

Status of Common School Forest Land Management



"STEWARDSHIP IN FORESTRY"

September 2005

Table of Contents

Introduction	1
Financial and Asset Management	2
Financial Administration and Reporting.....	2
Elliott State Forest Cost/Benefit Analysis	2
Long-Term Market Trends	3
Common School Forest Land Timber Sales	7
Timber Sales Sold During Fiscal Year 2005.....	7
Summary of Active Timber Sales.....	7
Planned Timber Sales	12
Reforestation and Intensive Management	12
Public Involvement.....	12
Forest Management Activities	15
Coos District / Elliott State Forest	15
NW and SW Oregon State Forests.....	19
Klamath-Lake District.....	21
Research and Monitoring	22
Updates of Selected Ongoing Research and Monitoring Initiatives.....	23
Planned Research and Monitoring.....	27
Stand Level Inventory	28
 Tables	
Table 1 Revenue and Costs (Dollars and Percentages) from CSFLs.....	4
Table 2 Value and Volume from CSFL FY 1995 – 2005	5
Table 3 Hardwood Volume and Value Information	6
Table 4 CSFL Timber Sales Sold in FY 2005.....	8
Table 5 Active Timber Sale Volume and Value from CSFL FY 2005	9
Table 6 Timber Sale Modifications and Contracts and Projects Extensions CSF FY 2005	10
Table 7 Planned Sales on CSFLs FY 2006.....	13
Table 8 Intensive Management Activities on CSFLs FY 2005.....	14
Table 9 SLI Accomplishments May 2002 through June 2005.....	28
Table 10 SLI Projected through May 2006.....	29



Introduction

The Oregon Department of Forestry (ODF) manages the Common School Forest Lands (CSFL) under agreement with the State Land Board (SLB) and the Department of State Lands (DSL). CSFLs are trust lands that were granted by the United States to the State of Oregon upon admission to the union for the use of schools. The primary obligation of the State Land Board as trustee is to manage and protect these lands for the maximum, long-term benefit of public schools, consistent with sound stewardship, conservation, and business principles. Revenues from these lands are dedicated to the State's Common School Fund (CSF).

The Oregon Department of Forestry manages a total of 124,000 acres of Common School Land under the agreement. These lands are located in several state forests throughout western Oregon and in Klamath County, with the largest block being on the Elliott State Forest in Coos and Douglas Counties. Outside of the Elliott, most of these lands are intermingled with Board of Forestry lands.

The Oregon Department of Forestry actively manages these lands for sustainable timber harvest and resource protection in a manner that is consistent with the management agreement and with the principles and strategies of Department of State Land's Asset Management Plan. The primary standards of management on CSFL is generation of the greatest amount of income for the corpus of the Common School Fund over the long term, consistent with sound techniques of land and timber management and the greatest benefit for the people of Oregon. The key management prescription from the Asset Management Plan applicable to CSFL management is to produce a sustainable, even flow of timber harvest.

This report highlights key management activities and issues during Fiscal Year (FY) 2005. Other information included in this report specifically discusses volume, value and methods of timber sales, reforestation and intensive management accomplishments and costs, estimated and actual fiscal year operating costs, sold sale revenues, contract modifications, timber sale planning, and other information affecting the management of CSFL.

Financial and Asset Management

During fiscal year 2005 a revenue transfer of \$19 million dollars was made to the Department of State Lands for the Common School Fund. ODF charges to the Common School Fund during this fiscal year, which included overall program and timber sale administration, long-range forest management planning, intensive management investments, and fund transfers, were \$5 million. Project costs associated with active recovery sales (work accomplished in conjunction with timber sales on roads, bridges, culverts, etc.) totaled \$652,500.

The Oregon Department of Forestry Protection from Fire program billed the Department of State Lands three separate invoices for fire patrol assessment. The invoice amounts were \$6,205 for Coos Slough lands, \$190,768 for State Land Board lands and \$24,728 for DSL managed lands.

Table 1 on **page 4** details revenue and cost data for fiscal years 1998 through 2005.

Table 2 on **page 5** shows gross timber sale value for the last ten years. This table also includes harvest volume and average stumpage price.

Financial Administration and Reporting

The current Common School Forest Land Management Agreement between ODF and DSL provides the basis for operational and administrative guidance for the management of CSF lands. A revised Management Agreement was signed in August, 2005. The goal of the Agreement is to provide updated terms that will give guidance to ODF so that adequate financial processes are followed and reports are provided to DSL, and assurance that those processes and reports are sufficient to support DSL's fiduciary responsibilities for Common School Fund lands.

DSL and ODF have been working closely during the past year to define efficient and effective tools to improve the quality of financial reporting information. Meetings have been held to discuss such topics as fiscal and biennial budget development, how ODF gathers and reports financial data, and the Common School Forest Land Management Agreement.

Elliott State Forest Cost/Benefit Analysis

In January 2005 Mason, Bruce and Girard, Inc., delivered the Elliott Cost/Benefit Analysis per the 2003 Legislature's budget note to DSL and ODF. The report analyzed likely revenue and values under management scenarios for several types of potential purchasers and compared those values with the revised FMP/HCP outputs under state ownership. The report found that the revised FMP/HCP outputs were in the middle of the range of outputs that could be expected under private ownership. This report will provide a benchmark for the State Land Board to compare with the expected economic outputs of the revised FMP/HCP. The planning team is using the Cost/Benefit Analysis as a comparison to the draft outputs of the revised FMP/HCP, and to highlight the importance of revenue production to the federal services.

Long-Term Market Trends

Overall, log and saw timber stumpage prices are expected to remain relatively stable over the next several years. Interest rates are assumed to gradually rise, resulting in declining housing starts over the next several years. However, strong demographics and a growing economy are forecasted to keep housing starts from falling precipitously from current high levels. This will result in strong western lumber production, but, in spite of currently strong panel prices, plywood will sometime in the future again struggle to remain at current levels because of expanding oriented strand board capacity outside the West.

Sawlog prices will not increase significantly because competition from oriented strand board and engineered wood products, the potential increased raw log imports from Canada, and wood product imports from the southern hemisphere.

Downward price movement will be limited by strong lumber production and panel demand, lack of federal timber availability, and limited inventories on private land. Sawlog prices will move cyclically within a relatively narrow range and the demand for pulp will remain steady.

Export demand will remain weak with ever-increasing overseas competition. With strong lumber production, supplies of residuals will be plentiful, further limiting the price of the high-cost supply of chips and roundwood

Hardwood Sales Outlook

ODF regularly monitors the prices and trends of alder and other hardwoods to establish the starting point for the timber sale appraisal process. Along with regular monitoring of alder pond values, the Department has an active log accountability program, which provides monitoring, investigation and identification of current industry practices in the grading, pricing and utilization of different alder log sizes. Awareness of current industry practices and issues allows for response to changes and provides data for consideration when planning future sales.

ODF continues to investigate opportunities to offer smaller sales of alder, and sales in which alder is the predominant species. There are no specific alder sales included in the FY 06 Annual Operations Plan. Common School Fund lands include a relatively small volume of alder, which is difficult to offer as a small, “unbundled” sale opportunity.

Table 3 on **page 6** displays Hardwood and Volume/Value Information.

