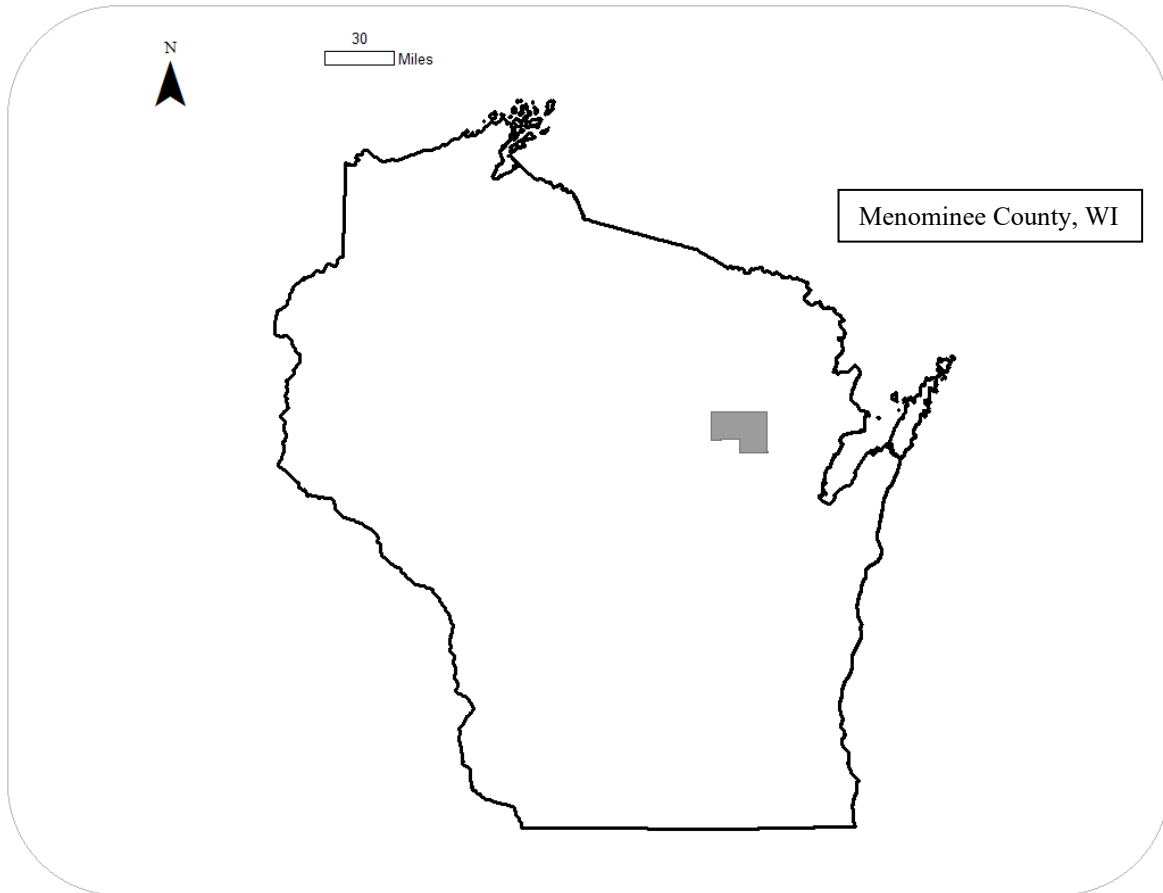


2023 Timber Management Environmental Assessment (EA)

Menominee Indian Tribe of Wisconsin forest lands

March 2023



Responsible Official:

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A. Purpose and Need

The purpose of this proposed timber harvest is to produce maximum quality and quantity of forest products grown under sustained-yield management principles, while maintaining the diversity of native species as stated under the Menominee Forest Management Plan. The need for this proposed action is to promote general forest health, produce revenue for Menominee Tribal Enterprises (MTE) and provide local employment.

