
Trust Lands Performance Assessment Project

Charting a Course for the Future

Legislative Report | January, 2021



Office of the Commissioner of Public Lands, Hilary Franz
Deputy Supervisor for State Uplands, Angus Brodie

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Prepared by
Washington State Department
of Natural Resources



WASHINGTON STATE DEPARTMENT OF
NATURAL RESOURCES

Acknowledgements and Primary DNR Contacts

Board of Natural Resources

- The Honorable Hilary Franz, Commissioner of Public Lands
- Jim Cahill, Representative for Governor Jay Inslee
- The Honorable Chris Reykdal, Superintendent of Public Instruction
- The Honorable Bill Peach, Clallam County Commissioner
- Dr. Andre-Denis G. Wright, Dean, College of Agriculture, Human, and Natural Resource Sciences, Washington State University
- Dr. Dan Brown, Director School of Environmental and Forest Sciences, College of the Environment, University of Washington

Steering Committee

- Angus Brodie, Deputy Supervisor for State Uplands
- Duane Emmons, Product Sales and Leases Division Manager
- Andrew Hayes, Forest Resources Division Manager
- Brock Milliern, Conservation, Recreation, and Transactions Division Manager
- Mike Buffo, Assistant Division Manager, Forest Resources Division
- Kristen Ohlson-Kiehn, Assistant Division Manager, Projects and Planning

Department of Natural Resources (DNR)

- Kristen Ohlson-Kiehn, Project Manager
- Hilary Browning, Data and Technical Lead
- Robert Greene, Chief Appraiser
- David Chertudi, Lead Economist

- Kristoffer Larson, Operational Research Specialist
- Candace Montoya, State Uplands Budget Manager
- Cassie Bordelon, Policy Director
- Tom Bugert, Senior Strategic Advisor
- Amanda Jahshan, Legislative Director

Deloitte Transactions and Business Analytics

- Dan Provencio, Principle, MAI, CRE, ASA
- Eric Dicus, Senior Manager, Real Estate Consulting
- Timothy R. Lowe, MAI, CRE
- Jake Kumferman, Data and Technical lead, Consultant, Real Estate Consulting
- Tiffany Trinh, GIS lead

Earth Economics

- Ken Cousins
- Johnny Mojica
- Trygve Madsen
- Corrine Armistead
- Angela Fletcher

Primary DNR Contacts

Angus Brodie, Deputy Supervisor for Uplands
Angus.Brodie@dnr.wa.gov

Kristine Reeves, Legislative Director
Kristine.Reeves@dnr.wa.gov

Kristen Ohlson-Kiehn, Trust Lands Performance Assessment Project Manager
Kristen.Ohlson-Kiehn@dnr.wa.gov

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List of Acronyms

CEP&RI	Charitable, educational, penal and reformatory institutions
COP	Certificate of participation
DNR	Washington State Department of Natural Resources
Deloitte	Deloitte Transactions and Business Analytics
FDA	Forest Development Account
GMA	Growth Management Act
HCP	Habitat conservation plan
RCW	Revised Code of Washington
RMCA	Resource Management Cost Account
TIMO	Timber Investment Management Organization



Executive Summary

Upon arriving in office in 2017, Commissioner of Public Lands Hilary Franz set a clear agenda for transforming state trust lands management to achieve a prosperous, sustainable future for trust beneficiaries and the people of Washington. This agenda includes optimizing policies, statutes, and operational business practices; investing in working forests and agricultural lands while improving and expanding other components of the state trust lands portfolio that show promise for immediate and continued growth; and rethinking existing state trust lands portfolio management tools while developing new tools that will help increase the revenue-generating potential of state trust lands and safeguard the natural resources that make Washington the beautiful place that we love.

To help set the Board of Natural Resources and the Washington Department of Natural Resources (DNR) on a course toward this future, the Commissioner worked with the Legislature on ESSB 6095, Section 7105 in 2018 (refer to Appendix D). ESSB 6095 required a comprehensive assessment of the state trust lands portfolio and its management (not inclusive of the Washington State Investment Board's management of public market assets [stocks and bonds] on behalf of the permanent funds). This assessment was conducted by Deloitte Transactions and Business Analytics (Deloitte), Earth Economics, and DNR.

Today, the Commissioner and DNR are excited to share the results of this important assessment, which provides valuable insight into the following: 1) the value of state trust lands and the revenue they produce, (2) opportunities and challenges the current holdings of the state trust lands portfolio present, and (3) initial ideas on ways to achieve this transformative agenda for the future of state trust lands management.

The Value of State Trust Lands

Across the approximately 2.9 million acres of state trust lands that DNR manages across Washington state, DNR generates revenue for trust beneficiaries through timber harvest, agriculture, grazing, commercial real estate, communication sites, solar and wind power, and other uses. The revenue generated from state trust lands funds local county services and facilities for many rural communities, making paramount the need to increase the amount and improve the reliability of that revenue.



State trust lands provide trust revenue and ecological services

DNR's active management of these lands provides more than just revenue for trust beneficiaries. Active forest management prevents wildfires, reduces and offsets carbon emissions, prevents conversion of these and adjacent lands to development, and contributes significantly to our state's rural economies. Active management of agricultural lands also provides significant value in growing our state's agricultural economies, ensuring critical food resources, maintaining water resources in public ownership, and reducing the loss of prime agricultural lands.

Actively managed state trust lands also provide significant, non-market environmental service benefits including wildlife habitat, scenery, recreation, clean air and water, and others. Earth Economics estimated that state trust lands provide nearly \$1 billion per year in recreation value and approximately \$1.4 billion per year in water quality and supply, pollination, and natural disaster risk reduction. Additionally, Earth Economics estimated that the carbon stored on state trust lands provides a social carbon benefit of approximately \$19 billion. Much of that carbon is stored in sustainably managed working forests, making these forests a critical tool for limiting the effects of climate change. While revenue streams for the trust beneficiaries from these non-market values are very limited, they demonstrate that maintaining these lands as working forests and agricultural lands creates value far beyond the revenue they generate.

Commissioner Franz and DNR care deeply about the trust beneficiaries and the urban and rural communities where the people of Washington live, work, play, and raise families. We also care about the health and wellbeing of Washington's natural resources. We believe that the scale and importance of market and non-market benefits, especially when coupled with real dollar returns for schools, counties and rural communities, are critical to consider when charting a path toward a sustainable future.

Challenges

State trust lands have produced over \$4.3 billion in non-tax revenue for trust beneficiaries in the past 25 years (nominal dollars, not adjusted for inflation). In that time, some components of the state trust lands portfolio have experienced rapid growth of revenue. Deloitte found that between fiscal years 1995 and 2018, commercial real estate revenue increased by 99 percent, agriculture revenue increased by 166 percent, and communication site revenue increased by 90 percent. And since March, 2019, DNR has converted three agricultural leases to solar leases. When fully operational, these leases will earn over \$893,000 a year in gross revenue, which is approximately \$870,000 more than these lands earned under agricultural leases. These are success stories that show promise for continued growth and portfolio diversification.

Yet this report also recognizes systemic challenges. Over the past 25 years, total net revenue from state trust lands has declined in real dollars (adjusted for inflation), and this decline has been coupled with difficulties in delivering steady and reliable revenue to trust beneficiaries. Timber, the largest asset class in the portfolio (generating 79 percent of total gross revenue produced on state trust lands), has shown an approximately 45 percent decrease in earnings in real dollars because stumpage prices have not maintained pace with inflation, the cost of operations has increased, and resource protection measures have been implemented to comply with federal and state environmental regulations, which decreased the size of the operable land base.

At the same time, Washington state is growing. According to the Washington Office of Financial Management, Washington's population has increased by nearly 2 million people in the past two decades, and it is expected to increase by roughly 2 million in the next two decades. That growth will result in more demand for renewable resources on state trust lands, such as timber and agricultural crops; more pressure to develop private forested and agricultural lands for other uses; more interest in different types of recreation; more need for water resources for irrigated agriculture and communities; more requests for view sheds and natural buffers for the increasing number of people living near working forest, agricultural, commercial, and industrial lands; and more urgency for carbon storage at a time when carbon emissions are rising and the climate is changing.

Given the many changes that have occurred over the last twenty years and will occur over the next twenty years, we must develop solutions to help increase the revenue-generating potential of state trust lands, support our rural economies and communities, and protect our natural resources. These challenges represent a call to action, one that DNR is ready to meet.



Mountain biking in Tiger Mountain State Forest near Issaquah, a fast-growing community in the Puget Sound area

Opportunities

This assessment of state trust lands demonstrates the potential of an impressive natural resource portfolio. Deloitte’s findings underscore past gains in diversification and demonstrate how, with leadership and vision, DNR is generating significantly more income, today and into the future, from asset classes that historically have not been leveraged.

To realize the potential of the state trust lands portfolio, it is essential to optimize business practices to improve DNR’s efficiency and revenue production. Following are examples of work that DNR has completed to date:

- Improved marketing of [commercial real estate](#) and [communication sites](#) for lease (refer to dnr.wa.gov).
- Initiated the lean process for timber sales planning and compliance, which resulted in changes to appraisal timing and printing and suggested legislative changes to advertising. This work saves \$140,000 in printing costs and two staff months each biennium.
- Completed plans for meeting timber volume targets. All of DNR’s six regions have completed plans for the next two years, and four have completed plans for the next four to five years.
- Established new grazing permit fees in cooperation with Washington State University and industry to align with market conditions.
- Protected investments in water infrastructure to increase value of agricultural lands.



State trust lands leased for commercial use

Yet these changes are just the beginning of our work. To increase the amount and reliability of trust revenue to support critical Washington state local government and education infrastructure and services, we must fundamentally transform the way DNR conducts business on behalf of trust beneficiaries.

Developing Solutions

Now equipped with the results of this assessment, Commissioner Franz and DNR are energized and committed to transforming state trust land management for a sustainable and prosperous future for our beneficiaries and the people of Washington. The goal is to develop and implement, over the next five years, significant, consequential, innovative, and multifaceted solutions that will maximize the potential value of state trust lands today and in the future for beneficiaries and the state of Washington. DNR envisions that these solutions will involve a combination of the following:

- Optimize policies, statutes, and operational business practices** to improve DNR’s efficiency and performance, make trust revenue more reliable on a year-to-year basis, and increase state trust lands portfolio performance for the benefit of current and future generations. One of Deloitte’s suggestions is that the legislature create a “reliability fund” for beneficiaries. This fund would be invested to create additional value, allowing for a more reliable distribution of revenue to beneficiaries despite market fluctuations. Another initial idea is for the legislature to address the current, divided governance structure for trust assets, in which the Board of Natural Resources manages the land assets and the State Investment Board manages the public market assets, such as stocks and bonds, on behalf of the permanent funds. Deloitte believed that the trust beneficiaries might benefit from a more integrated and coordinated approach to the governance of the trust assets. A third idea is to provide DNR access to a consistent and adequate source of capital for investments in infrastructure and other improvements, which will enable it to operate more like a business and ultimately increase revenue for trust beneficiaries.
- Maintain working forests and agricultural lands** as a core and valuable part of the state trust lands portfolio and **make strategic capital investments in these lands** to increase their revenue-generating potential. These lands are critical to rural communities and the people of Washington and vital in the effort to address climate change.
- Improve and expand other components of the state trust lands portfolio** that show promise for immediate and continued growth. Two major opportunities are transition lands, which are lands that are transitioning from natural resource production to higher and better uses as a result of land use planning and urbanization, and other parcels of state trust lands that are too isolated, scattered, or landlocked for DNR to manage efficiently or effectively for forestry or agriculture. These lands present prime opportunities for communication sites, renewable energy production, or other uses that could yield significantly higher revenue for trust beneficiaries. These lands also present opportunities for sale and transition to higher production working forest and agricultural lands or commercial investments.
- Develop new tools or rethink or improve existing state trust lands portfolio management tools**, such as the Trust Land Transfer program, Community Forest Trust program, and State Forest Land Replacement program, to help increase the revenue-generating potential of state trust lands and protect vital natural resources.