Table 1
Revenue and Costs from Common School Forest Lands
Fiscal Years 1998 through 2005

<i>Actual Revenue Transfer to DSL</i>		<i>Fund 52 Expenditures</i>					<i>Transfers Out</i>	<i>Total Costs</i>
Fiscal Year	Timber Sales & Forest Product Sales Revenue*	Personal Services	Services & Supplies	Capital Outlay	Special Payments	Total Expenditures	Other Rev. Transfers-Admin Prorate, Cap. Imprv., Seed Orchard etc.	Fund 52 Expenditures and Revenue Transfers
2005	\$19,092,180	\$2,344,566	\$1,687,799	\$16,833	\$34,193	\$4,083,391	\$1,037,909	\$5,121,300
2004	\$15,360,073	\$2,143,416	\$1,506,424	\$138,230	\$30,802	\$3,818,872	\$881,152	\$4,700,024
2003	\$8,550,000	\$2,142,745	\$1,567,088	\$2,471	\$50,167	\$3,762,471	\$660,865	\$4,423,336
2002	\$13,671,493	\$1,977,222	\$1,386,074	\$23,642	\$68,574	\$3,455,512	\$806,418	\$4,261,930
2001	\$16,787,101	\$1,986,033	\$1,243,061	\$12,629	\$171,314	\$3,413,037	\$740,159	\$4,153,196
2000	\$24,377,943	\$1,883,903	\$1,555,545	\$5,609		\$3,445,057	\$732,452	\$4,177,509
1999	\$17,439,454	\$1,702,266	\$1,966,104	\$20,521		\$3,688,891	\$490,209	\$4,179,100
1998	\$16,379,935	\$1,464,451	\$1,807,777	\$4,075		\$3,276,303	\$465,565	\$3,741,868

* Includes revenues from negotiated sales, rights-of-way, permits, etc., in addition to timber sales.

These numbers are produced from SFMA reports.

TABLE 2**Historical Timber Harvest Value and
Volume and Average Stumpage Price
Fiscal Years 1996 through 2005**

Fiscal Year	Timber Sales & Forest Products Value*	Timber Harvest Volume (MBF)	Average Stumpage Price
2005	\$20,080,172	42,106	\$477
2004	\$14,260,450	32,520	\$439
2003	\$10,992,972	24,310	\$452
2002	\$14,043,117	29,557	\$475
2001	\$19,231,816	36,621	\$525
2000	\$24,398,921	49,715	\$491
1999	\$20,089,447	38,019	\$461
1998	\$13,658,303	22,055	\$677
1997	\$16,186,164	24,976	\$691
1996	\$15,528,802	19,225	\$828
Last 5 Year Average	\$15,721,705	33,023	\$474
10 Year Average	\$16,847,016	31,910	\$552

*Value equals gross value of timber sales and forest products before project costs are subtracted.

This data is taken from TRAS reports.

Table 3
Hardwood Volume and Value Information

FISCAL YEAR	Total # of Timber Sales	Total # Hardwood Bid Species Sales	Hardwood Volume Harvested	Hardwood Value Harvested
FY05	12	0	1,286	\$555,439
FY04	10	0	536	\$187,234
FY03	10	1	889	\$352,515
FY02	12	0	786	\$345,688
FY01	14	7	1,319	\$522,765

Common School Forest Land Timber Sales

Management activities on state forests include regeneration harvests and partial cuts. Regeneration harvesting is one tool used in maintaining a diverse mosaic of age classes and habitat types across the forest landscape. Numerous species, including deer and elk, use the forage and early successional habitat(s) created by these harvests. The Oregon Department of Forestry also uses thinning and partial cuts to manage the density of stands for various purposes. Proper stocking levels in young stands help provide for good forest health and allow trees to progress towards mature and diverse stand characteristics at an earlier age, which may be important to many wildlife species. Thinning provides an early economic return on investments in tree planting, site preparation and brush control. In mature stands, carefully designed partial cutting can help attain stand characteristics that may function similarly to old growth, while generating revenue for the CSF.

Under the Elliott FMP, the Elliott HCP, and state law, all harvest and thinning activities require green tree retention, creation and retention of snags and down logs, and protection measures for streams. Topography in the coast range (especially the Elliott State Forest) is often steep and dissected, and much of the forest is classified as high-risk areas. To avoid high-risk sites, roads are generally located as close as possible to ridge crests, away from riparian areas. Erosion is minimized as necessary by full and single end suspension of logs, restricting road construction operations to dry seasons, and end hauling of materials excavated from roads and landings.

Timber Sales Sold During Fiscal Year 2005

During this fiscal year, twelve timber sales were sold that included CSFL. These sales should produce a total estimated volume of 31 million board feet (MMBF) with a value of \$16 million. Revenue from these sales will be received over the course of a three-year period. Total project costs for these sales will be about \$643,758. These sales are listed in **Table 4** on **page 8**.

Summary of Active Timber Sales

There were 34 active timber sales on CSFL during FY 2005 total. The volume of timber harvested totaled 42.1 MMBF with a value of \$20 million. Volume, value and project costs are listed in **Table 2** on **page 5**. Details of these active sales are shown in **Table 5** on **page 9**. (Dollars in this table represent the value of timber harvested during this period. For comparison, the revenues in **Table 1** reflect actual receivables.)

Table 6 (beginning on **page 10**) lists contract modifications and extensions processed from July 1, 2004 through June 30, 2005.

Table 4
Common School Forest Land Timber Sales Sold in Fiscal Year 2005

SALE NAME	SALE NUMBER	DISTRICT NAME	METHOD OF BILLING	CSFL % OF SALE	TOTAL SALE VOLUME (MBF)	CSFL VOLUME (MBF)	ACRES PARTIAL CUT	ACRES CC	TOTAL PROJECT COST	ESTIMATED NET SALE VALUE	ESTIMATED NET CSFL SALE RECEIVABLE
Salander Top	05076	COOS	Recovery	100	6,551.00	6,551.00	0	100	\$27,269.00	\$3,731,263.97	\$3,731,263.97
Middle Elk	05047	COOS	Recovery	100	1,986.00	1,986.00	0	70	\$24,002.00	\$737,161.35	\$737,161.35
Kelly Fish Overlook	05069	COOS	Recovery	100	1,954.00	1,954.00	0	29	\$25,904.00	\$1,036,499.74	\$1,036,499.74
Dry Stulls	05068	COOS	Recovery	100	3,693.00	3,693.00	0	70	\$46,657.00	\$1,858,910.04	\$1,858,910.04
Brown Ridge Corners	05074	COOS	Recovery	100	3,797.00	3,797.00	0	86	\$56,253.00	\$1,801,151.61	\$1,801,151.61
Deer Creek Salvage	05001	COOS	Recovery	100	276.00	276.00	0	5	\$644.00	\$107,848.68	\$107,848.68
Cedar Glenn	05014	COOS	Recovery	100	5,847.00	5,847.00	0	81	\$100,183.00	\$4,448,610.46	\$4,448,610.46
Totten Creek No. 2	05004	COOS	Recovery	100	3,288.00	3,288.00	0	71	\$49,631.00	\$1,447,048.30	\$1,447,048.30
Joe Buck	05002	COOS	Recovery	100	1,704.00	1,704.00	0	30	\$105,143.00	\$638,223.94	\$638,223.94
Cold Wash Thin	05032	N. CASCADE	Recovery	40	1,333.00	533.20	171	14	\$38,848.00	\$399,255.86	\$159,702.34
Desolation Saddle	05034	WEST OREGON	Recovery	100	914.00	914.00	56	0	\$12,864.00	\$180,338.04	\$180,338.04
Thin Steere Combination	05006	WEST OREGON	Recovery	29	1,787.00	518.23	233	28	\$156,360.00	\$75,365.39	\$21,855.96
TOTALS					33,130.00	31,061.43	460	584	\$643,758.00	\$16,461,677.38	\$16,168,614.44

This data is produced from an ODF in-house sale plan database.

