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HEADWATERS ECONOMICS

State Trust Lands in Transition:

Understanding the Trust Model

November 2019

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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

State trust lands account for one of every 20 acres in the western United States. It is surprising, then, that state trust lands remain "the most frequently ignored and least understood categories of land ownership in the American West."[1] The inconspicuous status of trust lands is largely due to their unique purpose, limited public access, and their relatively fragmented geography compared to federal public lands. State trust lands were granted to states by the federal government for the specific and narrow purpose of generating revenue to support beneficiary public institutions, primarily public schools. Public access is generally restricted. And state trust lands tend to be fragmented into relatively small and isolated parcels compared to the large contiguous blocks of federal public lands.

This research project explores the unique state trust model to understand current pressures it faces in the western states.

The state trust lands model—defined by the "fiduciary trust" responsibility to a beneficiary and a "permanence" mandate that the value of the original endowment must not be diminished—evolved over time and remains a work in progress. In practice, adherence to the beneficiary trust and permanence responsibilities has waxed and waned among states as they weigh incentives to spend savings to meet current needs against intergenerational commitments, with varying results.

More recently state trust land managers are responding and adapting to new pressures and demands from beneficiaries, politicians, and public stakeholders in ways that may erode the trust model.

On the one hand, a changing economy that is shifting away from extractive industries and toward services sectors, combined with shifting social values around recreation and conservation, apply pressure to state trust land managers to accommodate new uses on trust lands.

Alternatively, pressure to maintain lower taxes vis a vis rising demands to increase education budgets or to add new programs, such as early childhood education, have pushed states to prioritize current spending at the expense of permanence.

Our research is organized into three phases. The first phase, presented in this report and accompanying data, provides the context. A second report, *States' Treatment of Permanent Funds,* examines how factors pushing to increase current spending and reduce permanent savings are playing out in different states. A third report, *Challenges from New Uses and Demands,* examines how states are accommodating new demands for non-market or below-market uses of state lands to meet changing public expectations and economic realities.

All the data gathered are available for download for other researchers, decision makers, and stakeholders at: https://headwaterseconomics.org/topc/public-lands/state-trust-lands-model. Our goal is to present robust, relevant research that informs policy. Better understanding of the state trust lands will benefit not only state managers, but federal managers who face similar opposing pressures to more aggressively manage for resource extraction and adapt to economic and public demands for recreation and amenity uses of federal public lands.

II. INTRODUCTION: STATE TRUST LANDS IN CONTEXT

State trust land holdings are extensive. The 11 western states host 40 million acres of state trust lands.[2] One in every 20 acres in the West is state trust land.

Despite their extensive footprint on the western landscape, state lands remain relatively anonymous in debates about "public lands." This is in large part because state trust lands are not, in fact, public lands as they are commonly understood. The trust lands were granted to states as they entered the Union for the specific and narrow purpose of generating revenue to fund public institutions, primarily public schools. This means public access is generally restricted. State trust lands also tend to be relatively fragmented and dispersed in relatively small parcels, making them less conspicuous compared to the large contiguous holdings of federal public lands such as national parks and national forests.

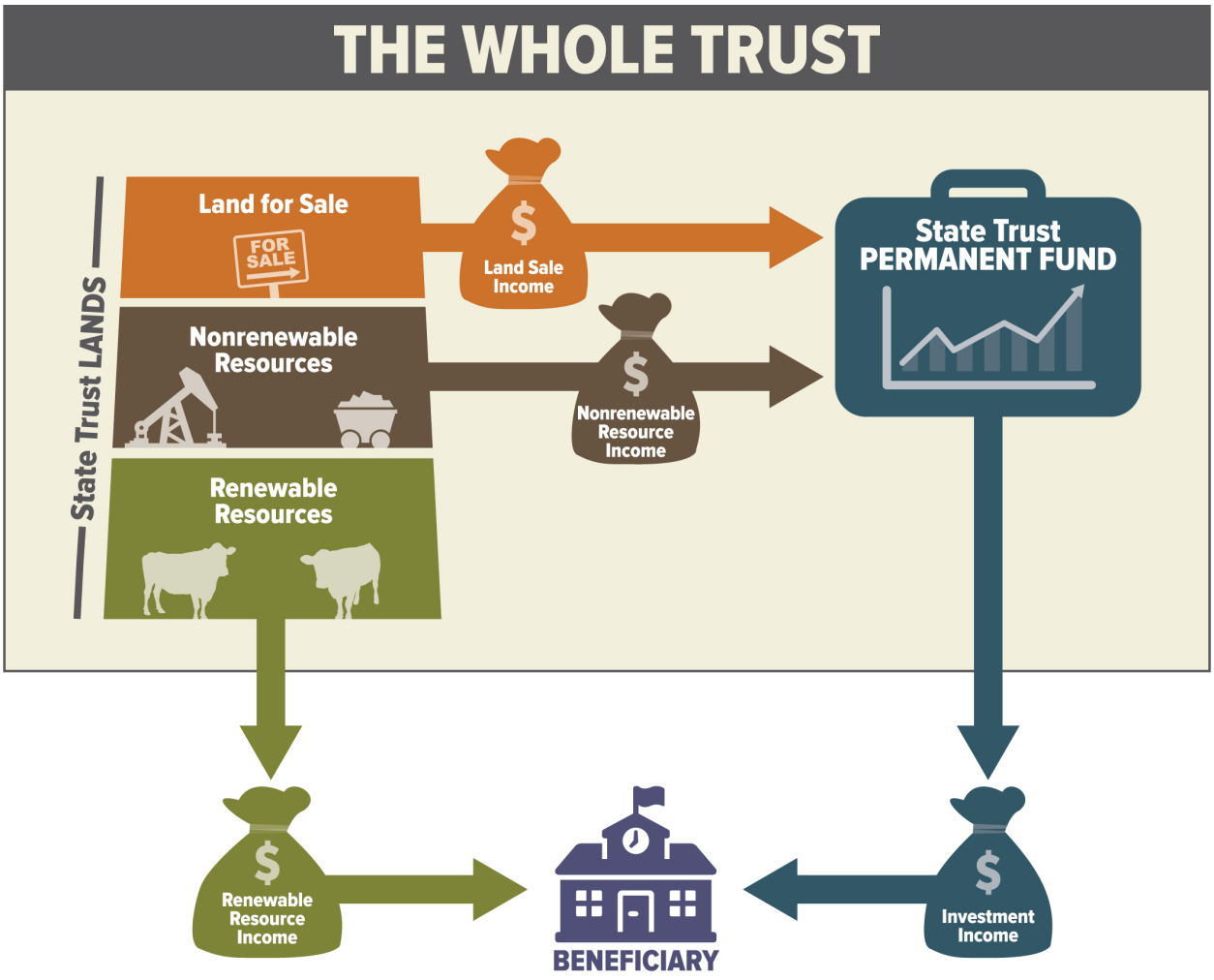
Two principles of trust land management are central to understanding their purpose and uses:

> Fiduciary Trust
> The fiduciary trust obligates trust land managers to generate revenue on behalf of a beneficiary—public schools and other public institutions. State trust lands are not "public" lands in a conventional sense. The fiduciary trust prioritizes receipts, which means that public access, recreational use, environmental quality, or community economic benefits are not permitted unless they maximize income from the trust land resource.
>
> Permanence
> The fiduciary trust also requires that the value of the original trust assets granted to states are held in perpetuity to benefit current and future generations. In practice, that 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 non-renewable trust assets (such as fossil fuels or minerals), the proceeds of these sales must be placed into a permanent fund to generate revenue for current and future beneficiaries from financial investments.

State trust lands and the permanent fund are two parts of an irreducible "whole trust" model. Using the whole trust model as a framework for assessing state trust lands allows us to assess whether the total value of the initial endowment is maintained in perpetuity. It also allows us to assess whether the entirety of state trust assets—physical and financial—are being managed together to meet the fiduciary trust obligation.

Figure 1: The "Whole Trust" Model

The diagram shows a model in which the state trust lands (on the left) and the permanent fund (on the right) comprise the "whole trust." The model requires that if physical trust assets are sold—the trust lands and non-renewable resources—the value of the assets is transferred to the permanent fund, maintaining the value of the whole trust. Each part of the irreducible whole trust is managed to earn income for beneficiaries through renewable land management activities and financial investments, respectively.

