



State of Washington
**Joint Legislative Audit
and Review Committee**

Forest Board Transfer Lands

Report 96-5

December 16, 1996

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TABLE OF CONTENTS

Chapter		Page
	Summary	i
	Summary of Recommendations	ix
	Addendum by the Committee	xiii
1	Introduction	1
	Study Scope	2
2	Priorities in Managing State Forest Lands	5
	Background	5
	Potential Differences in Priorities Between Forest Board Lands and Federal Grant Lands	6
3	Financial Management of State Forest Lands	9
	Trust Management Funds and Cost Allocation	10
	Differences in Costs Between Grant Lands and Forest Board Lands	10
	Interest Earnings on Management Funds	12
	FDA Fund Balance and Repurchase of Timber Cutting Rights	13
	Reduction in Management Fee Percentage	15
4	Comparisons of DNR Forest Management Costs	17
	Comparisons of DNR Management Fee Percentage	17

Chapter		Page
4	Comparisons of Management Costs Per Acre	19
	Comparisons of FTEs Per Acre	20
5	Economic Returns on State Forest Board Lands	23
	Comparison of Revenue Per Acre With Other States	24
	Comparison of Revenue Per Acre With Grays Harbor County	24
	Comparison with the National Council of Real Estate Fiduciaries (NCREIF) Timberland Index	26
	Potential Reasons for DNR's Lower Performance Compared to NCREIF	28
	Timber Arrearage	36
6	Considerations Regarding Potential Reconveyance of Forest Board Transfer Lands	39
	Legislative Authority to Establish Conditions	39
	Impact on Sustained Yield Calculations and Income	41
	Economic Implications	42
	Impact of Reconveyance on DNR and Other Trusts Managed by DNR	43
	Impact of Reconveyance on the State General Fund	45
	Forest Practice Implications	45
	Impact on Recreation and Public Access	46
	Status of Leases and Other Agreements	47
	Fire Protection	48

Chapter	Page
Correction Camps	49
Forest Development Account Fund Balance	50
Habitat Conservation Plan	51
Olympic Experimental State Forest	52
Methods and Procedures for Transferring Lands	53
7 Other Study Issues	57
Lack of Meaningful Performance Information	57
Deloitte & Touche Methodology Not Available	58
Appendices	
1 Scope and Objectives	61
2 Agency Response and Auditor's Comments on Agency Response	63

FOREST BOARD TRANSFER LANDS

Summary

This is a legislatively mandated study of the policies and economic elements of the Department of Natural Resource's (DNR) management of the forest board transfer lands. The forest board transfer lands, which are held in trust by the state, were acquired by the state in the 1920s and 1930s from 21 counties who had acquired the lands through tax foreclosures. Questions about DNR's management of the forest board transfer lands prompted some of the original conveying counties to request that the legislature authorize reconveyance of the forest board lands back to the counties. Rather than authorizing such a reconveyance, the 1995 legislature mandated this study.

This study found that the relative priorities for DNR's management of the lands have not been set forth by the legislature, and that state statute has not clearly identified the primary beneficiaries of the trust. Accordingly, the report recommends the legislature consider establishing the relative priorities for DNR's management of the lands and identifying the primary beneficiaries of the trust.

The study found that the forest board transfer lands are more costly to manage than other state forest lands. Also, the study found that DNR's fee for managing the lands could be reduced. The report therefore recommends that the Board of Natural Resources reduce the management fee.

The study found that DNR generates a substantial amount of revenue on the state forest lands in comparison with other states. In fact, DNR earns more per acre on state forest lands than any other state. However, the return on investment generated on the state forest lands lags behind an index of western timber properties.

Overview

Certain DNR economic policies may contribute to that lower performance because these policies preclude optimization of the economic value of the state forest lands. The report recommends that DNR change its policies to maximize the present value of its timber investments.

The report examined several issues related to the potential reconveyance of the forest board transfer lands back to the counties, and found that most of the issues either were manageable or could be addressed by the legislature. For example, concerns have been expressed about reconveyance resulting in a loss of income to the state general fund. This study found that the legislature could address any potential loss to the general fund by placing certain conditions on the reconveyance of the lands.

Background

The forest board transfer lands consist of about 531,000 acres of state forest lands. These lands were conveyed to the state by 21 counties during the 1920s and 1930s. The counties originally acquired these lands through tax foreclosures. Revenues generated on the lands through timber sales are distributed to the counties. DNR also manages about 1.5 million acres of other state forests (the federal grant lands). These lands were granted to the state by the United States Congress to support various beneficiaries such as public schools.

Some beneficiaries of DNR managed forest lands are concerned that DNR does not maximize revenue from the forest board transfer lands. These beneficiaries are also concerned about revenue fluctuations. The original version of a 1995 bill (SB 5574) would have authorized reconveyance of the forest board transfer lands back to the counties. The enacted substitute version of that bill required this study instead.

The legislature required the Joint Legislative Audit and Review Committee (JLARC) to conduct a study of the policies and economic elements of DNR's management of the forest board transfer lands. It also suggested that this study include a review of several issues related to the implications of reconveying the forest board transfer lands back to the counties.

Counties
acquired
forest
board lands
through tax
foreclosures

Some
concerns
that DNR
does not
maximize
revenue

Priorities in Managing the Trust

Some representatives of the timber counties suggest that DNR has a duty to maximize the revenue generated on these lands. However, the legislature has identified other priorities including reforestation, managing on a sustained yield basis, public access, and multiple uses. The legislature has not established relative priorities for DNR's management. Therefore, it is not clear that DNR has a duty to maximize revenue from the forest board transfer lands.

This report recommends the legislature consider establishing relative priorities for DNR in managing the lands so that these priorities are clear to both DNR and the beneficiaries of the trust.

Financial Management of State Forest Board Lands

There are two separate funds for managing the forest board lands: the Forest Development Account (FDA), and the federal grant lands' Resource Management Cost Account (RMCA). DNR's management fee is a percentage (up to 25 percent) of the revenue generated on these lands. The management fee percentage is established by the Board of Natural Resources. It is currently the maximum 25 percent of revenue for both funds. The two management funds may borrow money from each other should there not be sufficient funds within one of the management funds to cover DNR's costs allocated to managing the lands.

DNR's forest management costs are allocated to the two management funds based primarily on time and effort reporting by DNR staff. This study found that over the last 10 years, the forest board lands have been 37 percent more costly to manage per acre than federal grant forest lands. Although DNR has provided explanations for the disparity, the documentation provided in support of these explanations only explains a small amount of the difference.

Interest earnings on the two management funds are also treated differently. Statute specifies that the interest earnings from the FDA accrue to the state general fund, while the interest earnings on the RMCA are returned to the fund. During the 1960s, 1970s, and 1980s, the revenues generated from the forest board lands were not sufficient to cover all of the costs allocated by DNR to the FDA. During this period, the FDA borrowed about \$41 million from

Legislature has not established relative priorities for use of the land

Forest board lands more costly to manage than other state forest lands

Interest earnings do not accrue to management fund

the RMCA. Another \$60 million of interest was charged to the FDA. Therefore, in this instance, the FDA was charged interest expense when it carried a negative fund balance. However, it does not accrue interest earnings when it has a positive fund balance.

The distinction in how interest earnings are treated between the two management funds is important because, while the fund balances are not part of the trusts, DNR has made distributions of excess fund balance¹ to the beneficiaries of the federal grant lands. No such distributions have been made to the beneficiaries of the forest board transfer lands. This report recommends the legislature consider allowing interest earnings on the FDA to accrue to the fund.

The FDA currently has a \$19 million balance that is projected to grow to \$38 million by 1998. Given the size of this balance, and the fact that the 25 percent management fee is generating more revenue than what DNR is spending to manage the forest board transfer lands, this report recommends that the management fee percentage for the FDA be reduced to 22 percent.

Comparisons of DNR Forest Management Costs

This study found that DNR's management fee of 25 percent is comparable to management fee *percentages* of other public sector timber management agencies.

Forest board lands more costly to manage than Grays Harbor County timberlands

The study also compared DNR's *cost per acre* for managing the forest board lands with the Grays Harbor County Department of Forestry and a private sector timber company located in western Washington. While DNR spent about \$30 per acre to manage the forest board lands in FY 1995, Grays Harbor County and the private sector timber company both spent about \$24 per acre to manage their timberlands. DNR also has substantially more employees per acre than Grays Harbor County and the private timber company. DNR stated that their costs are higher for several reasons, including geographic, environmental, and usage factors, but did not quantify the impact of these factors.

¹ Excess fund balance means a balance in the management fund that is greater than what is needed to meet DNR's cash flow requirements.

Economic Returns on State Forest Board Lands

DNR generates a substantial amount of revenue for the beneficiaries of state forest lands. In fact, DNR earns more revenue per acre than any state forestry agency in the country. For example, in 1993, Washington state forest lands generated \$69 per acre—the highest amount per acre of any state. California was next at \$53 per acre. Oregon and Idaho state forest lands generated \$44 and \$20 per acre respectively.

While DNR is a leader among state forestry agencies in generating revenue, this report found that DNR does not optimize the economic value of the state forests compared to other benchmarks. For example, the return on investment earned by DNR on state forest lands consistently lags behind the performance of an index of timberland properties in western states.

Certain discretionary DNR economic policies may explain the lower performance of state forest lands in comparison to the timberland index. For example, while DNR's stated policy is to harvest timber at age 60, its timber inventory suggests that the actual harvest age is at least 70 years. The private sector typically harvests timber grown in Washington state at 40 to 50 years of age.

While more timber can be harvested each year with a harvest age of 70 than can be harvested with a harvest age of 40 or 50, the economic value of the timber is maximized at an earlier age. By harvesting at an earlier age, the revenue from the harvest is received sooner and has a higher present value. Therefore, the private sector chooses to harvest timber at an earlier age.

Another discretionary DNR policy requires that the current level of timber harvest be maintained into perpetuity. This “non-declining even-flow policy” would preclude consideration of a shorter harvest age because the level of harvest would be temporarily increased during the transition to the shorter rotation age. The higher level of harvest during the transition period could not be sustained into perpetuity. The purpose of this DNR policy is to maintain intergenerational equity among the beneficiaries of the trusts. This means that current and future trust beneficiaries must be treated equally.

DNR is a leader in generating revenue among state forestry agencies . . .

. . . but return on investment on state forest lands lags behind the private sector

This study found that by eliminating the non-declining even-flow policy and moving to a shorter harvest age, DNR could increase earnings for *both* current and future beneficiaries of the trusts. However, in order to maintain intergenerational equity, this would require that excess revenues generated during the transition period be reinvested on behalf of future trust beneficiaries rather than distributed to current trust beneficiaries.

The findings of this report concerning DNR's lower performance in comparison to the western timberland index and the impact of DNR economic policies are supported by a comparison of DNR's timber inventory with the private sector. DNR has between two and three times the amount of timber per acre as compared to several private sector timber companies. The larger DNR timber inventory per acre shows DNR's harvest cycle to be longer than the private industry standard. Because of its larger timber inventory, DNR would have to generate substantially more revenue per acre in order to match the performance of the index. DNR's lower performance in relation to the index indicates that DNR is not generating income proportionate to the value of its assets.

The report recommends that the Board of Natural Resources adopt a policy to maximize the present value of its timber investments, to repeal its non-declining even-flow policy, and to investigate options for re-investing additional timber revenues on behalf of future trust beneficiaries.

Considerations Regarding Reconveyance of Forest Board Transfer Lands

The study examined several issues related to the potential reconveyance of the forest board transfer lands back to the counties. In general, it was found that many of the concerns regarding reconveyance could be addressed by legislative actions. One concern raised by DNR was that other trust beneficiaries remaining under DNR management would suffer increased costs after reconveyance due to DNR's loss of economies of scale.

This study found that DNR management costs are proportionately higher than other (smaller) timber managers used for comparison in this study. Further budget analysis is warranted of any specific reconveyance plan. However, given that DNR is comparatively less efficient than other timber managers, we believe there is an opportunity for the legislature to reduce DNR's costs proportionate to the loss of workload/acreage without negatively impacting services provided to the remaining trust beneficiaries.

Other issues have been raised such as how reconveyed lands would be used and how revenue from reconveyed lands would be distributed. For example, DNR has expressed concerns that reconveyed lands could be sold and taken out of forest production, public access could be denied, and that the distribution of revenues from the lands could be changed. It is possible that any of these concerns could prove to be accurate if the legislature authorized reconveyance with few conditions. However, this report found that all of these potential concerns can be addressed by the legislature.

Acknowledgments

The study team wishes to acknowledge the efforts of DNR staff in providing information needed to conduct the study. We also appreciate the assistance provided by the Grays Harbor County Department of Forestry, professors from the University of Washington College of Forestry, and staff from John Hancock Timber Resources Group. This study was conducted by JLARC management auditors Carol Webster, Rob Krell, and Larry Brubaker. Larry Brubaker served as team leader and Ron Perry as the project supervisor. Robert Williams from Robert M. Williams and Associates provided consulting assistance.

Agency Response

The Department of Natural Resources provided a response to this report. DNR's response, as well as the audit team's comments on this response, are provided in Appendix 2.

Reconveyance
issues
could be
addressed
by
legislature

Cheryle A. Broom
Legislative Auditor

On December 16, 1996, the Joint Legislative Audit and Review Committee approved a motion to accept and distribute this report.

The committee also adopted an Addendum to the report (see page xiii, following the Summary of Recommendations).

Senator Al Bauer
Chair

RECOMMENDATIONS*

Summary

Recommendation 1

The legislature should consider establishing relative priorities for the Department of Natural Resources in managing the forest board transfer lands and identifying the primary beneficiaries of the trust.¹

Legislation Required:	Yes
Fiscal Impact:	None
Completion Date:	1997 Session

Recommendation 2

The legislature should consider authorizing the Forest Development Account to receive interest earnings accruing to the management fund.

Legislation Required:	Yes
Fiscal Impact:	No overall impact
Completion Date:	1997 Session

Recommendation 3

The Board of Natural Resources should reduce the Forest Development Account management fee to 22 percent.

Legislation Required:	None
Fiscal Impact:	Increased revenue to trust beneficiaries
Completion Date:	March 1997

****NOTE: The Joint Legislative Audit and Review Committee approved an Addendum regarding the recommendations. Please see page xiii.***

¹ The position taken by the legislature on this recommendation could result in a conflict between this recommendation and Recommendations 2, 4, 5, 6, 7, 8, and 10.