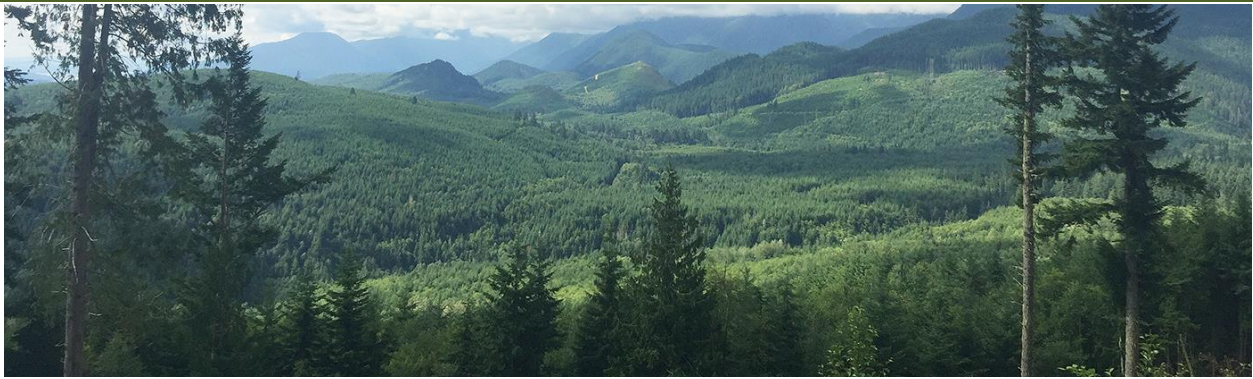
Agriculture on state trust lands

In the 2021 legislative session, DNR will bring an initial round of proposals for consideration, such as requests for improving the timber sale process and extending commercial real estate leases, which will

have zero fiscal impact in light of the current state budget challenges and impacts of COVID-19. DNR also will bring forth a number of capital funding requests to facilitate much needed replacement of outdated leasing data systems and investments in forests inventory, silviculture, and forest health to increase revenue from the timber asset class while also creating jobs.

Over the coming year, DNR will begin a collaborative process to develop multifaceted solutions that take into consideration changing environmental and economic realities. Developing these ideas will require careful consideration and the interest, time, and attention of legislators, beneficiaries, tribes, stakeholders, and advisory committees. Commissioner Franz has created a number of advisory committees to help advise DNR in the management of state trust lands. The Sustainable Harvest Technical Advisory Committee is advising DNR staff on forest inventory, economics, forest health, climate change, and other factors that affect the eastern and western sustainable harvest calculations. In addition, the Commissioner is launching a new advisory committee to explore opportunities and investments regarding DNR's commercial real estate lands.

The result of this process will be proposals for durable, actionable solutions for transforming and improving management and returns from state trust lands. DNR will bring these proposals to the Board of Natural Resources and then to the legislature for consideration.



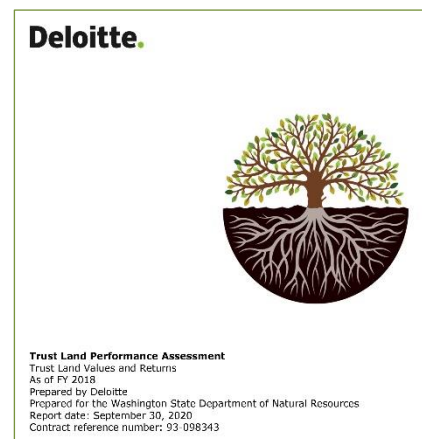
Introduction

The Trust Lands Performance Assessment Project

Commissioner of Public Lands Hilary Franz has set a clear agenda for transforming state trust lands management to achieve a prosperous, sustainable future for trust beneficiaries and the people of Washington. This agenda includes optimizing policies, statutes, and operational business practices; investing in working forests and agricultural lands while improving and expanding other components of the state trust lands portfolio that show promise for immediate and continued growth; and rethinking existing state trust lands portfolio management tools while developing new tools that will help increase the revenue-generating potential of state trust lands and safeguard the natural resources that make Washington the beautiful place that we love.

Achieving this future requires a comprehensive assessment of the state trust lands portfolio and its management.¹ Supported by ESSB 6095, Section 7105 (refer to Appendix D), this work has been completed by Deloitte Transactions and Business Analytics (Deloitte), Earth Economics, and the Washington Department of Natural Resources (DNR). Following is a summary of how this assessment meets the requirements of ESSB 6095:

- The *Trust Lands Performance Assessment: Trust Land Values and Returns as of Fiscal Year 2018* report by Deloitte (Appendix B) meets the Section 1 requirement to conduct an asset valuation of State Lands and State Forest Lands held in trust and managed by DNR.



¹ This analysis focused exclusively on DNR’s management of state trust lands. It did not include any analysis of the State Investment Board’s management of public market assets (stocks and bonds).

- This legislative report and Deloitte’s report meets the Section 2 requirement to describe each asset class on state trust lands and the revenue that asset class generates.
- The Deloitte report meets the Section 3 requirement to estimate the current asset value of these lands for each trust beneficiary. The *Non-Market Environmental Benefits and Values Report* in Appendix C meets the Section 3 requirement to provide the value of ecosystem services and recreation benefits for the asset classes that produce these benefits.
- The Deloitte report meets the Section 4 requirement to calculate average annual gross and net income as a percentage of the estimated, current asset value.
- Section 5 of the proviso states that three progress reports must be submitted to the legislature. DNR submitted the first report in December 2018 and the second in December 2019. As required, this third and final report² includes options to (a) improve the net rates of return on different classes of assets, (b) increase the reliability of, and enhance if possible, revenue for trust beneficiaries; and (c) present and explain factors that either (i) define, (ii) constrict, or (iii) define and constrict DNR’s management practices and revenue production. This report includes initial ideas gathered from past reports, the Deloitte report, and DNR as a starting point for discussion. Additional ideas can be found in Chapter 12 of the Deloitte report.



What is in This Report?

The Commissioner and DNR are eager to share the results of this important assessment in the following report. The report is presented in five parts:

- **Part One** provides background on state trust lands and DNR’s role as a trust lands manager.
- **Part Two** includes the findings of the Deloitte and Earth Economics asset valuations.
- **Part Three** describes the key challenges and opportunities facing state trust lands management.
- In **Part Four**, DNR sets forth the steps it will follow and some initial ideas to optimize policies, statutes, and operational business practices; invest in working forests and agricultural lands while improving and expanding other components of the state trust lands portfolio that show promise for immediate and continued growth; and rethink existing state trust lands portfolio management tools while developing new tools that will help increase the revenue-generating potential of state trust lands and safeguard vital natural resources.
- **Part Five** is a conclusion and a call to action.

² Delivery of this report was expected by June 30, 2020. Due to the impacts of the COVID-19 pandemic, DNR agreed to extend Deloitte’s contract to September 30, 2020, which delayed delivery of this report to the legislature until January, 2021.



Part One: Background

What are State Trust Lands?

State trust lands are lands held in trust and managed to generate revenue for specific trust beneficiaries. There are two categories. The first category is the federally granted lands, or State Lands,³ which were granted to the state at statehood through the 1889 Enabling Act⁴ as a means of support for various public institutions in the new state. The majority of state trust lands fall into this category. The federally granted lands support the following seven trusts, each of which is assigned acres on which revenue is generated.⁵

- **Common School Trust** (1,787,047 acres): Supports construction of public kindergarten through 12th grade schools.
- **Capital Building Trust** (109,510 acres): Supports state government office buildings.
- **University Trust** (89,051 acres): Supports the University of Washington.
- **Scientific School Trust** (84,177 acres): Supports Washington State University.
- **Charitable, Educational, Penal and Reformatory Institutions (CEP&RI) Trust** (71,624 acres): Supports institutions such as those managed by the Department of Social and Health Services, Department of Corrections, and University of Washington.
- **Agricultural School Trust** (71,148 acres): Supports Washington State University.

³ [RCW 79.02.010 \(15\)](#)

⁴ 25 Stat. 676, chs. 180, 276–284

⁵ For consistency with the assessment completed by Deloitte and Earth Economics, acres are based on DNR's June, 2018 GIS data.

- **Normal School Trust** (66,786 acres): Supports Eastern Washington University, Central Washington University, Western Washington University, and The Evergreen State College.

The second category is State Forest Lands,⁶ which themselves are separated into two categories:

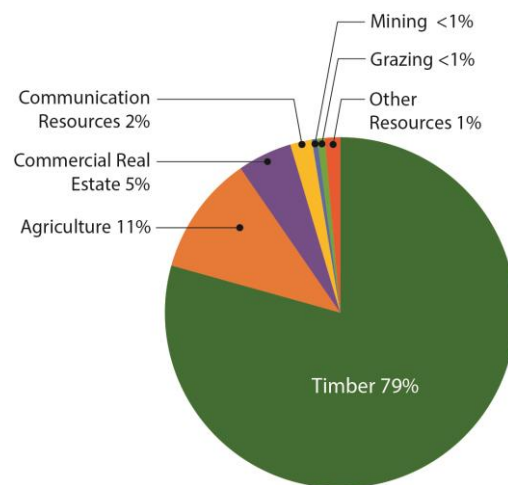
- **The State Forest Transfer lands** (538,015 acres) were acquired by 21 counties in the 1920s and 1930s through tax foreclosures. Pursuant to state law,⁷ most of these lands were transferred to the state of Washington and placed in trust status.
- **The State Forest Purchase lands** (79,384) were either purchased by the state, or acquired by the state as a gift.

The beneficiaries of State Forest Lands are the counties in which these lands reside. In most cases, counties distribute the revenue they receive from State Forest Lands according to the general tax distribution by tax code areas. Examples of typical recipients include taxing districts such as state schools and county roads, as well as fire districts, cemeteries, emergency medical services, hospitals, ports, and libraries.

Revenue is generated from seven asset classes (Figure 1). Each asset class consists of state trust lands on which revenue is generated from specific uses. The largest asset class is timber (2,056,507 acres). On these lands, revenue is generated through timber harvest. For the remaining six asset classes, DNR generates revenue through agreements (such as leases, permits, easements and land use licenses) for the following uses:⁸

- **Agriculture** (237,635 acres): Dryland and irrigated farms and orchards.
- **Grazing** (750,490 acres): Grazing of livestock.
- **Commercial real estate** (1,034 acres): Large retail outlets, single businesses, and small rural businesses; includes premise leases and ground leases.
- **Communication resources** (91 acres): Microwave antennas, emergency communication radio repeaters, private radio repeaters, and television (TV), radio, cellular, and digital telephone antennas.

Figure 1. Asset Classes and Percent of Gross Revenue Generated by Each



⁶ [79.22 RCW](#)

⁷ [1935 c 126 § 1](#)

⁸ Some of the listed acres are counted more than once due to overlapping uses between asset classes.

- **Other resources** (530,202 acres): Solar and wind energy; special uses such as archery clubs, underground storage, golf courses, and research agreements; right-of-way access; and special forest products such as floral greens (for example, salal) and boughs.
- **Mining** (5,869 acres): Extraction of rock, sand, gravel, and minerals, plus prospecting leases.



Mining on state trust lands

State trust lands management is funded through a portion of the revenue generated on these lands.

Revenue retained from the federally granted lands is placed into the Resource Management Cost Account (RMCA), and revenue retained from State Forest Lands is placed into the Forest Development Account (FDA). The Washington State Legislature sets the maximum percentage DNR may retain for the RMCA through [RCW 79.64.040](#), and for the FDA through [RCW 79.64.110](#). The Board of Natural Resources sets the actual percentage and adjusts it periodically.