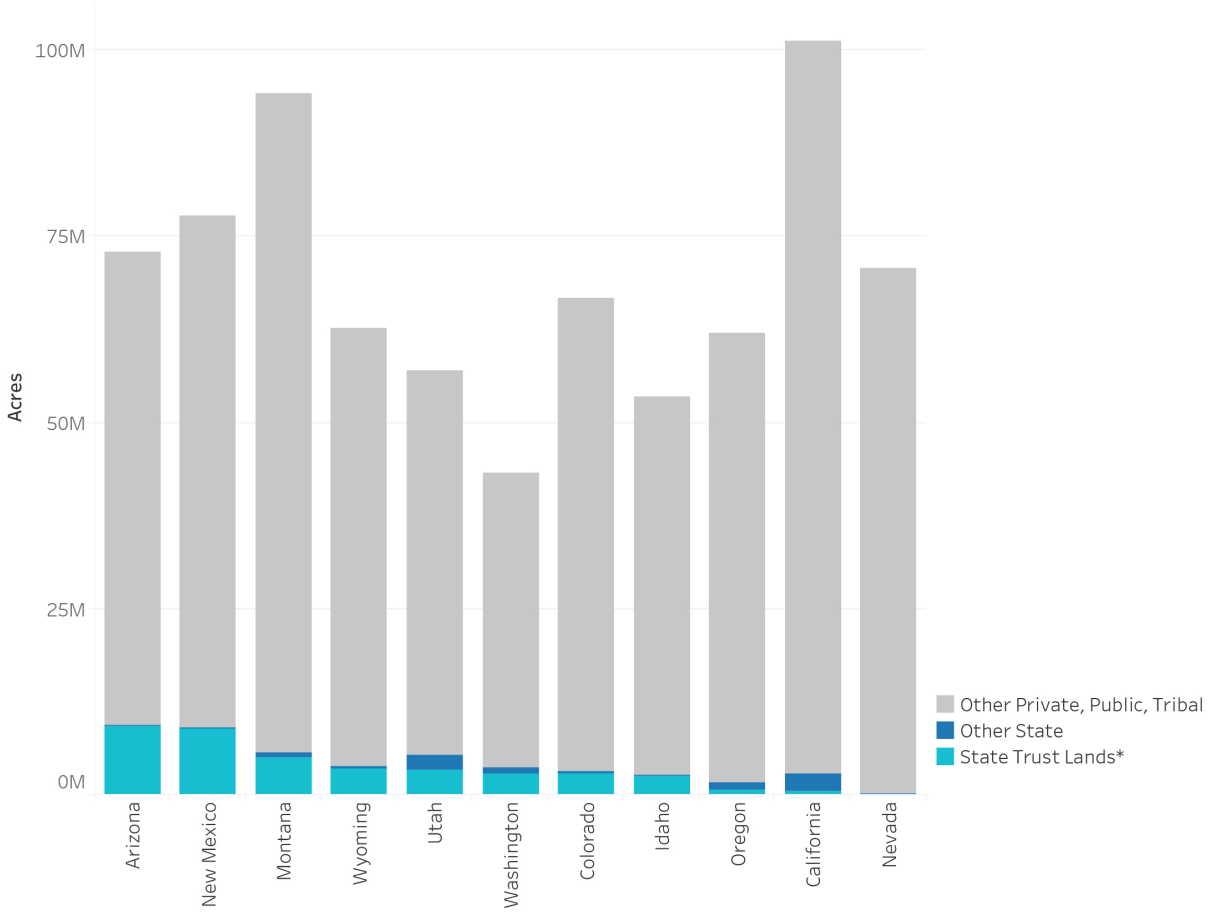


Fragmented Land Ownership

Initial grants of trust lands created a fragmented pattern of ownership (see Map 1). Unlike federal public lands (including national parks, national forests, and wildlife refuges), state trust lands were granted by the federal government to states as disparate sections. Initially, states were granted two sections (numbers 16 and 32) in each township. Granting sections that are not contiguous created a widely dispersed and disjointed land ownership pattern. Arizona and New Mexico, the last of the lower 48 U.S. states to enter the Union, were granted four sections per township, but these four sections also were non-contiguous parcels.

Figure 2: State Trust Lands in Western States[3]

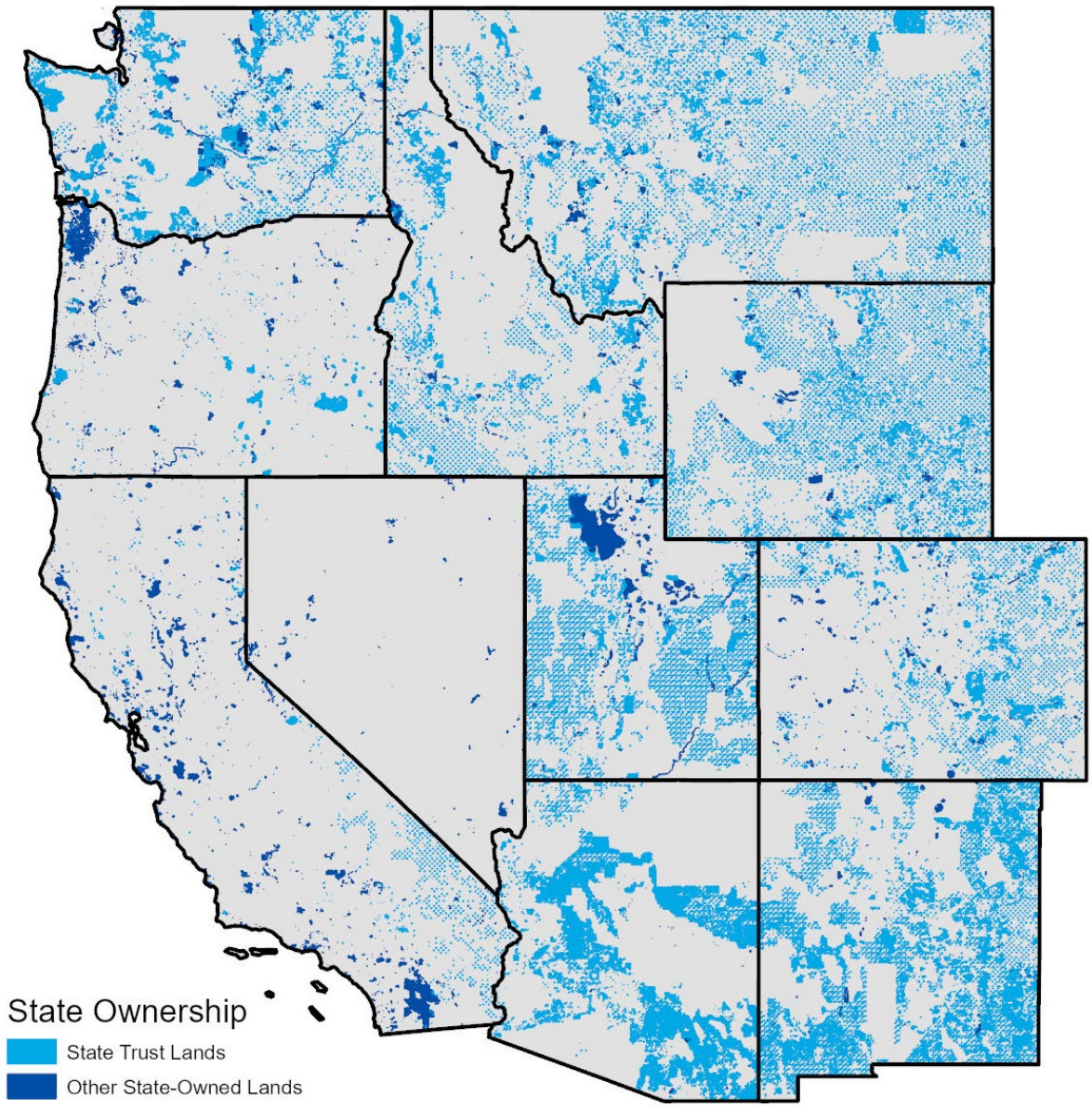
The figure sorts states from left to right based on the total acreage of trust lands (in blue). (Nevada's state trust land holders are too small to show in the figure.)



Because state trust lands were granted randomly from the perspective of what resources they contain or how accessible they may be, the fragmented nature of trust lands can limit management options and generate lower returns than might be possible from larger areas of contiguous lands.[4] For example, the Theodore Roosevelt Conservation Partnership and the software company *onX* report that 6.35 million acres of state lands—95% of which are state trust lands—are "landlocked," meaning they have no public access.[5] The report's authors were motivated to highlight landlocked state lands because of their concerns about public access for hunting. In doing so, the authors also illustrate the challenge of maximizing revenue from inaccessible and fragmented parcels.

Map 1: Fragmented Ownership of State Trust Lands[6]

This map of the western United States shows the fragmented pattern of trust lands. States were typically granted two sections in each township. A section represents one square mile of land, or 640 acres. Townships are made up of 36 sections.



