

Plan Implementation

Introduction

Implementation of the State Forest Management Plan (SFMP) goals, objectives, and management actions will be accomplished using various strategies and mechanisms. Each management priority may be influenced by programs and processes across multiple Michigan Department of Natural Resources divisions, and each has its own systems in place to help manage that resource. Considering the array of management priorities, affiliated programs and staff that manage them, the plan writing team committed to keeping a core segment together for the planning period that will focus on implementation and monitoring efforts.

The SFMP implementation and monitoring team will consist of the statewide forest planning and modeling specialist (Forest Resources Division), two regional wildlife planner/ecologists (Wildlife Division), and four district-level Forest planning and inventory specialists. Participation from Parks and Recreation planning specialists and Fisheries Division staff will be requested as needed. Team oversight will be led by planning section leaders in FRD and Wildlife.

Implementation strategy

The team will create a database that organizes SFMP goals, objectives, and management actions so that focused effort can be assigned to specific programs and relevant staff. Management actions can be recorded and progress toward desired future conditions can be reported annually to support monitoring needs. Specific metrics listed in each management priority section will be recorded as actions occur.

A significant part of implementation work is focused on commercial timber harvest to create both desired future conditions of forested cover types and wildlife habitat conditions. The SFMP model was created to help ensure that management of state forest land in Michigan creates a long-term sustainable supply of forest products and wildlife habitat while providing recreation opportunities and protecting natural and cultural resources for the people of Michigan. The model generated information for a 150-year planning horizon to create a long-term view of sustainability as it relates to multiple values. The first 10-year period of that horizon is included in this plan.

The harvest levels, by management area, forest management unit, special analysis unit, cover type, age class, BA class, availability and silvicultural method were extracted from the first period of the overall harvest schedule and allocated to eligible stands in a spatial stands layer. Because each stand is part of a compartment, and each compartment has a designated year of entry, a projected annual harvest schedule could be created representing a feasible implementation solution. The spatial allocation provides an estimated level of harvest for each compartment and year of entry for each cover type in each management area. Individual stand selection may vary depending on other factors the model does not consider, such as spatial juxtaposition of treatments, harvest timing efficiencies, access issues, local area age class diversity and disturbance levels.

Other limitations exist in the “stand selection” performed by the spatial allocation of the harvest schedule to the SFMP stand shape file, especially in the cover types eligible for selection, group

selection, shelterwood, and thinning treatments. The basal area ranges used in the MiFI system of forest inventory resulted in an inability to accurately forecast stands that would be ready for a thinning or selection harvest within the next decade. Because of this, spatial allocation of these types of treatments could fall on stands that are not quite ready for a thinning or a selection harvest. It is fully anticipated that at a compartment level, deviations from projected harvests will occur, but projected harvest levels will be prescribed at a higher scale across the management area each year of entry.

Shelterwood and group selection treatments are projected based on a percentage of anticipated need for the decade. Information necessary to select these treatments at a stand level is not included or evaluated in the SFMP model. The implementation process of spatial allocation will likely not “select” the right stands to receive these harvests. It is expected that the proportion of these types of treatments will be prescribed across the cover types in the management areas in the decade.

Management actions

Implementation of projected harvests is driven by cover type-specific goals for each management area, but those goals are implemented through FRD administrative units. Forest Management Units are each responsible for identifying eligible stands through forest inventory and prescribing a subset of those stands for treatments that align with and implement the goals of the SFMP. The spatial allocation of the period 1 harvests helps to guide harvests levels ensuring that forest and habitat conditions are moving from current conditions toward desired future conditions.

