

A White Paper by



State Trust Lands in Transition: Challenges from New Uses and Demands



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ABOUT HEADWATERS ECONOMICS

Headwaters Economics is an independent, nonprofit research group whose mission is to improve community development and land management decisions.

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I. EXECUTIVE SUMMARY

In this paper we assess whether states can maximize state trust land revenue for beneficiaries from traditional activities and whether they can accommodate the new uses and values important in a changing economy. We do this by answering three questions. First, are states maximizing revenues from traditional activities on trust lands? Second, can states effectively capture value from new uses—such as renewable energy, conservation, and recreation—in private markets? Third, how are states ensuring that citizens get value from new uses of trust lands while also guaranteeing that public institutions (trust land beneficiaries) are well funded?

We find that, in many cases, states are not successfully maximizing revenues from traditional activities on trust lands. States typically lease trust lands and resources to private interests in return for a fee or royalty paid to the trust. The leasing model works well in theory for “excludable” market products—those products that lessees can exclude others from using and therefore are easy to exchange in private markets. These include traditional uses such as grazing, timber, oil, and gas. However, state lands exist in a political environment and lessees are sometimes able to avoid competition and secure lower leasing rates on state trust lands, which reduces returns to the trust.

We also find that, in some cases, the leasing model can be used to accommodate new uses and nonmarket values on state trust lands. For example, many states allow renewable energy leases, use regulatory authority to charge hunters and anglers for access to state trust lands, and allow conservation interests and recreationists to compete with commercial users for leases. However, these examples are limited in scope and, in some cases, are prohibited by states.

Finally, in some cases, governments have recognized the value of conservation, recreation, and other nonexcludable trust land uses and have used taxpayer dollars to purchase conservation and recreation benefits from the trust. In at least one case, voters passed a constitutional amendment to allow state trust lands to be managed for long-term stewardship, redefining the trust obligation to provide for aesthetic and environmental values in addition to revenue generation.

Our assessment of state trust lands will help inform trust land managers, state officials, and communities about generating revenue for beneficiaries and also providing nonexcludable values in a changing economy and society.

This paper is part of a series of papers on State Trust Lands in Transition. The first paper in the series, *Understanding the Trust Model*,¹ provides context and a framework for assessing how states manage state trust lands and allocate revenue based on the “whole trust” model established in state enabling acts and constitutions. A second report, *States’ Treatment of Permanent Funds*,² examines how factors pushing to increase current spending and reduce permanent savings are playing out in different states. In a final white paper, *Implications for Federal Land Transfer*,³ we share our assessment of how federal transferred lands would be managed if they were managed as state trust lands, and the implications of federal transfer for local and state budgets and economies.

II. INTRODUCTION

State trust lands were granted by the federal government to states as they entered the Union for the specific purpose of generating revenue to fund public institutions, primarily public schools. The first states to receive trust lands, beginning with Ohio in 1802, sold most of the lands quickly. Many states that entered the Union later retained most of their granted land.⁴ In the West, states manage about 40 million acres of trust lands (one in every 20 acres in the 11 western states).⁵ The concept of the trust also has evolved, with later-admitted states required to: (1) maximize trust land revenue for public institutions that are beneficiaries, and (2) sustain the value of the trust in perpetuity.

In this paper we assess whether states can maximize state trust land revenue for beneficiaries from traditional activities, and whether states can accommodate trust lands' other uses and values that have become important in a changing economy.

Trust land managers have traditionally met the revenue maximization obligation by leasing trust lands for natural resource activities, including timber, grazing, mining, and fossil fuel extraction. More recently, these activities have also included leasing for commercial and residential development near cities. The leasing revenue model grants private interests the right to access public resources and to exclude other users from state trust lands. State trust lands are therefore not “public” lands in a conventional sense because public access is generally restricted unless it contributes to generating maximum revenues. In return for exclusive use of the land, lessees pay a fee or royalty to the trust.

The fiduciary trust also requires that the value of the original trust assets granted to states is held in perpetuity to benefit current and future generations. In practice, that often means the trust lands are not sold but are retained by states and managed to generate revenue via renewable resource activities, such as grazing and timber management. Or, if state trust managers do sell land or nonrenewable trust assets (such as fossil fuels or minerals), they are obligated to ensure assets are sold for a maximum price and that the proceeds are placed into a permanent fund that generates revenue for current and future beneficiaries from financial investments.

State trust lands exist in a political and changing world. The changing economy and evolving public values around natural resources are putting pressure on the revenue maximization mandate. An economic shift from non-services to services-related industries, combined with automation and productivity gains, for example, have reduced the employment and income benefits of natural resource sectors, including timber, agriculture, and related manufacturing activities.⁶ As fewer people are required to produce commodities, the economic and community benefits of rangelands, forests, and waterways increasingly includes their scenic, recreation, and wildlife value, particularly near larger cities and resort communities.