Recommendation 4

The Department of Natural Resources should repeal its non-declining even-flow harvest policy.

Legislation Required:	None
Fiscal Impact:	Increased revenue to trust beneficiaries
Completion Date:	March 1997

Recommendation 5

The Department of Natural Resources should adopt a policy to maximize the present value of its timber investments.

Legislation Required:	None
Fiscal Impact:	Increased revenue to trust beneficiaries
Completion Date:	March 1997

Recommendation 6

The Department of Natural Resources should investigate options for investing additional revenues that will be generated as a result of Recommendations 3 and 4 to create additional income for current and future beneficiaries of the trusts.

Legislation Required:	None
Fiscal Impact:	Increased revenue to trust beneficiaries
Completion Date:	June 1997

Recommendation 7

The legislature should provide statutory authority for the Department of Natural Resources to create permanent investment funds on behalf of trust beneficiaries.

Legislation Required:	Yes
Fiscal Impact:	Increased revenue to trust beneficiaries
Completion Date:	1997 Session

Recommendation 8

The Department of Natural Resources should conduct the economic analysis required under RCW 79.68.045 to identify alternative courses of action regarding the harvest arrearage.

Legislation Required:	None
Fiscal Impact:	Potential increased revenue to trust beneficiaries
Completion Date:	June 1997

Recommendation 9

If the legislature decides to authorize reconveyance, it is recommended that it give consideration to the various issues identified in this report, including:

- Time limit for counties to choose reconveyance
- Distribution of revenue from reconveyed lands
- Setting limitations on the use of the land
- Maintaining public access
- Financial impact on other Department of Natural Resources trust beneficiaries
- Method of transferring ownership

Legislation Required:	Possibly
Fiscal Impact:	None
Completion Date:	1997 Session

Recommendation 10

The Department of Natural Resources should regularly make information concerning its performance, in comparison to other comparable asset managers, available to the trust beneficiaries, the Board of Natural Resources, and the legislature.

Legislation Required:	None
Fiscal Impact:	None
Completion Date:	Ongoing

Recommendation 11

The legislature should amend RCW 39.29 (personal service contracting law) to require state agencies contracting for personal services to obtain all information generated under the state contract, or access thereof.

Legislation Required:	Yes
Fiscal Impact:	None
Completion Date:	1997 Session

ADDENDUM

Statement of the Joint Legislative Audit and Review Committee

This states the position adopted by the Joint Legislative Audit and Review Committee on December 16, 1996.

The Joint Legislative Audit and Review Committee has considered the findings and recommendations of the preliminary report of the Forest Board Transfer Land study. The committee has voted to approve the following addendum to be included in the final report.

JLARC approves recommendation #1, but does not take a position on the relative priorities for the use of the forest board transfer lands. Because the committee takes no position on the relative priorities for the use of the land, it takes no position on recommendations 2, 4, 5, 6, 7, 8, and 10. The committee approves recommendations 1, 3, 9 and 11, but does not take a position for or against reconveyance of the forest board transfer lands.

INTRODUCTION

Chapter One

Passed during the 1995 session, 2SSB 5574 required the Joint Legislative Audit and Review Committee (JLARC) to conduct a study of the policies and the economic elements of the management of the state forest board lands. It also required the study to examine specific issues that are primarily related to the implications of the potential reconveyance of forest board transfer lands back to the counties (see Appendix 1 for the study scope and objectives).

Washington State Forest Lands

The Washington State Department of Natural Resources (DNR) manages approximately 2.1 million acres of state forest lands which are held in trust by the state on behalf of several beneficiaries. The *forest board* lands comprise about 608,000 acres, or 29 percent, of the 2.1 million acres of state forest lands. Most of the forest board lands are forest board *transfer* lands. Forest board transfer lands are lands that were acquired by 21 counties in the 1920s and 1930s through tax foreclosures. Many of these lands had been recently harvested. They were acquired by counties when the owners did not pay property taxes. The other category of forest board lands is forest board *purchase* lands. These are lands that were either purchased or acquired as a gift by the state.

In addition to the 608,000 acres of forest board lands, DNR also manages 1.5 million acres of *federal grant* lands. The federal grant lands were granted to the state by the United State Congress at statehood. These state forest lands are held in trust to support several beneficiaries including public schools and universities.

Background

Forest board lands are 29% of total state forest lands

Revenues from transfer lands distributed to counties

In 1927, the legislature authorized conveyance of the forest board transfer lands from the counties to the state to become part of the state forest lands. In 1935, the legislature authorized the mandatory conveyance of these lands to the state--if the state determined that they were necessary for reforestation purposes. It was thought that the counties were not able to effectively manage these lands. The lands were to be held by the state in trust.

DNR manages the trusts as the agent of the state. The net revenues generated from the lands (primarily from the sale of timber) are distributed to the counties in which the revenues are generated once a DNR management fee is deducted. The counties must then distribute the net revenues in the same manner as property tax revenues (i.e., a portion returns to the state general fund, a portion is retained by the counties, and a portion is distributed to junior taxing districts).

Background to This Study

Some counties are concerned that DNR does not generate sufficient revenue from the management and sale of timber on the transfer lands. Also, some counties are concerned about fluctuations in the amount of revenue generated, since the fluctuations create difficulties for the counties during their budgeting process. The original version of 2SSB 5574 authorized reconveyance of the forest board transfer lands back to the counties. However, the substitute bill (2SSB 5574) that passed the legislature did not authorize reconveyance of the transfer lands back to the counties. Instead, it mandated this study.

STUDY SCOPE

There are three broad areas that are addressed by the study scope and objectives. They are:

- An assessment of the policies and economic elements of DNR's management of the forest board transfer lands;
- An assessment of specific issues related to the potential reconveyance of the forest board transfer lands back to the counties; and

- An examination of the potential repurchase of timber cutting rights that had been transferred from the forest board lands to the federal grant lands.

Certain interested parties have questioned whether or not the legislature mandated JLARC to assess economic aspects of DNR's management of the forest board transfer lands. These questions appear to be related to the fact that none of the specific study tasks suggested in 2SSB 5574 require JLARC to assess DNR's economic performance in managing the lands. However, 2SSB 5574 states:

Given changes in forest practices, recent fluctuations in income from the forest board lands, and questions about the management of the department of natural resources, the legislature directs that a study of the policies and an analysis of the economic elements of the management of the state forest board lands be conducted by the legislative budget committee (now JLARC).

The JLARC executive committee confirmed the scope and objectives of the study in light of this language.

Legislature
mandated
study of
policies and
economic
elements of
DNR
management

PRIORITIES IN MANAGING STATE FOREST LANDS

Chapter Two

The forest board transfer lands trust was created by the legislature in 1927. While the legislature indicated that these lands are to be held in trust, it did not specifically identify the primary beneficiaries of the trust; nor did it establish relative priorities for DNR in managing the lands. These questions are important because there is disagreement by some over how the lands should be managed and whose interests should come first.

While some county representatives suggest that DNR has a duty to maximize revenue on the trust, the legislature has identified other uses for these lands; such as, reforestation, managing on a sustained yield basis, and public access. These other uses may conflict with managing the lands to generate revenue.

The report recommends that the legislature consider identifying the primary beneficiaries of the forest board transfer land trust, and specifying DNR's relative priorities in managing the trust.

BACKGROUND

There are two major categories of forest lands managed by DNR. Approximately 1.5 million acres of state forest lands are the federal grant trust lands. These are lands that were given to the state by the federal government by the Enabling Act that created the state of Washington. These lands are held by the state in trust on behalf of several beneficiaries, including public schools and state universities. The terms of the federal grant trusts were established by the State Constitution.

Summary

Forest board trust created by legislature

Unlike the federal grant trust lands, the forest board lands (which are the subject of this study) were acquired by the state from 21 counties through actions by the state legislature. Like the federal grant lands, the forest board lands are also held in trust. However, in the case of the forest board transfer lands, the trust was created by the state legislature, rather than by the State Constitution.

The distinction between how the trust was created is important because DNR’s legal priorities in managing the forest board lands may differ from their legal priorities in managing the federal grant lands.

POTENTIAL DIFFERENCES IN PRIORITIES BETWEEN FOREST BOARD LANDS AND FEDERAL GRANT LANDS

Purpose of forest board trust may be different than federal grant trusts

Some beneficiaries of DNR managed trust lands suggest that DNR has a duty to maximize the amount of revenue generated on the lands. DNR may have such a duty, particularly with respect to the federal grant trusts—although this is still in dispute. In a 1996 ruling concerning a lawsuit filed by beneficiaries of the federal grant trusts against DNR, an Okanogan County Superior Court judge ruled that DNR has such a duty.

It may be less certain that DNR has a duty to maximize revenue in the case of the forest board lands. There is nothing in the statutes governing DNR’s management of the forest board transfer lands that requires DNR to maximize revenue generated on the forest board lands. This trust was created by the legislature. Statutes governing the forest board trust identify other purposes for this trust such as reforestation and protection of the lands, and managing the land for multiple uses, as well as production of revenue. The statutes do not set forth relative priorities for the management of state forest board lands.

The statutes creating the forest board transfer lands trust do not identify the primary beneficiaries of the trust. The statutes do stipulate that the revenue generated on the forest board transfer lands will be distributed to the counties, who in turn must distribute

the revenue in the same manner as property tax revenues are distributed. A 1995 report by an Independent Review Committee¹ contained the following statement:

*Thus, it might be argued that the counties, and those receiving funds from the counties are the beneficiaries of these lands. As a practical matter, if not strictly legally correct, this is the manner in which these lands have been treated.*²

However, the Independent Review Committee also suggested, that because the trust was created for reforestation and protection of the land, the state as a whole may be the beneficiary of the trust. It is likely that both the recipients of the revenue and the state as a whole are beneficiaries.

Because priorities among the various purposes for which the lands are managed have not been established, it is not clear whether the interests of the recipients of revenue from the lands outweigh the interests of the state as a whole, or vice versa. Clarification of the relative priorities for managing the forest board transfer lands would help to answer questions about the relative interests of the various trust beneficiaries, and would provide clearer direction to DNR.

Recommendation 1

The legislature should consider establishing relative priorities for the Department of Natural Resources in managing the forest board transfer lands and identifying the primary beneficiaries of the trust.³

Not clear what the primary purpose of trust is or who the primary beneficiaries are

¹ The Independent Review Committee was commissioned by the Board of Natural Resources in 1995 to review the board's policies and practices. The Committee consisted of the Secretary of State, the State Auditor, a former Governor, and a retired state Supreme Court Justice.

² *Report to the Washington State Board of Natural Resources from the Independent Review Committee, 1995, Chapter 3, p. 7.*

³ The position taken by the legislature on this recommendation could result in a conflict between this recommendation and Recommendations 2, 4, 5, 6, 7, 8, and 10.

FINANCIAL MANAGEMENT OF STATE FOREST LANDS

Chapter Three

DNR's forest management costs are allocated to the different trusts through a cost allocation system. DNR consistently spends more per acre to manage the forest board lands than the federal grant lands. While DNR provided explanations for these cost differences (e.g., impact of location), their documentation does not explain the majority of the differences.

The management fund for the federal grant trusts receives interest *earnings* on the balance of the fund, while the management fund for the forest board lands does not. However, the management fund of the forest board trust did pay approximately \$60 million in interest *expenses* to the management fund of the federal grant trust as a result of a loan that had been made to the fund.

In spite of these differences in management costs and treatment of interest earnings and expenses, the management fund for the forest board transfer lands is accruing a large fund balance. It is currently at \$19 million, and is projected to grow to \$31 million by 1998. Thus, DNR is currently receiving more management fee revenues from the forest board transfer lands than it is spending on those lands. This indicates the management fee could be reduced.

The report recommends that the legislature consider authorizing interest earnings to accrue to the management fund of the forest board transfer lands, and that the Board of Natural Resources reduce the management fee for these lands to 22 percent of revenue.

Summary

TRUST MANAGEMENT FUNDS AND COST ALLOCATION

Different management funds for different trust categories

DNR has separate management funds: the Forest Development Account (FDA) for the forest board lands, and the Resource Management Cost Account (RMCA) for the federal grant funds. DNR field staff may work one day on federal grant lands, and the next day on forest board lands. Direct costs that can be attributed to activities on a specific parcel of land are directly charged to the applicable trust fund. Indirect costs that cannot be charged to a specific parcel are allocated to the trusts, primarily on the basis of the amount of direct costs that are allocated to each trust.

The source of revenue for each management fund is up to 25 percent of the revenues generated on the lands managed by each fund. This revenue is generated primarily through the sale of timber on the state forest lands. Timber is sold by DNR through a competitive bidding process. Timber purchasers are typically given up to three years to harvest the timber. Timber sales revenue is received when the timber is harvested. Seventy-five percent of the revenue is distributed to the trust beneficiaries and 25 percent is retained by DNR as a management fee. The legislature appropriates the funds expended by DNR for management of the state forest lands.

DIFFERENCES IN COSTS BETWEEN GRANT LANDS AND FOREST BOARD LANDS

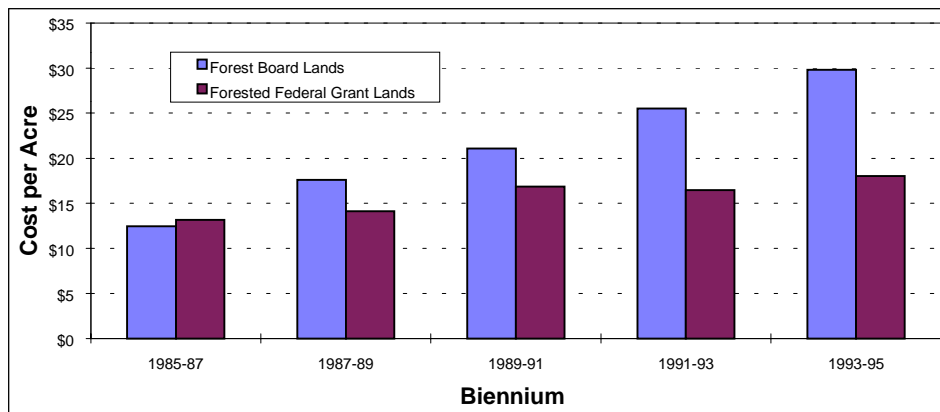
Historically, the forest board transfer lands have cost more per acre for DNR to manage than the forested federal grant lands.¹ That is, DNR has allocated greater costs per acre to the forest board lands than to the federal grant lands. For example, in the 1993-95 Biennium, DNR spent approximately \$30 per acre per year from the

¹ In addition to *forested* federal grant lands, other federal grant lands include agricultural and grazing lands which are also managed from the RMCA. DNR does not segregate RMCA expenditures by the use of the land upon which the expenditures were incurred. However, the information provided by DNR indicated that over the last ten years, 37 percent more per acre was spent managing the forest board lands than was spent managing the *forested* federal grant lands.