Proposed Action and Alternatives

Proposed Action: Menominee Tribal Enterprises is proposing to conduct harvest on approximately 1,217 acres and an additional up to 500 acres annually across the Menominee Indian Tribe of Wisconsin's forest lands, located in northeast Wisconsin (Figure 1). Table 1 has a summary of the proposed harvests, and their location within the Menominee Compartment system.

Prescription Number	Harvest season	Compartment	Treatment Type	Acres
123-23-10-01	Spring / Summer	123	Clear-cut Conversion	30
123-23-11-01	Spring / Summer	123	Pine Release	57
123-23-17-01	Spring / Summer	123	Pine Barrens / Savannah	14
226-23-22-01	Fall / Winter	226	Uneven Age Single Tree Selection with 1/2 pine removal	60
307-23-01-01	Fall / Winter	307	Single Tree Selection and/or Group Selection	520
351-23-22-02	Fall / Winter	351	Uneven Age Single Tree Selection with 1/2 pine removal	131
999-23-02-01	Spring / Summer	Various	Even-age BA Thinning (Plantation)	181
999-23-09-01	Spring / Summer	Various	Clear-cut Natural Regeneration	224
999-23-25-01	Fall / Winter	Various	Forest Health Mitigation / Ash Reduction	up to 500
			Total Acres	1,217
				+ up to 500 / year

There are eight different treatment types proposed across the 1,717 acres. Table 2 indicates the number of acres by treatment type.

Table 2: Acres by Treatment Type and Silvicultural System		
Treatment Type	Silvicultural System	Acres
Single Tree Selection and/or Group Selection	Uneven-aged	520
Clear-cut Natural Regeneration	Even-aged	224
Uneven-age Single Tree Selection with 1/2 pine removal	Uneven-aged	191
Even-age BA Thinning (Plantation)	Even-aged	181
Pine Release	Even-aged	57
Clear-cut Conversion	Even-aged	30
Pine Barrens / Savannah	Even-aged	14
Forest Health Mitigation / Ash Reduction	Forest Health	up to 500
	Total Acres	1,217
		+ up to 500 / year

A summary each of the eight treatments is below:

