****REQUEST FOR PUBLIC COMMENTS****

To: Bois Forte Tribal Members
Bois Forte Tribal Government Departments

From: Bois Forte Reservation Tribal Council

Re: Seeking comments on Bois Forte Carbon Banking Project Plan

Date: October 3, 2025

Public Review - Community Engagement Request

The Bois Forte Carbon Banking Project plan (called "Climate, Community and Biodiversity" or "CCB" plan) for the 28,000-acre land acquisition completed in 2023 will be sent soon to Bois Forte's carbon bank approving agency, for standards review. All proposed carbon banking projects must be approved by a centralized verification agency before credits can be sold. VERRA is the agency that reviews carbon banking for the voluntary carbon credit market in which Bois Forte will be active.

The attached Forest Management Plan (FMP) document will be incorporated in Bois Forte's public comments, will be submitted to VERRA as a component of the CCB Plan.

Bois Forte is hereby posting plan documents for a 30-day public review period of plan components. Comment time-period begins October 3 2025. End date for receipt of comments is November 2, 2025, 430 PM.

We sincerely appreciate Member time to review this plan document and your willingness to provide comments. Your input is important and essential. The Bois Forte Steering Group and plan development partners TNC, NICC and TerraCarbon will thoughtfully review all comments received and will incorporate those as appropriate to create a plan truly reflective of the Community's needs and wants for this land.

Thank you!

SCAN HERE TO SUBMIT COMMENT(S) OR copy and paste address in your browser

https://portal.laserfiche.com/u7744/forms/akiingazhenan

Bois Forte Band of Chippewa Indians Akiing Azhenan-Improved Forest Management Project Plan

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Table of Contents

1. Executive Overview

This plan outlines the sustainable forest management strategy for 28,089 acres lands recently acquired from The Conservation Fund and under the stewardship of the Bois Forte Band of Chippewa. The approach integrates traditional knowledge, cultural values, ecological science, and tribal priorities such as forest restoration, manoomin/wild rice, moose habitat protection, cultural gathering, road management, ash (Baapaagimaak) management, and water quality. Forest management planning for this property is overseen by the Bois Forte Department of Natural Resources (BFDNR), whose mission is to "protect and conserve the natural resources of the Band through management, biological monitoring, research, and enhancement activities".[1] Forest management planning is expected to continue in perpetuity (100+ years), with periodic reassessment and revision to adapt to changing conditions.

2. Acquisition/Forest History

The Bois Forte Band of Chippewa Indians entered into a treaty with the United States in 1854 that set aside a region around Lake Vermilion as a reservation, which was later defined through an 1881 Executive Order. In its 1866 Treaty with the United States, the Band reserved two additional sectors at Nett Lake and Deer Creek to serve as its permanent homeland. However, just 20 years later, the federal government changed course, dividing the Reservation land and selling it to timber companies and homesteaders under the General Allotment and Nelson Acts. PotlatchDeltic eventually came to own significant acreages on the Nett Lake and Deer Creek sectors of the Reservation.

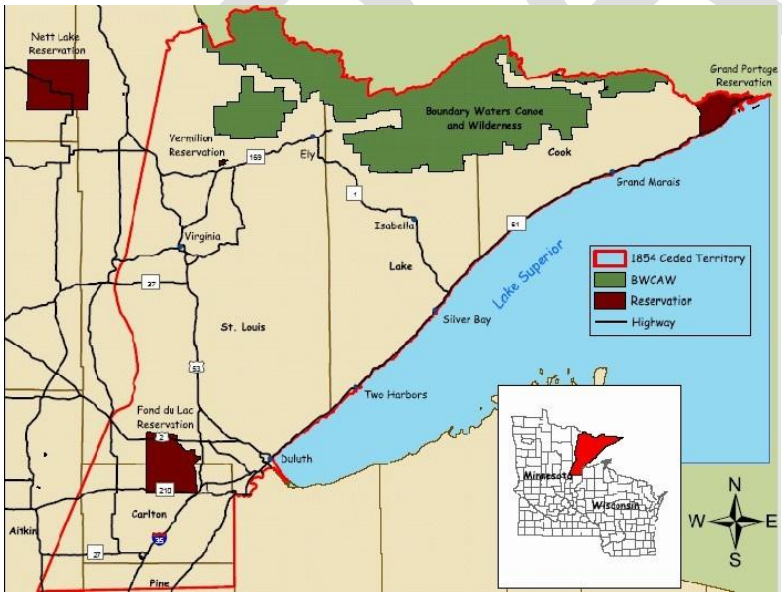

Fig 1. Current Nett Lake Reservation and 1854 Ceded Land

[1] Conservation Code of the Bois Forte Band of Chippewa (https://boisforte.com/wp-content/uploads/2025/04/DNR-CONSERVATION-CODE-FINE-SCHEDULE-REGULATION-OF-DOMESTIC-ANIMALS-1.pdf)

While some land was restored to the Band in 1938 under the Indian Reorganization Act, control of significant swaths of land within the 111,787-acre Nett Lake and 22,927-acre Deer Creek sectors remained out of Band ownership. But an opportunity for the Band to regain 28,089 acres (27,565 acres in Nett Lake and 524 acres in Deer Creek; hereafter referred to as Acquisition lands) — 21% of the total land base within the Nett Lake and Deer Creek sectors — emerged after PotlatchDeltic sold most of its land in Minnesota to The Conservation Fund in 2020. Conversations between the Band and the Fund about the lands within the Reservation began shortly thereafter.