At the time of this writing, each beneficiary of the federally granted lands receives 69 percent of the revenue earned from these lands and the remaining 31 percent goes to the RMCA. Revenue for beneficiaries is placed into accounts specific to each trust (such as permanent funds) and distributed according to the rules that govern each account.⁹

Beneficiaries of the State Forest Transfer Lands receive 75 percent of the revenue generated on these lands and the remaining 25 percent is placed into the FDA. On State Forest Purchase Lands, 50 percent of the revenue goes to the FDA, 25 percent goes to the state general fund, and 25 percent goes to the beneficiaries.

What are the Trust Management Responsibilities of the Legislature and DNR?

The federally granted lands are held in trust pursuant to the Enabling Act and Washington Constitution. The Washington Supreme Court landmark decision in *County of Skamania v. State of Washington*, 102 Wn2d 127, 685 P.2d 576 (1984) clearly recognized that these are real, enforceable trusts that impose upon the state the same fiduciary duties applicable to private trustees. The legislature created the State Forest Lands trust by statute and these lands are also governed by fiduciary principals. *Skamania* recognized that the legislature's authority to enact statutes specific to the federally granted lands are constrained by the Enabling Act and Washington Constitution, and fiduciary principles. As a statutory trust, the State Forest Lands trust can be altered by the legislature. However, *Skamania* held that as long

⁹ For more information, refer to the [DNR annual report](#).

as the statutory trust exists, statutes specific to these lands also are constrained by fiduciary principles. In other words, the legislature, as the trustee of these asset classes, has fiduciary obligations to the beneficiaries in managing federally granted lands and State Forest Lands trusts. The fiduciary obligations can be found in common law principles governing the administration of private trusts. These obligations include, but are not limited to, undivided loyalty to the trust beneficiaries to the exclusion of all other interests, exercise of reasonable care and skill in managing the trust, and impartiality. These obligations are further described in the formal opinion of the Attorney General ([AGO 1996 No.11](#)) and in *Skamania*.

The legislature created DNR in 1957 and assigned to it many responsibilities with regard to state trust lands, including that of trust manager ([RCW 43.30.010](#), [RCW 43.30.030](#), [RCW 43.30.215](#), [RCW 79.02.010](#)). In this role, DNR manages state trust lands on behalf of specific trust beneficiaries, consistent with federal and state law. In managing these lands, DNR must comply with laws of general applicability and follow the common law duties of a trustee. For example, DNR must administer the trust in accordance with the provisions that created it; maintain undivided loyalty to each of the trusts and its beneficiaries; manage trust assets prudently; make the trust property productive, while recognizing the perpetual nature of the trusts; deal impartially with beneficiaries; and reduce the risk of loss to the trusts.



Part Two: Valuation Findings

An important component of this assessment is a valuation of state trust lands and the non-market benefits (“ecosystem services”) that accrue from sustainable management of these lands for revenue generation. Following is a brief summary of the results.

Valuation of State Trust Lands

Most real estate valuations are performed using a “sales comparison” approach, in which the value of the land is based largely on the value of other, similar properties currently being sold. This approach assumes there are willing buyers and sellers for like properties. In their 1996 valuation of state trust lands, Deloitte and Touche primarily use this approach. Another valuation approach is the income approach, in which asset value is based primarily on the income the land can generate.

DNR’s ability to sell all state trust lands, as individual parcels or one property, is limited by the Washington Constitution and statutes. For example, federally granted lands can be sold, but only in parcels of 160 acres or fewer.¹⁰ It would take thousands of transactions to sell the entire portfolio.

Therefore, Deloitte used the income approach to calculate the “trust value” of state trust lands, rather than their market value. Trust value is based primarily on the revenue these lands have generated over time for the trust beneficiaries. A detailed explanation of trust value can be found in Chapter 1 of Deloitte’s report (Appendix B).

¹⁰ Washington State Constitution, Article XVI, Section 4 and [RCW 79.11.010](#).

Table 1 summarizes trust value of each asset class. Data is current as of fiscal year 2018¹¹ and is reported in nominal dollars (not adjusted for inflation).¹² For results at the trust and county level, refer to Appendix B.

In Table 1, net operating income is the income DNR provides to trust beneficiaries (gross revenue minus the revenue that DNR retains for management of state trust lands). The final column, which divides net operating income by trust value, provides a measure of the rate of return.

Table 1. Summary of Trust Value

Asset class	Gross income	Net operating income	Trust value	Net operating income/ trust value
Timber	\$171,700,000	\$123,624,000	\$2,136,000,000	5.79%
Agricultural	\$23,500,000	\$16,685,000	\$238,300,000	7.00%
Commercial real estate	\$10,300,000	\$7,210,000	\$95,700,000	7.53%
Communication sites	\$ 4,800,000	\$3,360,000	\$41,200,000	8.16%
Other resources ^a	\$3,200,000	\$2,240,000	\$20,300,000	11.03%
Mining	\$1,900,000	\$1,330,000	\$16,640,000	7.99%
Grazing	\$1,050,000	\$735,000	\$10,500,000	7.00%
Total	\$216,450,000	\$155,184,000	\$2,558,640,000	6.07%

^aIncludes clean energy; special uses such as archery clubs, underground storage, golf courses, and research agreements; right-of-way access; and special forest products such as floral greens (for example, salal) and boughs

Ecosystem Services

Earth Economics' *Non-Market Environmental Benefits and Values* report in Appendix C summarizes the annual value of ecosystem services for each asset class. The report included four classes of ecosystem services:

- Provisioning goods and services, such as energy, raw materials, food, medicinal resources, ornamental resources, and water storage.
- Regulating services, such as maintaining water quality, limiting soil erosion, regulating climate, and keeping wildlife populations and diseases in check.
- Supporting services, such as habitat and refugia for both plant and animal species.



¹¹ Fiscal year 2018 refers to July 1, 2017 to June 30, 2018.

¹² Refer to Page 11, Chapter 1 of Appendix B.

- Information services that support meaningful interactions with nature, including aesthetics, cultural uses, recreation and tourism, and science and education.

Ecosystem services benefits are not bought and sold in the marketplace, do not generate revenue directly, and are not paid for through taxes or other means. These benefits also do not represent revenue available to trust beneficiaries, although DNR may explore ways to capture a revenue stream from some of these benefits in the future. For these reasons, these benefits often are overlooked.

Beyond meeting the requirements of ESSB 6095, DNR included the valuation of these benefits in the Trust Lands Performance Assessment to provide a broader perspective on the magnitude of benefits that accrue from the sustainable management of working forests and agricultural lands. Ecosystem services benefits are in addition to these lands' value for revenue production. For example, in addition to providing revenue and jobs, working forests provide habitat, places to recreate, water and air filtration, and other benefits to society as a whole. The value of these benefits also can be viewed as avoided costs. If the working forests and agricultural lands did not provide these benefits, the costs of providing them would fall to society. For example, local governments may need to build additional water treatment facilities since the forest was no longer filtering water naturally.

Table 2 summarizes the total, annual value of all ecosystem services across all asset classes, not including recreation or carbon storage.¹³ Table 3 summarizes the total, annual value of recreation on state trust lands.¹⁴

Table 2. Annual Ecosystem Service Value, Averaged by Land Cover and Asset Class (2018)

Asset class	Asset acres	Annual ecosystem service value
Forested	2,170,070	\$1,231.64 million
Cultivated	301,807	\$84.55 million
Grazing	366,240	\$46.20 million
Other	124,969	\$37.68 million
Total	2,963,086	\$1,400.07 million

Table 3. Economic Value of Outdoor Recreation on State Trust Lands (2018)

Activities	Annual value
All recreational activities	\$990 million

¹³ Refer to Table 6, page 20 of Appendix C.

¹⁴ Refer to Table 10, page 27 of Appendix C.

Earth Economics estimated the total social cost of carbon¹⁵ stored on state trust lands at over \$16 billion (refer to Table 4). This total demonstrates the social value of sequestering carbon on state trust lands through sustainable management. Refer to pages 28 through 30 of Appendix C for a more detailed explanation.

Table 4. Social Cost of Carbon

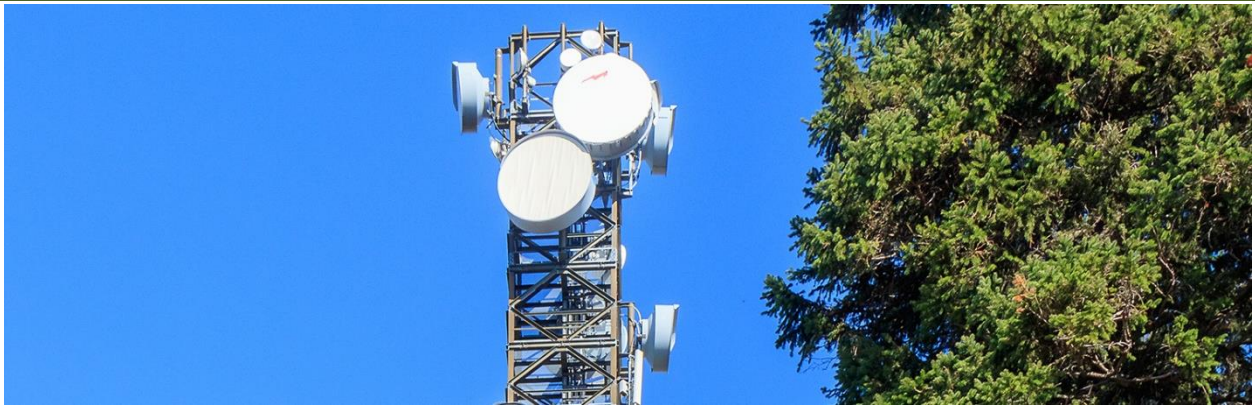
Asset class	Social cost
Forested	\$16.56 billion
Cultivated	\$0.74 billion
Grazing	\$1.00 billion
Other	\$0.44 billion
Total	\$18.74 billion

Looking Ahead

In order to maintain or enhance trust value going forward, given increased growth in population and need, DNR will need to maximize revenue generation on state trust lands. Maximizing revenue for the trust beneficiaries is DNR's fiduciary duty as a trust lands manager. Trust revenue also is extremely important to trust beneficiaries and rural communities. For example, in 2019, trust revenue comprised approximately 22 percent of Skamania County's general expense budget, which funds services such as law enforcement, courts, senior services, food banks, domestic violence prevention programs, probation, and planning, to name a few. In another example, trust revenue comprises 4 percent of the Timberland Regional Library's operating budget each year. The library district serves approximately 518,000 people in Thurston, Lewis, Grays Harbor, Mason, and Pacific counties. Other taxing districts throughout the state have an even greater reliance on trust revenue to fund critical local services, often in rural areas.

For the remainder of this report, DNR will focus specifically on revenue generation and ways that both the amount and reliability of that revenue can be increased by optimizing policies, statutes, and operational business practices and investing in working forests and agricultural lands while improving and expanding other components of the state trust lands portfolio. Focusing on cash flow is one of Deloitte's key suggestions.

¹⁵ The social cost of carbon represents the value of damages that are avoided when carbon is sequestered instead of emitted (in other words, the benefit of sequestering carbon). The social cost of carbon "is meant to be a comprehensive estimate of climate change damages and includes, among other things, changes in net agricultural productivity, human health, property damages from increased flood risk and changes in energy system costs, such as reduced costs for heating and increased costs for air conditioning." ([EPA Fact Sheet, Social Cost of Carbon](#)).



Part Three: Challenges and Opportunities

As this assessment has shown, state trust lands have produced over \$4.3 billion in non-tax revenue for trust beneficiaries over the past 25 years.¹⁶ These lands also provide extensive ecosystem services, which underscores the additional benefits provided by working forests and agricultural lands. Yet work remains to be done to ensure a sustainable and prosperous future for state trust land management, trust beneficiaries, and the people of Washington.