Table 5
Active Timber Sales on Common School Forest Land
Volume and Value Report for Fiscal Year 2005

District	Sale No.	Sale Name	%CSL	Estimated MMBF	Estimated Total Sale Value	MMBF Harvested	Value CSL*
ASTORIA	103075	COUGAR MONSTER	18.0%	7.19	1,005,552.76	0.65	\$111,989.83
ASTORIA	104031	PROGENY RIDGE	4.0%	6.28	2,041,032.78	0.13	\$46,278.90
TILLAMOOK	104057	COAL RIDGE	5.0%	1.71	407,868.44	0.00	\$412.72
WEST OREGON	103009	BARK CREEK THIN	1.0%	6.39	2,548,869.08	0.01	\$4,825.01
WEST OREGON	103010	DEER-SALMON THIN	19.0%	1.43	246,688.43	0.05	\$14,512.44
WEST OREGON	103045	WOLF CABIN THIN	41.0%	0.82	123,358.55	0.18	\$41,379.84
WEST OREGON	103048	HATCHERY COMBINATION	38.0%	1.29	249,220.65	0.00	\$110.53
WEST OREGON	104002	LONG HAUL THIN	21.0%	2.43	333,149.20	0.52	\$111,444.37
WEST OREGON	104024	LONG TOM	100.0%	0.64	160,164.64	0.11	\$29,863.90
WEST OREGON	104037	BUTTERMILK	100.0%	1.18	425,050.14	1.66	\$619,175.94
WEST OREGON	105006	THIN STEERE COMBINATION	60.0%	1.79	231,725.39	0.01	\$3,205.42
COOS	102028	ELEVEN RIDGE THIN	88.0%	1.56	429,619.15	0.02	\$3,517.32
COOS	102041	BENSON THIN	81.0%	1.26	270,413.71	0.10	\$20,140.00
COOS	102076	MILL POND OVERLOOK	100.0%	1.99	890,949.78	0.00	\$2,398.83
COOS	103012	TOTTEN CREEK	100.0%	1.06	406,755.34	0.74	\$310,784.83
COOS	103032	KELLY ELK DIVIDE	100.0%	3.70	1,814,566.49	1.12	\$554,500.62
COOS	103095	HOWELL RIDGE NO 3	100.0%	4.46	2,354,123.86	0.98	\$476,032.11
COOS	104025	SIXTEEN LOONS THINNING	100.0%	1.39	248,360.72	0.47	\$96,586.73
COOS	104028	JOHNSON TROUT THIN	100.0%	0.24	29,460.95	0.29	\$44,921.53
COOS	104040	KNIFE RIDGE NO 5	100.0%	2.48	1,086,691.40	2.68	\$1,240,280.34
COOS	104047	BLUE MILLICOMA THIN	64.0%	0.74	129,442.18	0.37	\$70,678.44
COOS	104052	CAMP CREEK	100.0%	2.46	1,262,033.20	2.00	\$1,064,942.91
COOS	104053	SCHUMACHER RIDGE NO 3	99.0%	4.91	2,055,141.22	1.66	\$708,372.74
COOS	104068	ELLIOTT AREA SALVAGE	89.0%	0.29	99,439.64	0.94	\$314,475.75
COOS	104073	BEARTOOTH TROUT NO. 2	100.0%	5.03	2,520,550.78	4.57	\$2,357,892.51
COOS	104077	CEDAR TOP	100.0%	1.77	1,059,581.56	1.73	\$1,036,532.24
COOS	104083	DRY MOBY	100.0%	3.03	1,549,060.34	3.00	\$1,601,771.21
COOS	104084	FISH KNIFE NO. 2	100.0%	3.11	1,685,390.44	2.63	\$1,447,975.84
COOS	104089	TOP PANTHER	100.0%	4.02	2,177,141.87	3.44	\$1,914,894.56
COOS	105001	DEER CREEK SALVAGE	100.0%	0.28	108,492.68	0.23	\$93,981.85
COOS	105014	CEDAR GLENN	100.0%	5.85	4,548,793.46	5.95	\$4,782,558.65
GRANTS PASS	104001	RED QUARTZ SALVAGE	100.0%	0.61	23,332.18	1.40	\$200,123.20
KLAMATH-LAKE	103092	SIDEROD	100.0%	5.67	1,140,036.32	3.32	\$632,375.09
KLAMATH-LAKE	104032	TRIPLE ARC	100.0%	0.85	66,838.83	1.12	\$121,236.18
FINAL Totals				102.72	41,273,902.04	42.11	\$20,080,172.38

*Value equals gross value of timber sales and forest products before project costs are subtracted.

Status of Common School Forest Land Management Fiscal Year 2005

Page 9

Table 6

Fiscal Year 2005 Timber Sale Modifications and Extensions on Contracts and Projects Common School Funds

SALE Number & Name	Modified	Narrative
*341-04-68 BOF/CSL Elliott Area Salvage D.R. Johnson Lumber Co. Coos District SOA	Date: September 15, 2004 Extend to: October 1, 2005 Date Granted: 10/12/04	Section 26, Extension of Time From: October 1, 2004 To: October 1, 2005 Addition of section (d) to Seasonal Restrictions; change of timber to all down timber in section 55; partial deletions and additions in section 55; deletion in section 57; add new section Cable Yarding
* 341-03-10 BOF/CSL Deer-Salmon Thin Hampton Tree Farms, Inc. West Oregon District NWOA	Date: December 9, 2004 Extend to: December 31, 2005	Per section 26, Extension of Time State to waive extension fee requirements. Extend expiration date from December 31, 2004 to December 31, 2005.
*341-04-47 BOF/CSL Blue Millicoma Thin Scott Timber Co. Coos District SOA	July 13, 2004	Changes to Section 70, additional project work. Exhibit D: Add line to compaction and processing requirements. STATE agrees to credit PURCHASER's timber account in the sum of \$3,353.60.
*341-03-48 BOF/CSL Hatchery Combination Maple Ridge Logging Inc West Oregon District NWOA	September 15, 2004	Section 69, Slash Disposal: Change from 72 hours of track-mounted excavator time to 90 hours. STATE agrees to credit PURCHASER \$1,980.00 upon completion.
*341-04-01 CSL Red Quartz Salvage Cascade Forestry Inc. Grants Pass District SOA	September 21, 2004	Section 44, Log Prices: Change from Conifer Logs Peelable cull logs.....At price above To: Conifer Logs Peelable cull logs.....No Charge
*341-04-52 CSL Camp Creek Scott Timber Co. Coos District SOA	October 11, 2004	Section 44, Log Prices Change price of Western hemlock and other conifers from \$680.00 to \$259.00
*341-04-01 CSL Red Quartz Salvage Cascade Forestry Inc Grants Pass District SOA	October 15, 2004	Section 39, Pre-operations Meeting and Operations Plan – Deletion of (a) and change in (e) seasonal restrictions. Section 54, Road Maintenance – Delete information pertaining to road closures. Section 55, Designated timber – Delete “all timber within Area II R/W” and “Area II R/W is posted...” Section 57, Felling – Delete (d). Section 59, Cable Yarding Specifications – Add (j). Section 62, Progressive Operations – Delete (3). Section 68, Project Work – deletion of Exhibit C in reference. Section 68, Project Work – deletion of project period on Nos. 1 and 3. Section 68 – Delete Project Nos. 1 and 3. Section 69, Completion of projects – Delete Project Nos. 1 and 3. Section 70, Credit for project work – Change credit amount from

SALE Number & Name	Modified	Narrative
		\$46,037.00 to \$3,184.76. Section 70, Delete partial credits pertaining to project Nos. 1 and 3. Exhibit B, Forest Road Specifications – Delete line in table referring to “A to B”. Exhibit B – Change wording on segment “C to D”. Exhibit B, Specific instructions – Delete road segment “A to B”. Exhibit B, End Hauling – Delete “A to B” and several parts of section. Exhibit B, Road surfacing – Delete several lines in table. Exhibit B – Delete subgrade and “A to B”. Exhibit B, Pit-Rock Run – Delete “A to B”. Delete Exhibit C.
*341-04-57 BOF/CSL Coal Ridge Olympic Forest Products Tillamook District NWOA	October 18, 2004	Section 68, Project Work – Instructions added to Project No.1. Exhibit C, Road Surfacing – Add data line to table. State agrees to credit purchaser \$1,248.00 upon completion.
*341-04-73 CSL Beartooth Trout No. 2 Scott Timber Company Coos District SOA	November 24, 2004	Section 44, Log Prices Change Western Hemlock and other conifers from \$300.00 to \$280.43 per MBF.
*341-04-83 CSL Dry Moby Scott Timber Company Coos District SOA	April 27, 2005	Section 69 Project work, add project No. 4 details. Replace page in Exhibit A. Add detailed information to Exhibit B and C.
*341-04-02 BOF/CSL Long Haul Thin Swanson Group, Inc. West Oregon District NWOA	June 20, 2005	Section 73, Project work. Add roadside vegetation points of O to O1. STATE agrees to credit PURCHASER \$420.34 upon completion.

