,861 acres owned by the federal government **28.9%** of state owned by federal government **$109,627,941** in direct federal-land payments made to Montana **$4.07** in revenue to state and local communities per acre of federal land in Montana.	**5,100,000** acres of state trust land in Montana **5.5%** of state held in state trust management **$107,062,945** in annual distributions to state trust beneficiaries **$20.99** in revenue to state trust beneficiaries per acre of state trust land.

Idaho

Federal	State
32,635,835 acres owned by the federal government **61.7%** of state owned by federal government **$68,046,153** in direct federal-land payments made to Idaho **$2.09** in revenue to state and local communities per acre of federal land in Idaho.	**2,446,651** acres of state trust land in Idaho **4.6%** of state held in state trust management **$51,676,270** in annual distributions to state trust beneficiaries **$21.12** in revenue to state trust beneficiaries per acre of state trust land.

New Mexico

Federal	State
27,001,583 acres owned by the federal government **34.7%** of state owned by federal government **$527,817,950** in direct federal-land payments made to New Mexico **$19.55** in revenue to states and local communities per acre of federal land in New Mexico.	**8,940,000** acres of state trust land in New Mexico **11.5%** of state held in state trust management **$624,465,062** in annual distributions to state trust beneficiaries **$69.85** in revenue to state trust beneficiaries per acre of state trust land.

Arizona

Federal	State
30,741,287 acres owned by the federal government	**9,339,037** acres of state trust land in Arizona
42.3% of state owned by federal government	**12.8%** of state held in state trust management
$49,944,304 in direct federal-land payments made to Arizona	**$106,439,812** in annual distributions to state trust beneficiaries
$1.62 in revenue to states and local communities per acre of federal land in Arizona.	**$11.40** in revenue to state trust beneficiaries per acre of state trust land.

Note: All data are adjusted to 2013 dollars. FY2009-FY2013 annual average reported. Federal land payment data is from Headwaters Economics, Economic Profile System, and includes revenues generated from Payments in Lieu of Taxes (PILT), Forest Service payments (including Secure Rural Schools, and the 25% Fund), BLM payments, U.S. Fish and Wildlife Service National Wildlife Refuge payments, and federal mineral royalty payments. Data on annual distributions to state trust beneficiaries were derived from the respective state trust agency annual reports.

The low financial returns on federal lands translate into relatively low amounts of revenue sharing with states and counties. In Montana, for instance, federal revenue-sharing programs distributed an average of $109.6 million to states and counties each year from 2009 to 2013. The state trust land agency in Montana distributed more than $107 million on average to trust beneficiaries during the same period—but the state did so on just one-fifth as many acres as the federal government owns in Montana. To put that into perspective, state trust lands in Montana generated $20.99 per acre for trust beneficiaries, while federal revenue-sharing programs generated only $4.07 per acre of federal land in Montana for state and local communities. The story is much the same for Idaho, New Mexico, and Arizona.

Although federal revenue-sharing programs may generate revenues for different purposes than state trust beneficiaries, the comparison provides insights into how readily each form of land ownership translates into financial benefits to certain beneficiaries. State trust agencies consistently generate financial returns to trust beneficiaries, and many maintain sizable permanent funds that assure such benefits will continue into the future. Federal revenue-sharing programs such as Secure Rural Schools and PILT are often underfunded or even cut from the federal budget. None of the federal programs provide funding that is as consistent—or as significant on a per-acre basis—as state trust revenues.

Conclusion

Federal land agencies lose billions of dollars each year managing valuable resources on federal lands. The current federal land system fails to foster fiscal responsibility and, in some cases, also fails to produce environmental stewardship. Managing these lands should provide a rich source of revenues to benefit the public, but it is instead coming at a high cost to taxpayers.

This report examines the costs of managing specific resources on federal lands and concludes that we can do better. State trust lands, which are governed by a different set of laws, demonstrate that land management agencies can be fiscally responsible. Unlike the federal government, states consistently produce generous financial returns while managing similar resources. For every resource that we examined—from timber and grazing to minerals and recreation—states generated, on average, more revenue per dollar spent than the federal government.

These results are the product of the different statutory, regulatory, and administrative frameworks that govern state and federal lands. State trust agencies have a fiduciary responsibility to generate revenues for trust beneficiaries. This provides trust managers with clarity, accountability, and the responsibility to manage for long-term resource stewardship. State trust management has demonstrated its ability to resist excessive political influence, respond to market signals, and accommodate new resource demands over time.