This part of the report will discuss the challenges and opportunities currently facing state trust land management. The first section provides a high-level overview of Deloitte’s findings. The remainder of this part of the report will focus on the results of DNR’s work.

Challenges and Opportunities Identified by Deloitte

Table 5 summarizes the challenges and opportunities that Deloitte identified, both for all asset classes and for each asset class. Note that Deloitte did not provide recommendations for either the mining or other resources asset classes.

Many of the concepts and ideas in this table are explained later in this section of the report and in Part Four, “Developing Solutions.” Additional information can be found in Chapter 12 of Deloitte’s report (Appendix B).

¹⁶ Net revenue from fiscal years 1995 to 2019, in nominal dollars. Includes revenue from trust land transfers.

Table 5. High-level Overview of Challenges and Opportunities Identified by Deloitte

Asset class	Challenges	Opportunities
All	Decline in revenue and lack of reliability in revenue	<ul style="list-style-type: none"> • Explore alternative governance structures, such as integrated management of land and public market assets,¹⁷ and create new funds for beneficiaries to provide more reliable and enhanced revenue. • Consider the use of debt to increase revenue reliability. • Improve financial systems (chart of accounts, cost accounting) to incorporate for-profit-enterprise practices and to make more strategic decisions about reducing costs and investing in profit-generating activities. • Improve operational business processes, such as developing a job cost accounting system. • Support the exchange of financial data with other state trust lands managers and private industry to establish credible benchmarks.
Timber	Stumpage price decline Decline in operating area	<ul style="list-style-type: none"> • Optimize revenue by reviewing rotation ages and lengths and selling timber when market conditions are favorable. • Explore other business models, for example using an external manager. • Improve operational business processes, such as consolidating timber appraisal data into one system. • Explore carbon market revenues as an additional benefit of working forest lands.
Agriculture	Lack of access to capital (for capital expenditures)	<ul style="list-style-type: none"> • Secure access to capital for investments in infrastructure to increase opportunities for higher-value agriculture.
Commercial real estate	Restricted ability to transact land (sales and exchanges) Lack of active management of transition lands	<ul style="list-style-type: none"> • Explore options for Enabling Act, constitutional, or statutory improvements to allow DNR more flexibility to transact land. • Establish transition lands as a separate asset class and establish an advisory committee for moving these lands into uses that produce higher net income for the trusts. • Secure access to capital for investments to increase revenue from commercial assets.
Grazing	Low returns that do not cover the cost of management	<ul style="list-style-type: none"> • Recognize the cost-reduction values that grazing provides through lowering land management costs for the trusts. • Explore potential carbon markets; maintaining lands as grazing instead of dryland agriculture has a carbon benefit. • Conduct periodic studies to ensure that the revenue earned is in line with private industry rates.
Communication resources	Lack of access to capital (for capital expenditures)	<ul style="list-style-type: none"> • Increase access to capital so DNR can invest in communication resources to improve existing sites and expand into new areas to keep pace with a rapidly evolving industry. • Improve operational business practices, such as improving data management and upgrading lease management software.

¹⁷ Public market assets includes stocks and bonds; also referred to as “liquid” assets.

Challenges and Opportunities Identified by DNR

Per DNR’s analysis, some asset classes have seen significant growth in the past 25 years. For example, agriculture has grown by 166 percent, commercial real estate has grown by 99 percent, and communication sites have grown by 90 percent. Clean energy represents another growth area. Since March 2019, DNR has converted three agricultural leases to solar leases. When fully operational, these leases will earn over \$893,000 a year in gross revenue, which is approximately \$870,000 more than these lands earned under agricultural leases. These successes demonstrate how the state trust lands portfolio can be diversified to increase the amount of revenue and offer other benefits, such as green jobs.



Clean energy is a potential growth area for the state trust lands portfolio

Yet in real dollars (adjusted for inflation), total net revenue has declined 35 percent in the past 25 years. Timber, the largest asset class in the portfolio (generating 79 percent of gross revenue distributed to beneficiaries), has shown an approximately 45 percent decrease in real revenue. As will be explained in this section, timber revenue has declined largely due to market forces, including increases in operational costs and changes in log supplies and mill closures; and environmental regulations, which decreased the size of the operable land base on state trust lands. Another contributing factor is urbanization, particularly of working forests. Urbanization results in more people living in or near working forests, which can affect timber sales. As people recognize more widely the environmental benefits of using wood instead of other building materials, including the potential for working forests to help mitigate climate change, the value of wood as a commodity could increase, presenting an opportunity for increasing trust revenues. In the meantime, the decline in timber revenue is part of the challenge facing DNR and beneficiaries and the communities that depend on the jobs and revenue these lands provide.

In the following section, DNR will first discuss the reduction in revenue over time and the need to increase reliability of revenue. Second, DNR will discuss the major opportunities it sees to address these challenges and make improvements that benefit current and future generations of beneficiaries and Washington residents. More specific ideas will be presented in Part Four of this report.

Challenges

► Changes in Trust Revenue Over Time

The previous valuation of state trust lands was completed in 1996 by Deloitte and Touche using data from fiscal year 1995, and the 2020 report was completed by Deloitte using data from fiscal year 2018.

Although the two reports differ in acres and methodology (refer to Appendix A), these reports show that net revenue has dropped 35 percent since fiscal year 1995, when adjusted for inflation (Table 6).¹⁸

Table 6. Differences in Net Revenue Between Fiscal Years (FY) 1995 and 2020

Asset class	FY 1995 revenue	FY 1995 revenue in 2018 dollars	FY 2018 revenue	Percent change
Timber	\$139,827,000	\$224,344,067	\$123,624,000	-45%
Agriculture	\$3,908,000	\$6,270,152.5	\$16,685,000	166%
Commercial real estate	\$2,261,000	\$3,627,639	\$7,210,000	99%
Grazing	\$386,000	\$619,314	\$735,000	19%
Communication resources	\$1,100,000	\$1,764,884	\$3,360,000	90%
Mining	\$1,079,000	\$1,731,191	\$1,330,000	-23%
Other resources ^a	n/a	n/a	\$2,240,000	n/a
TOTALS	\$148,561,000	\$238,357,248	\$155,184,000	-35%

^aThis category was not used in the 1996 report.

As stated previously, some asset classes have seen significant gains. These gains demonstrate how, with leadership and vision, DNR is generating significantly more income, now and into the future, from asset classes that historically have not been leveraged.

However, the timber resource asset class has seen a 45 percent decrease in earnings in real dollars since 1995. That decrease is significant because timber is the largest asset class. Over half of the federally granted lands and all of the State Forest Lands (transfer and purchase) are forested. Taken together, these lands comprise over 2 million acres of forest and generate approximately 79 percent of the gross revenue on state trust lands.

Why has Timber Revenue Declined?

Timber revenue has declined for two primary reasons: stumpage prices¹⁹ have decreased due to changing market forces, including mill closures, and resource protection measures have been instituted to comply with environmental regulations, which decreased the size of the operable land base.

Stumpage prices and market forces: Stumpage prices on state trust lands have varied since 1995, but the overall trend is down, as shown by the dotted line in Figure 2. Log prices show a very similar trend. Figure 3 shows sold and removed timber volume on state trust lands over the same period.²⁰

¹⁸ Revenue in this table differs from totals in DNR annual reports due to methodology differences between Deloitte and DNR.

¹⁹ Stumpage is the price a timber buyer pays for trees standing “on the stump.” In Figure 2 it is shown as dollars per million board feet (mbf). Another term for stumpage is sold log price. Stumpage is different than the delivered log price, which is the cost of wood delivered to a mill. Unlike stumpage, the delivered log price includes the cost of cutting and transporting the wood.

²⁰ Data in figures 2, 3, and 4 is from DNR’s product sales and leasing program.

Figure 2. Decline in Stumpage Prices from State Trust Lands, Fiscal Year 1995 to 2020, in 2018 Dollars
Log prices are based on “DF #2” saw logs, which are Douglas fir logs that are suitable for the manufacture of construction and better lumber.

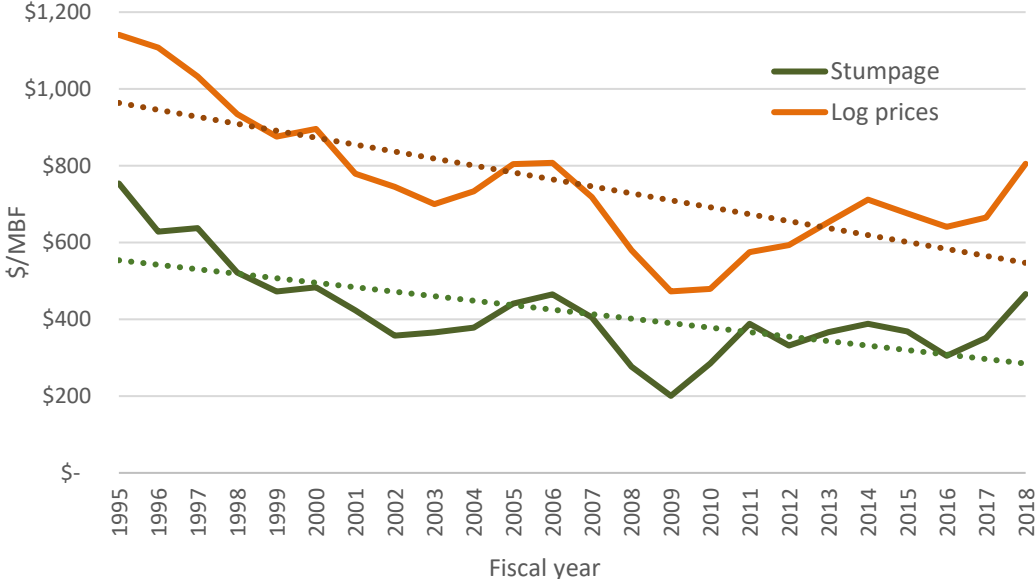
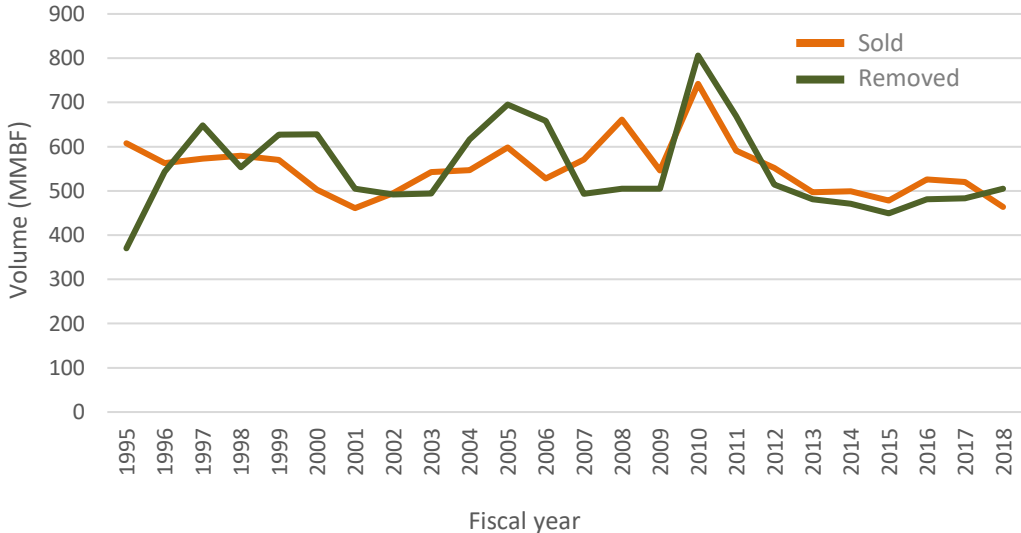
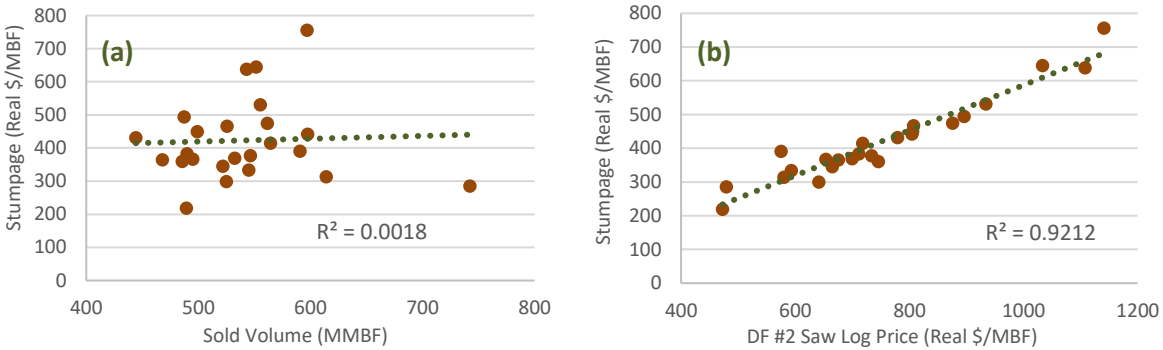