In this paper we explore how trust managers and states are responding to changing demands on trust lands. First, we ask: Are states maximizing revenues from traditional activities on state lands? We start with this question to better understand the current revenue model pursued by most states and its strengths and weaknesses. In the second part of this paper we ask: Can states effectively capture value from new uses of trust lands—such as renewable energy, conservation, and recreation—in private markets? Finally, we ask: How are states working around the trust model to ensure that citizens get value from new uses of trust lands while also guaranteeing public institutions (trust land beneficiaries) are well funded?

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increase current spending and reduce permanent savings are playing out in different states. In a final white paper, *Implications for Federal Land Transfer*,³ we share our assessment of how federal transferred lands would be managed if they were managed as state trust lands, and the implications of federal transfer for local and state budgets and economies.

III. ARE STATES MAXIMIZING REVENUE FROM TRADITIONAL ACTIVITIES?

Trust land managers seek to maximize revenue from traditional activities with varying degrees of success. While revenue maximization is not a new problem, it is still important to address. In this section we ask: To what degree are states maximizing revenue from traditional activities on state lands?

In general, states have adopted a passive leasing model to generate revenue from state trust lands. In this model, the state leases trust land to private interests, including ranchers, loggers, or oil and gas companies. In return, the lessee will provide management and stewardship services and pay a fee or royalty to the trust. The leasing model works well in most instances because the lessee can exclude other users from state trust lands and generate profits in private markets. Public access to trust lands is generally restricted unless users pay for access and do not diminish the economic value of the lands to the primary lessee. The passive leasing model also reduces state land managers' costs for land management, planning, and assessment of trust assets.⁴

For the leasing model to maximize revenue, several conditions must be met. According to various audit reports, referenced below, states must: (1) offer leases in competitive markets; (2) provide adequate monitoring and oversight to ensure lessees are fulfilling stewardship and management duties; (3) continually assess and rebalance leasing terms (including royalty and fee rates) to ensure maximum returns; and (4) have clear policies to identify and prevent conflicts of interest inside trust agencies.

A host of performance audits of state trust management by state attorney generals' and auditors' offices have found that in many states, trust land managers fail to generate maximum returns—or at least there is no evidence that returns are maximized—because these conditions are not met. For example, in 2017 the Colorado Office of the State Auditor found trust land managers (the State Land Board) sometimes failed to offer grazing leases for competitive bidding, resulting in lease rates of about half those received in competitive bidding. Additionally, the state failed to conduct or update appraisals for property sales and purchases, meaning that the State Land Board risked paying too much or receiving too little for land sales. Finally, the audit raised concerns that policies to identify and address conflicts of interest were not scrupulously followed and, in some cases, lacked specificity and clear review criteria.⁷

Similar issues were raised in audits in Arizona, California,⁸ and New Mexico.⁹ For example, Arizona's Auditor General recommended institutional reforms that would increase revenue from grazing leases.¹⁰ In Arizona, fees are set by the land commissioner based on recommendations of a panel appointed by the governor. The last time grazing fees were set in this way was in 1996. The 1997 audit recommended reconvening the commission to periodically reevaluate leasing rates. However, a more recent report noted that fees have not been reevaluated since 1996 and have declined in inflation-adjusted dollars since that year (from \$3.41 per Animal Unit Month [AUM]¹¹ to \$2.76/AUM in 2018 dollars).¹² By comparison, Montana adjusts its grazing fees annually based on market prices of beef. Arizona's grazing fees are also strikingly low compared to other states (\$5.60/AUM in New Mexico, \$15/AUM in Nevada, or \$14.51/AUM in Colorado) or compared to the private land grazing fees in Arizona, which average \$10/AUM.¹²

The audits also reveal the highly political nature of trust lands. Lessees sometimes pursue rent-seeking behavior that has the effect of transferring wealth from the beneficiaries (and the public) to private interests. (“Rent-seeking” is effectively capturing a portion of “rents”—that is, value that is coming from the land but which the lessee does not produce.) This is generally achieved when lessees exert political pressure to secure preferential leasing (avoid competition) or lobby to maintain below-market rates and other favorable lease terms.

An economic analysis in Mississippi found that state trust land managers failed to maximize revenue when multiple interests in land management exist. For example, managers may be legally required to maximize revenue for beneficiaries, but they also may be elected officials whose voting constituents include leaseholders.¹³ This divided loyalty and the resulting advantages for lessees was described clearly by a president of the Wyoming Stock Growers Association (many members of which are state land lessees) *and* former director of the Wyoming Office of State Lands and Investment, who said: “If we were going to sell a parcel of school trust land, we need to at least be able to show that we’ve looked at what impact there would be to, say, a ranching operation that would be on that land. It shouldn’t be a determining factor over what’s best for the income of the schools, but it should be part of the overall equation.”¹⁴ This example illustrates the ability of lessees to capture trust management agencies and exacerbate the politics of managing state trust lands.