Implementation guidance is provided at annual compartment review meetings, beginning with a harvest projection at the pre-inventory meeting. This projected harvest schedule allows stand examiners to evaluate potential candidates to receive treatments in both even-aged and uneven-aged systems. Harvest targets provided at the pre-inventory meeting help establish annual regeneration goals for each even-aged cover type, ensuring that annual harvests result in a new age class that contributes to a desired age class distribution. These regeneration harvest goals should be closely followed on an annual basis. Significant deviations should be avoided unless anomalies are documented to justify a change. Partial harvest projections for selection and thinning treatments are meant to be a higher-level expected level of harvest, and treatments should be applied to stands based on inventoried basal area observations and needs.

Pre-review meetings will be used to evaluate prescribed treatments and compare them with projected harvest levels in each cover type and management area. Deviations from projected harvest levels will be recorded and used in subsequent years to adjust harvest levels up or down as necessary. An overall effort should be made to reach decade-level harvest objectives, contributing to the achievement of the desired age and basal area class distributions and associated habitat elements.

The following tables and graphs summarize the annual projected harvest prescriptions to be made across the state forest. Actual acres prepared for harvest will likely average about 3 to 10 percent less than prescribed acres due to several contributing factors. The continued establishment of within-stand retention areas (required by forest certification standards) results in a reduction of 3 to 10 % of most even-aged regeneration harvests. These areas are often used to protect hydrologic features, wildlife habitat elements or recreation influences. They are also frequently used for visual management or aesthetics. Stands prescribed with a “soft limiting factor” such as survey needed, road needed, portable

bridge needed, also are included in these projections. They do not always get accomplished in the given year of entry, but usually within the decade. Other reductions in areas prepared for treatment can simply be a refinement of stand boundaries. This occurs once field work is completed and stand boundaries are verified on the ground.

Table 1. Annual harvest projections by silvicultural regime.

Year of Entry	Clearcut	Selection	Thinning	Shelterwood	Group Selection	Grand Total
2027	26,550	16,236	9,910	1,305	508	54,508
2028	24,543	18,207	7,371	1,398	1,122	52,640
2029	23,743	14,438	6,595	1,325	746	46,847
2030	23,183	13,294	7,081	1,435	743	45,736
2031	26,268	10,906	4,641	1,449	774	44,038
2032	21,371	15,071	6,177	1,526	1,204	45,348
2033	24,513	10,714	7,846	996	1,302	45,371
2034	32,990	18,580	7,714	2,007	1,297	62,587
2035	28,984	14,419	6,732	1,896	1,185	53,215
2036	30,010	14,720	6,409	800	715	52,653
Grand Total	262,154	146,586	70,475	14,135	9,594	502,944