FISCAL YEAR 2005	CSL
Extensions	2
Amendments (modifications)	9

Planned Timber Sales

The 2006 sale plan includes 1,308 acres of regeneration harvest and 2,409 acres of partial cutting. **Table 7** on **page 13** provides locations and additional information on these planned sales. The total estimated CSFL volume is 30.1 MMBF, with an estimated net value of \$12.2 million. If recent upward trends in stumpage values continue, the average received could be higher, with the result of additional revenue being generated from these sales. Future revenue to the Common School Fund from these sales is likely to be received over a 2-3 year time period due to contract duration. Project costs of about \$811,904 will pay for road and landing construction, road improvement and maintenance, rock stockpiles, culvert replacement, creation of wildlife trees and snags, and stream structure and riparian area rehabilitation.

Reforestation and Intensive Management

Intensive management activities represent an investment to increase the volume and/or quality of timber, resulting in increased revenue from harvests. Promoting large, fast-growing, healthy trees and forest stands is also important for wildlife and fish habitats.

Forest management activities and costs for FY 2005 are detailed in **Table 8** on **page 14**.

Public Involvement

ODF remained committed to proactively involving the public as part of the successful implementation of its forest management plans. ODF sought to focus public input on its annual operations plans, a detailed explanation of on-the-ground activities to be carried out to move forest stands to their desired future condition.

The two primary mechanisms for gaining public input are a comment period on annual operations plans and an advisory committee representing diverse interests. The plans for each of the nine districts with ODF-managed State lands, along with maps showing locations of planned activities, were posted on the ODF website.

The State Forests Advisory Committee met nearly every other month. Topics for discussion and input included: 1) reviewing annual operations plans, 2) reviewing a subcommittee's report on ODF's plan for watershed assessment relative to FMP implementation that provides guidance and advice about watershed assessment methods and implementation, and 3) reviewing hardwood as an important component of state forest lands.

Table 7
Annual Operation Plans
Timber Sales on Common School Forest Lands
FY2006

DISTRICT	SALE NAME	CSL %	MBF PLAN	CSL VOLUME	REGEN ACRES	PARTIAL CUT ACRES	GROSS SALE VALUE (BOF & CSL)	PROJECT COSTS CSL PORTION	ESTIMATED CSL NET VALUE
ASTORIA	Sagermeister	13	5,280	686	0	264	\$2,376,000	\$23,400	\$285,480
COOS	Locked Marlow	24	575	138	44	0	\$183,750	\$6,240	\$37,860
COOS	Elkhorn Ridge No. 6	100	2,288	2,288	37	0	\$888,200	\$73,544	\$814,656
COOS	Fish Cougar Divide	100	13,505	13,505	241	0	\$6,056,000	\$153,243	\$5,902,757
COOS	Lone Deer	71	2,508	1,781	44	0	\$1,445,715	\$30,448	\$996,010
COOS	Otter Creek Overlook	100	1,625	1,625	50	0	\$1,201,203	\$18,234	\$1,182,969
COOS	Kentucky Plantation	100	1,600	1,600	88	0	\$427,500	\$27,500	\$400,000
COOS	Curvy Puckett	100	1,655	1,655	100	0	\$507,051	\$106,349	\$400,702
FOREST GROVE	C.C. Rider	100	1,900	1,900	62	0	\$760,000	\$0	\$760,000
SW OREGON	Kerby Peak	100	500	500	0	94	\$127,399	\$37,641	\$89,758
TILLAMOOK	Tin Tank	2	8,400	168	0	854	\$1,456,085	\$7,190	\$21,932
TILLAMOOK	Fareast	100	1,280	1,280	112	56	\$274,700	\$25,500	\$249,200
TILLAMOOK	South Burma	44	4,700	2,068	497	0	\$2,622,975	\$231,211	\$922,898
WEST OREGON	Mill Stone	2	400	8	0	67	\$146,248	\$1,318	\$1,607
WEST OREGON	Ellmaker Overlook	4	4,700	188	0	482	\$1,710,371	\$9,870	\$58,544
WEST OREGON	Greenback	26	1,700	442	0	290	\$389,609	\$39,576	\$61,722
WEST OREGON	Mill Stone	4	800	32	33	68	\$160,000	\$2,160	\$4,240
WEST OREGON	Big Yaq	22	1,400	308	0	234	\$280,000	\$18,480	\$43,120
TOTALS			54,816	30,172	1,308	2,409	\$21,012,807	\$811,904	\$12,233,455

Table 8**Intensive Management Activities on Common School Fund Lands FY 2005**

Management Activity	Acres Planned	Acres Completed	Average Cost/Acre	Total Cost
Planting		560	\$175.09	\$98,048
Interplanting	100	110	\$156.28	\$17,191
Underplanting	27	18	\$186.89	\$3,364
Tree protection	1068	1112	\$30.87	\$34,327
Site Prep- Chem- Aerial	473	446	\$62.22	\$27,749
Site Prep- Chem- Hand	0	0	\$0.00	\$0
Site Prep- burning- Mech	44	42	\$205.71	\$8,640
Fertilization	0	0	\$0.00	\$0
Release- Chem-Aerial	0	8	\$72.88	\$583
Release Hand	22	42	\$30.29	\$1,272
Precommercial Thinning	842	906	\$60.75	\$55,042
Pruning	3	0	\$0.00	\$0
Totals	2945	3244	\$75.90	\$246,216

Forest Management Activities

Coos District / Elliott State Forest

The Coos District covers Coos, Curry and western Douglas Counties on the southern Oregon coast and contains about 88,400 acres of Common School Forest Land. The largest block of this land is 85,000 acres in the Elliott State Forest located southeast of Reedsport.

1. Elliott State Forest Management Plan and Habitat Conservation Plan

Planning for revision of the Elliott State Forest Management Plan (FMP) and the Elliott Habitat Conservation Plan (HCP) continued in FY 2005. The planning team consists of a policy steering committee, which includes representation from the Oregon Department of Forestry (ODF), Department of State Lands, Department of Justice, Oregon Department of Fish and Wildlife (ODFW), the Coos County Commission, the South Coast Education Service District, and a core team comprised of technical specialists from ODF and ODFW.

The planning team is developing a revised FMP and multi-species HCP for the Elliott State Forest. At a minimum, the revised Elliott HCP is intended to include the northern spotted owl, marbled murrelet, and coastal coho salmon. Other species at risk for listing that are known to inhabit the Elliott State Forest and for which there is suitable scientific knowledge are also being considered for inclusion in the revised Elliott HCP.

The current timeline for requesting State Land Board and Board of Forestry (BOF) approval of the revised FMP and submittal of the HCP is early 2006. The anticipated date for the federal decision on ITP issuance is December 2006, after completion of the National Environmental Policy Act (NEPA) process.