III. HOW ARE TRUST LAND REVENUES GENERATED?

In the state trust model, physical trust assets are managed (typically through a lease to a private entity) to generate income for beneficiaries. State trust lands generate revenue for beneficiaries from a variety of renewable activities including timber, grazing, agriculture, and leasing for commercial activities such as residential and commercial real estate. The physical trust assets, land, and non-renewable resources also can be sold, and the value is transferred to a permanent fund. The permanent fund is then invested in

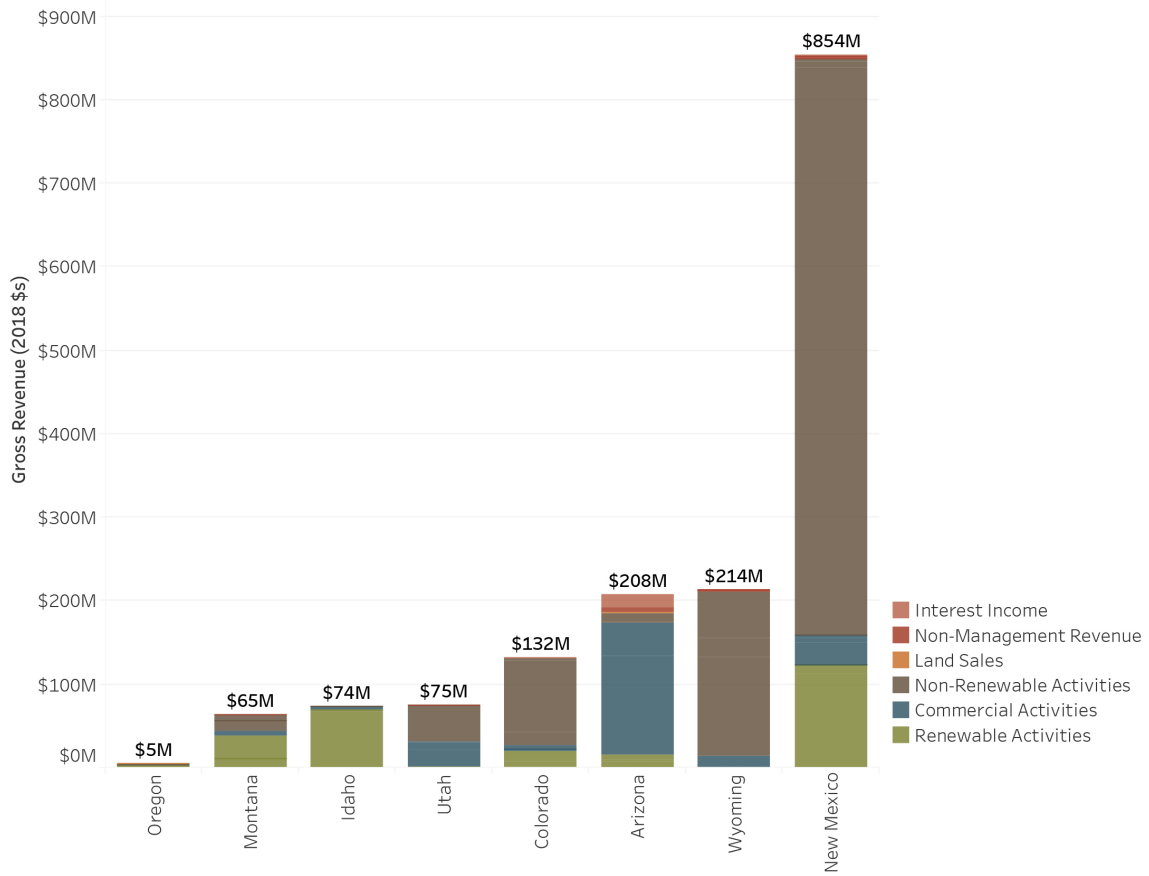
financial markets and instruments to earn revenue for beneficiaries. In this way, the whole trust—comprising physical and financial assets—is held in perpetuity and used to generate revenue.

In this report, we refer to revenue generated by leasing trust lands for renewable natural resource and commercial activities as "trust land revenue." We refer to investment and interest income earned by investing the permanent fund as "permanent fund income." And we refer to the physical trust lands, non-renewable resources, and the proceeds of their sale now residing in the permanent fund as "trust assets."

Figure 3 shows the sources of trust land revenue earned and the total value of trust assets transferred to the permanent fund in the most recent fiscal year (FY 2018) for western states. The importance of trust land revenue and trust asset transfers vary by state primarily based on the resource quality and quantity available to lease. For example, as Figure 3 shows, the sale of trust assets (including oil and gas, coal, and minerals) is most important in states with substantial fossil fuel resources such as Colorado, Wyoming, and New Mexico. The current oil boom in southeastern New Mexico's Permian Basin has generated near-record royalty payments to the state.[7] Figure 3 also shows trust land revenue from surface uses (including timber, grazing, and agricultural leases) is most important in Idaho and Montana. Arizona generates substantial trust land revenue from commercial activities, primarily by leasing trust lands for commercial and residential development.

Figure 3: Revenue by Activity Type and State, 2018[8]

The importance of different trust land revenue streams varies by state based on the resource quality and quantity available to lease, state policy regarding lease rates, and planning capacity, risk tolerance, and legal restrictions on agency limitations.

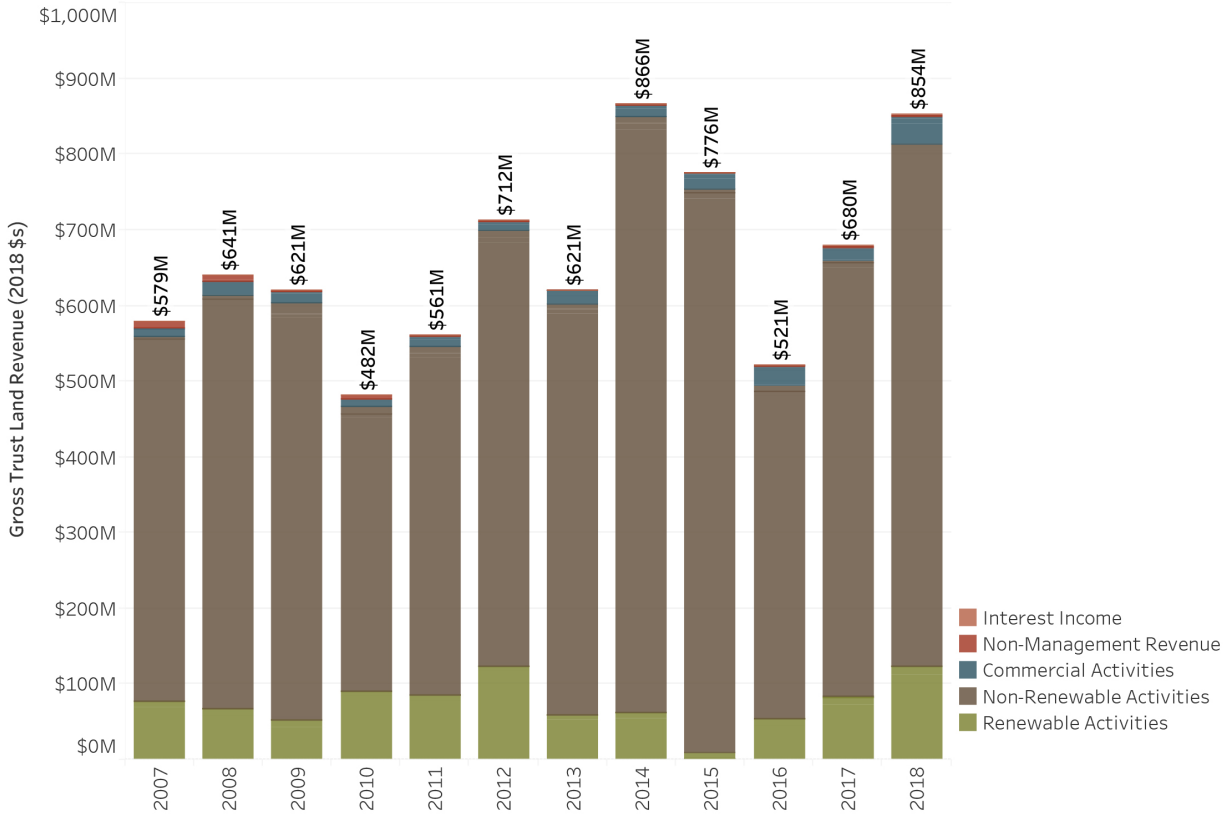


Sources for all data in this report are from a variety of state agency reports and data requests by Headwaters Economics. All data, methods, and citations are documented in Appendix A in this paper and can be downloaded at www.headwaterseconomics.org/topic/public-lands/state-trust-lands-model

Figure 4 shows how trust land revenue and trust asset transfers have changed over time in New Mexico. Wide swings in trust asset sales indicate the inherent volatility of oil prices and production volumes from year to year. For example, the sum of trust land revenue and trust asset sales fell from a high of $866 million in 2014 to $521 million in 2016 (a 40% decline), and rose again to $854 million in 2018 (a 60% increase).

Figure 4: Revenue by Activity, New Mexico, 2010-2018[9]

Trust land revenue varies over time in response to changing state and national economies and changing planning and leasing policies.



State leasing and trust asset sale policy also affect revenue. For example, states charge different rates to lessees for similar types of activities. Montana charges a royalty of 16.67% on oil and gas leases, New Mexico can charge up to 20% (but often charges less), while Texas charges a royalty of 25% on oil and natural gas extracted from state trust lands.[10] As a result, states will receive different rates of return from the sale of trust assets.

State policy also potentially limits revenue and returns in other ways. For example, agency funding models—in which agencies are largely self-funded from trust land revenue and are forced to balance expenses and beneficiary distributions—may constrain agency resources and capacity that could be used to evaluate alternatives and invest to increase the value of trust assets.[11]

And states sometimes limit the types of permitted activities. For example, Montana's Legislature recently passed legislation that ended the opportunity for the state Department of Natural Resources and Conservation (DNRC) to consider conservation leases.[12] Montana also prohibits DNRC from selling trust lands, which precludes the possibility that it may be more rewarding to beneficiaries to sell trust assets that have low revenue-generating potential and convert the physical asset into a financial asset (the permanent fund) that could be invested to earn higher returns.