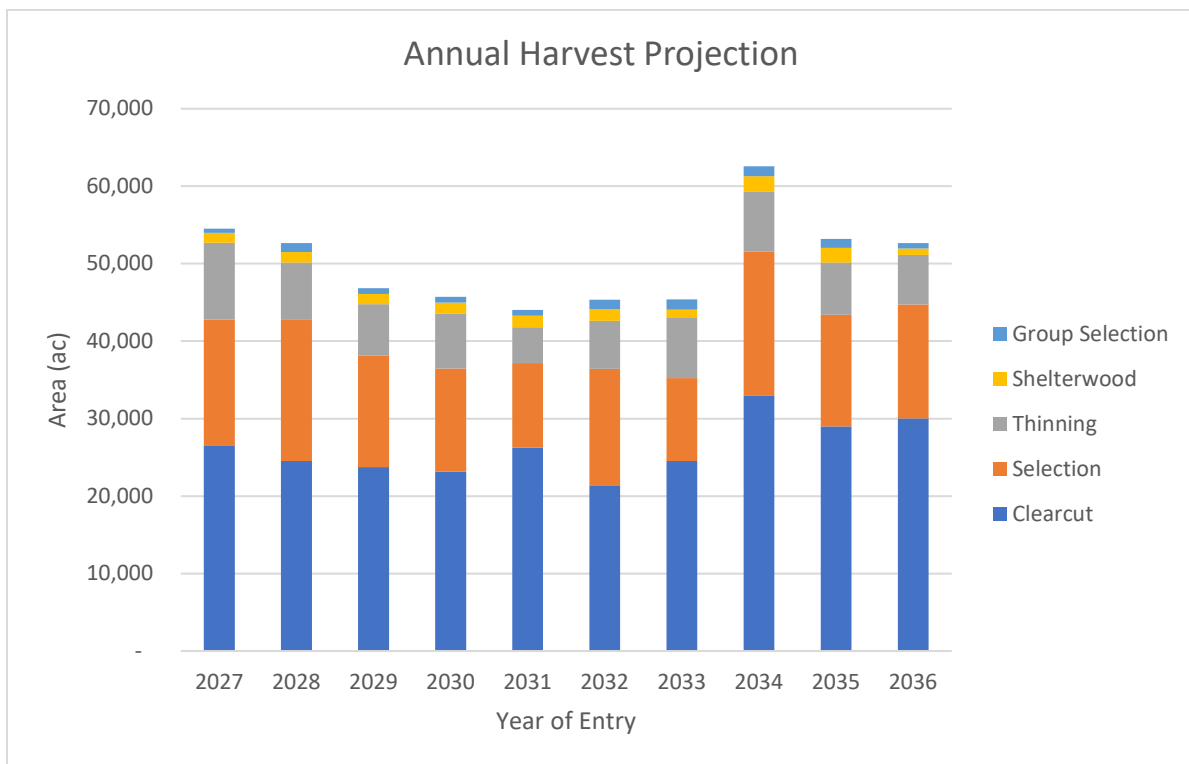


Figure 1. Annual harvest projections by silvicultural regime.

Table 2. 10-year harvest projections by cover type and silvicultural regime.

State Forest - Silvicultural Regimes						
Cover type	Clearcut	Selection	Thinning	Group Selection	Shelterwood	Grand Total
Northern Hardwood	3,107	142,410	-	8,383	1,682	155,583
Aspen	118,989	-	-	-	-	118,989
Planted Red Pine	15,202	-	57,414	-	-	72,616
Mixed Upland Deciduous	19,481	3,195	-	-	1,685	24,361
Natural Jack Pine	18,082	-	-	-	-	18,082
Planted Jack Pine	12,250	-	-	-	-	12,250
Lowland Conifers	9,936	-	-	-	-	9,936
Lowland Aspen/Balsam Poplar	9,647	-	-	-	-	9,647
Black/Red Hybrid Oak	8,243	-	591	-	343	9,176
Upland Mixed Forest	9,054	-	-	-	-	9,054
Northern Red Oak	6,923	-	351	873	115	8,261
Upland Conifers	6,774	-	8	-	1,062	7,844
Natural Mixed Pines	-	-	3,961	-	3,765	7,726
Lowland Spruce/Fir	7,307	-	-	-	-	7,307
Lowland Deciduous	4,727	515	-	327	1,666	7,235
Natural White Pine	-	-	2,387	-	2,362	4,749
Oak Mix	3,966	-	407	-	42	4,415
Planted White Pine	481	-	3,273	-	-	3,753
Lowland Mixed Forest	3,083	-	-	-	-	3,083
Natural Red Pine	-	-	1,530	-	1,415	2,944
Upland Spruce/Fir	2,838	-	-	-	-	2,838
Planted Mixed Pine	1,163	-	555	-	-	1,718
Tamarack	829	-	-	-	-	829
Hemlock	-	466	-	-	-	466
Cedar	72	-	-	11	-	84
Totals	262,154	146,586	70,475	9,594	14,135	502,944