In May of 2004 the first draft of the FMP was completed and public input sought at three public meetings in Salem, Roseburg and Coos Bay. Refinement of the harvest model continued with improved spatial layers and development of a new yield table using the most recent inventory data. HCP negotiations with the federal services began in September and work on a draft District Implementation Plan was initiated. A contractor was hired in late 2004 to write the Environmental Impact Statement (EIS) and assist the agencies through the National Environmental Policy Act (NEPA) process.

In January 2005 a Cost/Benefit Analysis comparing state management of the Elliott to sale of the forest to private interests was completed. Direction to conduct the study was included in a budget note from the 2003 Legislature. This analysis is being used as a benchmark for the economic outputs of the revised FMP/HCP. The EIS contractor began working with the planning team on the draft EIS and scoping meetings for the NEPA process were held in late May. A draft EIS is being developed and is scheduled for publication in early 2006.

2. Forest Management Plan

The Steering Committee finished reviewing the draft FMP at its March 2005 meeting. Final edits were made in early summer and the final draft of the FMP will be completed by the planning team in September. The final draft FMP will be available for public review and comment at public meetings planned for September 2005.

3. Implementation Plan

The district has developed an initial draft of the 10-year Implementation Plan (IP) for the revised FMP/HCP. The timber team foresters used harvest model outputs to help them identify harvest levels for each management basin in the forest. They were able to identify harvest units (clearcut and thinning) that approximately match the model outputs for the first 20 years. Though the IP is a 10-year plan, the foresters located harvests for the first 20 years and “looked ahead” to the third decade to make sure that planned harvest levels are available.

4. Habitat Conservation Plan

Focused meetings with the federal services began in September 2004 to work out the detailed strategies in the HCP. These strategies are based on the revised FMP but contain information that is more specific to the species being proposed for coverage. Those species are the northern spotted owl, marbled murrelet, coho salmon, bald eagle and about 20 other species that are not currently listed but are at risk for future listing. In general, there is agreement with the USFWS and NMFS at the negotiating team level that we can move forward with the strategies in the draft HCP.

5. Environmental Impact Statement

A contractor (Jones & Stokes) was hired in late 2004 to write the EIS and help us through the NEPA process. Jones & Stokes is a large environmental consulting company that has previous experience in forest HCP's as well as other types of projects requiring environmental analysis through the NEPA process.

Scoping meetings were held on May 24-26 at Roseburg, Coos Bay and Salem. This was essentially the first step in the NEPA process and helped identify the alternatives that will be analyzed in the HCP and EIS. A draft EIS is anticipated for early 2006 and a final EIS in mid 2006. Assuming that the timeline does not need to be extended, a decision by the federal services on the incidental take permit (ITP) would be made in late 2006.

6. Implementing Agreement

A final piece of the process will be developing an implementing agreement between the State and the federal agencies. The Department of Justice will work with the planning team and federal solicitors to complete this agreement before the ITP is issued.

7. Cost/Benefit Analysis

In January 2005 Mason, Bruce and Girard, Inc., delivered the Elliott Cost/Benefit Analysis per the 2003 Legislature's budget note to DSL and ODF. The report analyzed likely revenue and values under management scenarios for several types of potential purchasers and compared those values with the revised FMP/HCP outputs under state ownership. The report found that the revised FMP/HCP outputs were in the middle of the range of outputs that could be expected under private ownership. This report will provide a benchmark for the State Land Board to compare with the expected economic outputs of the revised FMP/HCP. The planning team is using the Cost/Benefit Analysis as a comparison to the draft outputs of the revised FMP/HCP, and to highlight the importance of revenue production to the federal services.

8. Forest Modeling

The draft landscape strategy is being modeled to help determine how well the strategies will achieve the goals for the forest. Inventory data being used in the model is good quality, with much of the

existing data collected during the last five years. A new yield table incorporating the latest Stand Level Inventory data for the Elliott was developed in collaboration with a contractor during 2004 and was incorporated into the model in early 2005. Outputs were analyzed and adjusted during the first half of 2005.

In addition to the draft Integrated Landscape Strategy, three other management scenarios were modeled using the same inventory data. These scenarios range from an emphasis on conservation to an emphasis on timber production. Outputs for all models will be displayed at the September BOF meeting and the October SLB meeting.

9. Public Involvement

In June 2004 public meetings were held in Salem, Coos Bay and Roseburg to present information on the draft FMP strategies and to obtain public input. The meetings were lightly attended but numerous comments were received both during the meetings and as written comments later in the comment period. A wide variety of comments were received ranging from increasing harvest to produce more revenue for the Common School Fund to decreasing harvest and emphasizing environmental values and recreation. A number of comments expressed agreement with the plan's integrated approach to providing an appropriate balance of economic, environmental and social values. Many of the comments were consistent with concepts and strategies already in the FMP. Reconciliation of the comments was completed by the Core Team in September 2004. Relevant comments were used to refine the draft FMP.

In May of 2005 public scoping meetings for the National Environmental Policy Act (NEPA) process were held in Roseburg, Coos Bay and Salem. In general, attendance was light with about 20 attendees each at Roseburg and Coos Bay. Just two individuals attended the Salem meeting. Similar to the 2004 meetings on the FMP, comments ranged from emphasizing economic values to emphasizing environmental and social values. Since these meetings were a part of the NEPA process, some of the more lengthy comments focused on the need to meet the NEPA standards for process. All comments have been evaluated for themes and issues to be addressed in the EIS. In addition, the comments will help shape the alternatives evaluated in the HCP and EIS.

10. US Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries Involvement in the Planning Process

The federal Services have been involved at various points throughout the process. Biologists from the Services have been in regular attendance at the Core Team meetings to provide input from their perspective and to maintain a connection with the planning process. A good working relationship exists among the Core Team and federal biologists. HCP negotiation meetings with the federal services began in September 2004 and will be ongoing through 2005.

11. Environmental Analysis (NEPA Process)

Obtaining an Incidental Take Permit (ITP) through approval of the HCP requires going through the NEPA (National Environmental Policy Act) process. This includes public scoping, developing a draft EIS, public review, a final EIS and obtaining a favorable Record of Decision. Negotiations with the federal services on the new HCP is also a part of this process. A contractor was hired in late 2004 to write the EIS and help the agencies through the NEPA process. Assuming a successful outcome, the NEPA process will continue into late 2006 when the decision by the federal services on issuing ITP is expected.

12. Other Elliott State Forest Activities During FY2005

a. Marbled Murrelet Protocol Surveys

In 2004, 272 surveys were completed at 172 stations representing 33 survey sites on the Elliott State Forest. These 33 sites represented 15 planned timber sales. Detections were recorded during 42 surveys at 18 different sites with 4 surveys recording sub-canopy behavior. Of the 4 surveys with significant, sub-canopy detections, 3 were associated with protocol surveys of 1 planned sale. The other significant detection was a result of monitoring surveys in an existing MMMA.

Summarizing the protocol sale surveys, a total of 54 acres were mapped as occupied with one new MMMA designated totaling 54 acres. Of these total acres, none were previously classified as conservancy areas for other purposes. Eleven sale units were released for sale preparation after no significant detections were observed in protocol surveys.

b. Oregon Plan for Salmon and Watersheds

The following activities were accomplished during this fiscal year under the Oregon Plan for Salmon and Watersheds:

Coos District has voting board members on the Coos Watershed Association and the Tenmile Lakes Basin Partnership.

There were no large in-stream projects on the forest either with timber harvest operations or in association with watershed councils. One of the sales completed during this reporting period, Knife Ridge #5, stockpiled 36 fish habitat logs (24" in diameter small end by 70' long) for use in future in-stream restoration projects.