Figure 3. Sold and Removed Timber Volume from State Trust Lands, Fiscal Year 1995 to 2020



As shown in Figure 4, there is little correlation between stumpage price and timber volume, but there is a strong correlation between stumpage and log prices. A comparison of the spread of data points in Figure 4(a) to the alignment of data points along the trend line in Figure 4(b) reveals this correlation.

Figure 4. Correlation Between Stumpage Price and Timber Volume (a) and Stumpage Price and Log Price (b) from State Trust Lands, Fiscal Year 1995 to 2020, in 2018 Dollars
 Log prices are based on “DF #2” saw logs.



Stumpage prices have declined because of changes in market forces. Examples include the ban on export of logs from state trust lands; increased labor costs; increased mill efficiencies, which have allowed mills to produce more lumber from fewer logs; mill closures; and natural disturbances such as wildfires and pine beetle impacts in Canada, which temporarily increased supply due to salvage operations. Another reason is the listing of the northern spotted owl (*Strix occidentalis caurina*) on the federal Endangered Species List and the subsequent decline in logging to protect their habitat. At the beginning of the time period shown in figures 2 and 3, log prices spiked as a result of reduced log supplies. In the latter half of the 1990s, log prices returned to normal with fewer domestic mills and increased supplies from Canada and other sources.

Resource protection measures: Most modern environmental statutes have been passed since DNR was established in 1957. Examples include the Clean Air Act (1963), State Environmental Policy Act (1971), Clean Water Act (1972), and Forest Practices Act (1973). The law that has influenced state trust lands the most is almost certainly the 1973 Endangered Species Act, and the subsequent addition of species to the Endangered Species List. One key example is the northern spotted owl.

The 1990 listing of the northern spotted owl as threatened under the federal Endangered Species Act created significant uncertainty for forest land managers in the public and private sectors, including DNR. At the time, 41 percent of the forest on state trust lands within



Mature forest

the range of the northern spotted owl was 51 years old or older,²¹ largely due to DNR’s commitment to sustained yield management.²² Because many of these older forests were either functioning as habitat or had the potential to become habitat for the owl and other listed species, they were subject to requirements for “survey and manage,” meaning they had to be surveyed for threatened and endangered species prior to timber sales, at great expense to DNR and trust beneficiaries.

In 1997, DNR adopted a 70-year, multiple-species habitat conservation plan (HCP) and obtained an incidental take permit from the Federal Services (NOAA Fisheries and U.S. Fish and Wildlife Service) to meet Endangered Species Act requirements for the owl and other listed and candidate species. The HCP provided operational certainty by helping define which lands are managed as habitat (for example, older forests and riparian areas) and where timber harvest can be conducted, effectively ending the costly “survey and manage” requirement and reducing risk to the trusts.

As a result of these environmental statutes, approximately 40 percent (816,000 acres) of forested state trust lands in the timber asset class are either unavailable or only partially available for harvest. DNR’s past analysis has shown that meeting Endangered Species Act requirements through the HCP is more cost effective than withdrawing from it, although some stakeholders and beneficiaries do not agree. Deloitte has recommended that DNR work with the legislature, beneficiaries and stakeholders to compare DNR’s current approach to Endangered Species Act compliance to other approaches.

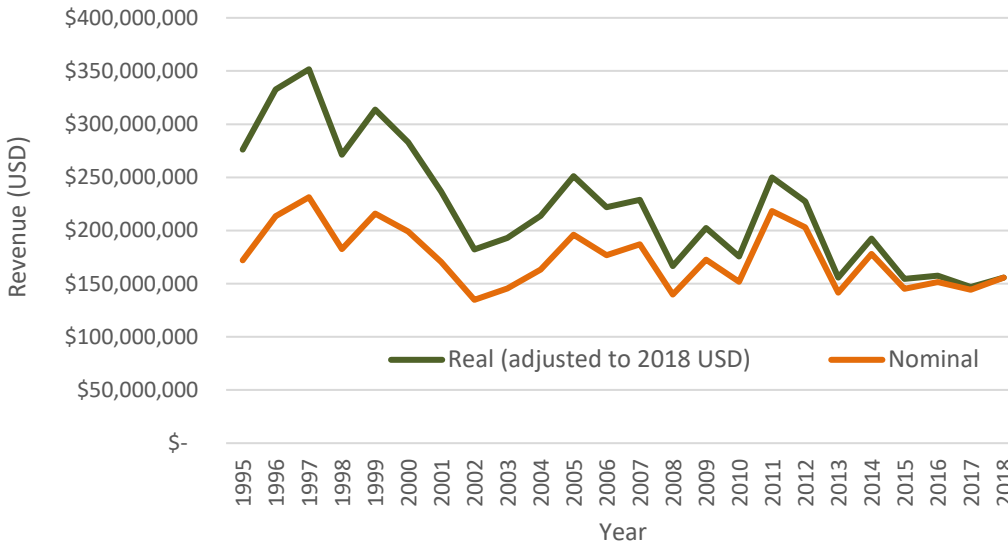
► Reliability of Revenue

Trust beneficiaries such as schools and rural counties and their tax districts rely on a predictable, reliable flow of revenue to provide services to the people of Washington. Because revenue is so heavily dependent on timber harvest, it tends to fluctuate. These fluctuations make it difficult for beneficiaries, particularly local governments like counties or taxing districts, to know when or how much funding they will receive, sometimes putting emergency response and other essential services at risk. Figure 5 shows the variability in trust revenue generated since 1995 from all asset classes in both nominal and real dollars. At smaller scales, trust revenue can be even more variable and unpredictable.

²¹ Table 3.4.1, *Merged Final Environmental Impact Statement for the Habitat Conservation Plan*, DNR 1996.

²² Management of the forest to provide harvesting on a continuing basis without major prolonged curtailment or cessation of harvest ([RCW 79.10.310](#)).

Figure 5. Total Net Revenue Generated from State Trust Lands from Fiscal Year 1995 to Fiscal Year 2018
Totals include revenue from trust land transfers.



The volatility in revenue is driven primarily by the dominance of the timber asset class in the portfolio and the year-to-year variation in stumpage prices due to market forces (refer to Figure 2). On both an annual and monthly basis, stumpage prices are affected by U.S. and Pacific Northwest housing construction, renovation and remodeling, which are major drivers of lumber demand and log prices; timber supply from competitors, both domestic and international; the species and product mixes being offered for sale by DNR; regional mill manufacturing capacity; competing foreign lumber supply; and other factors. Economic events like recessions can heavily impact log prices. In addition, natural events such as windstorms or wildfires, pest infestations, or disease outbreaks can reduce supply or result in a temporary but unsustainable flood of wood on the market from salvage operations. The instability and unreliability of wood supply can result in mill closures, which can compound negative consequences to revenue from state trust lands. Improving the stability and reliability of raw material supplies, investing in timber as well as other asset classes, and promoting wood products to increase demand presents opportunities to not only stabilize but also grow trust revenue.

Opportunities

The assessment highlights four major opportunities to increase the amount and improve the reliability of revenue: improve DNR’s business model and systems, increase access to capital, improve DNR’s ability to transact land, and expand tool sets to address evolving social expectations and needs.

► Improve Business Model and Systems

One of the major opportunities of this assessment is to improve DNR’s business model and systems to create portfolio growth and performance, while establishing modern business practices and accountability. A business model is a design for the successful operation of a business or organization,

and includes products, markets, financing, and other information. As explained in Part One, “Background,” DNR’s business model is to generate revenue for trust beneficiaries on state trust lands through the sale of timber, and through agreements (leases, permits, easements and land use licenses) for agriculture, grazing, commercial real estate, and other uses. A portion of the revenue generated on these lands is retained to cover the cost of management.

Improvements to this model are needed. DNR currently manages a \$200 million revenue operation; yet it has not made critical investments in accounting, financial reporting, and data management that a for-profit enterprise would use to understand and maximize the financial performance of its assets.

In their analysis (Appendix B), Deloitte identified several potential ways that DNR could improve its business model and systems to increase the amount and improve the reliability of revenue. These potential improvements are designed to enable DNR to operate more like a business, while also managing these lands in a way that is responsible and sustainable for current and future generations. Following is a brief overview of these improvements. Some of these improvements are discussed in more detail in Part Four, “Developing Solutions.” Additional information can be found in Chapter 12 of Deloitte’s report (Appendix B).

- **DNR should use an accounting and financial reporting system that is consistent with for-profit business enterprises.** This system would enable DNR to provide financial statements by asset class, allow it to determine if additional investment is appropriate to a particular asset class, help it understand the profitability of different properties, and provide the tools it needs to perform cost-benefit analysis for activities, so it can avoid activities without a net positive cash flow and pursue those that have a positive cash flow. It also would enable DNR to compare revenue from financial periods to its private market peers. A job costing and accounting system would allow DNR to track where time is spent and allocate expenses to specific properties or harvesting opportunities. DNR is now pursuing improvements to its current system.
- **DNR should modernize its property lease management system so it can track and report lease details, including options, annual increases, lease expiration reports, and important property details.** A modernized system would enable DNR to create better cash flow forecasts, account receivable reports, and detailed operation budgets, and to identify prospective lease opportunities. DNR will bring a capital funding request for this system to the 2021 legislative session.
- **Another initial idea is for the legislature to address the current, divided governance structure for trust assets,** in which the Board of Natural Resources manages the land assets and the State Investment Board manages the public market assets, such as stocks and bonds, on behalf of the permanent funds. Deloitte believed that the trust beneficiaries might benefit from a more integrated and coordinated approach to the governance of the trust assets.

- **The legislature should explore options for smoothing distribution of net revenue to beneficiaries**, including using debt or creating a reliability fund similar to the fund used by the State of Idaho.
- **The legislature could consider changing the way trust land management and investments are funded.** Instead of retaining a certain percentage of revenue, DNR could retain revenue based on actual management costs and liabilities, which would be different for each asset class.
- **Improving the performance of timber** will be challenging. Deloitte offered several initial ideas (Appendix B). Ideas included comparing DNR’s current approach to Endangered Species Act compliance to other approaches, comparing the services DNR provides to the services of an external manager, and pursuing ways to monetize ecosystem services, for example by participating in carbon markets.

► **Increased Access to Capital**

The management of state trust lands is funded almost entirely through a portion of the revenue DNR generates. DNR’s ability to access capital²³ through other means, such as borrowing money or issuing bonds, is very limited.