Politics result not only in land managers with divided loyalties, but also allow states to dismiss or even eliminate audits of trust land management. State auditors, charged with oversight of state agencies including trust land management agencies, are generally either elected or appointed officials. So, for example, when the New Mexico state auditor found instances where trust managers failed to update land appraisals or to assiduously follow policies related to conflicts of interest, the land commissioner—an elected official who happened to be a member of the opposing political party—fired back: “Either they [state auditors] are incompetent or this is just a political witch hunt, which is a shame.”¹⁵ These public spats, often between political parties, reveal that trust land managers may employ political power to avoid confronting potential problems in their organizations.

New Mexico’s efforts to increase royalty rates on oil and natural gas extraction from state lands is another example of the challenges trust managers face in maximizing revenue. Oil extraction in New Mexico is hitting record volumes because of new horizontal drilling and hydraulic fracturing in the Permian Basin of southeast New Mexico and western Texas. In 2018, 246 million barrels of oil were extracted in New Mexico, up from 86 million in 2012.¹⁶ Some of the oil production is on state trust lands and generated \$107 million in bonus payments and \$679 million in royalties in FY 2018 for beneficiaries.¹⁷ New Mexico negotiates royalties on a lease-by-lease basis, but the royalty is capped at 20%. In neighboring Texas, royalties are capped at 25%.¹⁸

New Mexico’s land commissioner asked state legislators in 2019 to allow the agency to increase the cap to 25% so they could negotiate for higher rates on the most productive leases. The proposal failed after lobbying from the oil and gas industry who claimed the increase would drive them from New Mexico and reduce revenue for schools.¹⁸

There is little evidence for the claim that small royalty rate changes (from a maximum of 20% to 25% in New Mexico, for example) have a negative effect on revenue. Most of the academic research demonstrates the opposite: that the increase in revenue from higher rates outweighs a relatively smaller decrease in production.¹⁹ What is clear from the debate is that state trust managers lack autonomy and capacity to set royalty rates that maximize revenue for beneficiaries. Instead, state legislators and industry (lessees) have substantial influence that constrains the duty to maximize revenues.

In the context of traditional leases, states clearly struggle to fulfill their obligation to maximize revenue for beneficiaries exclusively. In the next section, we address how this challenge continues and new challenges arise when states try to capture value from new uses through traditional private market mechanisms.

IV. ARE STATES CAPTURING VALUE FROM NEW LAND USES IN PRIVATE MARKETS?

As the economy and public preferences change, state lands can provide value in new ways. This sets up new challenges in fulfilling the trust lands' revenue-maximization mandate. States continue to face political pressure, both from traditional land users seeking to exclude competition from new users, and from a growing group of stakeholders demanding lands be available for new uses such as public access, recreation, and environmental protection. Additionally, many new uses are nonexcludable, making it difficult for states to capture value from these uses. For example, it is impossible or extremely difficult to charge private citizens for values like clean water, viewsheds, or recreational access.

In this section we ask: Can states effectively capture value from new uses such as renewable energy, conservation, and recreation in private markets? First, we discuss examples where states have and have not welcomed new competition to fulfill their fiduciary duty. Second, we discuss examples where states have captured—in the private market—value from land uses that are difficult to make excludable, but we find that these are rare.

Excludable Commercial Uses

States have been remarkably open to competition from new energy markets on trust lands, allowing them to capture substantial new revenue for beneficiaries. All Intermountain West states²⁰ have operational wind facilities leasing trust lands.²¹ The recent entry of Montana's state trust lands into the solar energy market demonstrates the ability of new markets to compete with traditional users for leases on trust land. Montana's trust land management agency recently approved a 1,306-acre solar development despite significant opposition from the surrounding ranching community and the ranchers who previously held the land leases. Multiple government officials, including Montana's governor, acknowledged that despite the difficult decision, they were obligated to maximize revenue from the land. The previous grazing lease on the land raised \$2,430/year, whereas the solar lease will provide a minimum of \$480,000/year to the trust.^{22, 23, 24}

Nonexcludable Uses

While renewable energy has the same advantages as traditional uses—essentially, it is excludable and therefore charging users is simple—most other new demands on state lands are difficult or impossible to make excludable. However, in a few cases, nonmarket uses including recreation, scenic, and conservation interests have successfully leased trust lands in the competitive leasing market, securing public values and delivering maximum revenue to beneficiaries.