NW and SW Oregon State Forests

Lands managed under the Northwest Oregon and Southwest Oregon State Forest Management plans cover about 26,000 acres of Common School Forest Land, which represents about 3% of the total state forest land managed under the two plans.

1. Forest Management Planning

District Implementation Planning

Implementation Plans describe the forest management approaches and activities a district will initiate and complete during a 10-year period in order to faithfully implement a forest management plan.

The State Forester approved implementation plans (IP) for the districts included in the Northwest Oregon and Southwest Oregon State Forests Management Plans (Astoria, Forest Grove, Tillamook, Cascades, West Oregon, Western Lane, and Southwest Oregon Districts) in March of 2003. Each IP describes the management approaches and activities for the ten-year period from July 1, 2001 through June 30, 2011. Along with approval of the IP, the State Forester adopted direction for enhancements to timber harvest schedule modeling, watershed analysis, monitoring, forest inventory, and salmon anchor habitats.

Several of the projects described in the State Forester's direction will acquire better data or improve analytical information that is likely to result in changes to the IPs prior to 2011. Such updates or revisions will be considered and reviewed in accordance with the standards for adaptive management described in the Forest Management Plans, and the thresholds for modifications described in the Implementation Plans.

Of particular interest is the Harvest and Habitat Modeling Project. The project is conducting a comprehensive and systematic process to resolve issues related to harvest levels that were identified in a report provided to the Council on Forest Trust Land Counties by Mason, Bruce, and Girard, Inc. The project will examine opportunities to realize any harvest level increases projected through modeling while simultaneously meeting other elements of the Greatest Permanent Value defined for these lands. The project is scheduled for completion in the spring 2006.

2. Western Oregon Habitat Conservation Plan (HCP) Status

Negotiations with the USFWS have resulted in a set of strategies for northern spotted owls, marbled murrelets, and a list of other species that ODF, the Oregon Department of Fish and Wildlife (ODFW), and USFWS think are a sound set of strategies to move forward into the NEPA process. Negotiations with the NOAA, Fisheries Division, have not produced an agreed upon set of strategies for fish. ODF is proposing to use the Aquatic and Riparian strategies that were included in the Northwest and Southwest Oregon State Forests Management Plans as strategies in the HCP. An effects analysis, conducted in coordination with ODFW, will inform further consultation efforts with higher level administrators in NOAA, USFWS, FTLAC, and with the BOF. A decision then will be made by the ODF on how to, or whether or not to, continue considering the inclusion of fish in the HCP.

Concurrently, discussion is underway on moving forward with development of the Environmental Impact Statement (EIS), a federal requirement under the National Environmental Policy Act (NEPA). Throughout the process both the Forest Trust Land Advisory Council (FTLAC) and the Board of Forestry (BOF) will be involved as decision points are reached. The EIS process includes

further public involvement on and technical analysis of the proposed strategies and alternatives. Updated information obtained from the Harvest and Habitat Modeling Project (discussed under Implementation Planning) will be incorporated into the EIS. The new modeling information will enable ODF, FTLAC, BOF and the general public to better understand the economic and environmental strengths and weaknesses of all the alternatives. The resulting analysis will assure that, if the decision is made to obtain the HCP, it will be a good business decision. The EIS process would likely take 12 to 18 months, with completion projected for early 2007.

To also assist with informing the HCP business decision, a cursory scoping of alternative geographic configurations for the HCP occurred in 2005. Discussions with the U. S. Fish and Wildlife Service identified what potential differences in HCP strategies might be required to minimize and mitigate incidental take if the HCP only covered Cascade, West Oregon, Western Lane and Southwest Oregon Districts. The discussions included overarching themes and the consideration of an example that specifically looked at potential differences in strategies and associated impacts at a local scale (Western Lane District). This cursory scoping will assure decision-makers that all options have been investigated.

Klamath-Lake District

The Sun Pass State Forest in Klamath-Lake District is comprised of 6,403 acres of Common School Forest Lands and 26,862 acres of Board of Forestry lands. These lands are managed under the Eastern Region Long Range Forest Management Plan, adopted in 1995.

1. Cultural Resources

During FY 2001, the district signed a cooperative agreement with the University of Oregon, State Museum of Anthropology to develop a planning document for the completion of a cultural resource inventory on state forests in Klamath County. This document lays out the cultural themes in the land use history of the state forests, and proposes a field survey strategy. Based on this planning document, the district operations plans for 2002 and 2003 called for surveys of about 4,130 acres. The survey areas were split between Sun Pass State Forest and lands in the district's Southwest Block. The first two year's survey area did not include any Common School Forest Land. Several historic and prehistoric sites were detected, including a logging camp, a homestead, and several lithic scatters where stone tools were made. Reports for the first two years of surveys have been completed. During FY 2004, Common School Forest Lands in the Yainax tract were surveyed. During FY 2005, surveys were completed on all state forest lands with a high likelihood of containing sites. The final report on these surveys will be completed in FY 2006.

2. Pileated Woodpecker Research

The long-range plan calls for habitat research on pileated woodpecker home ranges discovered in Sun Pass State Forest. This research was started in FY 2003 and was completed in FY 2005. Findings from this research will be used to fine-tune habitat standards for the Forest Connectivity Areas.

3. Forest Stewardship Council Assessment

The district has awarded a contract to SmartWood to complete a Forest Stewardship Council (FSC) assessment on the district's state forest management operation. The primary reason for pursuing certification is that regular purchasers of Sun Pass State Forest timber sales are chain-of-custody certified. This means they are likely to seek certified wood. The competition for certified wood could lead to increased demand and higher bid prices for state forest timber sales.

Research and Monitoring

The Forest Management Plans (FMPs) for state forest lands emphasize the need for adaptive approaches to management. Adaptive management requires a significant commitment to obtaining critical information over time and to ensuring that the information enters the decision-making process. The state forests research and monitoring program is in place to ensure that the levels of research, monitoring, and technology transfer are adequate to meet the information needs required by the long range management plans.

The *State Forests Monitoring Program Strategic Plan (Strategic Plan)* (ODF 2002) was approved as part of the Implementation Plan “package” for the Northwest and Southwest Oregon Forest Management Plans. While this plan primarily focuses on research and monitoring related to the NW and SW FMPs, its general approach applies to Elliott State Forest (ESF) and Eastern Oregon Area (EOA) forest lands as well.

The *Strategic Plan* is directly tied to the “working hypotheses” and forest management strategies identified and described in the FMPs. It sets a direction for monitoring and research work by identifying high priority projects that will contribute to our understanding of management strategy effectiveness and assumptions related to the FMPs. It also identifies priority research and monitoring themes which will translate over the next ten years into additional projects to contribute to the evaluation of the FMPs.

Two important objectives of the Monitoring Program are:

1. To determine whether FMP programs and strategies are implemented as stated, and
2. To determine whether FMP programs and strategies result in anticipated habitat for species of concern or other desired forest conditions.

As guidance in pursuing research projects and monitoring opportunities, several overarching research and monitoring themes have been identified that relate directly to the integrated forest management strategies and underlying assumptions:

- Implementation monitoring;
- Stand structure development and wildlife relationships;
- Hydrologic functions and aquatic and riparian habitat;
- Young stand development;
- Forest health; and
- Socio-economic indicators.

These themes are meant to encompass a problem area that includes a number of more specific issues and questions, and, therefore, a variety of potential research and monitoring approaches to meet the information needs are possible.