Per Deloitte’s assessment, DNR could operate more like a business if it had access to consistent and adequate sources of capital. Using this capital to invest in infrastructure and other improvements would yield



Vineyard on state trust lands

better return on investments and also improve reliability of revenue for beneficiaries. For example:

- **DNR should purchase additional water rights or invest in pipelines and other agriculture infrastructure.** To illustrate, DNR needed \$23 million to build a large water pipeline in the Patterson area to avoid losing a water right worth over \$40 million. This pipeline carries water from the Columbia River to state trust lands located approximately nine miles away.

Lacking sufficient cash reserves, DNR requested capital funding from the Legislature to construct the pipeline. Because this request was not successful, DNR leased the land at public auction with the requirement that the lessee construct the pipeline at their sole expense. With these terms, only one bidder came forward on a very valuable piece of agricultural land, and DNR’s ability to negotiate was limited. DNR agreed to abate the rent on this lease and ten other leases held by the lessee until the investment is repaid, at an annual rate of approximately \$1.9 million and 5 percent interest.

²³ In this context, capital refers to capital expenditures, not working capital that covers day-to-day expenses.

While it was successful and benefited the trusts by ensuring DNR did not lose a major water right, this mechanism reduced near-term cash flow to the beneficiaries by approximately \$1.35 million annually, at a higher rate of interest than may have been achieved by other means. Also, the requirement that the lessee build a \$23 million pipeline very likely reduced the bidder pool for the lease. The smaller pool of bidders may have resulted in lower rents on the property, although bids were comparable to historic averages.

- **DNR should buy land or exchange existing state trust land for high-performing commercial properties, or secure capital from the legislature (or through other opportunities) to improve low-performing properties in its portfolio to attract tenants.**



This Costco in Fife earns an annual rent of \$668,769

Re-tenanting vacant spaces in buildings requires capital investments to reconfigure the spaces to the tenant’s needs. Per current industry standards, these expenditures are typically the landlord’s responsibility. After improvements are made and the property is leased, returns on this investment capital are generally in the 6 to 9 percent range. These returns are similar to purchasing a new building with existing leases in place. As an example, the estimated return on DNR’s recent purchase of a Bartell Drug store in Darrington is 5.32 percent in the first 10 years and 9.42 percent in years 36 through 40.

Without sufficient access to capital, DNR often relies on a prospective lessee to fund the tenant improvements in exchange for rent abatement. As a result, properties can remain vacant longer as DNR must wait for a tenant with sufficient capital on hand to make that investment. Programs such as the certificate of participation (COP) through the Office of the State Treasurer are not a viable option because the timing of a vacancy, a new tenant’s inquiry into the vacant space, and the window of application for COP authority rarely, if ever, align. DNR has not been successful in securing requested capital funding from the legislature over the years to make critical improvements to increase revenues from these properties, and should work with the legislature to identify other opportunities for securing capital.

- **DNR should increase its investment in working forests to increase timber value and volume.** One example of an investment is to fund more silviculture treatments. The cost of silvicultural treatments for young forest stands began to rise sharply in fiscal year 2017, in response to a tightening labor market and an increasing minimum wage. For some contract types, the initial jump in costs exceeded 40 percent and has remained at elevated levels ever since. Current revenue in the RMCA and FDA has not been sufficient to increase investments in silviculture to make up for these increasing costs, with the result being a budget shortfall in excess of \$11

million dollars for both the 2019 to 2021 and 2021 to 2023 biennia. DNR is submitting an approximately \$13 million capital funding request for silviculture for the 2021 to 2023 biennium. Funding silviculture will increase the marketability and value of these forests, and/or address forest health and wildfire risk. Investing more in silviculture also could generate more jobs in rural areas.

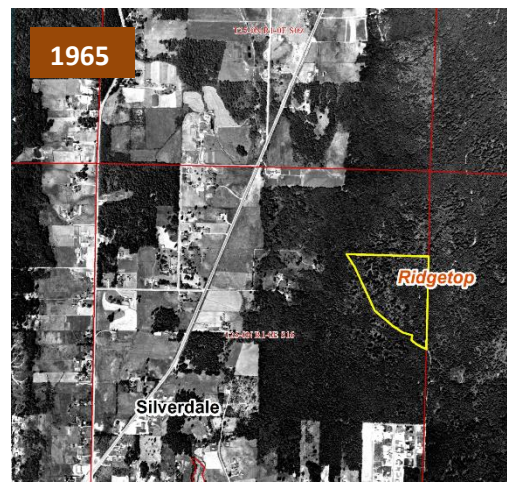
There are a number of ways DNR could increase access to capital. For example, when state trust lands managed for the Common School trust are sold at auction, the proceeds are deposited into the Common School permanent fund. Allowing DNR to retain some of that capital for investment in the asset classes could generate longer and larger returns from existing and new opportunities. These and other ideas will be discussed in Part Four, “Developing Solutions.”

► **Greater Ability to Transact Lands**

Some of the state trust lands that DNR manages are no longer earning revenue. For example, some state trust lands are too isolated or scattered to manage efficiently or effectively for forestry or agriculture. Others are called “transition lands,” which are lands that are transitioning from natural resource production to higher and better uses as a result of local land use planning and zoning.²⁴

As the state population has grown over the past 25 years, homes and urban development have expanded farther into what has traditionally been natural resource working lands like farms and working forests. Particularly in fast-growing cities and counties, some state trust lands that were zoned for forestry or agriculture are now zoned for urban development as their higher and better use, per local land use planning under the 1990 Growth Management Act (GMA).²⁵ In fact, some of these parcels have become surrounded by urban development and are difficult to manage as natural resource lands.

These lands should be transitioned to other revenue-generating land uses. They also could be sold or exchanged for lands with a higher potential to earn revenue. These changes would align these lands with the GMA and local



Ridgetop transition land near Silverdale, Washington in 1965 and 2018

²⁴ Refer to [Chapter 79.19 RCW](#).

²⁵ Refer to [Chapter 36.70A RCW](#)

land use planning and community goals, help to diversify the state trust lands portfolio, and ultimately increase needed revenue to trust beneficiaries.

DNR has made progress in selling or exchanging from state ownership underperforming properties that, as described above, are too isolated or scattered to manage as state trust lands or are no longer appropriate to their current asset class. DNR's ability to transact lands efficiently and expeditiously to keep up with market forces, however, is limited by its access to capital and by current constitutional and statutory limitations. For example:

- **Parcel size limitation:** Article XVI, Section 4 of the Washington Constitution limits the parcel size of any sale of federally granted land to 160 acres. [RCW 79.11.010](#) sets forth the maximum acreage for any single sale at 160 acres with no minimum acre size. Aside from limiting the growth of the state trust lands portfolio, investors in real estate typically have minimum acreages for transactions. The parcel size limitation therefore limits the marketability of state trust lands, particularly for forestry and agriculture.
- **Platting requirements:** Unplatted lands within a city or within two miles of a city's boundaries are subject to Article XVI, Section 4 of the Washington Constitution ([RCW 79.11.250](#)). Prior to sale, DNR must either plat these lands into lots and blocks, or sell the land with the understanding that the purchaser cannot begin construction until platting requirements are met. This statute can discourage land transactions that are in the best interests of the trusts, limit the marketplace in which DNR can participate, and lower resulting land values.
- **Auction requirements:** Article XVI, Section 2 of the Washington State Constitution requires that sales occur at public auction, and [RCW 79.11.090](#) states that "all sales of land under this chapter shall be at public auction, to the highest bidder..." This requirement was designed to ensure fair market value, but limits DNR's flexibility to work with potential sellers. Because these limitations are not standard business practice in the current real estate market, they put DNR at a competitive disadvantage and discourage potential business partners from engaging in state trust lands transactions.
- **Permanent fund:** When state trust lands managed for the Common School trust are sold at auction, the proceeds are deposited into the Common School permanent fund, not the Real Property Replacement Account (Washington State Constitution, Article XVI). This requirement limits DNR's ability to purchase lands that may yield a higher return to the trusts.
- **Auctions and professional real estate services:** According to [RCW 79.11.340](#), DNR may hire a professional real estate service only after failing to sell a parcel at public auction. For some land dispositions, it is prudent business practice to hire a professional auctioneer or realtor with knowledge of the local challenges and opportunities at the onset, instead of waiting for initial failure at auction. Waiting to hire a real estate service can be an inefficient use of staff time and

other trust resources, and can result in a lower-than-optimal price for complex land transactions.

- **Land bank limitations:** [RCW 79.19.020](#) established a land bank, which is an account that enables state trust lands to be sold and replaced in a way that maintains the corpus of the trust. The acreage held within the land bank at any given time cannot exceed 1,500 acres, which can severely limit DNR’s ability to reposition low-value acres. Land must first be acquired, which requires capital, and then placed in the land bank. Once the acquired land is in the land bank, DNR can exchange it for state trust lands of equal value. The exchanged state trust lands are then placed in the land bank without trust status and sold at auction. This restriction prohibits DNR from disposing and acquiring lands at a pace and scale consistent with its responsibilities as a fiduciary manager.
- **State Forest Land limitations:** Although they can be exchanged, both State Forest Purchase and State Forest Transfer lands are reserved from sale under [RCW 79.11.250](#). This statute makes it nearly impossible to reposition these lands to be consistent with land use planning objectives, and to avoid land-use conflicts with adjacent landowners. Additionally, State Forest Lands must remain in forestry and therefore cannot be converted to a higher and better use, such as commercial real estate, even if zoning and local land use rules allow that use. This statute limits DNR’s ability to diversify this portion of the state trust lands portfolio.

Addressing these limitations would make DNR more nimble and able to respond to market opportunities as they arise, and ultimately better able to diversify the state trust lands portfolio at a pace consistent with the requirement of prudent portfolio management.

► Expanded Tools to Respond to Evolving Societal Expectations and Needs

As explained in Part Two of this report, the working lands of the state trust lands portfolio provide extensive ecosystem services as well as trust revenue. Demand for these critical but finite services is growing along with Washington’s population, which has increased by almost 2 million people in the past two decades and is expected to grow by 2 million in the next 16 years.²⁶

One way to address this demand is through state trust lands portfolio management tools that allow DNR to reposition trust lands assets in a way that safeguards them and increases the revenue-generating potential of the portfolio. DNR currently has three tools. These programs have worked well in the past but could be revitalized to address current and future challenges.

- **Trust Land Transfer program:** Under this program, the Washington State Legislature provides funding to purchase federally granted state trust lands that provide greater social benefit through non-revenue activities such as recreation. Once purchased, these lands are transferred to other public agencies or DNR’s natural areas program to be managed as open space or parks.

²⁶ Washington Office of Financial Management

The proceeds of the sale are used to fund school construction and purchase replacement land. DNR has successfully transferred thousands of acres through this program, but legislative support for the program has decreased in recent years, making it more difficult to meet both the needs of the beneficiaries and the public. Currently, DNR is working with beneficiaries and stakeholders to create an updated, revitalized version of the program.

- **State Forest Land Replacement program:** Some of the State Forest Lands in small, rural, timber-dependent counties are no longer producing revenue because they are being used to meet Endangered Species Act requirements. Under the State Forest Land Replacement Program, these “encumbered” lands are purchased using legislative capital funding and transferred into conservation status. The purchase price is paid to the affected county. DNR requests legislative capital funding each biennium for this program.