Recreation Fees

One way that states have captured value is through nonconsumptive recreation fees for activities such as hiking, biking, or bird-watching (we discuss hunting and fishing access in a later section). These fees permit individuals to access any trust lands that are not subject to a lease or where recreational access does not diminish the value of the lease. (This is distinct from leases or easements held for recreational purposes; these will be discussed in the next section.)

For example, Montana charges a \$10/person/year fee for a nonconsumptive access permit to state trust lands. However, income from these fees is minimal (approximately 0.1% of annual revenues in 2018²⁵) and enforcement would be cost-prohibitive. Many people who access state lands either do not know they need to purchase a permit or ignore the requirement. Additionally, most Montanans view state trust lands as public; restrictions on access would be extraordinarily unpopular. Pressure from Montana citizens to keep these lands open together with the nonexcludability of the resource essentially mean that the state can only capture a small fraction of the value users get from distributed recreational access.

Conservation and Recreation Leases

States may capture value from nonexcludable uses when an individual or small group purchases rights to the land for these purposes. An example is a conservation lease purchased to prevent extractive use of the land such as grazing or logging. In this case, the purchasers either get enough personal value from the conservation or are philanthropists, finding enough value in providing conservation for others that they are willing to outbid other land users. This type of lease is relatively rare and captures only a tiny fraction of the nonexcludable resources that state trust lands offer. In most cases, members of the public are unable to outbid commercial users or are unwilling to pay large amounts of money for a resource that mostly benefits others.

Conservation lessees also often face political opposition from rent-seeking traditional users. The Idaho Land Board's legal battle to avoid these leases in the 1990s demonstrates the political opposition to competition from new users. Between 1994 and 2003, the land board repeatedly denied the right of conservationists to bid on grazing leases and created rules disallowing conservation leases. In each of four legal cases brought over the issue, the Idaho Supreme Court upheld the right of conservationists to bid, given the trust lands' revenue maximization mandate.²⁶ Since then, Idaho has created a specific category of conservation leases. However, there are still structural barriers to conservation leasing, including that any lessee, regardless of desired land use, must compensate the previous lessee for improvements made to the property. This generally means that conservation lessees must pay significant amounts for grazing infrastructure (fencing, water infrastructure, etc.) that is not useful to them, thus reducing the ability of these nontraditional users to compete in the lease market.²⁷

A more recent example demonstrates Montana's similar resistance to conservation leasing on timberland. Montana allowed for conservation leases (called "timber conservation licenses") beginning in 1999. However, the law was repealed after a group of neighboring homeowners, concerned about impacts to wildlife and their viewshed, successfully outbid logging interests for a large timber lease south of Bozeman in 2019.²⁸ The state Legislature argued that conservation leases do not generate economic benefits (e.g., logging jobs) and that logging is necessary to protect against wildfire risk.²⁹ These arguments—valid or not—are contrary to the revenue maximization mandate on trust lands: legislators passed a bill that requires trust land managers prioritize employment and land management outcomes over revenue maximization. While the pool of bidders for conservation leases may be small, excluding them from the market reduces competition and reduces income for the beneficiaries.

Because conservation or recreation leases are nonexcludable, the value (or "economic rent") they generate for the lessee will always be smaller than their total value to the public. Therefore, while beneficiaries are compensated for a recreation or conservation lease, the organization purchasing a lease will rely on philanthropic donations by a few people willing to sponsor others' use. In Montana, there are a few successful examples of recreational trail easements relying on this type of funding. Whitefish Legacy Partners and City of Whitefish, for example, have secured recreational easements on state trust lands near Whitefish, Montana, and the Gallatin Valley Land Trust and Gallatin County have secured trail easements

on trust lands near Bozeman, Montana. In both cases, funding for the trail easements came primarily from private funds raised by the nonprofit trail organizations.^{30, 31}

In Colorado, recreational land leases face similar challenges. Because public access to state trust lands is prohibited in Colorado—recreation is excluded from trust lands—gaining access requires recreation users to provide fair compensation to the trust. However, from the recreational lessee’s perspective, it remains difficult to charge users to pay for the cost of leasing access to a trail system, for example, because it is difficult and costly to exclude users from accessing trails without paying. Phil’s World, an area of mountain bike trails near Cortez, Colorado, demonstrates this problem. A local mountain-biking club has been able to raise money to purchase a recreational lease for the state trust lands on which these trails run because its members receive enough value from the trails that they find this purchase worthwhile. However, they have not avoided the free-rider problem: the fee works on an honors system. Anyone not paying for the lease through the club can drop \$3 in a pay box at the trailhead, but some simply ride the trails for free.³²

This situation again demonstrates why it is uncommon that land is leased for nonexcludable uses. Purchasing recreation leases requires a level of local organization and philanthropy that is rare. The club behind Phil’s World has a social contract and broad enough buy-in that it can collect value from enough local users to pay the lease. Additionally, those who are paying for the lease are also paying for users who are not part of the club and are not contributing. The problem of nonexcludability will continue to make recreation and conservation leases relatively rare.