These types of policy choices define the revenue model and affect the amount of income that could be generated for beneficiaries. The next section describes revenue models available to states.

Trust Land Revenue Models

Understanding how states generate revenue helps us assess how well states are meeting their fiduciary trust responsibility to beneficiaries. Each state pursues a slightly different set of mechanisms from passive leasing to riskier investments in public-private partnerships and land development. Mechanisms by which states may generate revenues include:

Leasing

The most common model is that the state leases the right to produce or extract renewable and non-renewable natural resources to a private lessee who performs most or all the land management and commercial activities. In return, the lessee pays a royalty or fee to the state, typically valued as a share of the market value of the commercial activity.

The lease can be a simple mechanism that transfers risks and responsibility to the lessee. The state, as the lessor, is guaranteed a return, most commonly as a fixed fee or a fixed percent of gross revenue, irrespective of whether the lessee earns a profit.

The lease arrangement is a relatively passive revenue model that reduces beneficiaries' risk, but also limits potential returns on renewable activities and the value of physical trust assets converted into financial assets.[13] The leasing model can be structured to share more of the risks and the income from renewable and non-renewable activities among beneficiaries and lessees. For example, some fiscal regimes include progressive lease rates linked to commodity prices that would return a larger proportion of windfall profits from high prices to beneficiaries and allow lessees to retain a larger share of revenue when prices are low.

Public Investments and Partnerships

In some instances, states will perform a variety of tasks before leasing land, such as preparing studies and plans to comply with regulatory requirements, securing development approvals, constructing infrastructure, or entering into public-private partnerships to finance a portion of lessee costs. By making investments of time, resources, and money, states may increase the value of the trust assets and secure a higher net return for beneficiaries. Unlike leasing, the state is taking on a portion of the risks associated with commercial activities by investing its own resources. Higher returns may come from the ability to charge higher lease rates because of the investments made before leases are offered, or by sharing investment returns via public-private partnerships.

For example, Arizona is aggressively pursuing commercial and residential real estate development on state trust lands around rapidly growing metropolitan areas. The trust land department has engaged in long-term planning and joint ventures that lower costs and risks to developers, thereby increasing returns

to beneficiaries from leasing or sale of trust lands.[14] Doing so increases the upfront costs to trust managers (long-term planning and infrastructure development are time-consuming and expensive), but ultimately increases revenue to beneficiaries and the value of trust assets transferred to the permanent fund through sales. This is opposed to a more passive leasing approach in which states may wait and entertain offers to lease or purchase unimproved trust assets at lower rates.

State Ownership and Enterprise

This model has not been pursued by state trust managers; however, it is an option. State trust managers could hire staff and contract services to extract or manage resources directly. For example, instead of offering a timber stand for lease, state employees could harvest the trees and deliver them to a mill and the beneficiaries would retain all the net revenue. Models of state-owned companies and enterprises exist in the United States and around the world, but trust land managers have effectively rejected the idea that states would invest capital and employees to develop commercial resources themselves. By not pursuing (or even assessing the potential of) different revenue models, states may be returning less than maximum revenue and value to beneficiaries.

Land Sales and Permanent Fund Investment

The whole trust model requires that the value of the original trust land endowment is held in perpetuity. The whole trust model offers states the opportunity to assess whether trust assets will generate more income if they are sold and transferred to the permanent fund (which can be invested in various financial instruments to yield a positive rate of return) than the rate of return they would earn from managing state lands for renewable revenue, such as grazing or timber.

IV. HOW IS TRUST LAND REVENUE SAVED AND SPENT?

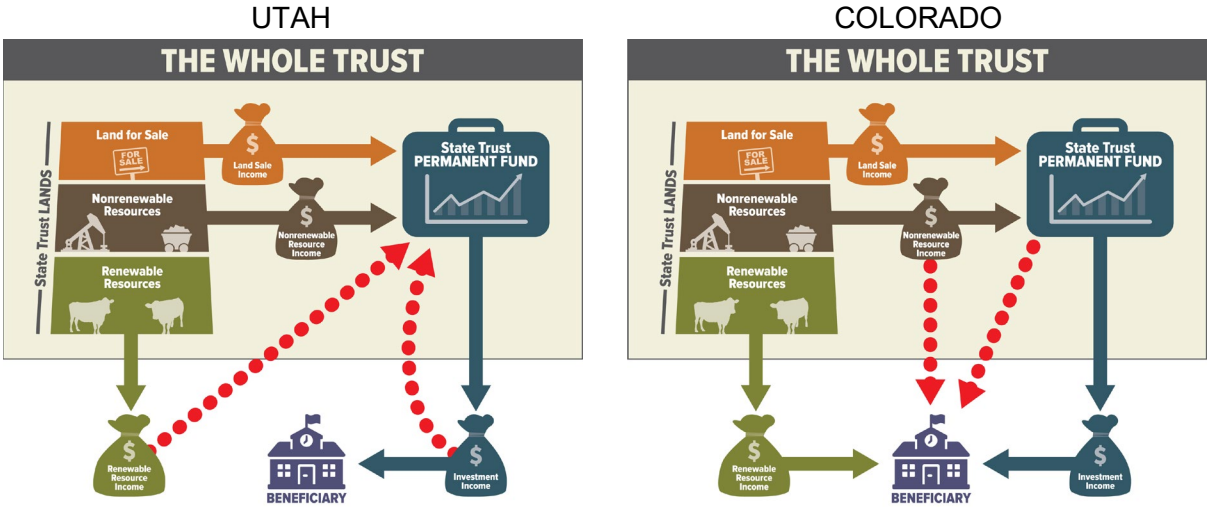
The primary purpose of state trust land management is to generate revenue for beneficiaries (see Figure 1: The "Whole Trust" Model). In this section, we detail how trust land revenue is allocated to beneficiaries and to other uses, including administrative costs or land management activities.

In general, trust land revenue is delivered to beneficiaries in two ways. First, trust land revenue generated from renewable activities—or "surface" activities such as grazing, logging, and leasing rights of way—and from leasing land for commercial real estate development are usually distributed to beneficiaries annually to support current budgets. Second, trust land assets—including the trust lands themselves and non-renewable resources such as minerals, oil, and natural gas—are usually transferred into a permanent fund when they are sold to maintain the value of the whole trust. Assets held in the permanent fund are invested in financial instruments to earn income for beneficiaries.

Documenting how states adhere to or diverge from the general distribution policy described above helps us assess how states approach the fiduciary trust and permanence responsibilities. For example, Utah invests renewable trust land revenue, in addition to any proceeds from the sale of trust assets, in the permanent fund (see Figure 5). Colorado, by comparison, invests half of all income it earns, including from the sale of trust assets. Colorado treats the proceeds from the sale of trust assets as annual trust land revenue rather than a trust asset that must be transferred to the permanent fund and invested to earn income. In years when the proceeds from the sale of trust assets make up more than half of Colorado's total income from renewable and non-renewable sources, the value of the whole trust is eroded by spending instead of saving income from the sale of non-renewable trust assets, primarily oil and gas royalty revenue.

Figure 5: Utah is Building Wealth by Reinvesting in the Permanent Fund; Colorado is Eroding the Value of Trust Assets

States allocate renewable resource revenue, income from the sale of non-renewable trust assets, and investment income from the permanent fund in different ways. Figure 5 shows that Utah invests both non-renewable income and renewable revenue into the permanent fund and reinvests a portion of investment income back into the permanent fund. Colorado, by comparison, spends some non-renewable revenue on an annual basis and makes distributions from the permanent fund that exceed investment income.



Some trust land revenue also is used to fund administrative expenses of the trust land agencies or is used to fund management activities that maintain or enhance the value of the trust lands. Using trust land revenue to fund these activities is common and appropriate—even desirable when management activities increase the value of trust assets and result in additional revenue for beneficiaries. Figure 6 shows how several states allocated trust land revenue and income from the sale of trust assets to different uses in FY 2018. Figure 7 shows how trust land revenue can change over time, using Utah as an example.

States allocate trust land revenue and income from trust asset sales in a variety of ways, including:

Direct Distributions to Beneficiaries

In general, states utilize the trust lands to generate revenue by leasing lands for renewable activities including grazing, agriculture, timber, and commercial real estate development. Revenue from these renewable activities is usually distributed directly to beneficiaries each year.

However, states make different choices about how to distribute trust land revenue. For example, Utah does not distribute trust land revenue to beneficiaries on an annual basis. Instead, it deposits all trust land revenue, after funding agency expenses, into the permanent fund.