FDA to manage the forest board transfer lands, while only \$18 per acre per year from the RMCA was spent to manage the forested federal grant lands. Over the last ten years, DNR has spent an average of 37 percent more per acre to manage the forest board lands than the forested federal grant lands. Exhibit 1 illustrates this comparison.

Exhibit 1

Comparison of DNR’s Cost per Acre to Manage Forest Board Lands vs. Grant Lands



Forest board lands more costly to manage than federal grant lands

We are not able to directly compare FDA and RMCA forest expenditures prior to the 1985-87 Biennium. However, it appears that the forest board lands have historically cost more to manage than the federal grant lands.²

DNR’s explanation for why the forest board lands are more costly to manage than the federal grant forest lands is that the forest board lands and the federal grant lands are not comparable. For example, 45 percent of the federal grant forest lands are in eastern Washington,

² Exhibit 1 appears to indicate a trend toward greater disparities in costs between RMCA or FDA managed forest lands. While we do not have RMCA expenditures separately for federal grant lands prior to the 1985-87 Biennium--and therefore cannot make a direct comparison, it appears that the disparity in forest management costs between RMCA and FDA managed forest lands has been consistent over time. If the percentage of RMCA costs that were spent managing *forested* RMCA lands prior to the 1985-87 Biennium is assumed to be the same percentage as was spent to managed forested RMCA lands between 1985 and 1995, then there have been similar historical disparities in costs between forested RMCA and FDA lands to the actual disparities between 1985 and 1995.

and DNR indicates that these forest lands do not require as intensive management as western Washington forest lands. Also, DNR indicated that per acre management expenses of the forest board lands are higher because these lands were recently harvested prior to acquisition by the state.

These explanations may be legitimate reasons for the difference in costs. However, the documentation provided by DNR to support these explanations explains approximately \$2.30 of the \$12 difference in cost per acre.

INTEREST EARNINGS ON MANAGEMENT FUNDS

Another difference between the financial management of the forest board lands in comparison to the federal grant lands concerns the treatment of interest earnings and expenses of the management funds for the different trusts.

Unlike
management
fund for
federal grant
lands . . .

. . . interest
earnings do
not accrue
to manage-
ment fund
for forest
board lands

In the case of the FDA, which is used to manage the forest board lands, the legislature mandated that interest earnings on the balance of the fund accrue to the state general fund. However, in the case of the RMCA, which is used to manage the federal grant trusts, interest earnings on the balance of the fund statutorily accrue to the RMCA.

The difference in the treatment of interest between the two funds is further demonstrated by the interest accrued on an interfund loan made from the RMCA to the FDA. Because much of the forest board lands had been recently harvested when they were acquired by the state, there was not a great deal of revenue that could be generated from these lands for many years. As a result, the 25 percent management fee was not sufficient to cover the costs that were allocated to the FDA for much of the 1960s, 1970s, and 1980s.³

As a result of the inability of the FDA revenues to cover allocated costs, beginning in 1964 and continuing until 1991, the FDA

³ DNR accounting records for the FDA go back to 1961. In the early 1960s, expenditures on the forest board lands were minimal. In the mid-1960s, expenditures on the forest board lands increased substantially. It was at this time that loans began to be made from the RMCA to the FDA.

borrowed approximately \$41 million from the RMCA to cover the shortfall between revenues and allocated costs. Interest was charged on the loan at a rate varying from 6 to 11 percent. Almost \$60 million of interest accrued on the debt, which was repaid during the 1990s.

Now that the timber has matured on forest board transfer lands and the FDA is generating a positive fund balance, the interest on the FDA accrues to the state general fund. Historically there have been distributions from the RMCA to the beneficiaries of the federal grant trusts when the fund balance of the RMCA was sufficiently large to allow for such distributions. The \$60 million of interest payments from the FDA to the RMCA would have been a factor in the ability of the RMCA to make distributions to the beneficiaries of the federal grant trusts.

The legislature may wish to consider whether or not the interest earnings from forest board and federal grant trusts management funds should be treated equally.

Recommendation 2

The legislature should consider authorizing the Forest Development Account to receive interest earnings accruing to the management fund.

FDA FUND BALANCE AND REPURCHASE OF TIMBER CUTTING RIGHTS

With the maturation of the timber on forest board transfer lands, the Forest Development Account is generating a positive fund balance that is currently \$18.9 million and is projected to grow to \$31 million by 1998. Through a proviso in the 1996 Supplemental Appropriations Act, the legislature directed this study to assess the repurchase of the timber cutting rights that were transferred from the FDA to the RMCA to repay the loan from the RMCA to the FDA. It is our understanding that the proviso was added in response to a request by one of the beneficiaries of the federal grant trusts.

Fund has
paid
interest
expenses . . .

. . . but does
not receive
interest
earnings

Timber cutting rights were transferred from FDA managed lands, specifically the forest board purchase lands, to the beneficiaries of the RMCA trusts as part of the proceeds to repay the loan that was made from the RMCA to the FDA. These rights, valued at approximately \$63 million, were transferred in the early 1990s because the balance of the loan had reached over \$73 million. The FDA's ability to generate a sufficient fund balance to repay the loan in cash was thought unlikely.

Repurchase of timber cuttings rights would require appraisals

A repurchase of the transferred timber cutting rights would require reappraisals of the properties from which the cutting rights were transferred. DNR staff indicate that the value of the timber cutting rights that were transferred has likely appreciated.

As previously noted in this report, over a period of time, DNR has allocated higher management costs per acre to the FDA to manage the forest board lands than to the RMCA to manage the federal grant lands. Additionally, the FDA has paid \$60 million of interest payments on the loan from the RMCA to the FDA. These interest payments would have contributed to the ability of the RMCA to make distributions to the beneficiaries of the federal grant trusts.

In light of this financial history, and the purposes for which the FDA was created (to cover DNR's costs of administration and protection of the forest board lands), it would appear that a refund to the beneficiaries of the FDA would be a more equitable use of the excess FDA fund balance, (see footnote 1, page iii), rather than to repurchase previously transferred timber cutting rights at a potentially higher price.

This does not necessarily mean that the trust beneficiaries have a right to a refund of excess management fees. For example, in 1992, the Attorney General opined that the fund balances of DNR management funds are not part of the trust. Rather, the legislature could *choose* to make a refund to the beneficiaries of the forest board transfer lands trust, similar to the distributions that have been made to beneficiaries of the federal grant trusts.

If the legislature authorizes reconveyance of the transfer lands back to the counties, we do not recommend that it authorize the distribution of the excess FDA fund balance to the beneficiaries of the trust. The potential reconveyance of the transfer lands would

create short-term, and possibly long-term, costs⁴ to the FDA. The extent of the additional costs is difficult to predict and is largely dependent on legislative decisions. It would seem prudent to retain the FDA fund balance intact, at least temporarily, if the legislature wishes to consider reconveyance of the forest board transfer lands.

REDUCTION IN MANAGEMENT FEE PERCENTAGE

The 25 percent management fee assessed by DNR is generating an excess of fund balance in the FDA. For the next ten years, DNR projects that management fee revenues will be substantially in excess of management costs for the forest board transfer lands. According to ten-year revenue and expenditure projections by DNR, the FDA management fee percentage could be reduced to 22 percent of revenue and still maintain an adequate fund balance in the FDA.

The statutory purpose of the management fee is for protection and administration of the forest board transfer lands. The 25 percent management fee will generate substantially more revenue than is necessary to manage the forest board transfer lands over the next ten years. The Board of Natural Resources has the authority to reduce the management fee and is considering this and other options for the excess FDA fund balance.⁵ A reduction in the management fee percentage would create greater incentives for DNR to control costs and generate revenue on the forest board transfer lands. Chapter 4 of this report discusses our finding that DNR's costs for managing the forest board transfer lands are relatively higher than the Grays Harbor County Department of Forestry and a private sector timber company.

Also, in contrast to a repurchase of transferred timber cutting rights or a refund to trust beneficiaries, a reduction in the management fee percentage would leave the FDA fund balance intact. This would provide flexibility for DNR in the event the legislature chose to authorize reconveyance of the transfer lands, which could create short-term, and possibly long-term, costs to DNR.

⁴ Whether reconveyance would create long-term incremental costs to the FDA is largely dependent on the amount of lands that are reconveyed and the budget actions of the legislature (see discussion of implications of reconveyance in Chapter 6).

⁵ The Board of Natural Resources establishes policy direction for DNR.

Management fee generates more money than is needed

Recommendation 3

The Board of Natural Resources should reduce the Forest Development Account management fee to 22 percent.

COMPARISONS OF DNR FOREST MANAGEMENT COSTS

Chapter Four

The scope and objectives of this study included a comparison of the efficiency and effectiveness of DNR's management of the forest board lands with other private and public sector timber managers, including Grays Harbor County. Grays Harbor County was used for comparison purposes because of the study mandate to compare DNR to this county; however, the report recognizes that there are some comparability issues.

While the DNR management fee *percentage* is comparable to the management fees of other public managers of forest lands, DNR spent more *per acre* in 1995 to manage the forest board lands than Grays Harbor County and a western Washington private sector timber company.¹ DNR has also spent more per acre every year for the last nine years to manage the forest board lands than Grays Harbor County has spent managing its forest lands.

COMPARISONS OF DNR MANAGEMENT FEE PERCENTAGE

DNR receives 25 percent of the revenue generated on both the federal grant trusts and the forest board trusts as a fee to manage

¹ Cost comparisons with the private sector are difficult for several reasons: 1) many private sector companies are in other businesses (e.g., manufacturing wood or paper products) than that of growing trees; 2) many private sector companies operate in widespread geographic locations; 3) private sector companies account for costs differently (e.g., depreciation and depletion) than public agencies; and 4) when we asked different companies to provide the information that would be required to make cost comparisons, they indicated that the information is proprietary. We also asked timber industry representatives, and faculty from schools of forestry for research identifying benchmarks for timber management costs. Nobody that we spoke to was aware of such research.

Summary

DNR's management fee percentage is similar to other public foresting agencies

the trust lands. The legislature authorizes DNR to collect up to 25 percent of revenues—at a rate to be determined by the Board of Natural Resources. The Board of Natural Resources has authorized DNR to collect the full 25 percent.

The actual revenues DNR receives to manage the trust lands (both the federal grant trusts and the forest board trusts) are somewhat higher than 25 percent of revenues. This is because the 25 percent of revenue is calculated *after* deduction of fees that are paid by timber purchasers to use DNR roads. These fees are spent to construct or maintain DNR forest roads and to cover a portion of DNR overhead. Including the road management fee, DNR actually received an average of almost 27 percent of revenue for management between 1990 and 1995.

We compared the percentage of DNR's management fee with Grays Harbor County and the states of Oregon and Idaho. The two states were selected for their proximity to Washington State, and also because besides Washington, they are the largest (in terms of revenue generated) managers of state timber trust lands. Grays Harbor County was selected because of the study mandate to compare DNR with to this county.² The following table illustrates these percentages:

State/County	Revenue Percent Retained as Management Fee³
Grays Harbor County	25%
Idaho	10%
Oregon	36.25%
Washington	25+%

The relative productivity of the land that is managed and the intensity of management efforts needed to make the land productive limit the usefulness of the comparison. For example, if the timberland in Oregon is only half as productive as Washington timberland, Oregon could have a higher management fee percentage, yet receive less revenue per acre in management fees.

² Grays Harbor County was the only county holder of timberland that did not convey their timberlands to the state.

³ Information on the percentage management fee from Idaho and Oregon is from Souder and Fairfax, *State Trust Lands*, 1996, p.46. Information on the Grays Harbor County management fee provided by the Grays Harbor County Department of Forestry.

COMPARISONS OF MANAGEMENT COSTS PER ACRE

Due to the limitations related to the comparison of management fee *percentages*, we compared DNR's management *costs per acre* with Grays Harbor County and a private sector timber company whose lands are located in Western Washington. The private sector timber company was chosen for comparison because, like the DNR forest board lands and the timber managed by Grays Harbor County, the private sector company's timber is located in western Washington.⁴ It should be recognized that there are no absolutely comparable entities, but the results of this analysis provide comparative cost per acre data that shows a clear trend or difference.

In 1995, DNR spent approximately \$30 per acre to manage around 600,000 acres of forest board lands.⁵ Almost all of the forest board lands are located in western Washington. In 1995, Grays Harbor County spent approximately \$24 per acre to manage 38,000 acres of forest lands. The private sector manager also spent approximately \$24 per acre.⁶ Exhibit 2 is a historical per acre cost comparison between DNR and Grays Harbor County.

DNR's management costs per acre are higher than Grays Harbor County and a WA private timber company

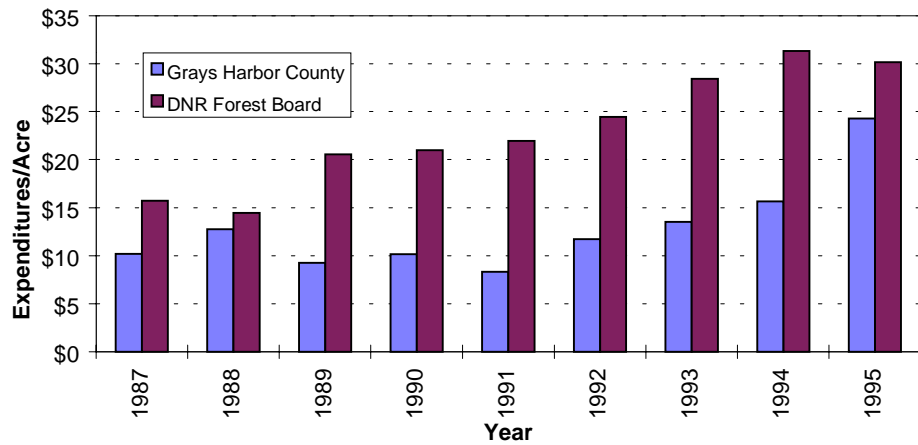
⁴ The private sector timber company provided information to JLARC on the condition that it not be identified by name.