Land Development and Total Asset Management

In rare cases, the geography of trust land ownership facilitates capturing value from nonexcludable uses. In the first paper in this series, we describe how states were granted one to four sections of land in each township when states entered the Union. The pattern of land grants created a geography of widely dispersed and isolated trust lands. However, in some cases, particularly in later-admitted states, some sections designated for the state trust had already been claimed by private entities, had been reserved by the federal government as national forest or national parks, or were already part of Indian reservations. In these cases, states were often allowed to select other available federal sections as state trust lands. This enabled some states to agglomerate contiguous parcels of state land that offer the opportunity for larger-scale planning and commercial uses.

For example, Arizona owns a large tract of land just outside Phoenix, which has allowed the state to plan for a major mixed-use urban development. In this case, the state is not a passive lessor, but is directly engaged in the planning process, securing zoning, subdivision review, and other permitting approvals before leasing or selling the land.³³ By engaging in the planning process, the state takes on greater risks relative to a passive leasing model in which a lessee would be responsible for all development approvals, but does so to increase returns to beneficiaries.

Because the parcel of state trust land is so large, the value of homes and commercial space will depend on open space, viewsheds, recreational opportunities, and potentially even water use that are also provided by the same tract of state land.³⁴ Home prices tend to be higher if they come with good views, access to open space and trails, and reliable clean water, all of which would also be provided by trust land. Arizona can therefore capture (at least part of) the value of providing these usually nonexcludable resources. If it chooses to leave some areas undeveloped, the trust can charge higher lease and sales prices on adjacent developed land. Through the planning process, Arizona showed that an overall development scenario with large areas of public open space and preserved natural space would ultimately yield twice the return of its usual disposition strategy of selling small parcels individually.³⁴

This is an example of a Total Asset Management approach. Total Asset Management proposes that states manage all their lands holistically as a balanced portfolio of assets rather than passively leasing each individual parcel to the highest bidder.³⁵ One benefit of Total Asset Management, as described above, is that managers can identify and capture synergies among trust assets that maximize value. They do this by allocating assets among uses that generate different rates of return but, taken as a whole, increase the value of the entire portfolio. The potential of capturing these synergies is seen most clearly in cases where large contiguous blocks of state land occur near growing urban centers, allowing trust land managers to leverage the conservation, recreation, and aesthetic values of state trust lands. It is more difficult to understand how synergies among land assets would increase the value of the portfolio in the context of widely dispersed and isolated trust lands that are largely leased for traditional natural resource activities. A second potential benefit of Total Asset Management is that states can increase risks and investment returns on some lands, balanced by other lands set aside for lower value—that is, less risky and more sustainable—uses. This is analogous to the way that assets in the state trust permanent fund are managed. Financial managers do not invest every dollar in the permanent fund to maximize revenue, but rather construct a diversified investment portfolio that seeks to achieve an average return for beneficiaries based on articulated risk tolerances and a portfolio approach.

States have pursued elements of Total Asset Management, but this strategy has not been implemented widely. One reason for this may be that it is difficult to show that this approach would maximize revenue more effectively than states' current approaches of maximizing revenue on a parcel-by-parcel basis. States also have limited capacity and authority to conduct assessments and invest in assets to increase their value. For example, Montana's management costs are limited to 25% of revenues,³⁶ and Washington's are usually limited to around 30% of revenues.³⁷ These restrictions may make it difficult for a state to continually reassess and rebalance trust assets across a wide portfolio of potential uses. However, a Total Asset Management approach holds unrealized potential for states to accommodate new uses, including nonexcludable public values, while still meeting the obligation to maximize total revenue for beneficiaries across the entire portfolio of state trust assets.

Accommodating new uses and public demands for access, aesthetic values, and conservation on trust lands within the leasing model is difficult. Anecdotal cases of successful conservation and recreation users entering private leasing markets are rare because it is difficult to capture value from nonexcludable uses. Additionally, politics, planning and management capacity, and the dispersed geography of trust lands make capturing value from nonexcludable uses even more difficult.

In the next section, we explore situations where states have intervened in the leasing model to directly purchase public values from the trust, or in other cases, changed the rules so that lands are managed for public values not captured in the markets.

V. WHAT ARE STATES DOING TO PROVIDE FOR PUBLIC VALUES AND FUND PUBLIC INSTITUTIONS?

Governments have sometimes stepped in to fulfill public demand for nonexcludable resources when the leasing model fails to provide for them. These activities lie on the boundary of, or firmly outside, the fiduciary mandate. Some states have recognized that the benefits of subsidizing, purchasing, or even regulating state trust lands can, in some cases, provide greater public value to schools than traditional uses. In this section we ask: How are states ensuring that citizens get value from new uses of trust lands while also guaranteeing public institutions (trust land beneficiaries) are well funded?