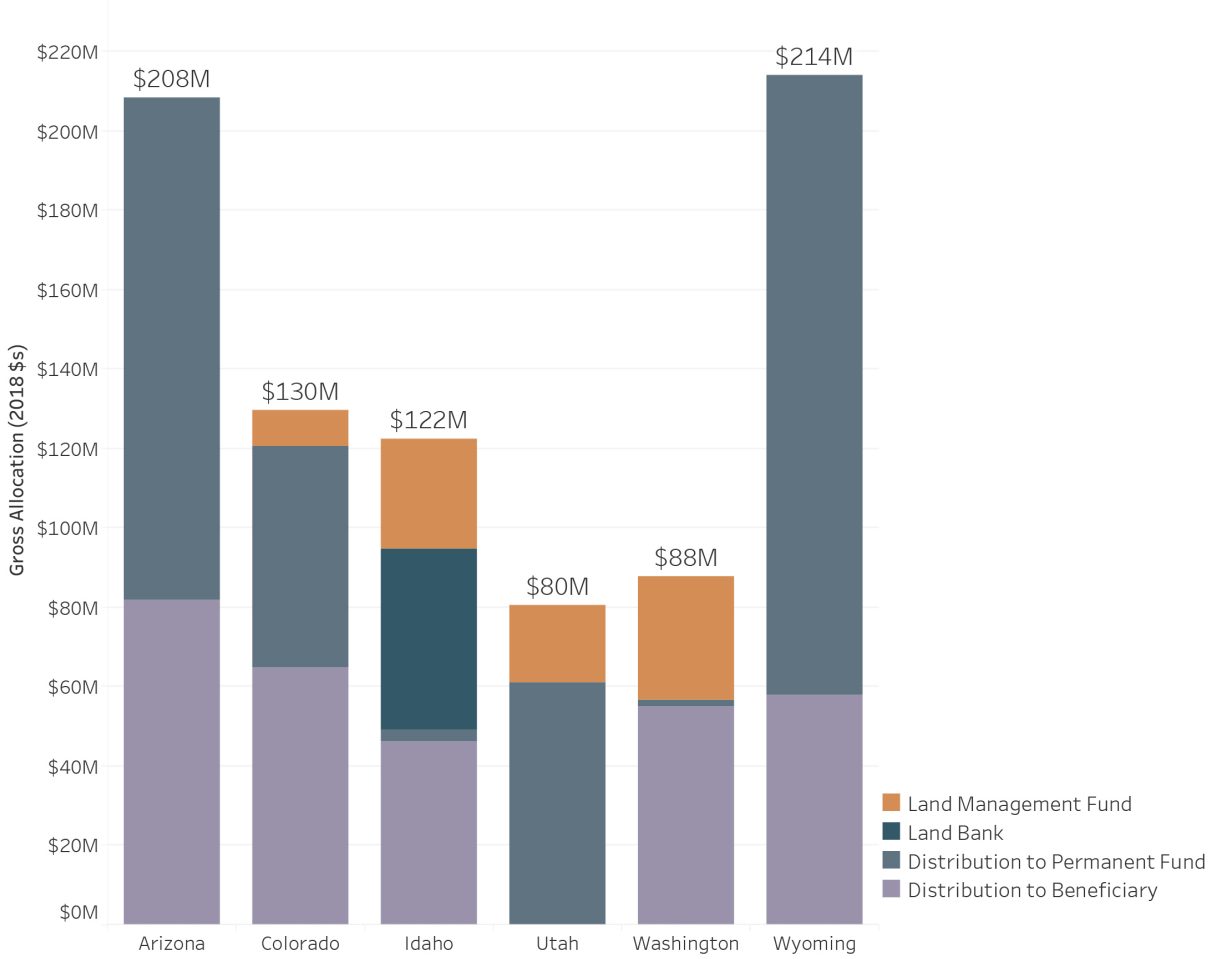
Permanent Fund Deposits

In general, income earned from the sale of trust assets—including non-renewable resources such as oil and gas, coal, and minerals, and trust lands themselves—is transferred from the physical trust land endowment to a permanent fund. Several western states do a good job at meeting this fundamental

permanence responsibility and transfer the full value of these assets to the permanent fund. However, not all do. Utah, as noted previously, is building the value of its trust assets by investing non-renewable and renewable revenue into the permanent fund, and by reinvesting a portion of investment income in the permanent fund.

Figure 6: Trust Land Revenue Allocations to Beneficiaries, Savings, and Other Uses, for Six Western States, FY 2018[15]

States allocate trust land revenue to beneficiaries in different ways. Trust land revenue is usually sent directly to beneficiaries but is sometimes transferred to the permanent fund. Proceeds from the sale of trust land assets is usually transferred to the permanent fund, but not always. States also use revenue to fund land management agencies and to invest in stewardship, infrastructure, and planning that protects and increases the value of trust assets.



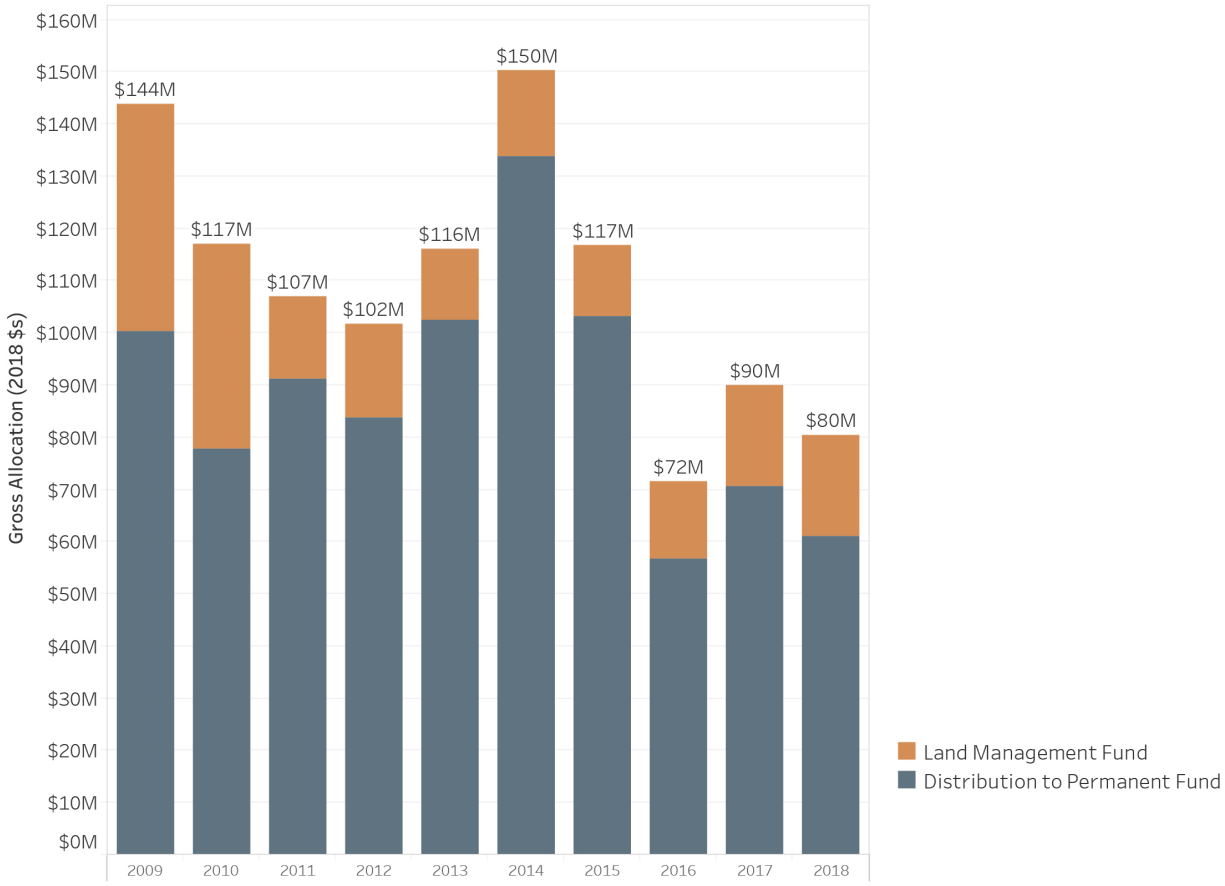
Note: Washington allocations are for FY 2017.

By comparison, Colorado deposits only 43% of total combined trust land revenue and income from the sale of non-renewable resources into the state's permanent fund. In years when income from selling trust assets makes up more than half of gross income including trust land revenue, the state fails to maintain the value of the whole trust by effectively distributing the value of trust land assets to meet today's spending needs instead of transferring them to the permanent fund. Colorado allocates half of all income, including from the sale of trust assets, to capital construction instead of savings. The name of the capital

construction program—Building Excellent Schools Today (BEST)—ironically confirms the tradeoff between spending and saving, of which Colorado has chosen the former.

Figure 7: Utah Trust Land Revenue Allocation, 2009-2018[16]

Revenue allocations change over time based on the amount and components of trust land revenue, and occasionally due to policy change by states. In the case of Utah, most allocations are transfers to the permanent fund.



Some grey areas also exist in how income from trust assets are distributed to permanent funds. For example, Montana considers income from all sources, including renewable and non-renewable activities, as trust land revenue. The state distinguishes between distributable and non-distributable revenue not based on the type of activity (e.g., grazing vs. mining) but based on the way revenue is paid to the state. Income earned through royalty payments for mineral extraction (including fossil fuels) is deemed non-distributable revenue, but the state deems surface rental fees and bonus payments associated with fossil fuels to be distributable revenue. (Bonus payments are one-time payments made at competitive auction for the right to extract non-renewable resources from public lands. Higher royalty rates will result in lower bonus payments, and vice versa.[17]) Montana's policy of saving royalty income but distributing bonus payments appears to violate the trust obligation to maintain the value of the trust assets in perpetuity. For example, in FY 2010 Montana received $86 million in coal bonus payments for the sale of coal leases at Otter Creek.[18] These revenues were distributed to beneficiaries instead of being transferred to the permanent fund.

