

## Mi DNR Timber Harvest Determination Process<sup>1</sup>

The 1998-99 Silvicultural Analysis was initiated to account for Michigan State Forest acres inventoried each year. Approximately 10% of the State Forest or 390,000 acres are scheduled to be reviewed each year, but only about 60,000 acres are prepared for commercial timber treatments. Differences of opinion exist over whether or not and how much the amount prepared for treatment can be expanded.

The Analysis addressed this question through establishing an accounting framework for the categorization of acres examined and applied this framework to a 10-year projection of the State Forest inventory. The projection was for the period 1999 to 2008.

The accounting framework developed through the Analysis has been incorporated into the Division's inventory and annual work plan processes<sup>2</sup>. This permits a close examination of how Analysis projections compare to what is actually being achieved during the projection period. Over time, a substantial, in-depth timber management review system has become established.

Following Compartment Reviews, when a Management Unit finishes their inventory updates and all quality control checks are completed, the inventory for that Unit is combined with other Units' inventories that have completed the process for that year. In this manner, a complete, up-to-date, statewide inventory for what is referred to as an "entry year" (YOE) is compiled despite the Management Units being on slightly different schedules. In turn, this "frozen" database is used as the basis for work planning for the entry year.

This process was begun with the 2000 entry year. Prior to the 2000 entry year, State Forest inventory databases (including the one used for the Silvicultural Analysis) were frozen at a particular point in time, with the Units at different stages of updating their inventories and completing their quality control work. Each year's statewide "frozen" database contains the most accurate inventory available for the entry year for which it was compiled. The frozen database contains inventory data for other years, but earlier years may or may not have been updated to reflect timber sales and later years might not reflect inventory changes as a result of treatments or the passage of time. Taking the current inventory year's data from the frozen databases provides the most accurate contrast to the annualized projections of the Silvicultural Analysis.

The current (2005) process to develop the plan of work (POW) is:

1. Units update OIPC to reflect compartment review decisions

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<sup>1</sup> This document describes the annual "plan of work" process which focuses on preparing acres for sale which have been prescribed for treatment during the inventory process. For more on the inventory prescription process, see the OI manual, especially chapter 7 on "Compartment Reviews." Two flow charts are companion documents to this paper and highlight the inventory and treatment-decision process which lead to timber sales and harvests. The Appendix F\_5\_02OImanual.doc from the OI manual provides a treatment decision tree description and the RAP Flow Chart 1\_03.doc (Resource Assessment Process Flow Chart) details the inventory steps leading up to the annual plan of work described in this document.

<sup>2</sup> Appropriations language for fy 01 and fy 02 calls for the Division's continuation of the silvicultural analysis

2. Planner verifies that information is correct and approves database
3. Statewide Inventory Specialist (SIS) queries OIPC for information needed for "Acres Available" portion of plan of work (POW). This information is broken down by Unit and includes:

2005 Timber Sale Preparation Plan of Work (Part 1 - Acres Available)																	
UNIT	All Acres Examined 2005 YOE <sup>1</sup>	Not Prescribed (not managerially desirable)			All Acres Prescribed for harvest in OI <sup>2</sup>	Prescribed (treatment managerially desirable)					Net Available 2005 YOE <sup>4</sup>	Additions <sup>5</sup>		TOTAL ACRES <sup>7</sup>	Carried from 2004 work plan unfinished contracts <sup>3</sup>	NET ACRES <sup>6</sup>	
		Non-Forest Types <sup>1</sup>	Forested acres not meeting silvicultural criteria <sup>2</sup>	silvicultural criteria, but restrained by limiting factors <sup>3</sup>		Expected Available		Unavailable				Other <sup>4</sup>	Carried from 2004 work plan <sup>5</sup>				Other Additions <sup>5</sup>
						Non-Forest Types <sup>1</sup>	Does not meet silvicultural criteria <sup>4</sup>	Does meet silvicultural criteria <sup>4</sup>	Restrained by limiting factors <sup>5</sup>	Other <sup>4</sup>							
Baraga	14,026	2,255	6,188	3,313	2,270	0	847	1,423	0	0	2,270	196	166	2,632	0	2,632	
Crystal Falls	28,284	4,005	15,800	4,646	3,833	0	357	2,953	88	435	3,310	267	0	3,577	0	3,577	
Gwinn	29,754	2,892	17,638	6,094	3,100	0	837	1,593	700	0	2,430	733	0	3,163	0	3,163	
<b>WUP Totals:</b>	<b>72,064</b>	<b>9,152</b>	<b>39,626</b>	<b>14,053</b>	<b>9,233</b>	<b>0</b>	<b>2,041</b>	<b>5,969</b>	<b>788</b>	<b>435</b>	<b>8,010</b>	<b>1,196</b>	<b>166</b>	<b>9,372</b>	<b>0</b>	<b>9,372</b>	
Esconaba	11,686	713	7,692	1,425	1,856	0	901	810	72	73	1,711	9	0	1,720	0	1,720	
Shingleton	43,011	13,678	20,339	3,772	5,222	16	1,849	2,965	335	57	4,830	99	41	4,970	0	4,970	
Newberry	41,734	16,547	16,186	5,682	3,319	0	496	2,497	336	0	2,983	0	240	3,223	0	3,223	
Sault	30,015	8,068	14,108	3,193	4,646	0	1,028	2,002	1,471	145	3,030	0	790	3,820	0	3,820	
<b>EUP Totals:</b>	<b>126,446</b>	<b>39,006</b>	<b>58,325</b>	<b>14,072</b>	<b>15,043</b>	<b>16</b>	<b>4,264</b>	<b>8,274</b>	<b>2,214</b>	<b>275</b>	<b>12,554</b>	<b>108</b>	<b>1,071</b>	<b>13,733</b>	<b>0</b>	<b>13,733</b>	
<b>UP Totals:</b>	<b>198,510</b>	<b>48,158</b>	<b>97,951</b>	<b>28,125</b>	<b>24,276</b>	<b>16</b>	<b>6,305</b>	<b>14,243</b>	<b>3,002</b>	<b>710</b>	<b>20,564</b>	<b>1,304</b>	<b>1,237</b>	<b>23,105</b>	<b>0</b>	<b>23,105</b>	
Gaylord	36,828	4,379	21,802	4,509	6,138	0	1,517	3,059	1,562	0	4,576	323	171	5,070	0	5,070	
Pigeon River	11,198	1,458	7,476	661	1,603	0	218	1,191	8	186	1,409	28	0	1,437	0	1,437	
Atlanta	29,266	3,517	18,521	2,992	4,236	0	1,554	2,577	105	0	4,131	1,104	0	5,235	0	5,235	
Roscommon	24,671	4,537	11,056	6,868	2,210	0	796	1,374	40	0	2,170	0	0	2,170	0	2,170	
Grayling	28,493	3,051	15,927	3,844	5,671	27	2,333	3,056	248	9	5,414	1,473	0	6,887	0	6,887	
<b>ELP Totals:</b>	<b>130,456</b>	<b>16,342</b>	<b>74,782</b>	<b>18,874</b>	<b>19,858</b>	<b>27</b>	<b>6,418</b>	<b>11,257</b>	<b>1,963</b>	<b>195</b>	<b>17,700</b>	<b>2,928</b>	<b>171</b>	<b>20,799</b>	<b>0</b>	<b>20,799</b>	
Traverse City OI	31,808	4,016	20,024	1,973	5,795	5	2,525	3,224	31	10	5,754	987	0	6,741	0	6,741	
TC IFMAP*	1,869	256	1,084	283	246	0	57	186	3	0	243	0	0	243	0	243	
Cadillac	24,891	2,803	14,691	2,045	5,352	0	2,634	2,421	297	468	4,587	1,467	224	6,278	0	6,278	
Gladwin	23,241	4,568	13,512	1,513	3,648	0	1,153	1,992	270	233	3,145	1,221	0	4,366	0	4,366	
<b>WLP Totals:</b>	<b>81,809</b>	<b>11,643</b>	<b>49,311</b>	<b>5,814</b>	<b>15,041</b>	<b>5</b>	<b>6,369</b>	<b>7,823</b>	<b>601</b>	<b>711</b>	<b>13,729</b>	<b>3,675</b>	<b>224</b>	<b>17,628</b>	<b>0</b>	<b>17,628</b>	
<b>NLP Totals:</b>	<b>212,265</b>	<b>28,585</b>	<b>124,093</b>	<b>24,688</b>	<b>34,899</b>	<b>32</b>	<b>12,787</b>	<b>19,080</b>	<b>2,564</b>	<b>906</b>	<b>31,429</b>	<b>6,603</b>	<b>395</b>	<b>38,427</b>	<b>0</b>	<b>38,427</b>	
<b>State Totals:</b>	<b>410,775</b>	<b>76,743</b>	<b>222,044</b>	<b>52,813</b>	<b>59,175</b>	<b>48</b>	<b>19,092</b>	<b>33,323</b>	<b>5,566</b>	<b>1,616</b>	<b>51,993</b>	<b>7,907</b>	<b>1,632</b>	<b>61,532</b>	<b>0</b>	<b>61,532</b>	