⁵ All of the forest board lands were used for this comparison rather than just the forest board transfer lands because DNR accounting records do not identify the transfer lands separately.

⁶ Grays Harbor County cost information was provided by the Grays Harbor County Department of Forestry. In 1995, Grays Harbor County actually spent \$63 per acre. However, the \$63 per acre included a payment of \$1,472,000 toward the cost of a new office building and warehouse (valued at \$1,753,000) for the Department of Forestry that was paid for from management funds. The remaining balance of \$281,000 cost of this building was paid in 1996. To be comparable to the new Natural Resources Building, which is amortized over a 25-year period, we amortized the cost of the new Grays Harbor County buildings over 25 years and included the cost of the annual payment in the 1995 management costs. The operating costs for the private sector timber company were provided by the Operations Forester for the company. This company's costs included the cost of logging the forest. Timber purchasers from DNR pay logging costs, so these costs are reflected in lower DNR revenues—not higher costs. Therefore, we deducted harvesting costs from the total costs reported by the private sector timber company.

Exhibit 2

Comparison of Expenditures per Acre Between Grays Harbor County and DNR Forest Board



Note: Grays Harbor County building construction costs are paid at the time of construction. For comparison purposes, these costs were assumed to be amortized over 25 years to be comparable to the Natural Resources Building.

We attempted to determine whether there are explanations for these cost differences. For example, Grays Harbor County timberland consists primarily of Western Hemlock. We were told by a college forestry professor that Western Hemlock is often left to regenerate naturally without replanting after harvest. It was suggested that this may explain why Grays Harbor County spends less per acre than DNR. However, the director of the Grays Harbor County Department of Forestry informed us that the county always replants after harvest--to replace its Western Hemlock with the more valuable Douglas Fir.

A factor contributing to these disparities in cost may be differences in indirect management costs (overhead). Following is a comparison of the number of acres per FTE.

COMPARISONS OF FTES PER ACRE

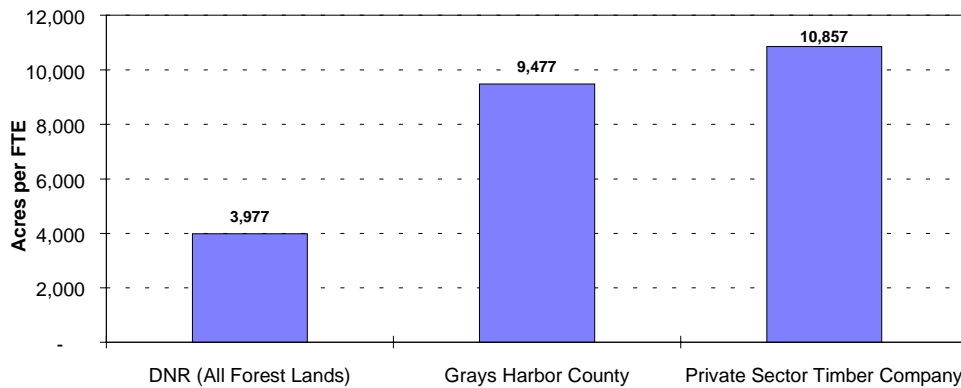
Grays Harbor County has 4 FTEs in its Department of Forestry who manage 38,000 acres of forest lands. This equates to 1 FTE per 9,500 acres of forest land. The private sector timber company has 1

Management costs higher than Grays Harbor County forest lands

FTE per 10,857 acres. DNR has approximately 529 FTEs who are responsible for managing 2.1 million acres of timber.⁷ This equates to 1 FTE per 3,977 acres of timber. Exhibit 3 illustrates this comparison.

Exhibit 3

Comparison of Number of Acres per FTE



DNR employees manage fewer acres of forest land on an FTE basis

DNR recently provided a list of explanations for why the cost for Grays Harbor County’s forest management activities are not comparable to DNR’s forest management costs. This includes differences in size, location, uses, and endangered species issues between forest board and Grays Harbor County lands. DNR did not quantify or substantiate these explanations.

⁷ The 529 DNR FTEs assumes that 32 percent of DNR’s 1,653 FTEs are allocated to managing state timberlands, equivalent to the percent of DNR’s total budget that is allocated to the management of state timberlands.

ECONOMIC RETURNS ON STATE FOREST BOARD LANDS

Chapter Five

DNR earns more revenue per acre from Washington State forests than any other state. However, the income generated on DNR forest lands relative to the value of the asset is lower than an index of western state private sector timber properties.¹ This lower performance may be linked to discretionary DNR economic policies which do not optimize the economic value of the forest land.

For example, DNR has stated that its policy is to harvest timber at age 60. A review of DNR's timber inventory suggests that the actual harvest age is between 70 and 80 years. The private sector routinely harvests timber at 40 to 50 years. While more timber can be harvested with longer harvest cycles, and higher prices are received for older timber, the economic value (or present value) of the timber is maximized at shorter rotation ages. This is because the revenue from the harvest is received sooner and can be reinvested to create more economic value (i.e., a higher present value) than with a longer harvest cycle.

Another DNR economic policy precludes DNR from considering a shorter harvest cycle because it requires that current levels of harvest be maintained into perpetuity. The purpose of this policy is to ensure that current beneficiaries are not favored over future beneficiaries of DNR trust lands. Because moving to a shorter harvest cycle would result in a temporary increase in harvest that

¹This comparison uses all of Washington State forest lands, not just the forest board transfer lands. This is because information on the return on investment on Washington State forest lands does not segregate the return on investment for each of the various trust lands.

Summary

could not be sustained in perpetuity, this DNR policy prevents consideration of a harvest cycle that optimizes the economic value (by maximizing the present value) of the timber. This study found that by reinvesting the additional revenue resulting from the temporary increase in harvest, while transitioning to a shorter harvest cycle, more money could be earned for *both* current and future trust beneficiaries.

This report recommends that DNR adopt a policy to maximize the present value of the timberlands; to repeal its policy that precludes moving toward a shorter harvest cycle; and to explore options for reinvesting the additional funds generated from the transition from a longer to a shorter harvest cycle.

COMPARISON OF REVENUE PER ACRE WITH OTHER STATES

DNR is a leader among state forestry agencies in generating revenue

In comparison with forested trusts in other states, DNR earns substantially more income than the other states. For example, in 1990, state forest lands in Washington generated \$261 million in revenue. The total amount of timber revenues generated in 14 other states which have forest trust lands totaled less than \$47 million.²

DNR also generates more revenue per acre than any other state. For example, in 1993, Washington earned \$69 per acre on its state forest lands—the highest amount of revenue per acre of any state in the country.³ California was the next highest at \$53 per acre. Oregon and Idaho forest lands generated \$44 and \$20 per acre respectively. In comparison with other state forestry departments, DNR clearly generates a substantial amount of revenue for its beneficiaries.

COMPARISON OF REVENUE PER ACRE WITH GRAYS HARBOR COUNTY

DNR also earns somewhat more revenue per acre than Grays Harbor County earns on its timberlands. For example, between

² Souder and Fairfax, *State Trust Lands*, 1996, p. 60.

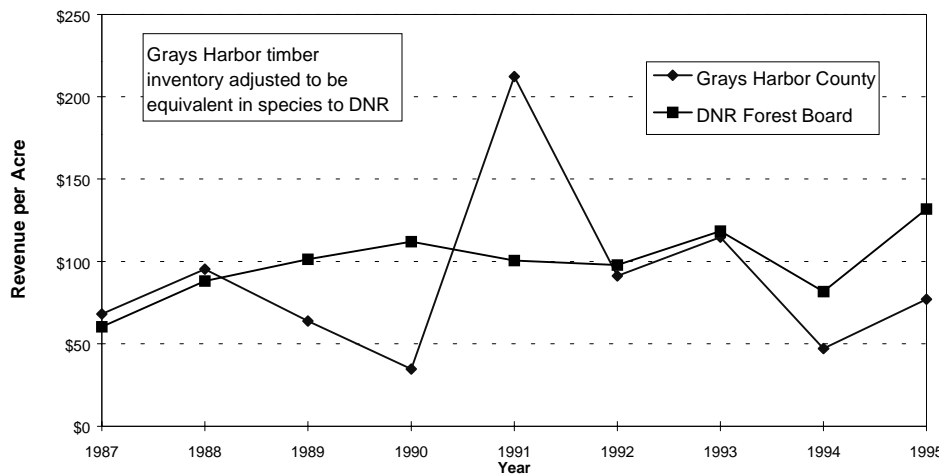
³ Information from the National Association of State Foresters.

1987 and 1995, DNR generated revenues totaling \$892 per acre on the state forest board lands. During the same period, Grays Harbor County generated a total of \$622 per acre on its forest lands. However, Grays Harbor County's forest lands primarily consist of Western Hemlock. DNR's forest lands include a much higher percentage of the more valuable Douglas Fir. After adjusting for the relative value of the timber inventories of DNR and Grays Harbor County,⁴ DNR generated a total of approximately \$80 per acre more than Grays Harbor County over the nine-year period. Exhibit 4 is a comparison of the revenue per acre generated by DNR with the adjusted Grays Harbor County revenue per acre.

**DNR
generates
more revenue
per acre than
Grays Harbor
County**

Exhibit 4

**Comparison of Revenue per Acre Between
Grays Harbor County and DNR Forest Board**



The Grays Harbor County Forestry Department indicated that a large percentage (approximately 25 percent) of Grays Harbor County forest land is wetlands, which are difficult to manage for timber production. Certainly, DNR forest lands include some proportion of wetlands as well. We did not attempt to adjust for all of the factors that could impact the relative productivity of Grays Harbor County forest lands in comparison to DNR forest lands. The lack of adjustment for these factors may limit the usefulness of this comparison.

⁴ We adjusted the revenue per acre generated on Grays Harbor County to reflect an identical timber inventory (by species) to DNR's inventory. We used information from the 1995 Deloitte & Touche Economic Analysis to make this adjustment.

While DNR is clearly a leader in generating revenue among state forestry agencies, such a comparison does not answer the question as to whether DNR is optimizing the economic value of the forest lands.

COMPARISON WITH THE NATIONAL COUNCIL OF REAL ESTATE FIDUCIARIES (NCREIF) TIMBERLAND INDEX

The NCREIF timberland index identifies the return on investment generated on institutionally held private timberland investments throughout the country. The NCREIF index is useful for comparison with DNR because the NCREIF properties are used for the same purposes (i.e., growing and selling trees). Most private forestry companies are involved in other businesses (e.g., manufacturing forest products) in addition to growing trees. These differences make comparisons more difficult.

NCREIF timberland index identifies return on investment for timber properties

Another benefit of comparing DNR to the NCREIF timber index is that the methodology for the calculation of the return on investment generated by the timberlands is quite similar to the methodology used by the consulting firm of Deloitte & Touche in a 1996 economic analysis of DNR’s asset management. In fact, Deloitte & Touche imputed much of the return on investment of DNR timberland based on the NCREIF timber index.⁵

We used the NCREIF western regional index rather than the total NCREIF timberland index which includes timber properties throughout the country. The western regional index consists of over 417,000 acres, about one-half of which are located in Washington State. The remainder of the acres are located in Oregon and California.⁶

⁵ Of the 8.5 percent that Deloitte & Touche calculated to be the return on investment generated by DNR on state forest lands, 2.5 percent was from the income generated by the forest lands, and 6 percent was based on the appreciation component of the NCREIF timberland index. Deloitte & Touche did not calculate the appreciation of the state forest lands, but rather imputed the amount of appreciation based on the appreciation of the NCREIF timberland index.

⁶ According to a senior forest economist from the John Hancock Timber Resources Group, which manages all of the properties comprising the NCREIF western regional timber index.

For the period ending June 30, 1995, the western regional NCREIF properties generated a return on investment of 16.1 percent. The return on investment of DNR timberlands, as calculated by Deloitte & Touche, was 8.5 percent.⁷

Deloitte & Touche calculated the return on investment earned by DNR for 1995. Using the same methodology as Deloitte & Touche, we calculated the return on investment generated by DNR timberlands over the last ten years. We found that the return on investment generated by DNR on state timberlands has lagged behind the NCREIF western regional timber index every year.

Exhibit 5 illustrates the comparison between DNR's performance and the performance of the NCREIF timberland index.⁸

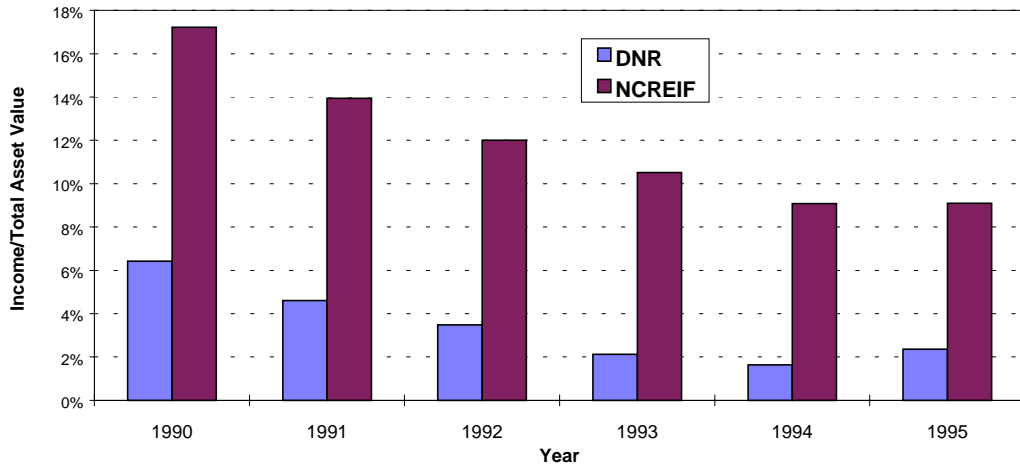
Return on
investment
of WA State
forest lands
lags behind
NCREIF
index

⁷ Differences in the physical characteristics and site productivity of DNR forest land compared to NCREIF properties may explain some of the difference in performance. Information is not available to control or account for all of these differences. The limitations on such comparisons were discussed in a 1994 paper entitled, *The Russell-NCREIF Timberland Index, A Review*, by Dr. Clark Binkley, Dean of the University of British Columbia College of Forestry. Dr. Binkley stated, "The actual returns from any timberland property depend on an enormous array of ecological conditions, local economic factors, and the forestry skills of the property manager. As a result, no small sample of properties can accurately measure the returns that would be expected over such vast regions as the U.S. South or the U.S. Pacific Northwest. However, the data in the Russell-NCREIF Timberland Index do reliably represent the returns that have been possible from generally well-managed, industrial grade timberlands in each region since 1987."