Administrative Costs

State trust management agencies often fund all or part of agency operations by retaining a portion of gross trust land revenue to fund administrative costs. Utah, for example, moved the state trust office out of the state administration (state trust lands had been managed by the Division of State Land and Forestry within the Department of Natural Resources) and created a new independent institution, the School and Institutional Trust Lands Administration (SITLA), that is self-funded from revenue it generates from land management activities.

While SITLA is relatively unique among state trust land management agencies—most states' agencies remain as departments within the state government—many states follow the same principle that trust land management agency operating costs should be wholly or primarily financed from trust land revenue. A review of state land management agency funding policies in the early 1990s found that 11 of 15 surveyed states used some portion of trust land revenue to fund annual operating budgets, of which the largest share of costs is for staff.[19] For example, Montana retains a portion of revenue from distributable activities in a Trust Administration Account to finance the agency's operating costs, while Colorado retains 5% of gross revenue from all activities to fund agency operations.

Payments for Land Management and Improvements

Maintaining the productivity of trust lands requires spending on restoration, reclamation, infrastructure, and other improvements. In a passive leasing model, states can shift most or all these costs to lessees through contracts in return for lower leasing rates. Most states reinvest a portion of trust land revenue into land management activities to protect and enhance the value of state trust lands assets. States also can increase returns by assuming some land stewardship and reclamation costs directly or by directly investing in infrastructure and planning that increases the value of lands to lessees.

Land Banks

In some states, such as Idaho, income from land sales is not deposited into a permanent fund but is held in a separate "land bank" account to be used to purchase replacement land. The land bank approach maintains the value of the original land endowment (holding trust assets in a temporary financial account) and provides flexibility to sell and buy lands to rebalance the land portfolio.

The land bank can serve multiple goals. First, it protects the value of the whole trust by ensuring the proceeds of land sales are not distributed to beneficiaries but are transferred into new trust assets. Second, selling and buying trust lands may serve to improve management efficiency by reorganizing or consolidating fragmented state lands when isolated parcels are sold and land adjacent to existing trust lands is purchased. States may also be able to increase the value of the trust land assets by selling trust lands that have a lower value to the state but a higher value to another entity and using the proceeds to purchase lands with a higher value to the state. For example, states may be able to sell lands that have higher conservation values to other entities and in return purchase new lands that have higher resource or commercial values that will increase returns to beneficiaries.

Other considerations

Policies outside the state trust land mandate also interact with and affect distributions and their outcome for beneficiaries in important ways. For example, it is unclear in some states how—or whether—distributions of trust land revenue increase school budgets above what otherwise would be funded with

other sources of tax revenue. State school equalization laws and/or general fund appropriations to local schools may use trust land revenue to offset the need for other taxes rather than increase school budgets.

Additionally, states may have an incentive to supplement administrative, land management, and even beneficiary distributions with revenue from non-trust land sources to meet a variety of stakeholder and economic needs that lie outside the narrow beneficiary obligation. For example, Montana has funded fire suppression activities and regional conservation plans for endangered and threatened species on state lands that protect the value of state trust assets and resources and facilitate commercial development.

The next section describes the permanent funds in principle and the way states manage these funds in reality.

V. HOW DO PERMANENT FUNDS WORK?

Permanent funds were created to implement the permanence principle, which is central to the trust lands mandate. Applying the whole trust model, the corpus of the permanent fund is invested in financial markets (e.g., stocks and bonds) to generate investment income that is distributed to beneficiaries. Permanent funds allow us to think in terms of the whole trust: the trust value can be held as a physical asset (the value of the land and resources) or a financial asset (the value of trust assets sold and transferred to the permanent fund). Both the land and financial assets are managed to generate annual revenue, with the goal of maintaining the real value of the whole trust over time.

States have pursued varied policies regarding permanent fund deposits (described in the previous section), permanent fund management and investment strategies (how the corpus is invested to earn income), and distributions to beneficiaries from the permanent funds (how investment income is distributed to beneficiaries). These choices help explain some of the differences in the size and performance of states' permanent funds.

Figure 8 shows the size of permanent fund ending balances in selected states. Several factors contribute to the difference in the size of permanent funds among states. First, the relative value of trust assets available for sale defines the potential size of the permanent fund. For example, Figure 9 shows that New Mexico's permanent fund has grown substantially since 2009, largely from transfers of oil and natural gas royalty revenue into the fund (see also Figure 4). Distribution policies that divert trust assets away from the permanent fund or spending policies that draw down the permanent fund corpus also affect the size of the permanent fund corpus. For example, Utah's permanent fund is smaller than it might otherwise be because of raids on the fund in the early 1980s. These policies are discussed in another paper in the Trust Lands in Transition series: *States' Treatment of Permanent Funds.*

Permanent Fund Management and Investment Strategies

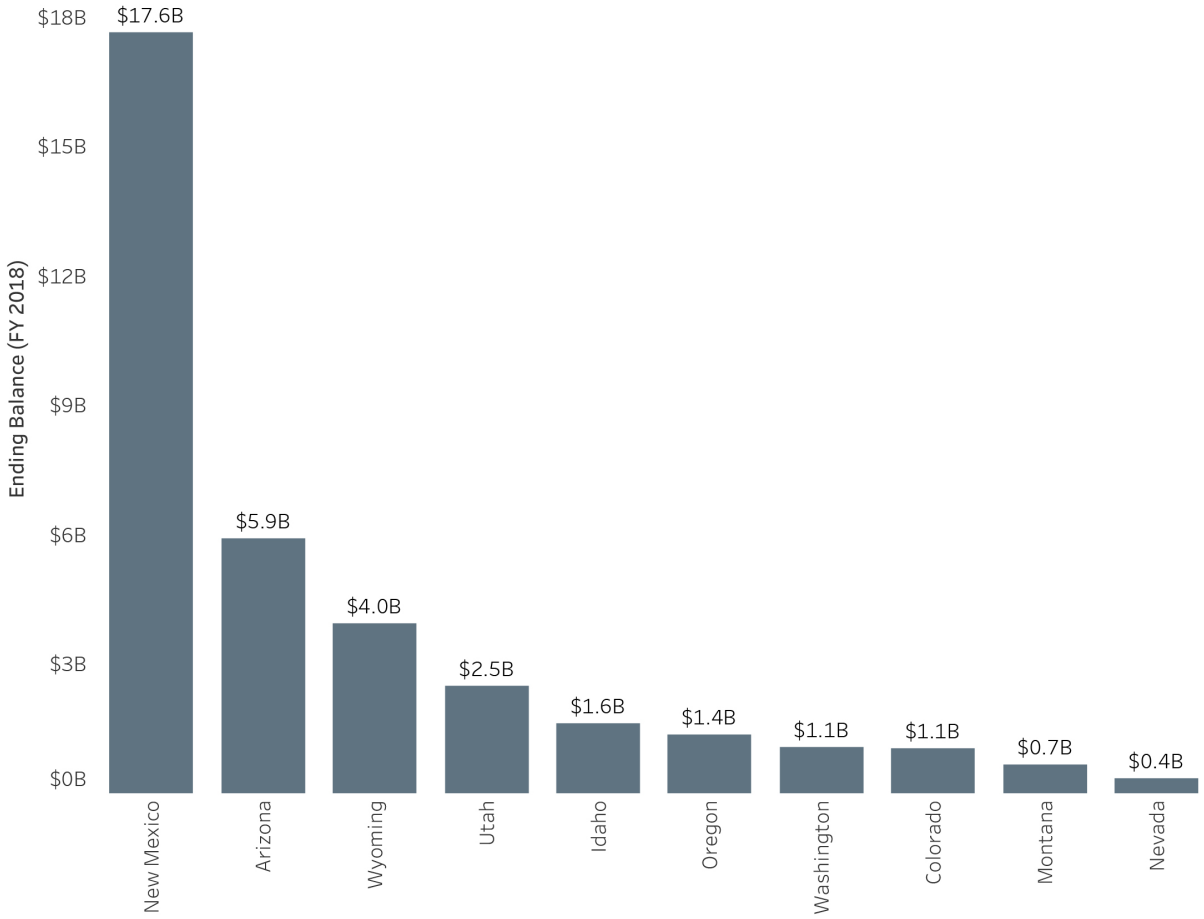
The principal balance of the permanent fund is invested to earn income that is distributed to beneficiaries. In most states, the permanent funds are managed by a state investment council that is most commonly separate from the trust land management agency. For example, the New Mexico State Investment Council makes investment decisions for the trust land permanent fund while the New Mexico State Land Office manages the trust lands and resources. Utah's School and Institutional Trust Funds Office (SITFO) also is separate from the School and Institutional Trust Lands Administration, again separating management responsibilities of the land and financial sides of the whole trust into separate agencies.