On the federal side, public land managers lack a clear purpose or sense of direction. Overlapping and conflicting regulations create what one Forest Service chief called "analysis paralysis," which increases costs and hinders the agency's ability to respond to resource needs or resolve conflicting resource demands. Federal land management is also, by its nature, political land management. Politics become entangled in many aspects of federal land management and often prevent agencies from evolving in ways that state trust agencies have—by adjusting lease rates, encouraging competitive bidding, or allowing conservation leasing.

Key Questions and Lessons Learned

It is important to note that state control alone will not necessarily solve the problems that exist on the federal estate. As we have shown, there are important differences between state and federal land management. For states to produce the type of results we describe in this report, the transferred lands would have to be managed as state trust lands are today. This could have significant effects on current land management practices and existing public land users, including higher lease rates, increased leasing competition, and modest fees for recreation access. Moreover, we do not directly address the cost of managing and suppressing wildfires, which presents a significant financial and environmental challenge on federal lands. Whether states could absorb or defray these costs, or whether other collaborative management alternatives might exist, is a question for future research.

States have clearly demonstrated their ability to generate greater returns from land management than the federal government—a fact that is even more remarkable considering how scattered state trust lands are across the West. But states are not guaranteed to become better land stewards than the federal government if they are burdened by similar regulations and restrictions as federal land agencies. We suggest that the central question in the debate over the transfer of public lands is *how* the lands would be managed under state control.

There is nothing inherently national in scope about many federal land management responsibilities. Timber harvesting, livestock grazing, and energy development are carried out responsibly and profitably on state trust lands. Our results provide further evidence to question whether these activities should remain federal responsibilities. States could likely earn much greater revenues managing these activities, but transfer proponents must consider how management practices would change in order to generate those revenues under state control.

Nonetheless, there are many lessons the federal government could learn from the state trust land model. It is clear that higher revenues could be generated on federal lands, and at much lower costs. A variety of state trust land management practices, such as escalating mineral lease rates and conservation leasing, could be adopted by federal land managers to increase revenues and resolve conflicting resource demands. Setting aside the proposals to transfer federal lands, public land advocates should carefully examine trust land management and consider how trust land principles might improve federal land management.

State trust lands offer compelling evidence that our federal lands are in need of reform. Regardless of whether federal lands remain in federal ownership or are transferred to the states, we can do better.

Appendix: Data Sources

In this report, the data on federal land management came from the following sources, unless otherwise noted in the text:

- BLM revenue and expenditure data are from the Department of Interior, Bureau of Land Management *Budget Justifications*, various years, (available at http://www.doi.gov/budget/index.cfm).

- Forest Service revenue and expenditure data are from Forest Service, *Budget Justification* and *Budget Overview*, various years, enacted (available at http://www.fs.fed.us/about-agency/budget-performance).

- BLM timber revenue data and commodity outputs (timber offered for sale, AUMs authorized, recreation visits) are from *Public Land Statistics,* various years, (available at http://www.blm.gov/public_land_statistics/).

- Forest Service grazing data are from Forest Service, *Grazing Statistical Summary Reports*, various years (available at http://www.fs.fed.us/rangelands/reports/).

- Federal grazing fee information came from Carol Hardy Vincent. *Grazing Fees: Overview and Issues*. Congressional Research Service. RS21232. (June 19, 2012) https://www.fas.org/sgp/crs/misc/RS21232.pdf.

- BLM onshore minerals revenues are from the Office of Natural Resources Revenue, *Statistical Information* (available at http://statistics.onrr.gov/).

- Federal land payment data is from Headwaters Economics, Economic Profile System (available at http://headwaterseconomics.org/tools/eps-hdt).

The data on state trust land management came from the following sources, unless otherwise noted in the text.

- State trust revenue and expenditure data are from applicable state trust land agency annual reports (FY2009-FY2013), except as follows: Montana expenditure data are from various *Return on Assets* reports. Arizona expenditure data are from personal communication with Jennifer Simmons, Arizona State Land Department, December 30, 2014. New Mexico revenue and expenditure data for grazing and minerals are from personal communication with Margaret Sena, New Mexico State Land Office, January 2, 2015.

- State trust agency employment data are from applicable state trust land agency annual reports, except as follows: Montana employment data is from personal communication with Connie Daruk, Montana Department Natural Resources and Conservation Trust Lands Admin. Officer, November 12, 2014. Idaho employment data is from personal communication with Emily Callihan, Idaho Department of Lands, November 13, 2014.

- State trust grazing fee information are from applicable state trust land agency annual reports, except as follows: New Mexico grazing fee data are from personal communication with Lucille Martinez, New Mexico State Land Office, January 20, 2015. Idaho grazing data are from personal communication with Emily Callihan, Idaho Department of Lands, November 15, 2014. Arizona grazing data are from personal communication with Willie Sommers, Arizona State Land Department, November 13, 2014.