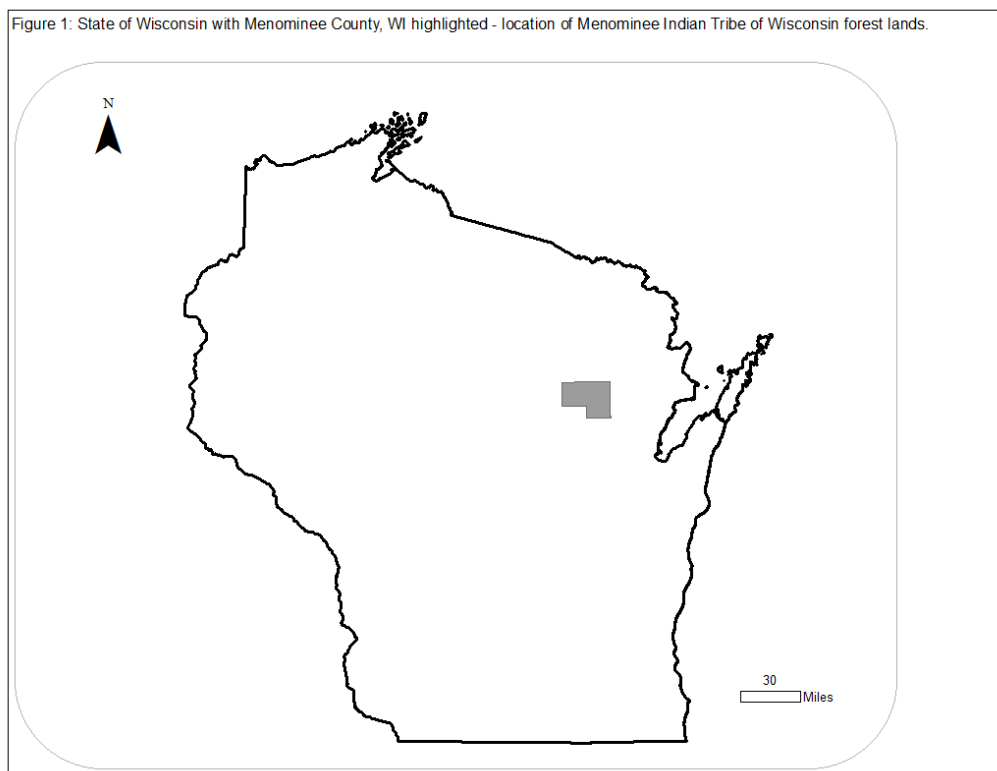
- Uneven-age Single Tree or Group Selection: Harvesting sawtimber, maintain growth and vigor of released trees, regenerating trees via canopy gaps.
- Clear-cut Natural Regeneration: Harvesting all trees in an area, with an expectation that it regenerates to the same general stand composition.
- Even-age Basal Area Thin (Plantation): Harvesting enough undesirable trees from a stand to meet a retention basal area, while leaving the residual trees relatively evenly spaced or releasing specific crop trees.
- Uneven-age Single Tree Selection with ½ pine removal: Harvesting ½ of the overstory pine in this entry, planning to remove the other ½ during the next entry. Changing the cover type to one featuring hardwoods or hemlock to manage as an uneven-aged stand.
- Pine Release: Harvesting most hardwoods and leaving most pine trees to keep stand as a pine stand.
- Clear-cut Conversion: Harvesting of all trees, then perform site preparation, and plant to pine.
- Pine Barrens / Savannah: All hardwoods are removed with 2-3 pine per acre remaining to simulate conditions pre-fire suppression. The area will be maintained with periodic prescribed burns covered by other operating plans and NEPA.
- Forest Health Mitigation / Ash Reduction: Target stands near planned operations that have an ash resource and remove the ash from those stands to prevent emerald ash borer habitat from being maintained. Swamp hardwood stands retain significant crown to prevent a water table change. The acreage will change year to year due to the targeted stands' proximity to stands identified on the schedule for management.

Specific portions of treatments:

- Appendix A includes stand by stand specifics for each treatment, including the location of those stands.

- In all treatments fresh cut pine stumps are treated with Sporax or Cell-u-Treat during the non-winter months. Those trees must be removed from the site within 2 weeks of cutting.
- Prescribed fire will be part of some prescriptions to reduce competition, prepare a seedbed for regeneration, or maintain an open condition within the stand.
- Spring and Summer treatments generally start May 1st.
- Fall and Winter treatments generally start September 1st or August 1st depending on equipment.

No Action Alternative: No timber harvest or other management actions are proposed under the No Action alternative for this project. The proposed treatments will not take place, however other forms of forest management will continue, under other NEPA documentation.



B. Effects to the human environment

i. Water Resources:

Action Alternative:

Direct, Indirect and Cumulative Effects: Potential effects will be mitigated by the measures indicated in Appendix A for each prescription. Appendix A states that:

- Harvesting equipment operation must not take place on grades greater than 15%, in order to control erosion. If this is unavoidable and the ground leaf layer is disturbed, proper structures must be constructed to minimize runoff and erosion.

- All BMP's and Menominee Indian Tribe of Wisconsin E-code: Chapter 340-20 Limitations on tribal logging practices are to be followed.
- Stream crossings will only be allowed on existing roads with approved crossings.
- Use current State of Wisconsin BMPs for water quality as a guide. Follow Menominee Indian Tribe of Wisconsin E-code: Chapter 340-20 Limitations on tribal logging practices. Do not operate wheeled or tracked harvesting equipment within 50 feet of wetlands or waterways except on roads or at stream crossings, or if the ground is dry or frozen.
- Avoid felling any timber into wetlands. If trees must be felled in such a manner, remove tops or slash from wetlands. Harvest equipment operating in areas of wetlands can occur where approved by the officer in charge if the area is dry or frozen. An example would be seasonally appropriate crossings of wetlands in order to harvest trees on drier islands of timber inside of the wetland.