⁸ Exhibit 5 illustrates only the income return on investment comparison between DNR and the NCREIF Timberland Index. The total return on investment calculated by the index includes both a return from income and a return from appreciation. The Deloitte & Touche methodology for calculating DNR's return on investment assumes that the appreciation of DNR timberland to be equivalent to the appreciation of the NCREIF properties. We used the same assumption in calculating DNR's historical return on investment. Therefore, the entire difference between the return on investment earned by DNR in comparison to the NCREIF index is due to differences in the income return on investment. Those differences are illustrated in Exhibit 5.

Exhibit 5

Comparison of Income Return on Investment Between DNR and NCREIF Western Regional Timberland Index



POTENTIAL REASONS FOR DNR’S LOWER PERFORMANCE COMPARED TO NCREIF

We identified two DNR policies which may help to explain DNR’s lower performance in comparison to the NCREIF timberland index.

Harvest Rotation Cycle

DNR has a policy to harvest timber at 60 years of age. However, a review of DNR’s timber inventory indicates that the actual average rotation age could be between 70 and 80 years. That is, DNR has a substantial amount of timber older than age 60. This compares to a private sector rotation age ranging between 40 and 50 years.⁹ Recent information provided by DNR indicates that it will approach a 60-year rotation age in 90 years.

⁹ Annual reports of private timber companies sometimes indicate the harvest rotation cycle. For northwest timberlands, the private sector rotation age appears to be between 40 and 50 years.

The discrepancy between DNR's policy rotation age and the actual rotation age might be the result of DNR's interpretation of and response to environmental requirements. While DNR has a policy to harvest timber at 60 years, not all of the timber can be harvested at 60 years because of requirements of the federal Endangered Species Act. Such restrictions on harvesting could explain why there is a substantial discrepancy between DNR's policy rotation age and its actual rotation age.

DNR harvests timber at older age than private sector

However, private timber companies are also subject to the same federal and state environmental requirements. Later in this chapter we note that DNR holds substantially more timber per acre than private sector timber companies. Since private sector timber companies are subject to the same environmental laws as DNR, DNR's larger timber inventory per acre is explained either by: its economic policies, a more aggressive effort to meet (or exceed) environmental goals than the private sector, and/or attributes of the forests that are not fully comparable. This report considers the impact of DNR economic policies.

Economic Significance of Timber Harvest Cycle

Using present value analysis and economic assumptions and data provided by DNR, we examined the impact of harvest cycle age. Exhibit 6 portrays the impact of harvest age on economic value.

This exhibit compares the present value per acre using a five percent real discount rate for different harvest policies, evaluated from the inception of the harvest cycle (e.g., harvest has just occurred).¹⁰ Assuming that the land has a basic value of \$250 per acre for all alternatives, and using DNR's standard assumptions about future price and cost increases, a 50-year rotation cycle would have the highest present value timber return—\$1583 per acre. On a highest "rate of return" basis, a 40-year rotation age would be slightly better than 50 years (9.3 vs. 8.9 percent). This economic result is consistent with the private sector harvest cycle of between 40 and 50 years.

¹⁰The data used in these calculations concerning land and timber prices and timber yields were provided by DNR. The assumptions used for modeling, such as the 5 percent real discount rate, are DNR's standard economic assumptions for economic modeling purposes.

Exhibit 6

Harvest Cycle Economic Return

Harvest Age	Yield/Acre at Harvest in Boardfeet (BF)	Price Per Thousand Boardfeet (\$/MBF) for Timber of the Specified Age	Total Revenue Per Acre at Specified Harvest Age	Present Value Per Acre Less \$250 for Land	Rate of Return on \$250 Land "Investment"
40	21,955	\$332	\$7,289	\$1,299	9.3%
50	34,509	\$365	\$12,596	\$1,583	8.9%
60	46,955	\$390	\$18,312	\$1,527	8.3%
70	56,138	\$409	\$22,960	\$1,230	7.6%
80	64,636	\$428	\$27,664	\$941	7.0%
90	70,306	\$441	\$31,005	\$644	6.5%
100	74,950	\$451	\$33,802	\$405	6.0%

Present value is maximized with shorter harvest cycle

Non-Declining Even-Flow Policy

The legislature requires DNR to harvest timber on a sustained yield basis. Sustained yield is defined by RCW 79.68.030 to mean “management of the forest to provide harvesting on a continuing basis without major prolonged curtailment or cessation of harvest.” The non-declining even-flow policy is DNR’s interpretation of the statutory requirement to harvest timber on a sustained yield basis. The “even-flow” policy means that, within the 10-year harvest level that is adopted by the Board of Natural Resources, DNR cannot vary the *annual* harvest by more than 25 percent of the average harvest per year. The “non-declining” policy means that DNR cannot harvest more timber in one decade if that level of harvest cannot be maintained in perpetuity.

DNR policy precludes moving to shorter harvest cycle

The purpose of this policy is to provide stable volumes of timber for harvest and to ensure that the volume of timber harvested in the future is not lower than the current harvest volume. Stable harvests are important for trust beneficiaries so that the revenue they receive is predictable. The purpose of non-declining harvest volumes is to ensure equal treatment of current and future trust beneficiaries.

The non-declining even-flow policy impacts the alternatives available for the harvest rotation age policy because it precludes DNR from moving to a shorter rotation age for its timber harvests.

In order to move from a longer to a shorter rotation age, a temporarily higher level of harvest would be required to transition to the shorter rotation age. This higher level of harvest could not be sustained into perpetuity; and therefore, would not be allowed under the non-declining even-flow policy.

Economic Significance of Non-Declining Even-Flow Policy

DNR's justification of the non-declining even-flow policy is that it maintains intergenerational equity. That is, the policy ensures that the future trust beneficiaries are treated equally in comparison to current beneficiaries.

An alternative would be to seek the harvest cycle that meets sustainable yield requirements with the highest present value. This would require: 1) moving to a shorter harvest cycle to maximize present value; and 2) that a portion of the higher total value be reinvested for the benefit of future beneficiaries. Reinvestment of some of the additional current revenue resulting from moving to a shorter harvest cycle would ensure that all generations equally share the economic benefits of the revisions in harvest cycle.

Exhibit 7 illustrates the impact of reducing the harvest rotation cycle from 70 to 50 years on a hypothetical 1.1 million acre forest.

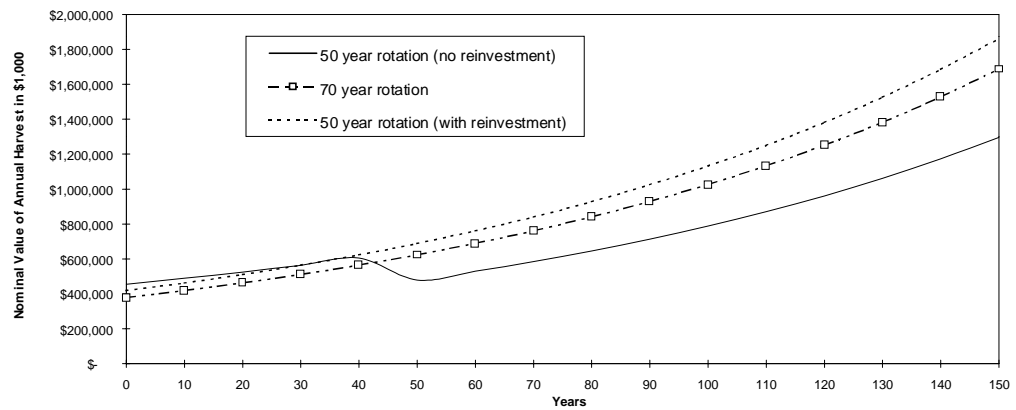
Maximizing present value can result in more money for both current and future beneficiaries

Exhibit 7

**Impact of Changing From 70- to 50-Year Rotation With and Without Reinvestment of Excess Revenue
Nominal Value of Revenue Generated**

Moving to a shorter rotation age results in more revenue in early years . . .

and a portion of the additional revenue can be reinvested to also generate more revenue in later years



This exhibit shows the nominal (not adjusted for inflation) revenue flow of three alternatives: 1) a 70-year rotation age (similar to DNR’s current practice); 2) a transition from 70-year to 50-year rotation age *without* reinvesting the excess proceeds from the temporarily higher harvest level; and 3) a transition from 70-year to 50-year harvest cycle *with* reinvestment of the excess harvest level at a 5 percent real rate of return.¹¹

The impact of the change in harvest level resulting from the change in harvest cycle is illustrated by the transition from a 70- to 50-year rotation age *without* the reinvestment alternative. Because all of the revenue from harvest is immediately distributed to trust beneficiaries and not reinvested, this alternative illustrates the impact on timber harvest relative to maintaining a 70-year rotation age. Exhibit 7 illustrates that with a transition from a 70- to a 50-year harvest cycle, there would be an initial increase in harvest with the eventual transition to a lower level of harvest as illustrated by the 50-year rotation (“no reinvestment” line).

¹¹ This exhibit is intended to illustrate the *relative* difference between a 70-year rotation age and a 50-year rotation age. It is not intended to indicate the *absolute* amount of revenue that would be generated under these alternatives. The actual amount of revenue generated would be substantially less than indicated by the chart on page 14 due to various factors including set-asides for endangered species.

The alternative, illustrating a 50-year harvest *with reinvestment* of the excess from the temporarily higher level of harvest, shows why shorter rotation ages optimize the economic value of the forest, even though long-term harvest is reduced. By reinvesting the excess revenue from the temporary increase in harvest, more money can be provided to *both* current and future beneficiaries of the trusts.

Our assumption is that the excess revenue that is reinvested earns a 5 percent real rate of return, which is DNR's standard economic modeling assumption. The reinvestment of the excess revenue could be made in financial instruments, in additional timberland, or some other investment. We note that, based on the economic assumptions used by DNR as illustrated in Exhibit 7, investments in additional timberland are likely to generate economic returns that are greater than 5 percent. Very conservative financial instruments (such as government bonds) also earn close to a 5 percent real rate of return.

Several alternatives available for reinvestment of revenue

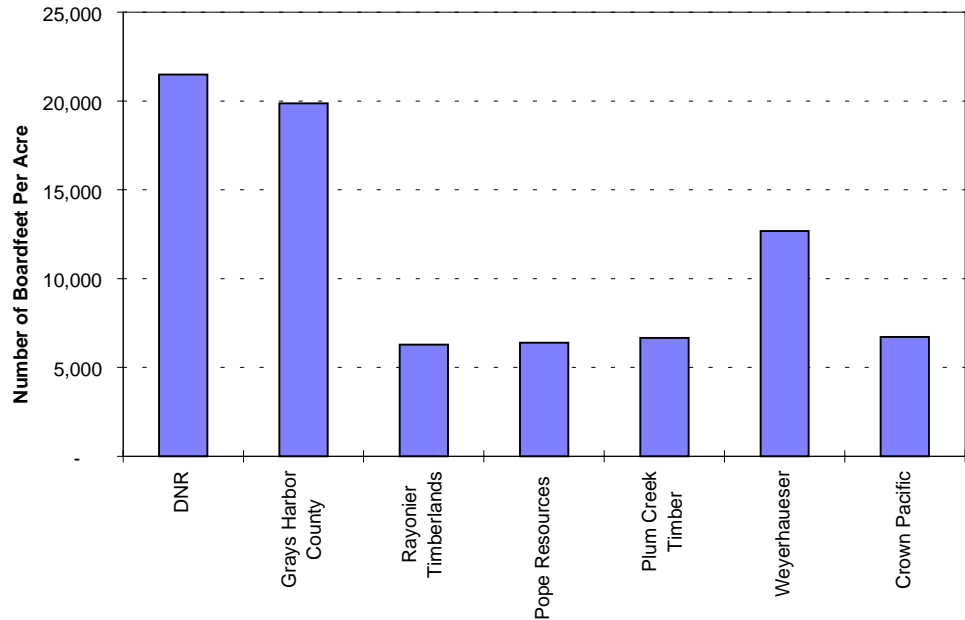
Comparisons of Timber Inventory

DNR's longer harvest cycle should result in a greater timber inventory per acre than private sector timber companies with shorter harvest cycles. This study found that DNR holds from two to three times the amount of timber inventory per acre as several private sector timber companies with timberland in Washington State. Exhibit 8 illustrates the timber inventory per acre of DNR, Grays Harbor County, and several private timber companies.¹²

¹²DNR's timber inventory information provided by DNR. Grays Harbor County's timber inventory information provided by the Grays Harbor County Department of Forestry. Private timber company timber inventories provided in company annual reports, and by an August, 1996, report entitled *Paper & Forest Products Industry Update*, by Ragen MacKenzie Incorporated.

Exhibit 8

Inventory Comparison of Managers of Northwest Timberlands



DNR's timber inventory reflects its longer harvest cycle

Significance of Timber Inventory on Return on Investment Calculation

Because the timber inventory for the properties comprising the NCREIF western regional timberland index is not available, we are unable to make a comparison of timber *inventory* between DNR and the NCREIF properties. We are, however, able to make a comparison of the *value* of DNR timberlands per acre with the NCREIF properties.

In their 1996 economic analysis, Deloitte & Touche valued DNR timber and timberland at \$4,669 per acre. The properties comprising the NCREIF western regional timberland index are valued at approximately \$1,992 per acre. This difference in valuation is consistent with DNR's relatively larger timber inventory per acre. This is particularly true since, according to the Deloitte & Touche analysis, 95 percent of the value of DNR timber and timberland is reflected by the value of just the timber.