Projects have been identified that will contribute to understanding the effectiveness of key management strategies, the underlying assumptions, and the working hypotheses related to the FMP. These projects are a high priority for ODF in this initial 10-year implementation period. They include:

- Implementation monitoring procedures and reporting
- The interaction between Swiss needle cast and commercial thinning
- Northern spotted owl and marbled murrelet surveys and site monitoring

- Assessment of young stand management strategies
- Stream temperature and riparian function
- Stand structure development and wildlife relationships
- Socio-economic indicators
- Public acceptance assessment

Updates of Selected Ongoing Research and Monitoring Initiatives

1. Implementation Monitoring

Implementation Monitoring (IM) focuses primarily on stand structure components and riparian zone management. Specifically, it will determine consistency with Landscape Management Strategies 1-3 and Aquatic and Riparian Strategies 2 and 5 of the NW and SW Forest Management Plans (FMP).

IM has two main components. The first involves a contract administration review. This component will review contract administration documents with district personnel to determine the consistency of contract documents with FMP strategies. It will involve responding to a series (currently 57) of both qualitative and quantitative questions.

The second main component involves field data collection. Three separate approaches have been developed. In partial cut stands, the Stand Level Inventory (SLI) protocol will be used. This will accommodate requirements for IM and help to populate the SLI database. For clearcuts, a new methodology has been developed that will estimate down wood, snag and green tree retention, and collect some qualitative information such as the spatial distribution of green trees and snags. This methodology is more appropriate and efficient for IM because it will provide a more precise estimate of legacy structures such as down wood and snags, but does not collect unnecessary information such as herb and shrub species and coverage. In both partial and clearcuts, another new methodology has been developed for testing consistency with aquatic and riparian strategies. Both qualitative information, such as whether or not tractor logging was used in the streambank zone and quantitative information such as the number of green trees retained in the inner RMA will be collected. The most important difference between this protocol and previous proposals is that the field data collection requires no additional workload of district staff.

Twenty percent of all clearcuts and partial cuts per district (Northwest Oregon Area, Southwest Oregon Area excluding Coos; the protocol will be modified for the Elliott State Forest) have been randomly selected for monitoring in each district, with a minimum of one of each type (if available) per district per year.

The first year of data collection is considered a pilot project. The quality of data collected and the satisfaction of objectives will be critically questioned at the end of the year and any necessary changes will be made. While we can't predict the outcome, we hope that the current protocol is sufficiently rigorous that few changes will be necessary. If this is the case, it will ameliorate the comparison of data between years.

IM will focus on Fiscal Year (FY) 2002 to FY04 Annual Operation Plans (AOP). Assuming a 2-3 year contract period, most of the FY02 operations are likely to now be complete. IM is currently being conducted on these sales throughout this summer and fall. For the FY03 AOP, current

expiration dates indicate that a larger proportion of the sales will not be completed until late 2005 to mid-2006. Unit-level data collection could be accomplished in late 2006. Since there can be some fluctuation in when sales are actually sold, termination dates for some FY04 sales are currently unknown. However, it is assumed that unit-level data could be collected in late 2006 to early 2007. Annual interim reports will be produced that summarize data collected to date and a project report with aggregated data should be developed by early 2008.

2. Swiss Needle Cast and Commercial Thinning

The purpose of the project is to determine the interaction between thinning of older stands (30+ years old) and disease severity and intensity of thinning. The approach includes a combination of a retrospective study of stand growth since thinning with permanent monitoring plots to track future growth.

Results from the retrospective study indicate that trees did respond to thinning in a positive manner, but the degree of response declined with increasing Swiss needle cast (SNC) severity. Heavier thinning stimulated a greater individual tree growth response than light thinning. Thinning “shock” for up to four years post-thinning occurred on some plots. A limitation of the retrospective approach is that volume growth may be overestimated because of the uncertainty in height growth. In addition, the study cannot describe what happens to foliage retention when a stand is thinned.

The permanent plot phase of the study was implemented to address key questions:

- Does thinning increase SNC severity?
- If thinning changes SNC severity, does the change depend on initial SNC severity?
- Does thinning reduce individual tree volume growth?
- Does stand volume growth after thinning decrease as initial SNC severity increases?

Fifteen paired plots were established in 2001, thinned in 2002, and re-measured in 2004. A second set of 15 plots was established in 2002, thinned in 2003 and re-measured in 2005. Variables measured included height, diameter, foliage retention, crown length, sapwood radius, age, basal area, and relative density.

Initial results of the permanent plot phase of the study show that thinning did not significantly increase the severity of SNC damage and crown sparseness may improve in stands having long crowns or in those undergoing light thinning. Thinning did not exacerbate growth loss from SNC. However, the two-year period since thinning was not long enough to detect a positive growth response to thinning. Stand growth for the two-year period after thinning was directly proportional to the proportion of initial basal area left in the residual stand, regardless of SNC intensity. Plots will be re-measured in 2006 and 2007. The study will be conducted for at least 10 years.

3. Northern Spotted Owl Surveys of the Tillamook Burn

This project is designed to detect potential use by spotted owls of young forest within the historic Tillamook Burn ("Burn"). The Burn is divided into 15 sampling units to be surveyed in a random order over 10 years, with each sampling unit receiving 2 years of intensive survey effort. In 2003 and 2004, the first 3 units were surveyed, with no spotted owl responses. Barred owls were recorded in all sampling units. A final report for the first 3 units was received in the fall of 2004. An interim report

on the next set of sampling units will be received in the fall of 2005, after the first season of surveys on these units, and a final report will be due in the fall of 2006. The results of these surveys will allow ODF to determine if and when it is appropriate to begin considering the Burn as potentially suitable habitat for northern spotted owls.

4. Assessment of Young Stand Management Strategies

Formatted: Bullets and Numbering

This project is designed to determine whether early stand management has foreclosed options for older stands to develop all desired structural components. The approach includes retrospective and manipulative studies. Data from the retrospective analysis indicate that some trends in stand development develop earlier than commonly assumed. Tree growth in young stands was positively related to stand density, but this trend reversed fairly early. Crown characteristics were influenced very early by stand density, indicating that maintaining a long live crown in typical plantations can only be accomplished by lowering stand density through pre-commercial thinning. Understory herb cover was reduced over time, while shrub cover increased. Species compositions were quite complex, with an initial strong presence of invasive species and later dominance of species usually associated with mature forests. However, there were many exceptions and early successional species were still present after 20 years. These results of the retrospective analysis show that this early stage is very complex and the dynamics vary for different characteristics. The retrospective showed that any gaps or openings in young plantations may provide for a diversity of within-stand conditions that may affect the role and impact of the stem exclusion phase on development of stand composition and ecosystem functions. Even if gaps are created over time due to various mortality agents, it appears that stand modifications of standard management operations are necessary to ensure gaps that have fully developed shrub, herb, and hardwood vegetation layers. The manipulative study is being developed to investigate whether these openings can be maintained through management. All plots for the manipulative study have been installed and initial results are expected early in 2006.

5. Stream Temperature and Riparian Function

Formatted: Bullets and Numbering

This project is designed to provide information to assess the effectiveness of the Aquatic and Riparian Strategies. This is a joint project of the State Forests and the Forest Practices Monitoring Programs. The project started in June, 2002 and is being conducted on both privately and state-owned forest land. A pre/post-study design that established control, treatment, and downstream reaches is being used. Water temperature, channel, overstory and understory riparian characteristics will be monitored two years prior to harvest and for five years after harvesting to evaluate harvest effects and recovery rates. Pre-harvest data from sites established in the first field season (2002/03) are being analyzed. In the 2004 field season, overstory data collection was completed on 9 sites and channel data collection was completed on 10 sites. Post-harvest measurements have been conducted on eight sites. Twelve sites will be available for post-harvest data collection in 2005. Depending on harvest schedules there is potential that 16 sites may be available during 2005. Seven sites will be sampled in 2006, and one site is scheduled for data collection in 2007. The first interim report will be available in late-2005. A final report is expected in 2008.