Notes

[1] Efforts to transfer federal lands to state control are underway in ten western states: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

[2] For a detailed discussion of state trust land management, see Jon A. Souder, and Sally K. Fairfax. *State Trust Lands: History, Management, and Sustainable Use*. Lawrence, KA: University Press of Kansas (1996); Peter W. Culp, Diane B. Conradi, and Cynthia C. Tuell. *Trust Lands in the American West: A Legal Overview and Policy Assessment*. Lincoln Institute/Sonoran Institute (2005).

[3] A township consists of 36 one-square-mile sections. Most western states were granted sections 16 and 36. Arizona and New Mexico were granted sections 2, 16, 32, and 36. In states where these sections were already reserved in national forests, states were allowed to select "in lieu" lands from the public domain, which created larger blocks of state lands. See Peter W. Culp, Diane B. Conradi, and Cynthia C. Tuell (2005).

[4] Arizona is unique in that its state trust agency expenses are appropriated out of the state general fund rather than paid out of revenues generated from trust land management.

[5] The multiple-use mandate originated with the Multiple Use and Sustained Yield Act in 1960 for the Forest Service and the Federal Land and Policy Management Act of 1976 for the BLM.

[6] For more information on the National Forest Management Act (NFMA) planning, see http://www.fs.fed.us/emc/nfma/index.htm.

[7] For more on the National Environmental Policy Act (NEPA), see http://www.epa.gov/compliance/nepa/submiteis/index.html.

[8] U.S. House of Representatives. Committee on Resources. Hearing on Conflicting Laws and Regulations: Gridlock on the National Forests. Dec. 1, 2004. 107th Cong. 1st Session. Washington: GPO, 2003 (statement of Dale Bosworth, Forest Service Chief). http://www.gpo.gov/fdsys/pkg/CHRG-107hhrg76448/html/CHRG-107hhrg76448.htm; Jack Ward Thomas and Alex Sienkiewicz, "The Relationship Between Science and Democracy: Public Land Policies, Regulation and Management," *Public Land and Resources Law Review* 26 (2005).

[9] U.S. Forest Service. "The Process Predicament : How Statutory, Regulatory, and Administrative Factors Affect National Forest Management." (2002). http://www.fs.fed.us/projects/documents/Process-Predicament.pdf.

[10] Personal Communication with Bob Harrington, Missoula Forestry Division Administrator, Montana Department of Natural Resources and Conservation. (January 20, 2015).

[11] See, for example, Montana Department of Natural Resources & Conservation. 2012 Forestry Best Management Practices Monitoring: 2012 Forestry BMP Field Review Report. (2012)

http://dnrc.mt.gov/Forestry/Assistance/Practices/Documents/2012BMPLongRpt.pdf.

[12] USDA Forest Service Forest Inventory and Analysis Program. 2012 RPA Resource Tables. (Jan. 21, 2015). http://www.fia.fs.fed.us/program-features/rpa/.

[13] Our findings are largely consistent with previous reports by the U.S. Government Accountability Office. See U.S. Government Accountability Office, *Livestock Grazing: Federal Expenditures and Receipts Vary, Depending on the Agency and the Purpose of the Fee Charged*, GAO-05-869 (Washington, DC: September 2005), which found that the federal government spent about $132.5 million on grazing management in FY2004 while collecting only $17.5 million in grazing receipts.

[14] An AUM is a standard grazing metric equal to the amount of forage needed for one animal unit (one cow and calf, one horse, or five sheep or goats) for one month.

[15] Carol Hardy Vincent. *Grazing Fees: Overview and Issues*. Congressional Research Service. RS21232. (June 19, 2012) https://www.fas.org/sgp/crs/misc/RS21232.pdf.

[16] Idaho, for instance, cannot award a lease to a current lessee without competition. See Peter W. Culp, Diane B. Conradi, and Cynthia C. Tuell (2005).

[17] Federal grazing permits can only be issued to lessees that own or control certain "base properties." Ownership of a base property establishes a grazing preference for the use of particular grazing allotments. See "Fact Sheet on the BLM's Management of Livestock Grazing," http://www.blm.gov/wo/st/en/prog/grazing.html.

[18] See Peter W. Culp, Diane B. Conradi, and Cynthia C. Tuell (2005); See also Erin Pounds. "State Trust Lands: Static Management and Shifting Value Perspectives." *Environmental Law*. Vol. 41:1333-1362. (2011).