States are ensuring value in four ways that are explained in more detail below. First, governments have used public funds to purchase nonexcludable values such as hunting and fishing access or conservation. Second, state governments have used taxpayer dollars to pay for trust land management activities that do not increase the revenue potential of the land, but do increase its conservation, recreation, or other values. Third, land management officials have subsidized commercial lessees when doing so also provides values to the public. Finally, in one case a state explicitly gained public approval to provide additional values from the land at the expense of revenue maximization.

These examples are important indicators of the future of state trust lands. The changing economy has elevated new economic and societal values of state trust lands. For example, most new jobs in the western United States are in services with the most important being in high-wage “innovation” occupations.³⁸ Communities find that access to raw materials is still important, but increasingly quality of life, access to recreation, and the amenity values of the surrounding landscape are important to attracting and retaining families, businesses, and educated workers.³⁸ The cases described below demonstrate how the government can protect and provide for nonmarket values that can help diversify economic opportunities while also funding public institutions.

Using Public Funds to Purchase Public Values

Many states have worked to ensure beneficiaries are compensated for new societal demands of the trust lands. This has generally taken the form of a separate governmental entity using taxpayer dollars or another revenue source to pay beneficiaries for nonmarket uses of trust lands. Importantly, these uses are not purchased by private interests through a leasing model but are directly purchased by the state for their nonconsumptive or nonmarket public value.

Ideally, anywhere the public value of nonmarket uses outweighs the land’s traditional revenue-generating potential, state trust land managers would designate the land for these nontraditional uses. However, as we saw in the previous section, most nontraditional uses are also nonexcludable, making their value difficult to capture in the trust land leasing model. In some cases, a small number of users have paid for values that will benefit a large number of people beyond themselves (for example, a conservation group leasing a parcel from which increased water quality will benefit an entire town). However, a more effective way to support these nonexcludable resources is to have an organization representing all citizens—i.e., the government—step in and use public funds to provide them. States and, in some cases, entities at other levels of government are sometimes doing this.

Subsidizing Enforcement of Hunting and Fishing

In several states, wildlife agencies pay for hunting and fishing access on state trust land to allow hunters to access trust lands. The agencies fund these payments by increasing hunting and fishing license fees. For example, the Idaho Department of Fish and Game pays \$580,000 per year to allow hunting and fishing on trust lands. Fish and Game also provides enforcement on these lands.³⁹ In New Mexico, the Department of Game and Fish pays \$1 million per year for hunting and fishing access to a limited number of access points and campsites on trust lands.⁴⁰ In Colorado, where state trust lands are generally entirely off-limits to the public, the Division of Parks and Wildlife pays about \$900,000 per year for access to about 1/6th of state trust lands during hunting season.⁴¹ Montana and Utah’s state fish and wildlife departments make similar payments to secure hunter and angler access to trust lands.⁴²

Although not all hunters and anglers will utilize state trust lands, this system comes close to charging the citizens who actually use the lands for their use. In this case, government uses its organizational and enforcement power to, in effect, make the resource excludable, capture its value, and transfer this value to

the trust. Other solutions are emerging for public values such as nonconsumptive recreational access or other ecosystem services (such as scenery or clean water) where those who benefit from the lands are difficult or impossible to exclude from or charge for the resource.

Securing Trust Land for Nonexcludable Values

In a changing economy, a large and growing portion of the population values recreational access, land conservation, or other ecosystem services on state lands. This might be because people value land access itself, they value the economic activity driven by conserved lands, or clean air and clean water are becoming more scarce resources and conserved lands help provide these services. If a large majority of citizens receive value from nonexcludable trust land uses, the government can legitimately use public funds to purchase these uses—that is, these funds compensate the trust for nonexcludable land uses that citizens demand.

One way that governments have done this is through purchasing lands and conservation leases that have significant public value. An example is Washington’s Trust Land Transfer (TLT) program. The Washington State Department of Natural Resources manages a large portfolio of trust lands. Some of these lands have relatively low income potential and/or possess high nonmarket values, including critical fish habitat, recreation, and aesthetic values. The TLT program allows the legislature to appropriate money to purchase or lease these lands from the trust (providing revenue to beneficiaries) and transfer the lands to other state agencies who can manage them for nonmarket values. Since the TLT program was started in 1989, the state has spent about \$800 million to transfer more than 111,000 acres and lease 5,000 acres.⁴³

Another example is the Arizona Preserve Initiative (API), in which lands valued for conservation were identified, priced at fair market value, and the state provided half the funding for a conservation purchase. Between 1996 and 2012 the API program conserved 16,343 acres.⁴³ The state effectively used public funds to purchase public values on trust lands by lowering the price for conservation leases and purchases by half. Importantly, most organizations that made conservation purchases through the program were also government entities—usually town, city, or county governments.