The NCREIF timberland index calculates the return on investment as the sum of income plus appreciation from the property divided by the value of the property. Expressed in a mathematical formula, the return on investment is calculated to be: $(\text{Income} + \text{Appreciation}) / \text{Property Value}$. The Deloitte & Touche economic analysis calculated the property value of DNR forest lands. The income portion of the return on investment was calculated by dividing the revenue generated from the forest lands by the calculated property value. Deloitte & Touche did not calculate the appreciation of DNR timber properties. Rather, it assumed the appreciation of DNR timber properties to be equal to the appreciation of the NCREIF properties. Therefore, the entire difference between the return on investment earned by DNR and the NCREIF properties is due to differences in the income return on investment.

In other words, the difference in return on investment between DNR timberlands and the NCREIF properties is totally explained by the difference in the amount of income generated on the properties relative to the value of those properties. With a substantially greater timber inventory per acre, the value of DNR timberlands is substantially higher than NCREIF properties. Because of the higher valuation per acre, DNR would have to generate substantially more revenue per acre in order to match the performance of the NCREIF timberland index. However, given its consistently lower level performance compared to the NCREIF timberland index, DNR is not generating additional revenue per acre proportionate to its additional value (or timber inventory) per acre.

The following recommendations are made in the context of this study of the forest board transfer lands, but DNR's economic policies apply to all of the state forest lands. The recommendations are not specifically directed toward the forest board transfer lands because creating differences in how the lands of different trusts are managed could create operational difficulties for DNR.

Recommendation 4

The Department of Natural Resources should repeal its non-declining even flow harvest policy.

Longer
harvest
cycle helps
to explain
DNR's lower
return on
investment

Recommendation 5

The Department of Natural Resources should adopt a policy to maximize the present value of its timber investments.

Recommendation 6

The Department of Natural Resources should investigate options for investing additional revenues that will be generated as a result of Recommendations 3 and 4 to create additional income for current and future beneficiaries of the trusts.

Recommendation 7

The legislature should provide statutory authority for the Department of Natural Resources to create permanent investment funds on behalf of trust beneficiaries.

TIMBER ARREARAGE

"Arrearage" is the difference between how much was planned to be harvested and actual harvest

RCW 79.68.040 requires DNR to periodically calculate a sustainable harvest level for the state forest lands. A sustainable harvest level is defined as “the volume of timber scheduled for sale from state-owned lands during a planning decade.” At the end of a planning decade, DNR is required to conduct an analysis of alternative courses of actions regarding any “arrearage” of timber harvested during the previous planning decade. The meaning of arrearage is the difference between the sustainable harvest level and the amount of timber actually harvested.¹³ The department is required to offer for sale the arrearage, in addition to the new sustainable harvest level, if the analysis determined that doing so will provide the greatest return to the trusts.

DNR recently calculated a new sustainable harvest level. DNR did

¹³ Actually, the legislative definition of arrearage is somewhat unclear. The interpretation of arrearage that we used in this report is based on the apparent legislative intent. The legislative findings that were included in C 159, Section 1, Laws of 1987 (RCW 79.68.040) appear to make clear that the definition of arrearage is the difference between the sustainable harvest level in a decade and the amount of timber actually harvested (excepting timber that is under contract to be harvested).

not provide a plan for harvesting the arrearage from the past planning decade, nor did it provide an analysis of alternatives which is required by law. Recent correspondence from DNR indicates the department plans to bring this issue to the Board of Natural Resources in the near future.

Recommendation 8

The Department of Natural Resources should conduct the economic analysis required under RCW 79.68.045 to identify alternative courses of action regarding the harvest arrearage.

Statute
requires
economic
analysis of
arrears

CONSIDERATIONS REGARDING POTENTIAL RECONVEYANCE OF FOREST BOARD TRANSFER LANDS

Chapter Six

Legislation which mandated this report listed various items as exemplifying the types of elements to be addressed in this study.¹ Included were a number of specific issues pertaining to the impact of reconveying the transfer lands back to the counties, as well as an assessment of the “best possible methods” to transfer the lands. This chapter reviews those issues as well as others the legislature may wish to keep in mind as it considers the possibility of authorizing reconveyance.

In brief, the overall impact of reconveyance would not appear to be particularly significant for many of the issues reviewed including various economic considerations, forest practices, and fire protection. The impact on the state’s sustained yield calculations would be proportionate to the amount of lands reconveyed.

A number of issues are identified which the legislature may wish to consider if it decides to authorize reconveyance: among them are, setting conditions on the counties’ reacquisition of the lands; the use of the lands after reconveyance; and considerations related to such issues as revenue distribution, public recreation sites, and liability.

LEGISLATIVE AUTHORITY TO ESTABLISH CONDITIONS

In considering the potential impact of reconveying the transfer lands back to the counties, it is important to keep in mind that the

¹ The actual wording is as follows: “The study under section 1 of this act shall include elements *such as* the following:” (italics added for emphasis).

Summary

Legislature has broad discretion over transfer lands

legislature--by its own actions--can significantly influence the extent of the overall impact. The laws governing the lands (both currently and at the time they were originally transferred to the state) are statutory rather than constitutional. As a result, if the legislature were to authorize reconveyance of the lands it would have the legal authority to impose various conditions on such things as the counties' reacquisition of the lands, the use of the lands after reconveyance, and on the distribution of revenues.

If the legislature elected not to impose any such conditions, the impact of reconveyance could be significant. Counties would likely have broad discretion to do what they wish with the lands. Possible examples include: selling the lands, not maintaining them in commercial forest production, and/or not managing them on a sustainable yield basis.

Reacquisition of the Lands by the Counties

We identified two issues concerning reacquisition of the lands that the legislature might wish to consider in any legislation authorizing reconveyance back to the counties.

Potential conditions for reconveyance

- In the original version of SB 5574, which did not pass but would have authorized reconveyance, counties were given the option to reacquire "all or part" of their forest board lands. This option would present an opportunity for counties to reacquire only those lands deemed to be particularly profitable or with mature timber--and leave DNR with management responsibility for a greater proportion of immature timber.

To prevent a potentially inequitable situation, the legislature might wish to consider requiring that a county reacquire *all* of its lands (if it is reacquiring any), or that it reacquire *equal* parts of land with mature and immature timber.

- The original version of SB 5574 did not establish a time frame during which counties could elect to reacquire their transfer lands. Conceivably, a county could leave portions of its lands under DNR control until just before the timber reached maturity, at which time it would opt for reconveyance. To prevent this type of situation, the legislature might wish to establish a time-limited "window of opportunity" that counties

would have for deciding whether or not to reacquire their lands (e.g., one year after the effective date of the act).

Future Use of Lands After Reconveyance

If the legislature so desired, it could establish limitations or conditions on use of the lands by the counties after reconveyance that would be similar to limitations that currently exist. Two major examples include:

- Requiring that the lands remain in forest production; and
- Requiring that the lands be managed on a sustainable yield basis.

Distribution of Revenues

RCW 76.12.030 (2) currently requires that revenues from transfer lands received by the counties be distributed “in the same manner as general taxes are paid and distributed” If legislation authorizing reconveyance were silent on the issue, counties reacquiring their lands may assert that they have the authority to change that distribution. If the legislature wishes that the current distribution formula remain unchanged it should specify this in the authorizing legislation.

Legislature
can set
conditions
over
distribution
of revenue

IMPACT ON SUSTAINED YIELD CALCULATIONS AND INCOME

According to the sustainable harvest calculations released by DNR on October 8, 1996, the transfer lands are projected to account for 239 million boardfeet of timber annually under current management strategies. This equals 36 percent of the total sustainable harvest level over the next decade. Over the next 200 years, the figure is estimated to increase to 38 percent.

DNR calculates sustainable harvest levels for the transfer lands individually by county. If all the lands were reconveyed, the state’s sustained yield calculations would be reduced by the level noted above. If only some of the counties elected to reacquire their lands, the total would be reduced by the amount attributable to just those

Sustained
yield
calculated
individually
by county

Reconveyance could impact Habitat Conservation Plan

counties. As an example, the three counties with the largest individual sustainable yield calculations (Clallam, Skagit, and Snohomish) account for almost half of the transfer lands total.

With respect to income, and based on the same source noted above, revenues from transfer lands at the sustainable harvest levels will account for 35.5 percent of the total DNR timber sale revenue over the next decade.

It should be noted that the above is based on the policies and regulations in effect as of this writing. DNR has informed us that if all the lands were reconveyed, DNR would need to rewrite its proposed Habitat Conservation Plan and that this *could* have the effect of reducing the sustainable harvest on the remaining lands. This issue is discussed in more detail later in this chapter.

ECONOMIC IMPLICATIONS

Overall Impact

The overall economic impact of reconveyance, at least in terms of total harvest levels, would appear to be minimal.

Reconveyance would have little impact on statewide timber harvest

As noted above, DNR’s sustainable harvest calculations project that the transfer lands will account for 239 million boardfeet of timber annually under current management strategies. In 1993 (the latest year for which we have data), the total timber harvest in Washington—including that from private lands—was 4.3 billion boardfeet.² If all the counties reacquired their transfer lands and were able to increase their harvest levels by 25 percent, the additional amount of harvested timber would equal only 60 million boardfeet, or less than 1.4 percent of the 1993 annual total. (Note: This is a hypothetical scenario that is used for purposes of illustration only. It is unknown whether or not counties could actually increase their harvest levels to that extent.)

² PRIVATE TIMBERLANDS: Private Timber Harvests Not Likely to Replace Declining Federal Harvests, United States General Accounting Office, Report GAO/RCED-95-51.

Impact on Remaining Counties If Only Some Counties Reacquire Their Lands

It is argued that if only some of the counties elected to reacquire their lands, particularly those counties with the largest transfer land holdings, it would be unfair and detrimental to the remaining counties.

This argument is based on the fact that management fees collected from transfer lands timber sales have always been intermingled in a common fund—the FDA. Thus, management fees collected from a timber sale in one county have been used (as needed) to fund forest management activities in another county. Over time, such a system could reasonably be expected to balance out, with each county receiving from the fund an amount generally equivalent to the amount it put in. With reconveyance, however, it would be possible that a county could withdraw from the system before it had repaid (through timber sales on lands within that county) an amount equal to what it had received.

In our opinion, the impact on any remaining counties would not be particularly significant. This is so for two reasons. First, there is an existing balance of approximately \$18.9 million in the Forest Development Account. These funds will presumably continue to be available—at least in the short term—to fund necessary forest management activities in the remaining counties. (This issue is discussed in greater detail later in this chapter.) Second, according to data provided by DNR, approximately two-thirds of the management costs associated with managing state forest lands are incurred immediately before and directly after a timber sale (e.g., surveying the sale area, appraising the timber and preparing bid documents before the sale, and replanting after the sale). The costs are also generally proportionate to the individual sale.

Costs are incurred close to when revenue received

IMPACT OF RECONVEYANCE ON DNR AND OTHER TRUSTS MANAGED BY DNR

If all of the forest board transfer lands were reconveyed back to the counties, DNR would lose approximately \$30 million per year in

Reconveyance could result in a loss of economies of scale . . .

management fee revenues. DNR currently spends about \$20 million per year managing forest board transfer lands. This difference between current revenues and expenditures is the reason for the growing FDA fund balance that was discussed in Chapter 3. Therefore, if the legislature approved reconveyance and all of the counties chose to reconvey, the FDA fund balance would not continue to grow.

DNR has stated that reconveyance would negatively impact the counties who did not reconvey, as well as other trust beneficiaries, due to the loss of economies of scale. The fiscal note prepared by DNR for the original version of SB 5574 (which would have authorized reconveyance of the forest board transfer lands) identified approximately \$12 million per year of cost reductions that DNR could make in the event of reconveyance. This reduction is not proportionate to the reduction in workload/acreage. No further analysis was available on the projected impact of reconveyance on DNR's average costs.

Much of the difference between the current \$20 million per year of expenditures on forest board lands and the \$12 million per year of cost reductions identified is attributed by DNR to the loss of economies of scale. There would be some costs that would be difficult for DNR to reduce in the event of a reconveyance of forest board lands. For example, DNR pays about \$2 million per year for rent on the Natural Resources Building. This rent payment would not decrease with a reconveyance of the transfer lands--unless DNR used less space in the building and another tenant was found to occupy the space vacated by DNR.

Chapter 4 of this report illustrated that DNR spends more per acre to manage its forest lands than Grays Harbor County and the private sector timber company. Both Grays Harbor County and the private sector timber company have considerably fewer acres under management than DNR. Both have substantially fewer FTEs per acre than DNR.

. . . further budget analysis is needed

Given this information, there does not seem to be a strong argument for losing economies of scale as a result of reconveyance. Further budget analysis needs to be done. We believe such analysis could show that DNR's costs could be reduced proportionate to the reduction in workload/acreage resulting from reconveyance--without a substantial impact on the services provided to the remaining trust beneficiaries.

IMPACT OF RECONVEYANCE ON THE STATE GENERAL FUND

In its fiscal note for SB 5574, DNR suggested that reconveyance of the forest board transfer lands could result in a revenue loss to the state general fund. This is because the revenues from the lands that are received by the counties are distributed by the counties in the same manner as general (property) tax revenues. Part of these revenues are redistributed to the state general fund by the counties.

It was noted previously that if the forest board lands are reconveyed to the counties, the counties may assert that they could change the way the revenues are distributed. If so, this could result in a loss to the state general fund.

We previously suggested that the legislature may wish to require that the revenues from the lands continue to be distributed in the same manner should it choose to authorize reconveyance. If the legislature required this, there would be no direct impact of reconveyance on the state general fund.

It is possible that a reconveyance of the forest board transfer lands could indirectly result in an *increase* in revenue to the state general fund. If the counties that reconveyed their lands generated greater revenue from those lands than DNR, there would be more money available for distribution. The state general fund currently receives a portion of the forest board transfer land revenues that are distributed to counties. Presuming that the distribution of revenue remained the same after reconveyance, higher revenue generated on the reconveyed lands would result in a revenue increase to the state general fund. Alternatively, if the counties who reconveyed did not generate revenue equivalent to the revenue that would have been earned by DNR, the general fund would receive less money.

FOREST PRACTICE IMPLICATIONS

The state's Forest Practices Act, Chapter 76.09 RCW, generally defines forest practice as "any activity occurring on forest lands that pertains to growing, harvesting or processing timber." Examples of such activities include road and trail construction, planting, thinning, fertilizing, pest suppression, and harvesting.

Legislature
can require
same
distribution
of revenue

Reconveyed land subject to environmental laws and regulations

If forest board transfer lands were reconveyed and required to remain in commercial forest production, they would remain subject to the Forest Practices Act and the regulations promulgated pursuant to that act (just as they are now). Because of this, one would not expect reconveyance to have a significant impact.