his year of entry (YOE)

- Of those, the acres without prescriptions are broken into non-forested, forested that do not meet silvicultural criteria, forested that do meet silvicultural criteria that are restrained by limiting factors.
- All acres prescribed for harvest in OIPC
- Of those, prescribed acres that are available for harvest that:
  - a. are classified as non-forested
  - b. do not meet generic silvicultural criteria but are approved and prescribed for treatments
  - c. do meet generic silvicultural criteria
- The rest of the prescribed acres are unavailable acres that are:
  - a. prescribed but unavailable due to limiting factors
  - b. prescribed but unavailable for other reasons (already on contract, planned to treat with adjacent compartment in other years, planned to treat other years for other reasons, etc.)
- Net available from the YOE.
- Additions. These include stands carried from the previous year's POW and other additions from previous years (see final bullet in step 4)

4. SIS creates tab within POW for each unit that shows all prescribed stands with stand specific information. This shows all acres prescribed broken into:

	A	B	C	D	E	F	G	H	I	J	K
	Unit	Comp	Stand	YOE	Acres	Cover Type	Stem Density	Method of Cut	Harvest Priority	Limiting Factor 1	Comments
2	<b>EXPECTED AVAILABLE (2005 YOE Compartments):</b>										first draft 4/14/4
3	11	2	12	2005	59	M	6	8	2		approved by unit 5/18/4
4	11	2	23	2005	62	F	6	1	3		carryover added 11/4/4
5	11	2	27	2005	36	M	6	8	3		List final - 11/24/4
6	11	2	34	2005	67	M	6	8	1		monthly report template sent 11/30
7	11	6	29	2005	40	B	5	1	3		
8	11	6	32	2005	17	B	5	1	3		
9	11	6	34	2005	21	M	6	8	3		
55	11	74	6	2005	12	B	5	2	2		
56	11	74	7	2005	10	B	5	2	2		
57	Total: 2270 acres										
58	<b>EXPECTED UNAVAILABLE due to Limiting Factors:</b>										
59	Total: 0 acres										
61	<b>EXPECTED UNAVAILABLE due to other reasons:</b>										
62	Total: 0 acres										
64	<b>CARRIED FORWARD FROM FY 2004 Plan of Work:</b>										
65	1. 2004 Contract not complete in time to have proposal date prior to 10/1/04										
66	Total: 0 acres										
67	2. Carried forward for other reasons (see 2004 disposition of sales)										
68	11	11	46	2004	115	J	6	1	1		
70	11	11	48	2004	29	J	6	1	1		
71	11	11	78	2004	13	J	5	1	1		
72	11	11	80	2004	12	J	6	1	1		
73	11	11	108	2004	11	J	6	1	1		
74	11	11	328	2004	11	J	5	1	1		
75	11	11	53	2004	5	J	6	1	1		
76	Total: 196 acres										
77	<b>OTHER STANDS FROM PREVIOUS YEARS</b>										
78	11	48	1	2003	17	M	6	8	1		scheduled to harvest with compartment 49
79	11	50	4	2002	72	M	6	8	1		previously approved pending land exchange now final.
80	11	50	6	2002	30	H	9	8	1		previously approved pending land exchange now final.
81	11	50	7	2002	47	M	6	8	1		previously approved pending land exchange now final.
82	Total: 166 acres										
83	<b>TOTAL NET ACRES AVAILABLE:</b>										2632
84	<b>TOTAL ACRES EXPECTED UNAVAILABLE:</b>										0