A third example is Montana’s recent designation of state funds to purchase permanent recreation easements on land used for state parks. The most recent of these purchases was Big Arm State Park, a popular park that lies along the shores of Flathead Lake. Based on a new assessment of its property value, the park would have had to pay the trust \$600,000 per year for its lease. The Parks Department was unable to afford that annual lease, so the Legislature designated \$12 million to buy the permanent easement, which allows the state park to use the land without an annual lease.

The federal government also has participated directly in protecting and providing for publicly demanded land values. In some cases, this has taken the form of a land transfer where the federal government “pays” the trust some amount of commercially valuable land in exchange for land valued for conservation. For example, in 2008 the BLM transferred 330 commercially valuable acres to Utah’s trust land management organization in exchange for 950 acres of trust land inside the Three Peaks Recreation Area.⁴³

These examples demonstrate how governments are recognizing and paying for public values on trust lands. Ideally, transaction costs associated with purchasing and transferring lands to protect and provide for public values would be minimized by structuring state programs to identify trust lands valuable for conservation and recreation.

It is also important to recognize that state citizens are paying for these purchases. When the commercial value of trust lands are not converted into revenue for schools, taxpayers pay for a larger share of public education costs.

Subsidizing Public Benefits with Stewardship Activities

States may provide funding for stewardship of state trust lands that serve the public interest. While not purchasing the lands for conservation as described above, this is another way that governments are purchasing public values on state lands.

The largest of these stewardship costs is wildfire suppression, which is funded using a variety of mechanisms in different states. For example, in Montana the Department of Natural Resources and Conservation's (DNRC's) Forestry Division provides fire suppression services on private, state, and federal lands to protect lives, property, and natural resources. DNRC's fire suppression costs are paid from a variety of state sources and from federal reimbursement based on reciprocal fire suppression and funding agreements. Fire suppression protects trust assets—including timber, grazing lands, and infrastructure on state trust lands—and protects communities, water quality, and other public values. Longer and drier fire seasons, increasing development in the wildland-urban interface, and a continuing legacy of fire suppression that contributes to riskier fire conditions virtually guarantee increasing wildfire suppression costs.

States may also subsidize public values on trust lands by expending funds to protect biodiversity. For example, Montana's Sage Grouse Conservation Strategy is developed collaboratively among several state agencies, the governor's office, a public advisory committee, and the Legislature. The goal is to protect sage grouse habitat and populations in ways that maximize flexibility to continue to use state trust lands and private lands for commercial activities, including grazing and oil and gas development, and to preclude federal listing of the sage grouse under the Endangered Species Act. Public funds used to develop the strategy and to finance ongoing research, collaboration, and implementation of the strategy protect the sage grouse and its habitat and effectively subsidize commercial activities on state trust lands.⁴⁴

State intervention in the trust model offers insights into the increasing value of trust lands in a changing economy and reflects new pressures as public attitudes about public lands continue to evolve. States have found creative ways to structure programs that identify trust lands valuable for conservation and recreation, and they use direct purchases, land transfers, and subsidies to secure these values while still compensating trust beneficiaries.

The next section turns to situations in which states have regulated or redefined the fiduciary trust obligation to include the long-term sustainable management of trust lands that provides a suite of values not limited to commercial receipts.

Subsidizing Commercial Activities for the Public Benefit

State lands exist in a political environment and trust land managers face pressures to accommodate certain commercial uses at below-market rates. While not always advised (see description in previous section about rent-seeking behavior), below-market lease rates may be justified when managing trust lands for less than maximum revenue provides public benefits. Particularly in rural communities, traditional natural resource activities on state trust lands (including grazing, timber, and mining) can be important to a way of life and the continuity of some resource-dependent communities. States may decide to continue traditional leases to maintain the current land use and character of the community, or as part of a Total

Asset Management assessment strategy where some lands are retained in lower value but stable and long-term uses to balance risks.

For example, in Teton County, Wyoming, home to the Jackson Hole ski area and Grand Teton National Park, open space, aesthetics, and the viability of the ranching community are important community concerns.⁴⁵ The fair market value of state trust lands in Jackson Hole exceeds their agricultural production value by a wide margin. Selling or leasing trust lands for development would likely better maximize revenue for beneficiaries. However, ending a grazing lease on state lands may have a detrimental impact on the larger ranch operation, which would result not only in the state land being converted to development, but likely the base ranch also being sold to developers.¹⁴ The state allows grazing leases to be renewed on a preferential basis (the existing lessee does not have to enter into competitive bidding with new potential uses to retain the lease) in order to subsidize commercial grazing because of the public benefits open space provides to communities.