Since August 2017, DNR has been working with an encumbered lands steering committee to develop a long-term solution for Pacific, Wahkiakum, and Skamania counties to reduce their dependency on legislative funding. One possibility that has secured support from beneficiaries and other stakeholders is to acquire new forest lands or exchange forest lands within the three counties. Exchanges would be accomplished by acquiring new, revenue-generating assets elsewhere in the state. To date, DNR and beneficiaries have not been successful in securing the necessary funding.²⁷

- **Community Forest Trust program:** This program transfers private and state-held properties under development pressure into community forests, which are self-supporting and managed consistent with local community values. Past successes include creation of the Teanaway Community Forest and the Klickitat Canyon Community Forest. This program has not had the critical funding and investments needed to be widely utilized to protect working forests significant to local communities. A reinvigorated Community Forest Trust program holds great promise for addressing shifting societal values in a forested landscape with increasing pressure from human development.



Teanaway Community Forest

In addition to revitalizing these programs, DNR could develop new portfolio management tools or pursue ways to capture revenue from ecosystem services on state trust lands or lands in conservation status. An example is participation in carbon markets.

²⁷ Refer to DNR’s 2019 legislative update, “An Assessment of Options to Replace Timber Trust Revenues for Counties.”

A significant amount of analysis and work has been done across many sectors to identify the value of carbon sequestration from forests and other natural and working lands. DNR has spearheaded efforts to improve carbon inventories and fully understand all available incentive-based programs that target carbon sequestration as a goal. The work of the Carbon Sequestration Advisory group, led by DNR, did this work by bringing industry, environmentalists, non-profits, and researchers together to explore different carbon markets for Washington State. Additionally, DNR is continuing to engage with the legislature over potential carbon opportunities for state trust lands. The forested state trust lands that DNR manages are well positioned to secure additional benefits and revenues as a result, if those efforts move forward.



Part Four: Developing Solutions

Commissioner Franz and DNR have pushed for this assessment because we are committed to transforming the way we work to deliver more efficient effective results for our beneficiaries, our economy, and our environment, and to set these trust lands, trust beneficiaries, and the people of Washington on a prosperous path for the future.

What Will Transformation Entail?

DNR envisions multifaceted solutions that address all aspects of the challenges and opportunities facing state trust land management. These solutions likely will involve a combination of the following:

Optimize policies, statutes, and operational business practices to improve DNR's efficiency and performance, make trust revenue more reliable on a year-to-year basis, and increase state trust lands portfolio performance for the benefit of current and future generations.

The framework for managing state trust lands dates almost entirely to the establishment of DNR in 1957 or soon afterwards. This framework of statutes and authorities was visionary and has stood the test of time; however, it is now half a century old. Optimizing this framework will provide DNR with the tools and flexibility it needs to meet the challenges of the future. Equally important are improvements to operational business practices that make DNR more efficient and effective.

Maintain working forests and agricultural lands as a core and valuable part of the state trust lands portfolio and **make strategic capital investments in these lands** to increase their revenue-generating potential.

Working forests and agricultural lands will continue to comprise the majority of the state trust lands portfolio because they are essential to our environment, our economy, and our quality of life in Washington. Aside from providing revenue, critical natural resources, and ecosystem services, working forests and farms provide jobs and therefore support local economies. Washington’s climate and access to international markets also provide a competitive advantage.

Table 7 is an estimate²⁸ of the number of jobs in the wood product manufacturing industry that are supported by working forests statewide and by state trust lands specifically. Table 6 also includes the median annual income of these jobs. Indirect jobs include jobs in forestry and logging. Total gross revenue for this sector in 2017 was \$8,310,937,292.

Table 7. Direct and Indirect Jobs in Wood Product Manufacturing in Washington State

	Direct jobs	Indirect jobs
Estimated jobs per \$1 million in output in wood manufacturing, statewide	3.10	5.32
Estimated total jobs in wood manufacturing across state economy	25,764	44,214
Median annual income of a person working in the wood manufacturing industry	\$39,888	\$50,236
Estimated labor income (median income multiplied by total jobs)	\$215,810,840	\$466,440,212
Jobs in wood manufacturing attributable to logs from state trust lands (21%)	5,410	9,285
Labor income in wood manufacturing attributable to logs from state trust lands	\$45,320,276	\$97,952,445

What is needed now is investments in these lands to optimize their revenue-generating potential. Two examples are investments in irrigation pipelines and infrastructure to support irrigated crops and orchards and additional investments in silviculture to keep forests healthy and productive.

Improve and expand other components of the state trust lands portfolio that show promise for immediate and continued growth.

Two major opportunities are transition lands, which are lands that are transitioning from natural resource production to higher and better uses as a result of land use planning and urbanization, and other parcels of state trust lands that are too isolated or scattered to manage efficiently or effectively

²⁸ DNR used an input-output model to produce these estimates. The model is a snapshot in time that does not account for changes in supply and demand and assumes a perfectly elastic supply. For example, if there is an expansion in some sector’s output, the price that the sector pays for labor or other supplies does not change. Because the model is a snapshot, results become less accurate over time. The model uses 2016 data and does not reflect the economic impacts of COVID-19. Source: “Employment Associated with DNR Managed Lands,” September 2020.

for forestry or agriculture. These lands present prime opportunities for communication sites, renewable energy production, or other uses that could yield significantly higher revenue for trust beneficiaries.

Rethink existing state trust lands portfolio management tools.

DNR needs to revitalize existing programs such as the Trust Land Transfer program, Community Forest Trust program, and State Forest Land Replacement program, and to develop new tools that will help increase the revenue-generating potential of state trust lands and protect natural resources.

How Will Solutions be Developed?

Transformation is a substantial undertaking. For that reason, DNR is committed to working in collaborative partnership with the legislature, beneficiaries, tribes, stakeholders, and advisory committees to define and agree on solutions that have broad support.

In the following section of this report, DNR provides a number of initial ideas for addressing the challenges and opportunities identified in Part Three. These ideas represent a range of possibilities and are meant as a starting point for discussion. DNR will ask legislatures, beneficiaries, tribes, and stakeholders to provide feedback on these ideas and to brainstorm additional ideas. In addition, DNR will ask participants to provide recommendations for subject matter experts to serve on an advisory committee(s) that DNR will establish for this project.

The advisory committee(s) will do the following:

1. Develop an understanding of the challenges and opportunities facing DNR.
2. Review feedback gathered from legislatures, beneficiaries, tribes, and stakeholders.
3. Drawing on 1), 2), and subject matter expertise, develop recommendations for revenue generation, asset management, and trust revenue distribution. Some initial ideas may be researched and developed into proposals, some may not, and some may be combined and transformed into something new and innovative. To assure an actionable outcome, solutions should fall within the scope of the need, purpose, and objectives that DNR established for this project (Text Box 1 on page 36).

DNR has a strong track record in establishing and working with advisory committees. DNR created the Sustainable Harvest Technical Advisory Committee to advise DNR on forest inventory, economics, forest health, climate change, and other factors that affect the eastern and western sustainable harvest calculations. DNR also is launching a Commercial Lands Advisory Committee to explore opportunities and investments regarding DNR's commercial real estate lands.

Once the advisory committee(s) has crafted recommendations, DNR will gather feedback on them from legislature, beneficiaries, tribes, stakeholders. Once that process is complete, the recommendations will

be brought to the Board of Natural Resources and then to the legislature for consideration. The goal is to develop and implement, over the next five years, significant, consequential, innovative, and multifaceted solutions that will maximize the potential value of state trust lands today and in the future for beneficiaries and the state of Washington.

Throughout this process, DNR will brief the Board of Natural Resources on its progress and conduct outreach to ensure the public understands what DNR is doing and why.

Initial Ideas

The following selected, initial ideas were gathered from past reports, the Deloitte report, and DNR. These initial ideas are organized by the objectives established for this project. Additional ideas can be found in Chapter 12 of Appendix B.

Objective One: Increase Revenue

Following are initial ideas for structural changes to asset management.

- **Integrated investment strategy:** This idea addresses the current, divided management structure. The Board of Natural Resources oversees the management of the state trusts land assets, which are generally considered in the financial sector as relatively low risk and low return. The State Investment Board manages the trust’s permanent fund accounts. Deloitte believed that the trust beneficiaries might benefit from a more integrated and coordinated approach to the governance of the trust assets, in which strategic investment and diversification decisions are made for all trust assets (land and public market assets) collectively. The public

Text Box 1. DNR’s Need, Purpose, and Objectives

Need

DNR needs to increase the amount and the reliability of the revenue it generates through the assets it manages on state trust lands, in perpetuity.

Purpose

The project will transform state trust lands management by developing and implementing (1) legislative proposals to increase the amount and the reliability of the revenue generated by the state trust asset portfolio, (2) changes to Board of Natural Resources policies to improve trust asset management performance, and (3) updated operational business practices to increase DNR’s efficiency and effectiveness in managing state trust assets.

Objectives

- **Objective 1. Revenue Generation.** Increase the total amount of revenue for current and future trust beneficiaries and its reliability by decreasing the difference between expected and actual revenue.
- **Objective 2. Working Lands.** Sustain the natural resource lands that were entrusted to the people of Washington State, while seeking opportunities to diversify the portfolio of revenue-generating assets.
- **Objective 3. Multi-Use Values.** Sustain or enhance the social, environmental, and cultural benefits of state trust lands consistent with the revenue generating purposes of the land.
- **Objective 4. Accountability, Transparency, and Flexibility.** Maintain accountability and transparency as a public agency but have the flexibility to take advantage of business opportunities and make management more efficient and effective.

market assets could be invested in higher-risk funds to balance the overall portfolio.²⁹ Idaho State Trust Lands are managed in this manner.³⁰ This solution would require statutory changes and possibly amendments to the Enabling Act and constitution.

- **Asset management:** Under this idea, DNR would update its *Asset Management Plan* and associated policies to provide strategic direction for each asset class to guide business decisions, funding, and deliverables. This solution would require action from the Board of Natural Resources.

Following are ways to increase access to capital.

- **Borrowing authority:** This idea grants DNR the authority to borrow money or issue bonds to allow more investment in opportunities with high initial costs but high potential for increased revenue. Examples include commercial real estate, communication sites, and water rights and infrastructure for converting dryland farms to the more lucrative irrigated farms or orchards. This solution may require legislative approval and statutory change.
- **New operational funding models:** Deloitte observed that the percentage of revenue DNR retains for management and investment is not well correlated with the actual costs and liabilities associated with each asset class. For some asset classes, the percentage is much lower than actual costs and liabilities, which must be covered using revenue from other asset classes and funding sources. For other asset classes, the percentage is much higher than actual costs and liabilities, resulting in less revenue being distributed to the beneficiaries. Deloitte recommends basing the percentage of revenue retained on actual management costs, which would be different for each asset class and which would rise or fall based on the needs of that program. For example, costs may rise to cover investments in land or infrastructure that would increase the revenue-generating potential of the asset class. This idea would allow DNR to make investments in different asset classes in a timely manner.

Following are ideas for increasing the reliability of revenue to the trusts:

- **Reliability fund:** In general, DNR’s current business model distributes trust revenue either directly to beneficiaries or into permanent funds and other accounts. This direct connection, coupled with the predominance of timber revenue, makes revenue more volatile on a year-to-year basis. This idea involves establishing a “reliability fund” to help shield the trusts from revenue fluctuations and to increase revenue. Revenue would be deposited into this account and invested. Distributions would be set by policy and consist of earnings, principal, or a combination of both. This fund also would cover DNR’s operating expenses. One example of this

²⁹ Liquid assets managed by the Washington State Investment Board are currently invested in accordance with an approved asset allocation study.

³⁰ <https://efib.idaho.gov/>

model is the very successful “earning reserve fund” being used by the State of Idaho’s Department of Lands. Funds are distributed annually at a rate of 5 percent of the three-year, moving average of the permanent fund balance. Adjustments can be made to the distribution based on factors such as the level of earning reserves funds, and transfers to the permanent funds. This idea could be combined with the integrated investment strategy idea and would require statutory change.

- **Smoothing revenue through loans:** Deloitte recommends a program in which the State of Washington borrows money as needed to smooth the flow of revenue to trust beneficiaries. This program could be particularly useful during economic downturns. This solution would require statutory change.