6. Stand Structure Development and Wildlife Relationships

Formatted: Bullets and Numbering

A key assumption of the forest landscape management strategies is that they will provide for native species and their respective habitats. A research project was implemented to address several questions related to this assumption. The first phase of the project was a problem analysis to determine what

information is already available and what techniques we have to address these questions. The analysis, completed in 2003, linked FMP stand structure types and structural elements to wildlife habitat characteristics and makes recommendations for options to study the effectiveness of the strategies in the field. One recommendation from this assessment is that a coarse filter monitoring approach would have a high applicability to answering questions about habitat effectiveness at a low relative cost. Coarse filter monitoring is defined as monitoring the amount, distribution, or characteristics of habitat components, stands or landscapes, rather than directly measuring response of any wildlife species directly. Coarse filter monitoring would be appropriate to use for species which are strongly associated with specific habitat attributes that we are managing for and which can be measured. A draft assessment of which species can be monitored using a coarse filter approach was completed in 2004, and will provide the basis from which to make predictions about which species we can expect to be associated with the habitats developed through active management.

The second phase of the project is the development of a field study to address issues raised in these assessments. The objective of the study is to examine how stand structure conditions are changing as a result of management prescriptions and to determine whether post-harvest stand structure conditions are developing as anticipated. A project plan was developed and reviewed by district staff. Site selection and installation was started this summer (2005). Preliminary data will be available for the FMP review in 2011. The study will also continue as a long-term study in order to better describe the process of stand development. Information from this study will also be used as part of a project aimed at defining relationships between stand structure characteristics and native wildlife habitat.

7. Socio-Economic Indicators

In 1996, Resources Planning Program produced a lengthy report on potential social and economic impacts of the NW FMP. The report covers background; economic analysis approach; Oregon forest ownership patterns, ages, and sizes; Oregon and local population trends; Oregon economic performance and outlook. It describes local economies and non-timber resource uses, including recreation and special forest products. The report summarized the NW FMP management strategies (as of 1996) and the potential economic impacts of the strategies in the short- and long-term. We are currently working with the ODF Resources Planning Program, USDA Forest Service, and the Bureau of Land Management to develop a regional economic model that will update our knowledge of these impacts. In addition the model will allow us to assess the larger picture of how management practices may be affecting regional employment, distribution of wood processing, as well as non-timber resource uses such as recreation and special forest products. Interim outputs will be available periodically as individual modules of the model are tested. The completed model will be available for the FMP assessment in 2011.

8. Public Acceptance Assessment

The first working hypothesis of the NW/SW FMPs states that “The citizens of Oregon will continue to support integrated and active management of state forests in Western Oregon to provide for multiple outputs and benefits”. We intend to test this assumption through a combination of human dimensions research approaches. Working with ODF Public Affairs we developed a Request for Information (RFI) to help us evaluate appropriate methods and survey designs. Based on the replies to the RFI we are developing a Request for Proposals (RFP) for contractors to propose research. That research will include (i) a literature review of recent research in understanding public attitudes toward forest management issues, (ii) a telephone survey of at least 1000 Oregonians, (iii) an on-line

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

survey, and (iv) a follow-up focus group assessment. We anticipate selection of a contractor by November, 2005 and a final report early in 2006. We plan to repeat the research at least biennially.

Planned Research and Monitoring

1. Watershed Scale Monitoring

Most monitoring typically takes place at either very large or very small spatial scales. Results of large-scale monitoring show the status and trends in conditions, but are difficult to link to a specific management practice, project, or policy. Results of small-scale monitoring may provide cleaner links between conditions and projects or practices, but are difficult to extrapolate to conditions at larger scales beyond the specific area being monitored. An advantage to watershed scale effectiveness monitoring is to bridge the gap between small- and large-scale monitoring. The goal for this project is to establish a foundation for conducting effectiveness monitoring at the watershed scale. To this end, a comparative analysis of different watershed scale effectiveness monitoring designs was conducted. Based on the information from the analysis, a basic structure and scope for watershed scale effectiveness monitoring was recommended. The analysis report and recommendations was reviewed both within ODF and by external experts and the suggested approach was refined based on the reviews. A two-phase approach is proposed that includes (I) intensively monitored watershed studies to address management-specific, process-level effectiveness questions and aquatic and riparian responses; and (II) extensive status and trend monitoring throughout the region within state forest and mixed ownerships to characterize aquatic and riparian conditions of basins with varying management strategies. Next steps are to establish partnerships with forest industry and university researchers and finalize the project plan. Implementation of the project is anticipated for the fall of 2005/spring of 2006. Preliminary results should be available in 2011 for the first 10-year review of the FMPs.

2. Marbled Murrelet Management Area Habitat Monitoring

The overall objective of this monitoring is to evaluate the effectiveness of different management prescriptions on the maintenance and development of suitable marbled murrelet habitat. The project will address forest operations in Marbled Murrelet Management Areas (MMAs) on north coast ODF Districts. The intent of the operations is to maintain forest health and vigor and promote the development of trees with characteristics that are, or are near to becoming, capable of supporting nesting marbled murrelets. As part of the operations, ODF will monitor certain trees within the MMAs that biologists feel have the greatest potential to develop suitable structure, or a subset of those trees. Potential study sites will be surveyed in early 2005. Development and implementation of a study plan is planned for early 2006.

3. Investigating Vegetation and Wildlife Response to Gaps in Young Plantations

This study is an expansion of the Young Stand Management study and will investigate effects of maintaining and enhancing gaps in young Douglas-fir plantations on large spatial scales. Response measurements will include productivity in terms of wood volume and quality, understory vegetation, and wildlife habitat, including usage of stands by songbirds, bats, and small mammals. These responses will be assessed on individual gap and stand scales. Comparison of gap development of different sizes and natural vs. created gaps will also be investigated. Study sites will be established during 2005.

Stand Level Inventory

The Stand Level Inventory (SLI) is a forest inventory developed by ODF. The SLI provides site-specific information on trees, down wood and understory vegetation on State Forest lands. It is a primary source of information for operational intensive management planning and decision-making, harvest scheduling, monitoring, watershed assessment, wildlife habitat suitability, and stand structure classifications.

Three years of SLI contract work have been completed through May 2005. This equals approximately 39% of the total stands being measured to date.

Table 9
SLI Accomplishments
May 2002 through June 2005

State Forest Districts	Total Stands	Stands Completed	Percent Completed
Astoria	1,433	532	37%
Forest Grove	1,222	563	46%
Tillamook	1,850	654	35%
West Oregon	955	378	40%
North Cascade	769	320	42%
Western Lane	366	134	37%
Southwest	289	150	52%
Coos	2,133	640	30%
Klamath-Lake	303	259	85%
Total	9,320	3,630	39%

The fourth year of contracting is underway and is scheduled to be completed by June 2006. The long-term goal is to maintain at least 50% of the State Forest lands with recent inventory. As the program approaches that mark there will be continued discussion to determine how much more is needed or if efforts can be reduced to a maintenance mode.

The Tillamook District was not included in the initial contract for the fourth year of inventory work. The district is contracting out a re-typing of the forest stands to assure the sampling results will provide the level of information they need in their planning efforts. Contracting the SLI work for Tillamook will continue when they complete the re-typing project.

Table 10
SLI Projected through May 2006

State Forest Districts	Contracted Stands	Projected June 2006	Estimated Percent
Astoria	139	671	47%
Forest Grove	125	688	56%
Tillamook	-	654	35%
West Oregon	113	491	51%
North Cascade	40	360	47%
Western Lane	44	178	49%
Southwest	10	160	55%
Coos Bay	170	810	38%
Klamath-Lake	-	259	85%
Total	641	4,271	46%

*Includes current contract (4th year)