This concern also was raised in Arizona in an example discussed earlier in this report. Lack of competitive bidding and below-market grazing fees were a concern raised by an Arizona audit report of trust lands. Ranchers responded by stressing the cultural value and economic importance of trust lands to the ranching community.¹² The public may agree to receive less than maximum revenue if they value the ranching community's viability as a way of conserving open spaces and maintaining a particular set of landscape aesthetics and cultural values.

Grazing on state trust lands is also subsidized in Utah, in this case by the state government, instead of by reduced-lease income to the trust. For example, the Utah Department of Agriculture and Food's Grazing Assistance Program helps ranchers to develop water, improve fencing, and develop and monitor grazing plans on private and state lands. These services and resources improve rangeland health to both increase the economic benefits of livestock grazing for ranching families and communities and to improve rangeland health and wildlife habitat.⁴⁶

Another example in Utah is the Parker Mountain Block of state lands, which is the site of a research and monitoring collaboration designed and funded by the Grazing Improvement Program, Utah Division of Wildlife Resources, Utah State University, federal agencies, and the Utah State and Institutional Trust Lands Administration (SITLA). The partnership improves forage quality for livestock and wildlife, creating additional value for beneficiaries. It also develops grazing practices that accommodate or improve wildlife habitat, creating additional public values.⁴⁷

However, in none of the above cases does it appear that states have evaluated the financial tradeoffs: How does money spent on subsidies, or revenue lost due to low rates or preferential grazing leases, compare to the public values gained by maintaining ranching operations? Trust land managers must balance pressures from lessees and from the public, often without adequate resources and information to assess these tradeoffs. State land management is inherently political, which complicates attempts to maximize revenue and to secure public values.

In the next section, we discuss a case where voters passed a constitutional amendment through a statewide referendum redefining the fiduciary trust obligation.

Redefining the Fiduciary Trust Obligation in Colorado

In practice, protecting and providing for public values on trust land is constrained by the fiduciary trust mandate that states must maximize revenue. In Colorado, voters interested in a broader suite of values provided by state trust lands simply changed the rules. Voters passed a constitutional amendment in 1996

that changed the focus of the fiduciary trust away from generating the “maximum possible amount” to “providing for prudent management” of the trust lands. Specifically, Amendment 16 stated that the “economic productivity of all lands held in public trust is dependent on sound stewardship, including protecting and enhancing the beauty, natural values, open space, and wildlife habitat thereof for this and future generations.”⁴⁸

When challenged by trust beneficiaries (several rural school districts and individual students litigated on behalf of beneficiaries), Colorado’s Amendment 16 was upheld by the courts because the state’s enabling act does not specifically mandate that the trustee seek maximum revenue for beneficiaries. The trust exists, the court agreed, but the fiduciary duty offers flexibility in how the obligation is defined, including by defining the fiduciary trust obligation in fiscal and conservation terms.⁴⁹ Colorado’s example may provide room for additional states—with the likely exceptions of Arizona and New Mexico—to reinterpret the revenue-maximizing principle to secure a wider set of benefits for a broader group of beneficiaries. Even in Arizona, however, the state’s federal representatives successfully changed the state’s enabling act to allow greater flexibility in managing the permanent fund. As pressures on state trust lands continue to change, reforms to state law, constitutions, and enabling acts may become more common.

VI. CONCLUSION

States have traditionally generated revenue by leasing state trust lands for natural resource activities that include timber, grazing, mining, and fossil fuel extraction. The passive leasing model has limitations, including but not limited to the challenge of maximizing revenue in a highly political environment where lessees have been able to exclude competition from time to time and secure favorable lease terms.

The larger challenge to the leasing model is that it more often fails to protect and provide for new public values demanded by economic and social changes. Open space, recreation, and clean water generate economic benefits and lower costs to adjacent communities, but do not generally maximize revenue to beneficiaries. Balancing the new and expanding value of trust lands—and changing public attitudes about the ways that trust lands ought to be used—against the narrow obligation to maximize leasing revenue will shape the future of trust lands.

States have tried to address these issues within the fiduciary mandate to maximize revenue by allowing for conservation and recreation leasing, by using the state’s regulatory power to require user fees for access, and in some instances by taking a portfolio approach that can accommodate below-market uses of some trust assets.

However, many states have also used taxpayer dollars to purchase public values on state trust lands, to subsidize stewardship of public values, and in at least one case, to change a state constitution and allow managers more flexibility to manage for sustained value over time, including environmental, scenic, and use values. These actions indicate important new directions for state trust land management that should inform ongoing debates about trust lands in a changing economy.

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