- Expected Available.
- Prescribed but Unavailable due to Limiting Factors. First priority limiting factor is listed for individual stands.
- Unavailable for other reasons. Reasons are individually documented.
- Carried forward from the previous POW.
- Other stands from previous years that were not on a prior work plan – such stands that were planned to treat with adjacent compartments in this YOE and other stands that were planned to treat in this YOE.

5. POW as assembled is verified by units.

6. Verified POW is forwarded to Field Coordinators. Estimates are made for expected carry-over, if any. The Field Coordinators then work with District Supervisors and Unit Managers to determine what resources will be needed to accomplish approved treatments. The Resource Needs tab of the POW is used to document resource needs.

2005 Timber Sale Preparation Plan of Work (Part 2 - Resource Allocations) April 25, 2005													
TOTAL POSSIBLE WITH CURRENT RESOURCES													
		TOTAL ACRES AVAILABLE	Minimal resources needed (balance of work done last year)	No FMD resources needed (wildlife division will accomplish)	Regular Time Acres Unit Staff	Regular Time Acres District Staff	Carried over 2004 w/ plan contracts*	Contract Acres and Dollars	Student Acres and Dollars	Overtime Acres and Dollars	TOTAL PLANNED ACRES and Additio Dollars	Acres not scheduled due to lack of resources	
9	Burago	Acres	2,632		1,040	200		1,392			2,632	0	
10	Crystal Falls	Acres	3,577		1,919	600		164,687			164,687	0	
12	Gwin	Acres	3,163		2,295	200		138,000			138,000	0	
14	WUP	Acres	3,372	0	5,254	1,000	0	3,118	0	0	3,372	0	
17	Esconaba	Acres	1,720		1,720			10	126,687	10	126,687	0	
19	Shingleton	Acres	4,370		3,176	418		1,376			4,370	0	
20	Newberry	Acres	3,223		1,667	240		143,700	100	100	147,700	0	
22	Sault	Acres	3,820		2,620	400		500		300	3,820	0	
24	EUP	Acres	13,733	0	3,183	1,058	0	3,098	0	400	13,733	0	
25	UP Totals:	Acres	23,105	0	14,437	2,058	0	106,700	0	400	112,700	0	
27	Gaylord	Acres	5,070		3,350			1,720			5,070	0	
30	Pigeon River	Acres	1,437		1,000			437			1,437	0	
32	Atlanta	Acres	5,235		2,000	1,000		1,000	1,134	5,134	101		
34	Roscommon	Acres	2,170		1,170			1,000			2,170	0	
35	Grayling	Acres	6,887		2,400	888		1,737	1,300	6,325	562		
37	ELP	Acres	20,799	0	3,320	1,888	0	5,894	0	2,434	20,136	663	
40	Traverse City	Acres	6,984		3,280	1,800		638		1,212	6,984	0	
41	Cadillac	Acres	6,278		2,700	1,800		123,000	839	300	158,000	579	
43	Gladwin	Acres	4,366		1,600			1,798	400	3,798	568		
46	WLP	Acres	17,628	0	7,580	3,600	0	3,329	0	1,972	16,481	1,147	
47	LP Totals:	Acres	38,427	0	17,500	5,488	0	3,223	0	4,406	36,617	1,810	
50	State	Acres	61,532	0	31,337	7,546	0	15,433	0	4,806	59,722	1,810	
52		Dollars						10: \$52,887	10: \$171,000	10: \$703,867			

\*All acres not finished in time by sale prep contractor to be complete in FY 2005. If FY 2005 dollars are to be used to pay for any of the prep contract carry-over, include them here.