In most states (other than Utah), investment councils are housed in the state treasurer's office and the managers that invest the trust land permanent fund are also managing other state permanent funds and

investments. Housing the trust land permanent fund inside a state investment council likely has benefits in terms of the experience of fund managers.

Figure 8: Western State Trust Permanent Fund Ending Balances, FY 2018[20]

The size of permanent funds reflects historical policies and the types of natural resources available to be sold. States that failed to save the proceeds from the sale of trust assets and states that liquidated permanent funds historically have smaller permanent funds today. More recently, oil and gas booms and more aggressive investment strategies have increased permanent funds.



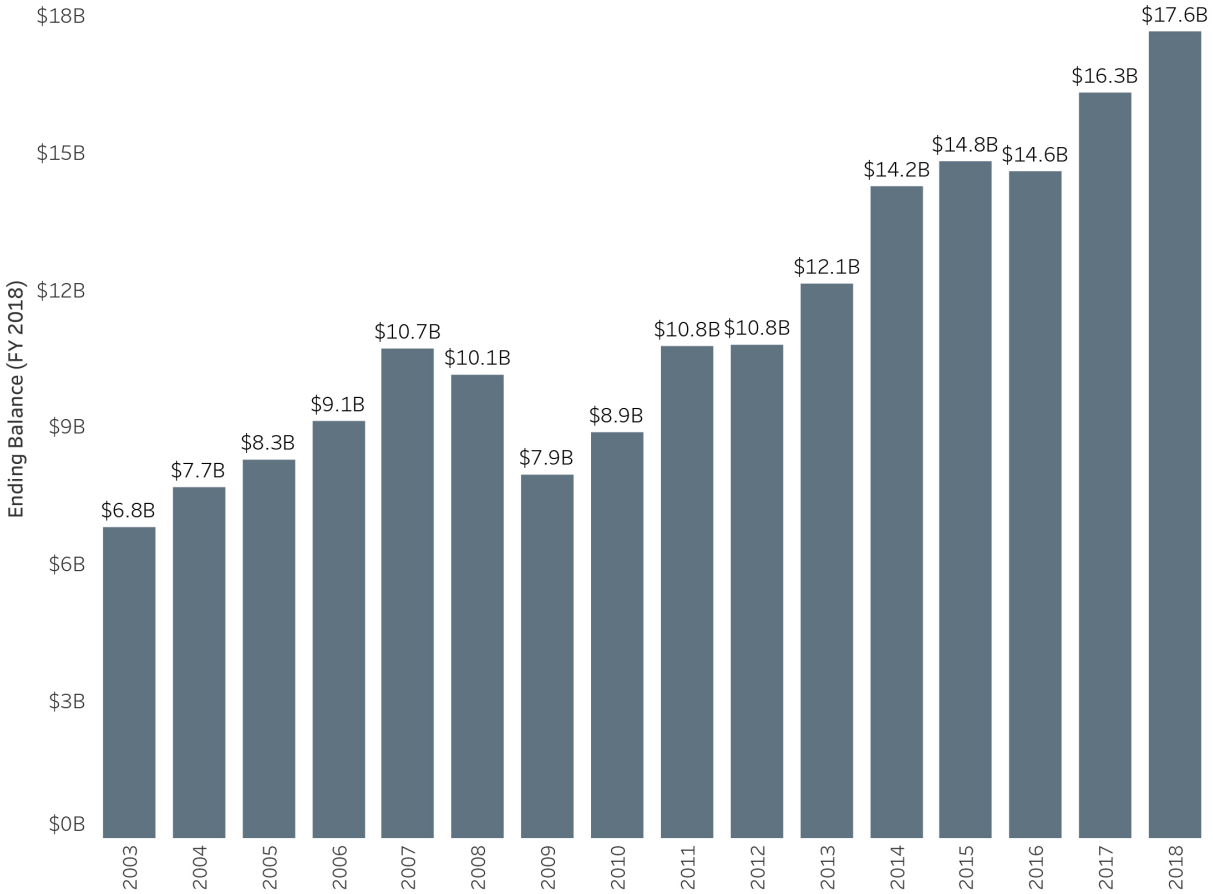
A more sophisticated and aggressive investment policy implemented to some degree by investment councils in most states has significantly changed fund revenues in three ways. First, average annual investment income has increased substantially. Second, revenues increasingly take the form of capital gains instead of just dividends and interest. And third, year-to-year revenues are much more volatile.[21] State legislatures have responded by also reforming permanent fund spending policies, discussed later in this report.

More aggressive management of the permanent funds has increased their visibility and importance. The separation of permanent fund management from the state trust land agencies potentially exposes the permanent funds to greater political risks because the permanent funds themselves don't have an institutional advocate in the same way that beneficiaries and trust land managers defend the fiduciary trust

as it relates to the physical trust lands assets.[22] For example, some trust managers worry that the lack of an advocate results in greater exposure of the trust assets to raids in which different stakeholders attempt to transfer wealth away from the whole trust by spending trust assets before they reach the permanent fund or by raiding the corpus of the permanent fund.

Figure 9: Growth of the New Mexico Permanent Fund Balance, 2003-2018[23]

The growth of permanent funds depends on annual transfers of trust assets, the performance of the investment portfolio, and distribution policy. For example, New Mexico's permanent has grown by from $15 to $18 billion in two years due to a large oil boom in the Permian Basin that has generated significant income for the fund.



Finally, the separation of permanent fund management from trust land management may limit the ability of the state trusts to move toward a total asset management framework, described in the next section. In meeting the fiduciary trust responsibility, state trust land managers must in theory weigh the returns from retaining and sustainably managing trust lands against the potential returns from selling physical trust assets and investing the proceeds in the permanent fund.[24] This weighing of returns and assets is difficult when the physical and financial assets are not managed by the same institutions.

The financial capital held in the permanent fund might also be invested directly back into trust lands to increase the returns from management by lowering financing costs and allowing land managers to take

risks that private capital may not understand or be willing to finance.[25] The separation of trust land and permanent fund management possibly constrains these options and limits the potential of a total asset management approach.

Permanent Fund Distributions to Beneficiaries

The permanence principle requires that the corpus of the permanent fund is held in perpetuity. Originally, state policy usually held the permanent fund in less risky interest-bearing accounts and bonds and distributed gross interest income to beneficiaries annually. But spending policy (the way income is distributed to beneficiaries) is more complicated than it appears. For example, distributing total income fails to insulate the trust against inflation. Reforms to the investment strategies that allow for investments in stocks and other financial markets generate income from capital gains and dividends in addition to interest, so distributing only income from interest leaves substantial income from other types of investments in the permanent fund. To address these issues, changes in investment policies have been accompanied by changes in spending (or distribution) policies aimed at stabilizing distributions to beneficiaries (managing volatility) while maintaining the real (inflation-proofed) value of the whole trust.

Many states have changed spending policies in recent years so that the permanent fund distributes a fixed percentage of the permanent fund ending balance, often averaged over a period of months or years. A fixed percentage distribution stabilizes revenue to beneficiaries and, if set appropriately, maintains the value of the permanent fund net of inflation (distributions leave enough money in the fund so that its value is not eroded by inflation). For example, Utah distributes 4% of the ending fund balance and seeks an investment return of at least 4% net of inflation. In some years, the permanent fund will distribute an amount less than net income and in others the distribution may exceed net income.

Changes to revenue allocations, investment strategies, and distribution policies may help meet the goals they are intended to achieve (greater investment income for beneficiaries, for example). These changes also have unintended consequences. For example, the introduction of a fixed percentage distribution is aligned with best fund management practices, but also has opened a door for politicians to tinker with the distributions in ways that erode the value of the whole trust. (We discuss these policies and their implications in depth in a separate report dedicated entirely to the permanent fund.)

VI. TOTAL ASSET MANAGEMENT

State trusts are largely assumed to be narrowly prescribed—that is, states must lease lands to generate revenue and the leasing decision must maximize revenue on a parcel-by-parcel basis. In this model, states are generally passive actors, largely reacting to proposals from private interests to lease individual tracts of state lands. This basic leasing model remains the primary—and preferred—way that state trust lands earn income for beneficiaries because it entails relatively low risks and low costs.

Several researchers who studied state lands concluded that the trust obligation may not be best met by leasing. Leasing fragmented and uncoordinated state trust assets allows lessees to seek rents (profits) at the expense of beneficiaries. In addition, researchers found that institutional inertia, limited financial capacity, and state-imposed restrictions on competition ossify the lease as the primary model for meeting the fiduciary trust.[26]

Alternative revenue models and trust land management strategies have been proposed. Portfolio theory is used by some to understand how states balance risk and reward to earn revenue for beneficiaries.[27] Researchers from the Lincoln Institute of Land Policy and the Sonoran Institute suggest a similar total

asset management framework to assess state performance in meeting the fiduciary trust and permanence responsibilities.[28]

A total asset management approach asserts that a manager can allocate assets across a variety of activities with different levels of risk that will maximize returns. A total asset management approach would allow states to engage in some activities that may be too risky alone but are appropriate when balanced against the entire portfolio of activities. The diversity of activities across a portfolio can be evaluated and repositioned to allow asset managers to stay within risk tolerances for the entire portfolio while engaging in more aggressive management of some trust assets. A diverse portfolio also allows flexibility to accommodate activities that offer less immediate income but lower risk and longer-term planning horizons.