DNR staff indicated reconveyance of the lands would have no impact on planting or harvesting of their other lands. They did note, however, that fertilizing might be done less frequently, that there could be less sophisticated planning, and there could also be less monitoring. Presumably, this is due to the potential loss of economies of scale. DNR staff also indicated that overall management flexibility would become more limited if the lands were reconveyed.

Although these are things that *could* happen, it is by no means certain that they would. Further, it would be extremely difficult to quantify the impact of such eventualities, particularly as they relate to such issues as planning and monitoring.

IMPACT ON RECREATION AND PUBLIC ACCESS

General Public Access

The transfer lands, like most of DNR's forest lands, are generally open and accessible to the public, although there are differing levels of access permitted. For example, some areas are gated to prevent access by motorized vehicles; while most other areas are open for activities ranging from hiking, to hunting, to berry and mushroom picking. There are also over 213 miles of recreational trails on the transfer lands that are open to hikers and bikers.

If legislation authorizing reconveyance were silent on the issue, counties that reacquired their lands would likely have the authority to limit such access. As with other issues, however, that possibility is one that the legislature could address by establishing conditions in the authorizing legislation; in this case, by requiring that the lands, or some portion, remain open for public access.

There are, however, at least two points the legislature might wish to consider before setting such conditions. First, limiting public access is not something that county officials would be likely to do without

Legislature can require public access be maintained

due consideration since it would be the residents of their own county that would be most directly affected. Second, an argument could be advanced that any entity with land ownership and management responsibility needs to have general authority to govern the day-to-day use of the land. DNR states, for example, that there is an increased management cost associated with keeping the lands open for recreational use (e.g., because of vandalism and liability issues).

Specific Recreational Sites

DNR has a total of 33 “formal” recreation sites (e.g., camp sites and off-road vehicle facilities) located on the transfer lands. This accounts for 31 percent of the 107 total recreation sites that DNR has on all of its lands in the western counties.

Combined, the 33 transfer lands sites total approximately 318 acres and individually range in size from 0.5 to 30 acres. Sixteen sites have campsites (158 campsites total). In terms of a disproportionate impact on recreational activities on these sites, the hardest hit would be facilities for motorcycles and off-road vehicles. Sixteen of DNR’s 23 sites for these activities (70 percent) are located on transfer lands.

By acreage, these sites account for less than one-tenth of 1 percent of the total amount of transfer lands. Presumably, the legislature, if it were so inclined, would have the authority to exclude them from any reconveyance option. Alternatively, it could require the counties to continue their operation after reconveyance.

STATUS OF LEASES AND OTHER AGREEMENTS

Leases and Other General Agreements

DNR has over 1,500 leases or agreements currently in effect that involve the transfer lands. Over 80 percent are right-of-way agreements. Other types of agreements include leases for communication sites, oil and gas sites, material sales (e.g., gravel), and grazing and agricultural leases.

Legislature
has options
for retaining
recreational
sites

Contractual obligations would transfer to counties

DNR does not—as a matter of practice—include nonassignability clauses in its contracts. As a result, and barring any other contractual provisions to the contrary, these agreements would remain in effect and automatically transfer to the counties upon reconveyance of the lands. According to JLARC’s Assistant Attorney General, it is unlikely that the courts would allow the legislature to nullify agreements entered into by DNR with respect to the transfer lands.³

The above can be thought of as contractual “obligations” related to the transfer lands. In many cases, the state also has contractual “rights” with respect to these lands (i.e., rights such as easements) that adjoining landowners have contractually extended to the state. As in the case above, barring contractual provisions to the contrary, it is likely that most of these rights would transfer to the counties upon reconveyance. In the event contractual restrictions did exist, it would be necessary for the counties to renegotiate such agreements in order to take advantage of the same rights the state currently enjoys.

Timber Sales

Timber sales contracts would remain in effect

Similar to the above, timber sales that had been contracted for prior to reconveyance would remain in effect after transfer had occurred. This would be the case *even if* the timber had not yet been harvested. In this event, DNR would remain entitled to its share of the sale proceeds (i.e., the 25 percent management fee) at such time as the timber was eventually harvested. If it so desired, however, the legislature would have the option of transferring the state’s rights to such contracts so that the proceeds went to the county in which the lands were located.

FIRE PROTECTION

Reconveying the transfer lands back to the counties would likely have minimal *long-term* impact in the area of fire protection. Irrespective of ownership, DNR has “direct charge of and supervision of all matters pertaining to the forest fire service of the state” (RCW 76.04.015 (2)). Thus, DNR would continue to have fire protection authority and responsibility for the transfer lands even if they were transferred back to the counties.

³ A provision was included in the original version of SB 5574 which would have voided all “pre-existing agreements pertaining to these lands.”

Similarly, there would be no loss of fire protection revenue since all forest owners are assessed fire protection fees. Transferring the lands back to the counties would simply mean that rather than charging the fees against the FDA, DNR would assess the same fee rate on the reconveying counties.

DNR has indicated that reconveyance of *all* the transfer lands could result in the loss of up to 70 trained DNR staff positions, and that this would result in a *temporary* period of diminished fire fighting expertise as well as additional costs for training new personnel. This may well be a legitimate concern.

We note, however, that the 70 positions cited by DNR represent only 20 percent of its total number of trained fire-suppression personnel. Further, according to DNR staff, the affected positions would likely run the gamut of fire-fighting experience; from entry level, newly trained employees to the most senior and highly trained personnel. Presumably, the impact on its fire fighting capability – as well as its training costs – could be lessened somewhat if DNR focused its personnel reduction actions on those employees with the least experience.

We also note that DNR does not rely solely on its own employees for fighting fires. Consequently, a loss of employees may not directly translate into a proportional loss of available fire fighting personnel. Particularly on a temporary or interim basis, some employees who lost their jobs as a result of reconveyance, could continue to be available on a contractual basis.

CORRECTION CAMPS

The Department of Corrections (DOC) operates three adult corrections centers (Larch, Cedar Creek, and Olympic) that have, as part of their correctional programming, “work crews” that work on DNR lands. The Juvenile Rehabilitation Administration (JRA) within the Department of Social and Health Services (DSHS) operates three youth camps (Nasalle, Mission Creek, and Indian Ridge) that have similar crews. Although the facilities are operated by DOC and JRA respectively, the work crew component is carried out under the guidance and supervision of DNR personnel.

Reconveyance
would not
impact fire
protection
revenue

Few
corrections
camps
impacted
by
reconveyance

Based on our review of maps provided by DNR, reconveyance of the transfer lands would not appear to present a major problem for any of the adult facilities or Nasalle Youth Camp. Those facilities are located in areas where their proximity to the other DNR lands (i.e., federal grant state forest lands) appears to be equal to or greater than, their proximity to transfer lands. In other words, if the transfer lands were no longer available to them as work sites, it would seem that they could switch their efforts to other DNR lands.

Reconveyance could, however, pose problems for Mission Creek Youth Camp in northeastern Mason County and Indian Ridge Youth Camp in northwestern Snohomish County. The substantial majority of DNR-managed lands that appear to be within a reasonable proximity to those camps are transfer lands. Therefore, a reconveyance of the transfer lands could impact the existing programs at these facilities.

Alternatives available for corrections camps that may be impacted

When we discussed this with JRA staff, they indicated that if they were unable to continue their current DNR work program, they would likely be able to develop some other type of work training program to replace it. It is also possible that the counties would wish to continue the existing programs on their reconveyed lands. Thus the overall impact on these programs would not appear to be particularly negative.

DNR staff have indicated, however, that the camps do provide an important source of support for fire suppression activities, and that alternatives to the camp crews could result in some undefined amount of increased costs.

Counties not entitled to share of management fund balance

FOREST DEVELOPMENT ACCOUNT FUND BALANCE

The Forest Development Account (FDA) is funded primarily through the management fees imposed by DNR for administration, reforestation, and other management of the transfer lands. In a 1992 Opinion, the Attorney General concluded that these moneys do not constitute trust moneys. Therefore, counties would likely have no legal claim to any of the fund balance if they were to reacquire their transfer lands. Chapter 3 of this report discusses *discretionary* legislative options for disposition of the FDA fund balance.

HABITAT CONSERVATION PLAN

In comments dated October 25, 1996, made in response to an initial draft of this report, DNR indicated that its proposed Habitat Conservation Plan (HCP) would have to be re-written if the transfer lands were reconveyed, and that this would have two major ramifications: 1) it would be “a time consuming and expensive process, with the costs borne by the remaining trust beneficiaries,” and 2) re-writing the plan “for a smaller land base could reduce the sustainable harvest on the remaining trust lands.” This was the first time DNR had indicated these concerns to us, despite the fact that our study began in mid-February.

We met with DNR staff to discuss, in broad terms, why it would be necessary to re-write the HCP if the transfer lands were reconveyed. A second meeting we had scheduled for the purpose of discussing the *specific impact* of reconveyance was eventually cancelled when DNR informed us that they would be unable to provide the information we were seeking, specifically, their best estimate as to:

- The total number of staff months, and cost, that would be required to re-write and renegotiate the HCP; and
- The specific impact on sustained harvest levels on remaining trust lands, based on a hypothetical, “worst case scenario.”

As a result, we are unable to comment on what the impact might be in these areas *if*, in fact, the Habitat Conservation Plan would have to be re-written.

As to whether it actually would be necessary to re-write the HCP, the answer depends both on how much of the transfer lands were reconveyed, and which particular lands were reconveyed. The draft HCP Implementation Agreement stipulates that, in the event lands initially covered under the agreement are disposed of by DNR, the HCP will have to be amended if the “cumulative impact of the land disposition would have a significant adverse effect” on different affected species.

DNR staff indicate that reconveyance of *all* the transfer lands would almost certainly require a re-write of the HCP, simply because of magnitude — in total, transfer lands account for roughly 30 percent of the entire area covered by the HCP. If less than all of the lands were reconveyed, the need for re-writing the HCP would depend on the particular lands in questions. For example, nearly one-fourth of the transfer lands (124,000 acres) have been designated in the HCP as being "spotted owl habitat." If substantial amounts of these lands were reconveyed, a re-write of the HCP could be likely. DNR staff indicated that this is a particular concern for transfer lands located in three specific counties.

In sum, without knowing which particular lands might be reconveyed, it is impossible to predict whether the HCP would have to be re-written.

As a final observation, we note that the prospect of reconveyance has been at least a possibility since the 1995 legislative session, when this study was mandated. Given its concern over the potential impact of reconveyance on the HCP, we cannot help but wonder why DNR would not have engaged in any "contingency planning" in this area.

OLYMPIC EXPERIMENTAL STATE FOREST

In the same written comments noted in the previous sub-section (those dated October 26, 1996), DNR raised the issue of what impact reconveyance would have on the Olympic Experimental State Forest (OESF). This is a 264,000 acre area on the western Olympic Peninsula that was established approximately six years ago to serve as a testing ground for innovative forest management practices. Approximately 43,000 acres of the OESF (16 percent) are transfer lands. All but 158 of these acres are located in Clallam County.

According to DNR staff, the OESF has never quite gotten past the "vision stage" in terms of fulfilling its original purpose. The director of the Olympic Natural Resource Center characterized the OESF as having been put into a form of "suspended animation" when the spotted owl was placed on the endangered species list in 1992. The

director also said there was nothing particularly unique about the Clallam County lands.

Because of the proportionately small amount of land involved, the fact that they aren't unique, and the fact that the forest has not been fully operational in the way originally intended, reconveyance would not have a particularly significant impact on the OESF *per se*. However, the OESF has been designated as one of the major planning areas for the Habitat Conservation Plan. Because of this, reconveyance could lead to a requirement to re-write the HCP.

METHODS AND PROCEDURES FOR TRANSFERRING LANDS

One of the items identified in 2SSB 5574 as being appropriate to address in this study was an examination of "the best possible methods and procedures to transfer board lands to the counties."

Based on conversations with legislative staff, the intent of this language was probably to consider the basic legal issues concerning transfer (e.g., deeds, timing, etc.), as well as identifying issues the legislature might wish to consider addressing in any legislation authorizing reconveyance.

Method of Transfer

A question was raised as to whether it would be necessary to transfer the lands back to the counties by deed, or whether the legislature could simply transfer them by legislation.

Current statute (RCW 64.04.010) requires that "[e]very conveyance of real estate, or any interest therein . . . shall be by deed." Because this provision is statutory rather than constitutional, the legislature could presumably override the existing statute in order to provide for direct transfer through legislation. It would seem impracticable to do so however. Among other things, title to real property is determined by formally recorded documents. This system requires the type of information that is currently required as part of a deed (e.g., legal description).

Transfer to
counties
best accom-
plished by
quitclaim
deed

We note that both RCW 76.12.067 and .070, which currently authorize reconveyance of transfer lands back to the counties in certain circumstances (e.g., for parks), specify that the transfer be “by quitclaim deed.”

Timing and Issues of Liability

The original version of SB 5574 (which did not pass but would have authorized reconveyance) specified that the counties would regain administrative control of the lands sixty days after notifying DNR of their plans to reacquire them.

State may still be liable during transition

Actual legal transfer of the lands would not occur until the applicable deeds had been formally transferred. Issues of potential liability could be raised in the event property damage or injury occurred on the lands while it was under the administrative control of one entity, but the legal ownership of another.

The legislature could include a provision that would make counties liable for all damage claims upon the counties’ assumption of administrative control—even if actual transfer had not yet occurred. JLARC’s Assistant Attorney General has advised us, however, that even though such language might well decrease the state’s liability, it would not necessarily eliminate legal costs to the state since plaintiffs might nonetheless sue the state as owner.

Issues for Legislative Consideration

There are a number of issues we feel the legislature may wish to consider if it decides to authorize reconveyance. These issues have been referenced throughout this chapter. Among them are: setting conditions of the counties’ reacquisition of the lands; the use of the lands after reconveyance; and considerations related to such issues as revenue distribution, public recreation sites, and liability.

Recommendation 9

If the legislature decides to authorize reconveyance, it is recommended that it give consideration to the various issues identified in this report, including:

- Time limit for counties to choose reconveyance
- Distribution of revenue from reconveyed lands
- Setting limitations on the use of the land
- Maintaining public access
- Financial impact on other Department of Natural Resources trust beneficiaries
- Method of transferring ownership

OTHER STUDY ISSUES

Chapter Seven

The scope of this study included an assessment of the policies and economic elements of DNR’s management of the forest board transfer lands and a review of issues related to the potential reconveyance of the forest board lands back to the counties. Our findings regarding these issues are presented in other chapters of the report.