- The list of treatments in step 4 is put into a monthly report format for the Unit. Throughout the year, the unit tracks the treatments as timber sale contracts are prepared on a stand by stand basis. Actual timber sale acres are reconciled to the inventory acres, with any differences documented. Some stands are found to be factor limited and treatments are not prepared. These are documented as well. The monthly report also provides progress updates to District and Lansing staff.

From Operations Inventory				From Timber Sale Proposal (update this column as sales are submitted)				Acres Difference (if positive, either of next 2 columns should be negative)	Expected to be unavailable for future	Expected to be available for next year's plan (acres)	Acres not accomplished, Available for next year - Reasons not prepared this year																
Unit	Comp	Stand	YOE	Stand Acres	Cover Type	Size/Density	Method of Cut	Source	Timber Sale Number	Local Use	Stand Acres within sale	Minor Acres Change	Factor Limitations? (To be Updated in OIPC)	Weather	Staff on Vacation	Fires beyond	Staff on Michigan fires	Contractor	Prepared sales not finished	Expected survey not completed	Specific Assignments	Use of vocations, etc., injuries, etc.	Workload shift due to salvage, etc.	Other acres not completed	Timber Sale Comp. or Var. From Plan	Comments	
28	63	61	50	2005	54	A	6	3	A																		0.0
29	63	61	52	2005	21	O	6	3	A																		0.0
30	63	61	53	2005	64	O	6	1	A																		0.0
31	63	61	60	2005	57	J	6	1	A																		0.0
32	63	61	62	2005	11	O	5	1	A																		0.0
33	63	61	63	2005	21	R	6	4	A																		0.0
34	63	61	65	2005	11	O	3	3	A																		0.0
35	63	61	71	2005	50	J	6	1	A																		0.0
36	63	61	82	2005	21	O	6	1	A																		0.0
37	63	91	47	2000	24	J	6	1	C	Twin Creek East Jack	63-012-05-01	19	-5.0	5													0.0
38	63	101	56	2004	34	O	6	3	B	Trailside Oak	63-051-05-01	27	-7.0	7													0.0
39	63	101	60	2004	9	O	6	8	B	Sweet Oak & Pine	63-023-05-01		-9.0														0.0
40	63	101	35	2004	21	O	3	3	B				-21.0														0.0
41	63	101	117	2004	114	O	3	3	B	Sweet Oak & Pine	63-023-05-01		-114.0														0.0
42	63	101	165	2004	39	J	6	1	B	Sweet Oak & Pine	63-023-05-01		-39.0														0.0
43	63	121	15	2003	49	O	3	1	B	Twelve Oaks	63-050-05-01	40	-9.0	9													0.0
44	63	121	30	2003	37	J	6	1	B	Three Oak Jack	63-046-05-01		-37.0														0.0
45	63	121	32	2003	23	O	6	1	B	Three Oak Jack	63-046-05-01		-23.0														0.0
46	63	131	23	1999	10	J	6	1	C	C19 Jack Pine	63-015-05-01	11	1.0	1													0.0
47	63	131	28	1999	57	J	6	1	C	C19 Jack Pine	63-015-05-01	49	-8.0	8													0.0
48	63	131	40	1999	18	J	6	1	C	C19 Jack Pine	63-015-05-01	24	6.0	6													0.0

- Throughout the year, additional stands may be added to this list due to disturbances such as wind storms and insect damage. Also, stands thought to be factor limited (step 3, bullet 5a) may become available and will be added as well. Example – landowner previously denied access to a stand, ownership changes and access is now available.

