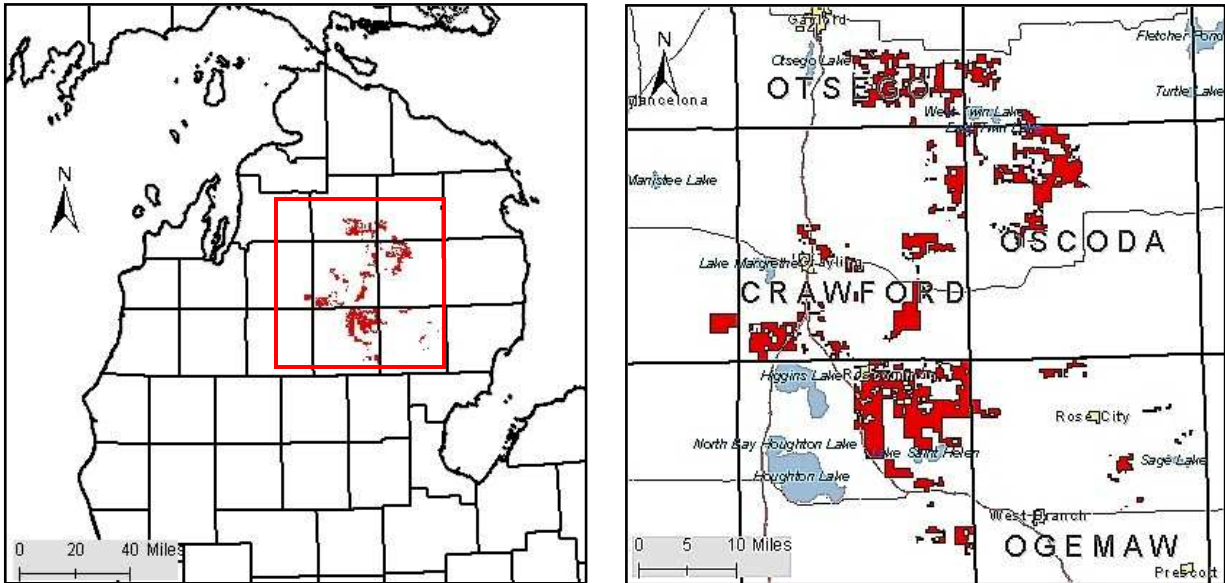


AuSable Outwash Management Area



Attributes

The large AuSable Outwash Management Area is located in parts of Otsego, Montmorency, Crawford, Oscoda, and Roscommon Counties and has approximately 162,000 acres of State Forest land. The primary attributes which were important in identifying this MA include:

- Ecological Classification - The MA falls within the Grayling Outwash Plain sub-region of the NLP Ecoregion as classified by Albert (1994).
- Cover Types – Historically, frequent fires in this MA were important in determining species composition. Jack pine and northern pin oak dominated the outwash plain, vegetation varied on the ridges – some were dominated by northern hardwoods and others were dominated by red oak, hemlock and white pine. The current vegetation composition is aspen, jack pine, oak, and red pine with 18% percent in relatively inaccessible lowland cover types. There has been interest in maintaining large ecosystem complexes (Old State Road sharp tail area in Otsego County and the frost pocket restoration area in Oscoda County). There is also a desire to significantly increase the acreage of pine and oak-pine barrens on appropriate sites.
- Landforms – This MA is characterized by a high outwash plain with several large ridges of excessively drained sand. The nearby AuSable River and its tributaries are designated as a Natural River.
- Social and Economic – Antrim and Niagaran gas development is extensive in the north part of the MA. The AuSable River is a major recreation source for fishing and all forms of boating. Hiking, hunting, camping and other forms of outdoor recreation are all popular throughout the MA.
- Ownership size and connectivity - The state land in this MA is very scattered.