No Action Alternative:

Direct, Indirect and Cumulative Effects: No effects are anticipated as a result of the No Action alternative.

If no action is taken to manage Emerald Ash Borer habitat, it will move quicker through the Menominee Forest, increasing the chances of swamping some areas, potentially causing an increase in run-off and other water quality effects.

ii. Living Resources:

Forest Ecosystem

Action Alternative:

Direct Effects: At the stand and compartment level the effects of timber harvest will be temporary and short-term. Even-aged treatments covering 506 acres includes 254 acres of clearcut harvest that will naturally or artificially regenerate. The other 252 acres are intermediate treatment and not regeneration harvests. They will keep mature tree cover until the regeneration harvest in the future. All 711 acres of uneven-aged treatments will temporarily reduce the overstory coverage, but the stands will generally remain the same, with similar tree ages, structure, and classes, as well as shrub and forb vegetation layers. Up to 500 acres managed for forest health will have individual trees or groups of trees removed similar to the effects of uneven-aged management treatments.

Indirect and Cumulative Effects: The management of up to 1,271 acres of forested stands will have a negligible effect on the overall forest ecosystem due to the scale of the Menominee forestlands and the relative lack of harvest intensity across much of that landscape. This type of forest management is typical across the Lake States, and this is not a disproportionate amount of area to treat on the Menominee Forest in a year.

Managing up to 500 acres per year to reduce the short-term effects of Emerald Ash Borer on the Menominee Forest will maintain species diversity and allow time for some stands to regenerate opening to other species adapted to the site.

No Action Alternative:

Direct, Indirect and Cumulative Effects: No effects are anticipated as a result of the No Action alternative.

If no action is taken to manage Emerald Ash Borer habitat, it will move quicker through the Menominee Forest, increasing the chances that some stands convert to non-forest types reducing habitat for forest dependent species.

Threatened and Endangered Species

Table 1: Threatened and Endangered Species in Menominee County, Wisconsin

Species	Status	Habitat
Gray wolf <i>Canis lupus</i>	Endangered	Northern forested areas
Northern long-eared bat <i>Myotis septentrionalis</i>	Threatened	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. During summer, roosts and forages in upland forests.
Karner blue butterfly <i>Lycæides melissa samuelis</i>	Endangered	Prairie, oak savanna, and jack pine areas with wild lupine

List accessed 2023-03-28 using FWS IPaC tool (<https://ipac.ecosphere.fws.gov/>)

Action Alternative:

Direct, Indirect and Cumulative Effects:

Gray wolf: There are no known denning sites in the project area and this limited proposed harvest is expected to have negligible effect on gray wolves due to their broad range, and the negligible effect that this harvest would have on the forest ecosystem.

Northern long-eared bat: No direct, indirect, or cumulative effects to the northern long-eared bat population are anticipated as a result of the proposed harvest, as there are no known populations on Menominee Reservation forestlands. Additionally, there are no known hibernacula, no known roost trees on Menominee Reservation forestlands. This meets or exceeds the US Fish and Wildlife Service's mitigation measures for avoiding harvest activities within a 150 foot radius of known roost trees between June 1 and July 31 which is pup season; as well as avoiding year-round harvest activities within ¼ miles of known hibernacula.

Karner blue butterfly: No effects to Karner blue butterflies or their habitat are anticipated due to their habitat being prairie, oak savanna, or jack pine areas with wild lupine. This alternative does not propose harvest in those habitats.