Objective Two: Sustaining Working Lands While Seeking Opportunities to Diversify the Portfolio

Following are ideas for making it easier to diversify the state trust lands portfolio.

- **Land transactions:** This idea could involve changing the 160-acre limit on the sale of federally granted land, removing the requirement to plat lands within two miles of a city prior to sale, removing the public auction requirement, increasing the acre limit for lands within the land bank, or enabling DNR to sell State Forest Land. These solutions would require constitutional and statutory changes.
- **Advisory committee:** Deloitte suggests that an advisory committee or expert team be created to assess the state trust lands portfolio and identify opportunities for diversification. This solution is an operational change.

Objective Three: Sustain or Enhance Multi-use Values

- **Funding sources for recreation:** DNR provides recreation on state trust lands when such use is in the best interest of the state and the general welfare of citizens, and is consistent with the obligations of trust management ([RCW 79.10.120](#)). Recreational trails, trailhead parking, campgrounds, picnic areas, and other recreation facilities on state trust lands are accessed by forest roads that are financed with trust revenue. Trust revenue also is used for some ongoing costs to manage dispersed recreation and repair damaged facilities. Recreation is a benefit enjoyed by all Washington residents and does not specifically benefit the trust beneficiaries. For that reason, a consistent and adequate funding source is needed to support these public access projects. This solution would require statutory change.
- **Portfolio management tools:** This idea involves enhancing or rethinking existing state trust lands portfolio management tools, such as the Trust Land Transfer program, Community Forest Trust program, and the Forest Land Replacement program, and to develop new mechanisms

that will help increase the revenue-generating potential of state trust lands and safeguard the natural resources that make Washington a beautiful place to live. This idea could also include pursuing ways to monetize ecosystem services. This solution would require statutory change.

Objective Four: Maintain Accountability, Transparency, and Flexibility

DNR needs to maintain accountability and transparency as a public agency but it also needs the flexibility to take advantage of business opportunities and make its management more efficient and effective.

Deloitte recommends that DNR develop a comprehensive financial system that is consistent with for-profit business enterprises. This system would include financial accounting, cost accounting, operations (sales, planning, and so forth), and real estate management. This system would enable DNR to manage these assets more efficiently and profitably, as well as provide financial statements typical of for-profit businesses. This solution is an operational change. DNR is pursuing this idea now. For example, DNR is requesting funding to replace NaturE, the leasing system that tracks contracts and revenue for the asset classes. NaturE will become obsolete when the new One Washington system is completed in 2022.

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Part Five: Conclusion

The assessment conducted by DNR, Deloitte, and Earth Economics provides valuable insight into the strengths and opportunities presented by state trust lands and their abundant natural resources. The Commissioner and DNR are energized by these results.

Commissioner Franz and DNR are proud to embark upon a journey to transform state trust lands management for a sustainable and prosperous future. In the 2021 legislative session, DNR will bring an initial round of proposals for consideration, such as requests for improving the timber sale process and extending commercial real estate leases that will have zero fiscal impact in light of the current state budget challenges and impacts of COVID-19. DNR also will bring forth a number of capital funding requests to facilitate much needed replacement of outdated leasing data systems and investments in forests inventory, silviculture, and forest health to increase revenue from forested state trust lands while also creating jobs.

Over the longer term, DNR will work in partnership with the legislature, beneficiaries, tribes, stakeholders, and advisory committees to develop multifaceted solutions. These solutions likely will involve optimizing policies, statutes, and operational business practices; making strategic capital investments in working forests and agricultural lands; improving and expanding other components of the state trust lands portfolio; and rethinking existing state trust lands portfolio management tools. DNR will bring these proposals to the Board of Natural Resources and then to the legislature.

Washington state held on to its trust lands when many other states sold theirs, and these lands are part of the state's rich natural and cultural legacy. Washington now has the opportunity to be a leader in transforming management of these lands. DNR looks forward to working in a collaborative process over the coming year to make real changes that address the challenges and opportunities identified in this report.

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Appendix A. Comparing the 1996 and 2020 Trust Land Valuations

The last asset valuation of state trust lands was completed in 1996 by Deloitte and Touche. The 2020 asset valuation was completed by Deloitte Transactions and Business Analytics (Deloitte). The two valuations provide a useful set of benchmarks and information to understand how the performance of state trust lands has changed over time. However, DNR cautions against directly comparing these reports for three reasons: significant differences in methodology between the two valuations, economic changes since the 1996 report was written, and differences in how acres were classified.

Differences in Methodology

The 1996 report was a comprehensive and dependable document that represented the valuation practices and the markets of that time. However, the methodology of the 2020 report is reflective of current, state-of-the-art best practices for valuation and represents a significant advance over the earlier report. Following are examples of differences in methodology between the two reports.

- **Valuation approach:** The 1996 report estimated the market value of the trust assets using a sales comparison approach for all asset classes except mining. In the sales comparison approach, one property is compared to similar properties or similar, recently sold properties in the area to estimate value.

The 2020 report estimated the “trust value” of the trust assets using the income approach, in which asset value is based primarily on the income the land can generate. For the timber asset class, Deloitte also used the whole property value method, in which bare land and timber are first valued separately and then combined. These two approaches were reconciled, with the income approach receiving primary weight.

Deloitte used trust value instead of market value because DNR’s ability to sell all state trust lands, as individual parcels or one property, is limited by the state constitution and statutes. For example, federally granted lands can be sold, but only in parcels of 160 acres or fewer.³¹ As such, it would take thousands of transactions to sell the entire portfolio of these lands.

- **Communication resources asset class:** The 1996 report based value on acres and the 2020 report based value on average lease cost.

³¹ Washington State Constitution, Article XVI, Section 4 and [RCW 79.11.010](#).

Economic Changes

Nearly a quarter century has passed since the 1996 report. The economy has undergone numerous changes since then, including two major economic events and their lingering effects: the “dot-com bust” of March 2000 to October 2002, and the Great Recession of December 2007 to June 2009. Economic changes include the following:

- Volatility in market prices for primary products such as timber.
- A general reduction and compression of expected and achievable capitalization rates, yield rates, and other measures of rate of return; lower market rates of return increase the market value of assets, but the absolute value of the returns themselves remain stagnant or even fall.
- Larger changes in the structures of markets and the relative importance (hence desirability) of different market segments.
- Increased regulatory and environmental concerns, which influence management practices.
- The emergence of new market segments, such as renewable energy (wind and solar, for example), and the growing importance of submarkets such as irrigated agriculture (orchards and vineyards in particular).

These changes make direct comparison between the reports difficult.

Differences in Acre Classifications

The acres within each asset class differed significantly between the 1996 and 2020 report. For example:

- **Timber asset class:** In the 1996 report, the timber asset class included 2,113,760 acres. For the 1996 report, Deloitte and Touche made an assumption that the entire forested land base was available for harvest. This is an oversimplification, because some areas were not operable and some areas were not forested (for example, roads and water bodies) In addition, at this time 41 percent of the forest on state trust lands within the range of the northern spotted owl were 51 years old or older,³² largely due to DNR’s commitment to sustained yield management.³³ Because many of these older forests were either functioning as habitat or had the potential to become habitat for the owl and other listed species, they had to be surveyed for threatened and endangered species prior to timber sales, meaning they may or may not be available for harvest.

In the 2020 report, the timber asset class included 2,056,510 acres. This total excludes non-forested areas such as roads and water bodies, natural resource conservation areas and natural

³² Table 3.4.1, *Merged Final Environmental Impact Statement for the Habitat Conservation Plan*, DNR 1996.

³³ Management of the forest to provide harvesting on a continuing basis without major prolonged curtailment or cessation of harvest ([RCW 79.10.310](#)).

area preserves, and community forests. However, Deloitte based its valuation on 1,240,163 “net acres,” which are acres that are known to be available or partially available for harvest. Net acres are a more accurate representation of the forested land base.

- **Commercial real estate asset class:** In the 1996 report, this asset class included 29,176 acres of transition lands, which are lands that are transitioning from natural resource production to higher and better uses. In the 2020 report, these acres were not valued based on their potential, future commercial use. Instead, they were valued based on their current use.
- **Mining asset class:** For the mining asset class, the two reports labeled and grouped lands differently. The 1996 report used three subgroups in the valuation, all of which included surface rights: surface rights only, surface and active mineral rights, and surface and mineral prospects. The surface rights only subgroup had the most acres of the subgroups valued.

The 2018 report used only two subgroups in the valuation: surface and subsurface rights; and subsurface rights only. The subsurface rights only subgroup includes 185 acres with prospecting leases. There was no subgroup for surface rights only.

In addition, Deloitte valued the “other resources” asset class in the 2020 report. This asset class includes wind energy; special uses such as archery clubs, underground storage, golf course-related usage, and research agreements; right-of-way access; and special forest products such as floral greens (for example, salal) and boughs. The 1996 report did not include this asset class.

1996 and 2020 Results

Table A-1 shows the results of the 1996 valuation and Table A-2 shows the results of the 2020 valuation. Keep all the foregoing caveats in mind when reviewing this information.

Table A-1. 1996 Report Valuation Results (in 1996 Dollars)

Asset class	1995 market value
Timber	\$5,883,000,000
Commercial real estate	\$146,000,000
Transition lands²	\$82,000,000
Agriculture	\$84,000,000
Grazing	\$100,000,000
Communication sites	\$9,000,000
Mining	\$10,000,000
TOTAL	\$6,232,000,000

Table A-2. 2020 Valuation Results

Asset class	2018 concluded trust value
Timber	\$2,136,000,000
Commercial real estate	\$95,700,000
Agriculture	\$238,300,000
Grazing	\$10,500,000
Communication sites	\$41,200,000
Mining	\$16,640,000
TOTAL	\$2,558,640,000

Appendix B. Deloitte 2020 State Trust Lands Valuation

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Appendix C. Non-Market Environmental Benefits and Values

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Appendix D. Trust Lands Performance Assessment Budget Proviso Language

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- (1) The Department of Natural Resources must conduct an asset valuation of state lands and state forestlands held in trust and managed by the department. The analysis required in subsections (3) and (4) of this section may be provided through contracted services.
- (2) The department must describe all trust lands, by trust, including timber lands, agricultural lands, commercial lands, and other lands, and identify revenues from leases or other sources for those lands. The department must briefly describe the income from these trust lands, and potential enhancements to income, including intergenerational income, from the asset bases of these trusts.
- (3) The analysis must estimate the current fair market value of these lands for each trust beneficiary, including the separate beneficiaries of state lands as defined in [RCW 79.02.010](#), and the beneficiaries of state forestlands as specified in chapter [79.22 RCW](#). The estimation of current fair market values must specify the values by the various asset classes including, but not limited to, the following asset classes: Timber lands; irrigated agriculture; dryland agriculture, including grazing lands; commercial real estate; mining; and other income production. The analysis must also estimate the value of ecosystem services and recreation benefits for asset classes that produce these benefits. The legislature encourages the department and its contractors to develop methods and tools to allow tracking of the estimated fair market values over time.
- (4) For each of the different asset classes and for each of the various trusts, the analysis must calculate the average annual gross and net income as a percentage of estimated current asset value.
- (5) The department must provide a progress report to the legislature by December 1, 2018. A follow up progress report is expected to be provided by December 1, 2019, and may include any initial ideas. The final report is expected to be submitted by June 30, 2020, and must include options to: (a) Improve the net rates of return on different classes of assets; (b) Increase the reliability of, and enhance if possible, revenue for trust beneficiaries; and (c) Present and explain factors that either (i) define, (ii) constrict, or (iii) define and constrict the department's management practices and revenue production. The factors to be considered include, but are not limited to, statutory, constitutional, operational, and social factors.