9. At the end of the fiscal year, this list of treatments (the Stand List of the monthly report) is reconciled. Stands that were not completed either by timber sale or factor limitations are carried over into the next year's POW as shown in step 3 above.
10. A year end disposition is prepared that shows how many acres were treated, as well as a breakdown of OI vs. timber sale acres.
11. Recently, the Michigan legislature has required two timber harvest-related annual reports:

Public Acts of 2003 Act No.147 Approved by the Governor: August 7, 2003  
Filed with the Secretary of State: August 8, 2003 EFFECTIVE DATE:  
August 8, 2003

Sec. 801. Of the funds appropriated in part 1, the department shall prescribe appropriate treatment on 63,000 acres, plus or minus 10%, at the current average rate of 12.5 to 13 cords per acre provided that the department shall take into consideration the impact of timber harvesting on wildlife habitat and recreation uses. The department shall endeavor to increase marking or treatment of hardwood timber by 10% over 2003 levels. In addition, the department shall take into consideration silvicultural analysis and report annually to the legislature on plans and efforts to address factors limiting management of timber.

The appended three-page report "Plans and Efforts to Address Factors Limiting Management of Timber" addresses the report requirement of this legislation.

There is also language in statute to report acres and cords harvested from state forest land:

Part 525, P.A. 451, 1994, as amended. Sec. 52506. By January 1 of each year, the department shall prepare and submit to the commission of natural resources, the standing committees of the senate and the house of representatives with primary jurisdiction over forestry issues, and the senate and house appropriations committees a report that details the following from the previous state fiscal year:

(b) The number of acres of the state forest that were harvested and the number of cords of wood that were harvested from the state forest.

The appended "Michigan State Forest System Acres and Cords Cut Summary" addresses this requirement.

## Department of Natural Resources Plans and Efforts to Address Factors Limiting Management of Timber

### Prescribed and Planned Timber Harvest Treatments

Department of Natural Resources (Department) staff develop work plans each fiscal year to implement activities on the state forest system that have been approved through the resource assessment and inventory process. Work plans for commercial timber sales on the state forest system are developed by the Forest, Mineral, and Fire Management Division, based on the resources and time available to accomplish the work during the fiscal year. The fiscal year Plan of Work (POW) for timber sales details which forest stands will be prepared for sale. Sale preparation includes sale layout, volume and product estimation, value calculations and developing the sale prospectus and bid information.

In Fiscal Year 2003-2004, timber harvest treatment was approved for 69,110 acres on state forest lands. The POW for FY 2003-2004 was comprised of 62,088 acres, as shown in Table 1.

Table 1  
Fiscal Year 2003-2004 Plan of Work

Description	Acres
Total approved prescribed harvest treatments	69,110
Acres not planned, no resources	3,795
Acres not planned, added during the year	3,227
<b>Acres planned, resources available</b>	<b>62,088</b>

Timber sales were prepared for 60,730 acres<sup>3</sup>, or 98% of the acres scheduled on the POW in Fiscal Year 2003-2004.

### Hardwood Timber Treatment

Year of Entry (YOE) 2003 included treatments or prescriptions for 33,304 hardwood<sup>4</sup> acres. YOE 2004 included treatments or prescriptions for 40,129 hardwood acres. This 20% increase over YOE 03 was much higher than the 10% increase targeted in statute.

### Factors Limiting Management of Timber and Efforts to Address Factors

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<sup>3</sup> These POW acres correlate to 55,074 acres on proposals for bid in the timber sale tracking system (Tsale). The difference (5,656 acres) is comprised of minor acreage adjustments (stand boundary changes—3 %), and other physical and biological factors that prohibited treatment (fens, swales, steep slopes, too wet, etc.—6 %).

<sup>4</sup> Hardwood cover types include aspen, birch, mixed northern hardwoods, oak, and lowland hardwood.

An accounting of factors that impact timber availability on state forest lands was begun with a Silvicultural Analysis (SA) project in 1999. This initial attempt was further refined by a peer review analysis of the project's methods, as well as a comparison of the SA projections to actual on-the-ground conditions.<sup>5</sup> The comparison found that, given the Department's silvicultural criteria and standards, the SA over-estimated timber availability on state forests.