No Action Alternative:

Direct, Indirect and Cumulative Effects: No effects to the listed species are anticipated as a result of the No Action alternative.

iii. Cultural Resources:

Action:

Direct, Indirect and Cumulative Effects: No effects are anticipated. The Section 106 consultation process has been completed, and cultural resource sites will be avoided during the project. If any cultural resources sites are found during treatment preparation or harvest, they will be protected under Menominee Indian Tribe E-code: Chapter 340-20 Part C and the National Historic Preservation Act and Archaeological Resources Protection Act. Please see appendix A for Section 106 documents.

No Action Alternative:

Direct, Indirect and Cumulative Effects: No effects will occur.

iv. Socioeconomic Conditions:

The socioeconomic status in Menominee County, Wisconsin is below average relative to the rest of the State of Wisconsin. The monthly, not seasonally adjusted unemployment rate as of January 2023 for Menominee County is 4.3%, which is more than the rate for the whole state of Wisconsin's of 2.8%. (<https://research.stlouisfed.org/fred2/series/WIMENO8URN>, <https://research.stlouisfed.org/fred2/series/WIURN>).

Per capita personal income in 2020 was just over half of the average in Wisconsin at \$43,212 compared to \$59,626 (<https://fred.stlouisfed.org/series/PCPI55078>, <https://fred.stlouisfed.org/series/WIPCPI>). In 2021, 26.2 % of Menominee County residents were below poverty level compared to 10.8% state-wide in 2021 (<https://fred.stlouisfed.org/series/S1701ACS055078>, <https://www.census.gov/quickfacts/fact/table/wi/PST045217>). No other county in Wisconsin was greater than 18% in 2021 (<https://fred.stlouisfed.org/release/tables?rid=416&eid=342620#snid=342660>).

Action Alternative:

Direct, Indirect, and Cumulative Effects: The proposed harvest will provide revenue for Menominee Tribal Enterprises; and employment for members of the Menominee Indian Tribe of Wisconsin and other residents during the harvesting and processing of the forest products. The overall direct, indirect and cumulative effects as a result of the proposed harvest for socioeconomics are expected to be a minor positive benefit.

No Action Alternative:

Direct, Indirect, and Cumulative Effects: No additional harvest and wood processing revenue and employment would occur because of this alternative. This would be a negative impact to the Tribe and surrounding communities, as logging and forest products processing is a major employer in the area. No benefit to residents or the Tribe will occur. No changes to direct, indirect, or cumulative effects are anticipated because of this alternative from the current condition.

v. Other resources:

Action Alternative:

Mitigation measures identified in Appendix A minimize the potential adverse effects to land resources. Negligible direct, indirect, and cumulative effects to water resources are expected with mitigation measures in place.

No effects will occur to other resources are anticipated under the action alternative.

No action Alternative:

No effects to other resources are anticipated as a result of this alternative.

C. Mitigation Measures to Reduce Potential Adverse Effects:

See Appendix A for all mitigation measures required to implement this harvest.

D. Consultation and Coordination

Section 106 of the National Historic Preservation Act:

Consultation took place with Tribal Historic Preservation Office and BIA Midwest Region Staff. Consultation consistent with Section 106 of the National Historic Preservation Act has been completed and cultural resource sites will be avoided during the project. If any cultural resources sites are found during treatment preparation or harvest, they will be protected under Menominee Indian Tribe of Wisconsin E-code: Chapter 340-20 and the National Historic Preservation Act and Archaeological Resources Protection Act. Please see appendix A for Section 106 documents.

Section 7 of the Endangered Species Act:

Consistent with Section 7 of the Endangered Species Act, given the no effects determination was made for all known or suspected Threatened and Endangered species as a result of the project and proposed mitigation measures, no consultation with the US Fish and Wildlife Service was necessary. Any additional information found during preparation or harvest, including confirmation of maternity roost trees or hibernaculum for Northern Long-eared bats will be used to re-evaluate the determination before proceeding.

Updates to the Threatened and Endangered species list for Menominee County can be found using the USFWS iPAC tool at: <https://ipac.ecosphere.fws.gov/>

E. Contributors

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Menominee Tribal Enterprises documentation of prescriptions.