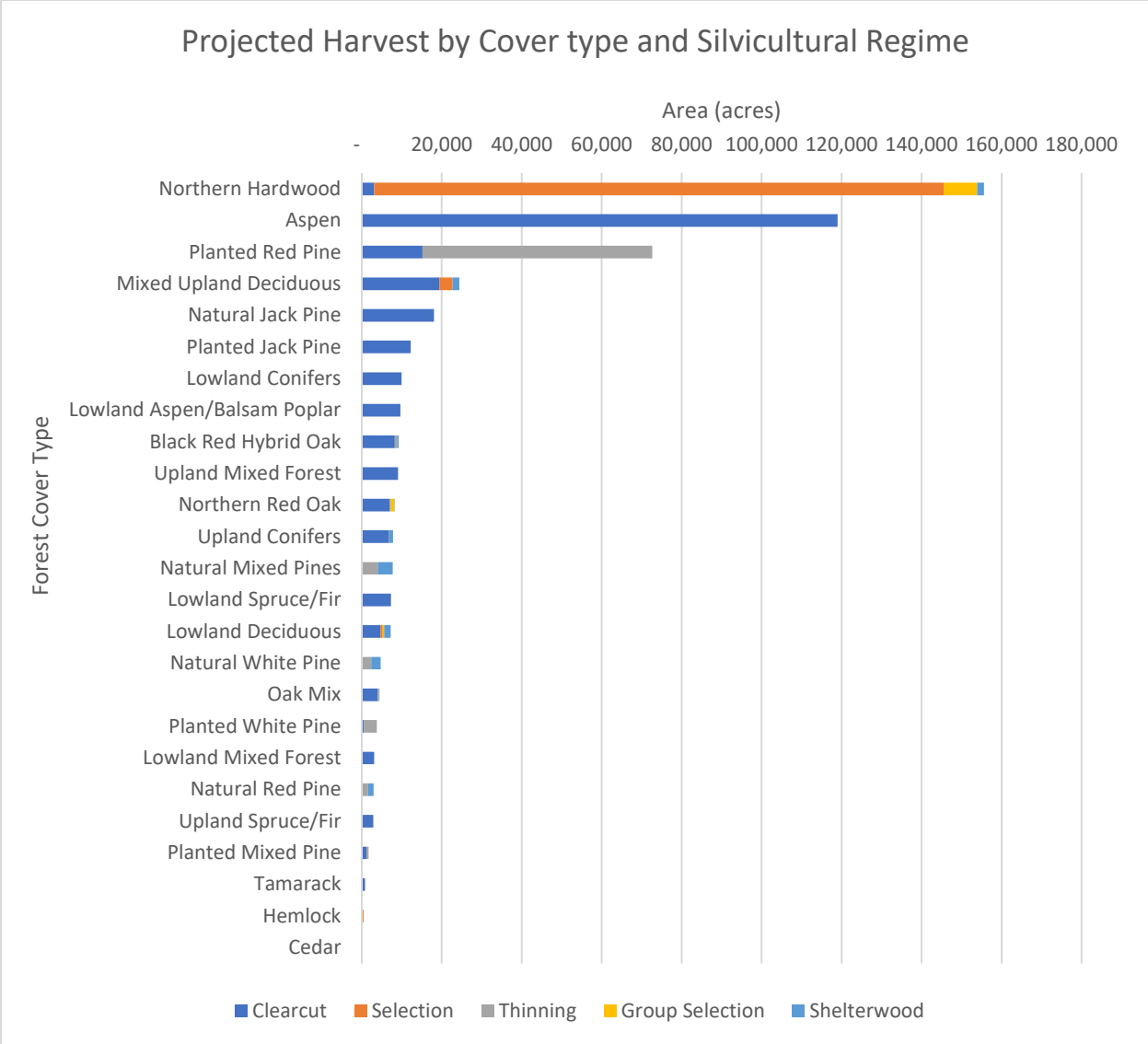


Figure 2. 10-year harvest projections by cover type and silvicultural regime.

Table 3. 10-year harvest projection by district and forest management unit (FMU).