Major Cover Types

- Aspen – There are over 43,000 acres aspen, with approximately 19,000 acres in the operable 40–59 year age classes and over 3,600 acres in older age classes, most likely in inaccessible areas. There is a fair amount of aspen mixed in with jack pine and oak.
- Jack Pine – Most of the 29,500 jack pine acres occur in the Grayling and Roscommon Forest Management Units. Jack pine has well balanced age classes to age 70 with approximately 7,400 acres exceeding the 60-year rotation age. Older stands of natural origin are being replaced by plantations, with some naturally regenerating to various species mixes. Oak regeneration has been successful in the understory of older jack pine.
- Oak – Almost 70% of the 24,000 oak acres is in the 70+ year age classes. Approximately 5,000 acres of oak is age 30 or less indicating recent successful regeneration harvests including 5-spot patch harvests or shelterwood harvests in areas with a natural white pine understory. Hypoxylon fungus associated with mortality in older oak has been noted in many areas. As aspen increases in oak stands, some oak stands will be reclassified as aspen.
- Red Pine – There are 18,000 acres of red pine with a well balanced age class distribution with the exception of a trough in the 0-10 year age class. About half of the red pine is over age 60 and over 500 acres are in the 100+ age class. Plantations on xeric sites are not performing well; however, these stands are not currently merchantable.
- Mixed Swamp Conifers – There are about 9,000 acres of mostly older mixed swamp conifers in the MA
- Upland Brush/Grass – Grass and upland brush totals over 9,000 acres which is a relatively high amount. This is a result of the past management practices or natural processes of fire, frost or other disturbances which create openings in the forest canopy along with maintenance treatments to keep areas open.

AuSable Outwash			Age Class (Years)											Uneven Aged
Cover Type	Acres	%	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100+	
Aspen	43,503	27%	2,677	7,295	8,306	10,649	8,412	2,481	813	1,010	1,457	367	4	32
Jack Pine	29,491	18%	2,254	5,846	4,854	3,978	2,438	2,482	3,277	1,560	1,687	802	73	170
Oak	23,630	15%	1,579	1,719	1,693	956	442	116	767	3,178	7,573	4,265	956	386
Red Pine	18,176	11%	237	1,165	1,229	219	3,635	2,593	2,174	2,752	1,564	1,752	576	280
Mixed Swamp Conifers	9,154	6%	3	9	30	123	72	414	211	579	2,853	2,717	2,070	72
Marsh	5,091	3%												
Grass	5,040	3%												
Upland Brush	4,106	3%												
Water	1,628	1%												
Other Types	21,726	13%												

Total 161,545

Other Types include: Lowland Brush, White Pine, Cedar, Swamp Hardwoods, Bog, Marsh, Upland Hardwoods, Black Spruce, Lowland Poplar, Tamarack, Hemlock, White Birch, and Sand Dune.

Concepts of Management

- Aspen (27% of the MA) – Harvest with a concentration on the 30-39 year age classes to balance the 0-59 year age classes at approximately 6,200 acres per 10 year group. Perpetuate mixed stands where aspen occurs with other species.

- Jack Pine (18% of the MA) – Continue harvesting with an emphasis on regeneration harvests in the 70-99 year age classes to balance age class distribution in the 0-69 year age classes. Mixed species natural regeneration is acceptable, and in particular, oak regeneration where it is occurring in the understory of jack pine.
- Oak (15% of the MA) – On sites with successful stump sprouting, regenerate oak through clearcutting, especially in the 80-89 year age class. Utilize large cuts to minimize deer browse impacts. Use shelterwood harvesting in areas with a natural red or white pine understory. On higher quality sites, reintroduce white or red pine following final harvest. If practicable, utilize accepted methods for pine and oak-pine barren restoration.
- Red Pine (11% of the MA) – Follow the Red Pine Management Guidelines to balance the age class distribution by aggressively harvesting in the age classes between 40-79 years and regenerating red pine. Allow selected areas of managed red pine to reach biological maturity. Following the Within Stand Retention Guidelines allow selected individual red pines in other cover types to become super canopy specimens. Conversion to jack pine on lower quality sites will decrease red pine acreage over next 10 years.
- Mixed Swamp Conifers (6% of the MA) – On selected sites, conduct regeneration cuttings in a manner that will not adversely impact wetland soils or encourage deer browse.
- Upland Brush/Grass (3% of the MA) – Increase the amount of grass openings by converting poor quality red pine areas to grassland through prescribed fire or other acceptable methods.