[19] For further discussion of the obstacles to buying federal grazing leases for conservation purposes, see Shawn Regan, "Raiding and Trading in the American West." *The American Conservative*. (May 23, 2014) http://www.theamericanconservative.com/articles/raiding-and-trading-in-the-american-west/.

[20] Bureau of Land Management. *Rangeland Inventory, Monitoring, and Evaluation Report.* Fiscal Year 2012. http://www.blm.gov/style/medialib/blm/wo/Planning_and_Renewable_Resources/rangeland.Par.30896.File.dat/Rangeland2012.pdf. A recent assessment of BLM grazing practices by Public Employees for Enviornmental Responsibility (PEER) found that 29 percent of the agency's allotted lands (16 percent of allotments) have failed to meet BLM's standards for rangeland health due to livestock impacts. See http://www.peer.org/campaigns/public-lands/public-lands-grazing-reform/.

[21] The Bureau of Land Management manages the entire federal mineral estate, covering nearly 700 million subsurface acres. Some mineral revenues are collected by each agency, but the bulk is paid to the Office of Natural Resources Revenues (ONRR) which redistributes revenues to various state and federal accounts. All onshore mineral revenues collected by the BLM, Forest Service, and ONRR are

included in this analysis.

[22] U.S. Government Accountability Office. "Oil and Gas Royalties: A Comparison of the Share of Revenue Received from Oil and Gas Production by the Federal Government and Other Resource Owners." GAO-07-676R (2007). http://www.gao.gov/products/GAO-07-676R. The GAO report compares a measure known as the "government take," the total revenue as a percentage of the value of the oil and natural gas produced received by government resource owners such as state and federal governments. The GAO found that the United States consistently ranks low in government take compared to states and other national governments.

[23] U.S. Government Accountability Office. "Oil and Gas Leasing: Interior Could Do More to Encourage Diligent Development." GAO-09-74 (2008). http://www.gao.gov/products/GAO-09-74.

[24] See Montana Rule: 36.25.210, http://www.mtrules.org/gateway/RuleNo.asp?RN=36%2E25%2E210; New Mexico State Land Office. *Oil and Gas Manual*. (2013). http://www.nmstatelands.org/uploads/files/Minerals%20Division/Oil_%26_Gas_Manual_MAY2013.pdf.

[25] U.S. Government Accountability Office. "Government Operations: Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue." GAO-11-318SP (2011) http://www.gao.gov/products/GAO-11-318SP.

[26] U.S. Government Accountability Office. "Oil and Gas Resources: Actions Needed for Interior to Better Ensure a Fair Return." GAO-14-50 (2013). http://gao.gov/products/GAO-14-50.

[27] U.S. Government Accountability Office. "High Risk Series: An Update." GAO-13-283 (2013). http://www.gao.gov/assets/660/652133.pdf.

[28] The Federal Lands Recreation Enhancement Act, passed in 2004, extended the 1996 Recreational Fee Demonstration Program that authorized federal land agencies to collect fees at federal recreational lands and waters. A minimum of 80 percent of the revenue must be retained and used at the site where it was generated. See Carol Hardy Vincent. *CRS Report for Congress: Federal Lands Recreation Enhancement Act*. Congressional Research Service. RL33730. (March 9, 2007). http://new.nationalaglawcenter.org/wp-content/uploads/assets/crs/RL33730.pdf.

[29] State trust agencies do not track recreation visits, so no comparison could be made on a per-recreation-visit basis with federal lands.

[30] States generally have strict requirements on trust land sales. In Arizona, public auctions and competitive bidding are required for any sale of state trust lands, and lands must be sold to the highest bidder. Sales cannot be made for less than the true value of the land as determined by appraisal. See Peter W. Culp, Diane B. Conradi, and Cynthia C. Tuell (2005).

[31] See Federal Land Transaction Facilitation Act of 2000 (FLTFA). The BLM has disposed of nearly 30,000 acres since 2000 under FLTFA authority; United States. Cong. Senate. Committee on Energy

and Natural Resources. Report on Federal Land Transaction Facilitation Act Reauthorization. Jun. 27, 2013. 113th Cong. 1st Session. http://www.gpo.gov/fdsys/pkg/CRPT-113srpt61/html/CRPT-113srpt61.htm.

[32] Erin Pounds. "State Trust Lands: Static Management and Shifting Value Perspectives." *Environmental Law*. Vol. 41:1333-1362. (2011).

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PERC, the Property and Environment Research Center (www.perc.org), is a nonprofit research institute dedicated to improving environmental quality through markets and property rights. Located in Bozeman, Montana, PERC pioneered the approach known as free market environmentalism. Its staff and associates conduct original research that applies market principles to resolving environmental problems.