The fiduciary trust obligation ought to motivate state trust managers to explore different models that seek superior returns to beneficiaries over time and greater flexibility across a portfolio of assets. A total asset management framework would provide trust managers with a framework to assess fragmented assets, each with different resource characteristics, cost profiles, and management needs, as a single whole. Such a framework would allow managers to take greater risks and invest greater resources into some trust assets while pursuing longer-term, lower-risk activities with other trust assets. A total asset management framework may also help managers more readily identify linkages and opportunities to generate revenue and manage for multiple values between asset classes.

For example, trust managers may choose to manage some state lands for conservation or recreation uses to increase the commercial real estate values of nearby state lands. Or states may choose not to lease productive mineral rights when prices are low (despite demand from lessees) and hold these lands in lower-value uses until prices rise. These decisions run counter to a passive leasing strategy that would argue that every parcel be leased in each year for its highest and best use, but these decisions make perfect sense to a portfolio manager. Ultimately a total asset management approach will likely improve returns to beneficiaries.

Pursuing a total asset management framework is consistent with emerging research and policy analysis in public finance. Economist Mariana Mazzucato, among others, questions the basic arrangements through which government seeks a return on its assets and investments. She suggests that government be more actively engaged in economic development and seek higher returns for the value that government research, investment, and planning generates in private markets.[29] The beneficiary trust obligation uniquely positions state trust lands to explore these models.

Total asset management provides a useful analytical framework to understand how states are addressing fiduciary trust obligations and new uses of state trust assets, and in practice the framework provides flexibility to managers seeking to maximize revenue for beneficiaries while balancing risk and accommodating public values on trust lands.

VII. CONCLUSION

State trust lands are unique and important among publicly owned lands in the West. They are not, in fact, managed for the public in the same way that federal public lands are managed: state trust land managers have no obligation to accommodate multiple uses—including non-market or below-market value uses such as public access for recreation or wildlife habitat. Understanding state trust lands hinges on two key principles: states have a fiduciary trust responsibility to maximize revenue for beneficiaries, and the value of the original trust endowment must be maintained in perpetuity.

States have taken strikingly different approaches to meeting these fiduciary and permanence obligations. This report and companion reports in the Trust Lands in Transition series show that the beneficiary trust obligation to maximize revenue and protect the value of the whole trust is often difficult to achieve in practice. We see the effects of pressure on state trust managers to prioritize the needs of current beneficiaries over those of future generations, from rent-seeking lessees, and to meet the needs and wants of stakeholders who are not direct beneficiaries.

The way that these pressures on state trust lands and permanent funds are resolved will affect current and future beneficiaries and shape debates about the future of state trust lands, federal public lands, state fiscal policy, and the ongoing economic transition in the West.

APPENDIX A: DATA SOURCES

Data used to describe how trust land revenue is generated, how it is allocated to beneficiaries, permanent savings and expenses, and to describe permanent fund performance are gathered from a variety of state sources, including annual reports, audit and legislative reports, and personal communication with trust agency staff. These data sources are listed here by state. The data collected and used in this report also are available for download in Microsoft Excel format. All data are presented in inflation-adjusted dollars.

Arizona

Trust Land Revenue and Income Data:

- Arizona State Land Department, Annual Reports available from FY 2003 to 2016. https://land.az.gov/about/annual-reports.
- Data for 2017 and 2018: Kristen Desmangles, Legislative Policy Research Assistant, Arizona State Lands Department. Personal communication, July 22, 2019.

Permanent Fund Data:

- State Treasurer of Arizona, Board of Investment Reports, 2008-2018. June reports contain fiscal year-end data for each year. https://aztreasury.gov/boi-reports-archive/.
- State Treasurer of Arizona, Financial Report, Fiscal Year 2007. http://web.archive.org/web/20080616174346/http://www.aztreasury.gov/AR2007/FY07FinancialStatementReport.pdf.
- State Treasurer of Arizona, 2007 Endowment Quarterly Meeting: http://web.archive.org/web/20080309025905/http://www.aztreasury.gov/presentations/FY081stqtrEndowment.pdf.
- 2006: State Land Endowments Report. http://web.archive.org/web/20070614193649/http://www.aztreasury.gov/pdfs/State%20Land%20Endowments%20NRRA%201-24-07.pdf.

Colorado

Trust Land Revenue and Income Data:

- Colorado State Board of Land Commissioners, Income and Inventory Report, Fiscal Years 2015-2018, Denver, Colorado, https://www.colorado.gov/pacific/statelandboard/reports-2.
- Colorado State Board of Land Commissioners, Annual Report, Fiscal Years 2015-2018, Denver, Colorado, https://www.colorado.gov/pacific/statelandboard/reports-2.

Permanent Fund Data:

- Colorado State Board of Land Commissioners, Income and Inventory Report, Fiscal Years 2015-2018, Denver, Colorado, https://www.colorado.gov/pacific/statelandboard/reports-2.
- 2014 and earlier: Nick Massie, Assistant Director (CFO-COO) MBA, Colorado Department of Natural Resources. Personal communication, September 25, 2019.

Idaho

Trust Land Revenue and Income Data:

- Idaho Land Board, Department of Lands. Annual Report, 2018. https://www.idl.idaho.gov/land-board/about-idl/annual-reports/index.html.

Permanent Fund Data:

- Idaho Land Board, Department of Lands. Annual Report, 2018. https://www.idl.idaho.gov/land-board/about-idl/annual-reports/index.html.

Montana

Trust Land Revenue and Income Data:

- Montana Trust Land Gross Revenue Generated by Activity, 1999-2018. Montana Department of Natural Resources, Annual Reports, Trust Land Management Division. http://dnrc.mt.gov/divisions/trust/docs/annual-report.

Permanent Fund Data:

- Montana Department of Natural Resources, Annual Reports, Trust Land Management Division. http://dnrc.mt.gov/divisions/trust/docs/annual-report.

New Mexico

Trust Land Revenue and Income Data:

- New Mexico State Land Office Annual Reports, Fiscal Years 2009-2018. State Land Commissioner, Santa Fe, New Mexico, http://www.nmstatelands.org/Reports.aspx#5.

Permanent Fund Data:

- 2003 – 2018: New Mexico State Investment Council Annual Audit Reports, Fiscal Years 2013-2018. https://www.sic.state.nm.us/sic-annual-audit-reports.aspx.
- Charles Wollmann, Director, Communications, Legislative & Client Relations, New Mexico State Investment Council. Personal Communication, August 1, 2019.

Oregon

Trust Land Revenue and Income Data:

- Oregon Department of State Lands. 2018. Annual Report on Common School Fund Real Property for Fiscal Year 2018. https://www.oregon.gov/dsl/Land/Documents/AnnualReportRealPropertyFY2018br2.pdf.

Permanent Fund Data:

- Oregon Department of State Lands. 2018. Common School Fund Annual Financial Report for Fiscal Year 2018. https://www.oregon.gov/dsl/About/Pages/AgencyPub.aspx.

Utah

Trust Land Revenue and Income Data:

- State of Utah School and Institutional Trust Lands Administration. 2018. Annual Report. https://trustlands.utah.gov/resources/public-document-search/.

Permanent Fund Data:

- State of Utah School and Institutional Trust Lands Administration. 2018. Consolidated Balance Sheet Fiscal Year 2018 Year to Date. https://trustlands.utah.gov/resources/public-document-search/.

Washington

Trust Land Revenue and Income Data:

- 2010-2018: Washington State Department of Natural Resources Annual Reports. https://www.dnr.wa.gov/about/fiscal-reports/dnr-annual-reports.

Permanent Fund Data:

- Chris Phillips, Director, Institutional Relations and Public Affairs, Washington State Investment Board. Personal Communication, October 28, 2019.
- 2010-2018: Washington State Investment Board, Quarterly Investment Reports: https://www.sib.wa.gov/financial/invrep.asp?subs=%2Ffinancial%2Fpdfs%2Fquarterly%2Fqr063019.pdf&x=19&y=25

Wyoming

Trust Land Revenue and Income Data:

- State Board of Land Commissioners, Summary of State Trust Land Revenue, Fiscal Year 2018. https://sites.google.com/a/wyo.gov/osli/boards/sblc.

  Notes: The *Agenda and Matters* documents for each year's August meeting include a Summary of State Trust Land Revenue. "Schedule 3 Trust Land Revenue Distributions" presents revenue distributions to the permanent land funds, land income funds, and the general fund, as designated by W.S. § 9-4-310. Additional presentation is made showing distribution of revenue to the individual funds within these fund classes. "Schedule 4 Mineral Royalty Revenue by Source" details subsurface revenues by source and as a percentage of total revenue collected by the division. "Schedule 5 Other Trust Land Revenue by Source" details trust land revenue collected by the trust land management division and revenues by source and as a percentage of total collections.

Permanent Fund Data:

- Wyoming State Treasurer, Annual Report, Fiscal Year 2018. https://statetreasurer.wyo.gov/Reports.aspx.

ENDNOTES

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