The most common factors limiting timber management documented by the SA were as follows:

- The land was too wet
- Insufficient age or size diversity of the forest
- Potential old growth (biodiversity)
- Low stocking, diameter
- Regeneration concerns

Many forest stands have multiple limiting factors. Although there may be a primary barrier to commercially harvesting a forest stand, there will typically be multiple limiting factors to be resolved before a commercial harvest treatment may occur. Some limiting factors may be temporary, while others may be more permanent. For example, age and size diversity refers to maintaining a balanced range of forest types in all stages of growth. This provides a sustainable even flow of forest benefits, particularly timber and wildlife habitat, and a diversity of forest covers over time. A forest stand that is not cut in one ten-year cycle may be cut in the next ten-year cycle to maintain forest diversity.

The Department is taking several strategic steps to address factors limiting timber availability including:

- Development of Geographic Information Systems (GIS) layers that correspond to limiting factors. This data will improve analysis and help validate the nature, magnitude, and trends related to limiting factors.
- Development of habitat information (Kotar system) and timber growth and yield projection capabilities to refine timber availability analysis.
- Development of an old growth and biodiversity stewardship strategy that identifies biological and social values and compatible forest treatments.
- Establishment of an interdisciplinary Vegetative Management Team (VMT) to examine technical silvicultural issues in an ecosystem context.
- Creation, in 2005, of a broad-based, twenty-member interdisciplinary forest advisory group to advise the Department on statewide forestry issues and state forest system concerns.
- An annual review of road, bridge, and land survey projects. Priorities and costs will be identified to most effectively use resources.

In addition, the Department is working with Minnesota, Wisconsin, the Great Lakes Forestry Alliance, and the United States Department of Agriculture Forest Service on developing non-industrial private forest lands (family forest) forest certification

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<sup>5</sup> These findings are in the *Silvicultural Analysis Review Team Final Report*, Peer Review Committee, May 2003 and *Developing Sustainable Forestry in Michigan: Assessing Timber Availability from State Forest Land*, Larry Pedersen, August 2003.

methodologies. This is supplemental to Department efforts to increase active management and timber harvesting on family forests.

Finally, the Department is working toward third-party forest certification by January 1, 2006, for the 3.9 million acre state forest system. This effort is essential in order for primary wood producers in Michigan to have continued access to national and international markets. The investment the Department is making in forest certification will strengthen Michigan's forest products sector.

**Michigan State Forest System Acres and Cords Cut Summary**  
**FY 2004: October 1, 2003 to September 30, 2004**  
**Required under Part 525, P.A. 451, 1994 MCL 324.52506 (b)**

<b>State Forest Management Unit</b>	<b>Payment Unit Value</b>	<b>Cords</b>	<b>Acres</b>	<b>Cords/acre</b>
Baraga Management Unit 1104	\$2,261,723	44,752	4,173	10.72
Crystal Falls Management Unit 1204	\$1,920,939	60,303	3,419	17.64
Gwinn Management Unit 3204	\$1,845,577	59,257	3,712	15.96
Escanaba Management Unit 3304	\$818,607	24,757	2,020	12.25
Shingleton Management Unit 4104	\$2,174,601	47,700	3,925	12.15
Newberry Management Unit 4204	\$1,853,779	40,107	2,661	15.07
SSM Management Unit 4504	\$1,791,176	56,370	4,543	12.41
Gaylord Management Unit 5204	\$1,925,661	50,430	4,356	11.58
Pigeon River Country Management Unit 5304	\$278,520	14,984	1,005	14.90
Atlanta Management Unit 5404	\$1,124,920	28,012	2,369	11.83
Traverse City Management Unit 6104	\$2,650,205	51,378	4,879	10.53
Cadillac Management Unit 6304	\$2,761,993	65,850	4,513	14.59
Roscommon Management Unit 7104	\$2,854,798	67,004	4,395	15.24
Grayling Management Unit 7204	\$3,757,675	89,220	6,223	14.34
Gladwin Management Unit 7304	\$913,469	21,458	1,327	16.17
<b>Totals</b>	<b>\$28,933,643</b>	<b>721,579</b>	<b>53,522</b>	<b>13.48</b>