While conducting this study, we identified issues with some of the information that was provided for this study. This chapter discusses these issues.

LACK OF MEANINGFUL PERFORMANCE INFORMATION

Prior to 1996, DNR had not provided information to the beneficiaries of the trusts concerning its economic performance in managing the trusts. Trust beneficiaries have an interest in obtaining information concerning the performance of the trustee. RCW 79.01.095, which passed in 1969, requires DNR to conduct periodic economic analyses of the trust lands “where the nature of the trust makes maximization of economic return to the beneficiaries of income from state lands the prime objective.”

Until the completion of a 1996 economic analysis conducted on behalf of DNR by the consulting firm Deloitte & Touche, we had seen no evidence that DNR had generated information regarding its performance to the beneficiaries of the trusts. The Deloitte & Touche economic analysis estimates the value of all of DNR’s assets—including the state forest lands. It also identifies the return on investment generated on these assets during fiscal year 1995.

Overview

Economic performance information not complete

While the Deloitte & Touche economic analysis provides information concerning DNR performance that had not been previously available, there are still inadequacies in the information provided. For example, the Deloitte & Touche report estimated the return on investment generated on DNR forest lands in 1995, but it did not provide a context by comparing DNR's performance to other timber managers.

Representatives of Deloitte & Touche did make such a comparison between DNR and the NCREIF timberland index (the same index that was used for comparison purposes in this report) in their *oral* presentation of their report to the Board of Natural Resources. However, the *written* report did not include a comparison of DNR's performance with other timber managers.

Recommendation 10

The Department of Natural Resources should regularly make information concerning its performance in comparison to other comparable asset managers available to the trust beneficiaries, the Board of Natural Resources, and the legislature.

DELOITTE & TOUCHE METHODOLOGY NOT AVAILABLE

DNR
contracted
for
economic
analysis . . .

In our review of the Deloitte & Touche report, we had several questions regarding the methodology that was used. Although the Deloitte & Touche report did provide a description of the methodology used in the economic analysis, the description did not provide sufficient information to fully understand or recreate the methodology, assumptions, or calculations that were used to arrive at a valuation of DNR's assets. This information was important for this study because the asset value forms the basis for the return on investment comparisons that were made in Chapter 5.

We met with DNR staff to discuss our questions concerning the methodology and assumptions that were used in the Deloitte & Touche analysis, but they were unable to answer many of our questions. In a letter to JLARC staff, DNR stated that its \$350,000 contract with Deloitte & Touche did not require the consultant "to provide the underlying detail, calculations, or a report that described in detail their methodologies and procedures."

We requested that Deloitte & Touche provide us with more details concerning the methodology that was used. Deloitte & Touche met with JLARC staff and discussed the overall methodology used in the report. However, they did not provide full access to the methodology and assumptions used in the analysis.

Deloitte & Touche indicated that it would provide us with more details concerning the study methodology if JLARC paid for this under a separate contract. The JLARC executive committee reasoned that paying additional state funds for the methodology details--which were used by the consultant under a previous contract with a state agency--would be an inappropriate use of state resources.

It is unusual for state agencies to contract for an analytic product from a consultant without obtaining at least access to the supporting details, assumptions, and calculations of the methodology used. The prototype Office of Financial Management personal service contract includes language stipulating that such information generated under a contract becomes the property of the state. The DNR contract with Deloitte & Touche included this language, but the state's ownership was subject to another contractual provision that, according to DNR and Deloitte & Touche, was intended to mean that DNR did not own and thus did not have access to the methodology used by Deloitte & Touche in the economic analysis.

Recommendation 11

The legislature should amend RCW 39.29 (personal service contracting law) to require state agencies contracting for personal services to obtain all information generated under the state contract, or access thereof.

. . . but
study
methodology
not
available

SCOPE AND OBJECTIVES

Appendix 1

SCOPE

Pursuant to statutory directive, this study will examine the Department of Natural Resources' (DNR) management of state Forest Board Transfer Lands (which are held and managed in trust by the state on behalf of 21 counties). The study will examine the policies and economic elements of the management of the transfer lands, and will include an examination of issues related to the possible reconveyance of those lands back to the counties. Further, the study will include a review of the repurchase of transferred timber cutting rights.

OBJECTIVES

1. Assess issues related to the potential reconveyance of the transfer lands back to the counties, including:
 - The impact of removal of the lands on the state's sustained yield calculations;
 - The economic and forest practice implications of removing the forest board lands;
 - The effects of a transfer on public access, recreation and the management of other public and private lands; and
 - The best methods for transfer of the lands to the counties.
2. Quantify DNR's costs of managing the transfer lands and determine whether the transfer lands subsidize, or are subsidized by, other DNR operations.
3. Identify and quantify the role of DNR policies on the management of the transfer lands.
4. Compare the efficiency and effectiveness of DNR's management of the transfer lands with Gray's Harbor County, and other private and public sector timber managers.
5. Identify DNR's legal responsibilities in managing the transfer lands and assess whether DNR is fulfilling its legal responsibilities.
6. Assess whether DNR uses best forest management practices in the management of the transfer lands.
7. Review the potential repurchase of transferred timber cutting rights on forest board land.

AGENCY RESPONSE AND AUDITOR'S COMMENTS

Appendix 2

- Department of Natural Resources
- Auditor's Comments on Agency Response

NOTE: The Department of Natural Resources provided a lengthy set of detailed comments on this study. They are not reproduced here but are available on request from the office of the Joint Legislative Audit and Review Committee.



WASHINGTON STATE DEPARTMENT OF
Natural Resources

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DEC 02 1996

JLARC
JOINT LEGISLATIVE AUDIT AND REVIEW COMMITTEE
COMMISSIONERS OF PUBLIC LANDS
KALEEN COTTINGHAM
Supervisor

December 2, 1996

Cheryle A. Broom
Joint Legislative Audit and Review Committee
506 East 16
PO Box 40910
Olympia, WA 98504-0910

Dear Cheryle,

Enclosed are the Department of Natural Resources's final comments on the Forest Board Transfer Land Preliminary Report. If the final report differs significantly from the preliminary report, we would like an opportunity to revise our comments in accordance with those changes.

We appreciate the challenges the JLARC staff faced to gain an understanding of the history of the Forest Board Transfer lands and complexities of forest land management. We also appreciated the opportunity to review the initial draft report and submit informal comments to your staff on that draft.

We have received a number of inquiries from legislators interested in DNR's response to the JLARC report. Because of these inquiries, we hope that our comments in their entirety will be included with the Final Forest Board Transfer Lands Report. We worked to make our comments as brief and succinct as possible as requested by your staff.

Please call me if you have any questions about our responses

Sincerely,

Kaleen Cottingham
Department Supervisor

KCI:dh

c: Committee Members

Auditor's Comments on the Department of Natural Resource's Response to the Preliminary Report of the Forest Board Transfer Land Study

The Department of Natural Resources did not follow JLARC's standard format for submitting an agency response to the report in which agencies are requested to indicate whether they concur, partially concur, or do not concur with the report recommendations. Following is a listing of each recommendation, a synopsis of the Department of Natural Resources' response and comments to the recommendation, and the auditors' comment on the response.

Recommendation 1: The legislature should consider establishing relative priorities for the Department of Natural Resources in managing the forest board transfer lands and identifying the primary beneficiaries of the trust.

Agency Position and Comments: The department does not believe more legislative direction is needed. Statute and case law shows that there is ample information to answer the question of who are the beneficiaries of the forest board transfer lands, and that priorities for management already exist.

Auditor's Comment: We agree that state statute identifies two sets of beneficiaries of the forest board transfer lands (the state as a whole and the recipients of the revenue from the lands). However, it is not clear who the *primary* beneficiaries of the trust are. Also, while the department suggests that priorities for managing the lands have been established by statute, there is no identification in statute of the relative priorities for the different purposes of the trust.

Recommendation 2: The legislature should consider authorizing the Forest Development Account to receive interest earnings accruing to the management fund.

Agency Position and Comments: The department agrees with this recommendation.

Auditor's Comment: No comment.

Recommendation 3: The Board of Natural Resources should reduce the Forest Development Account management fee to 22 percent.

Agency Position and Comments: The Board of Natural Resources is acting on this issue. A recommendation is not necessary.

Auditor's Comment: The fact that the Board of Natural Resources is considering different options for addressing the excess Forest Development Account fund balance does not mean that a recommendation by JLARC to the board is not necessary. Adoption of this recommendation would clarify that JLARC prefers the option of reducing the management fee percentage.

Recommendation 4: The Department of Natural Resources should repeal its non-declining even-flow harvest policy.

Agency Position and Comments: The department disagrees with this recommendation. The non-declining even-flow policy assures that projected harvest in future decades will be at least as great as that projected for the current planning decade.

Auditor's Comment: We agree that the non-declining even-flow policy assures that future harvests will be at least as great as that projected for the current planning decade. In fact, the department's harvest projections show that harvest will be *greater* in the future than the current harvest level. However, as explained in the report, this results in a failure to optimize the economic value of the state forest lands. Also, since future harvest levels are projected to be greater than current harvest levels, in addition to not optimizing the economic value of the forest lands, the department's policy could be seen as favoring future trust beneficiaries at the expense of current trust beneficiaries.

Recommendation 5: The Department of Natural Resources should adopt a policy to maximize the present value of its timber investments.

Agency Position and Comments: The department disagrees with this recommendation. Using maximization of present value as a criteria for scheduling harvest would result in an increase of current harvest over the sustainable harvest level resulting in a prolonged curtailment or cessation of harvest in violation of RCW 79.68.030.

Auditor's Comment: Maximizing present value of the timber would entail moving to a shorter harvest age. While harvest would be temporarily increased above current levels during the transition to the shorter rotation age, a new sustainable harvest level would be reached at the shorter rotation age with no prolonged cessation or curtailment in harvest. Maximizing present value would also result in the ability to generate more revenue for *both* current and future trust beneficiaries.

Recommendation 6: The Department of Natural Resources should investigate options for investing additional revenues that will be generated as a result of recommendations 3 and 4 to create additional income for current and future beneficiaries of the trusts.

Agency Position and Comments: This investigation is not needed. The distribution of revenues is controlled by state statute and could only be changed by the legislature.

Auditor's Comment: We acknowledge that the distribution can only be changed by the legislature, which is addressed by Recommendation 7 of this report. However, the investigation of options by the department for investing the additional revenues *is* needed so that the department is able to implement a legislative change.

Recommendation 7: The legislature should provide statutory authority for the Department of Natural Resources to create permanent investment funds on behalf of trust beneficiaries.

Agency Position and Comments: Such authority is not needed by the department. Harvesting timber at younger ages is inconsistent with legislative direction and statutory trust directive for the management of these trust lands. The current practice to manage for longer rotations adds value through both increased volume and quality, and therefore, a higher price is received at harvest. The theoretical marginal increase in present value of harvesting at a 50-year rather than a 60-year rotation is only about 3.7 percent, and this does not account for interest rate risk or the cost of managing an investment program.

Auditor's Comment: There is no legislative direction or statutory trust directive that precludes the department from moving to the rotation cycle that maximizes the economic value of its timber investments. The department indicates that the increase in present value resulting from moving from a 60-to a 50-year rotation is only about 3.7 percent. Apparently, the purpose for pointing this out is to suggest that the department is currently close to maximizing the present value of state timberlands because its stated policy is to harvest timber at age 60. In practice, the current average age of harvest is over age 80, and the department's projections indicate that it will not approach a 60-year rotation cycle for another 90 years. Expediently moving to a 50-year rotation age would substantially increase the amount of revenue available to current and future trust beneficiaries in comparison to the department's harvest projections.

Recommendation 8: The Department of Natural Resources should conduct the economic analysis required under RCW 79.68.045 to identify alternative courses of action regarding the harvest arrearage.

Agency Position and Comments: The department disagrees with this recommendation. No harvest arrearage exists from prior decade harvest plans because the department used its entire timber inventory to calculate the new sustainable harvest level.

Auditor's Comment: As noted in the report, an arrearage is the difference between the amount of timber planned to be cut over a 10-year period and the amount actually cut. The department cut substantially less timber over the last 10-year period than the amount that had been planned. An arrearage as defined by statute does not disappear simply because the department used its entire timber inventory (including the arrearage) to calculate the sustainable harvest level for the next decade. DNR is required by RCW 79.68.045 to conduct an analysis of alternatives to determine a course of action regarding the arrearage. Based on the department's response, it apparently did not conform with statutory requirements to 1) perform an economic analysis to determine how to provide the greatest return to the trusts; or 2) immediately offer the arrearage for sale if the economic analysis determined that this was in the best interest of the trust.

Recommendation 9: If the legislature decides to authorize reconveyance, it is recommended that it give consideration to the various issues identified in the report.

Agency Position and Comments: The department agrees with this recommendation.

Auditor's Comment: No comment.

Recommendation 10: The Department of Natural Resources should regularly make information concerning its performance in comparison to other comparable asset managers available to the trust beneficiaries, the Board of Natural Resources, and the legislature.

Agency Position and Comment: The department strives to make the most relevant information available to all interested parties. The recommendation assumes that performance of other asset managers is comparable. Management by private firms is not comparable as they operate under a different set of objectives from those applicable to the department. Other states operate under different direction and constraints which would make such comparison complicated, expensive and of low validity.

Auditor's Comment: Providing information regarding its relative performance in comparison to other comparable asset managers would improve the department's accountability to the trust beneficiaries, the Board of Natural Resources, and the legislature. The department's response appears to suggest that it does not wish to be held accountable for its performance.

Recommendation 11: The legislature should amend RCW 39.29 (personal service contracting law) to require state agencies contracting for personal services to obtain all information generated under the state contract, or access thereof.

Agency Position and Comment: The department takes no position on this recommendation. The department does not believe that Deloitte & Touche LLP would have competed for this contract with such a constraint, thereby, limiting access to world renowned experts.

Auditor's Comment: As pointed out in the report, it is routine (and suggested in OFM guidelines) for state agencies to obtain full access to the methodology and assumptions used by consultants in analytical work conducted on behalf on the agency.