Projected 10-Year Harvests District / FMU	Clearcut	Selection	Thinning	Shelterwood	Group Selection	Grand Total
ELP	60,395	44,435	24,886	2,215	3,322	135,253
Atlanta	24,473	3,539	4,950	679	469	34,109
Gaylord	11,227	31,045	12,368	322	2,168	57,131
Grayling	17,030	4,059	5,580	654	685	28,008
Pigeon River Country	7,664	5,792	1,989	559	-	16,005
WLP	89,104	23,691	31,889	6,254	1,936	152,874
Cadillac	19,795	5,205	7,857	986	1,284	35,125
Gladwin	15,217	569	3,057	2,483	225	21,551
Roscommon	31,013	689	4,209	1,466	-	37,378
Traverse City	23,079	17,228	16,766	1,319	427	58,820
EUP	56,101	29,855	11,104	4,208	3,979	105,248
Newberry	20,055	9,234	3,452	2,211	984	35,937
Sault Ste. Marie	19,405	9,649	2,664	351	495	32,563
Shingleton	16,642	10,972	4,988	1,647	2,500	36,748
WUP	56,555	48,604	2,596	1,458	357	109,569
Baraga	10,908	22,967	625	324	-	34,823
Escanaba	26,775	14,859	1,552	577	324	44,087
Gwinn	18,872	10,778	419	558	33	30,660
Grand Total	262,154	146,586	70,475	14,135	9,594	502,944

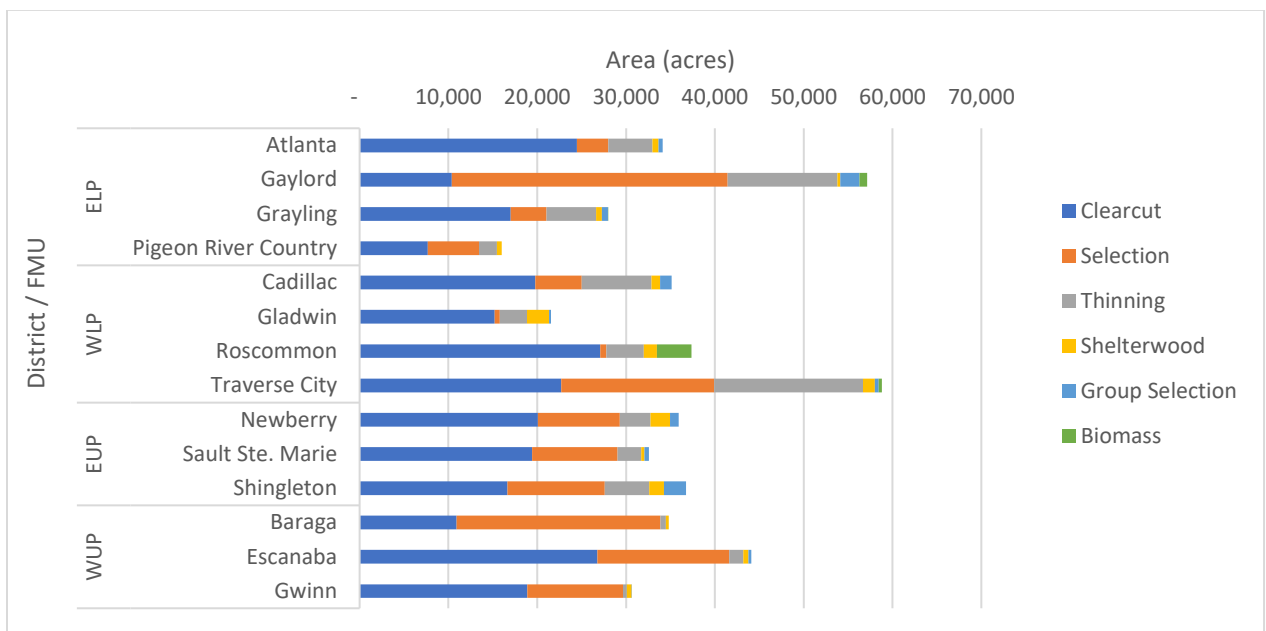


Figure 3. 10-year harvest projection by district and forest management unit (FMU).