The Band's purchase was financed by the Indian Land Capital Company, a Certified Native Community Development Financial Institution (CDFI) providing alternative loan options to Native Nations for tribal land acquisition projects. ILCC is owned by the Indian Land Tenure Foundation, a national, community-based organization serving tribal nations and people in the recovery and control of their rightful homelands.

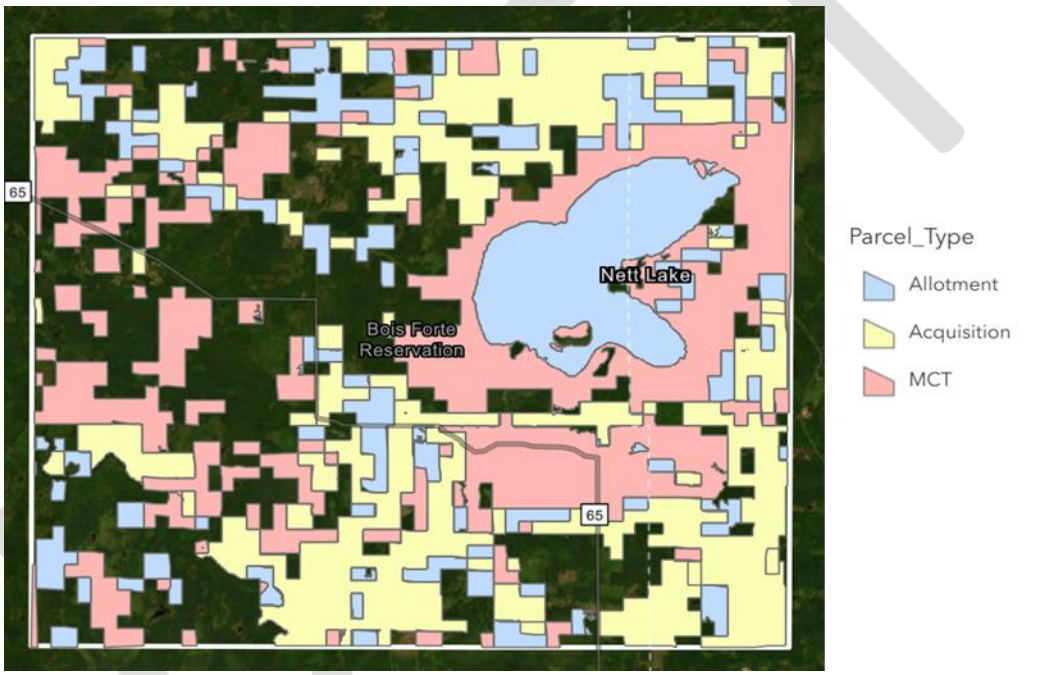

Fig 2. Spatial boundaries of the Allotment, Acquisition, and MCT (MN Chippewa Tribe) Trust Lands in the Reservation.

a. Pre-Colonization Forest

Prior to European colonization, the Bois Forte landscape was not simply a mosaic of mixed coniferous and deciduous forests—dominated by white pine (Zhingwaak), jack pine, spruce (Gaawaandag), birch (Wiigwaasaatig), maple, and aspen (Azaadi), with abundant wetlands and peatlands—but a living, relational landscape actively stewarded by the Bois Forte Band of Chippewa. For generations, Ojibwe people maintained reciprocal relationships with these lands and waters, guided by traditional ecological knowledge, seasonal cycles, and cultural responsibilities. Species like Baapaagimaak (black ash), vital for basketry and ceremonies,

were protected and tended with care. Wetlands and manoomin (wild rice) beds were not only sources of sustenance but were also central to cultural identity and governance. Colonization disrupted these systems through land dispossession, resource extraction, and imposed land management regimes, but the Bois Forte Band continues to assert their sovereignty through renewed stewardship practices rooted in Indigenous knowledge, kinship with place, and the inherent rights of the land to heal.

b. Post Colonization Management

Following European colonization, extractive industries—particularly intensive logging—disrupted the ecological balance of the Bois Forte homeland. Settler-driven resource extraction prioritized profit over relational stewardship, leading to widespread clearcutting of culturally and ecologically significant species such as white pine and other large conifers. This unsustainable harvesting not only altered forest composition—favoring younger, early successional species like aspen (Azaadi) and birch (Wiigwaasaatig)—but also severed the reciprocal relationships Ojibwe people held with the land. Sacred groves, medicinal plant areas, and habitats for important species like Baapaagimaak (black ash) and manoomin (wild rice) were degraded or destroyed. These landscape-level changes were accompanied by legal and political dispossession, including land allotment and restricted access to traditional territories, further undermining Indigenous stewardship. Despite these impacts, the Bois Forte Band continues to revitalize traditional land care practices, asserting their inherent rights to restore and protect these forests in alignment with Ojibwe values and ecological knowledge.

c. Previous Owner Management

Under previous management regimes, these lands were often subjected to industrial timber extraction focused on short-rotation harvests and maximum yield, with minimal regard for long-term forest health or the interconnected needs of the ecosystem. Little to no consideration was given to the cultural practices, subsistence needs, or spiritual relationships that the Bois Forte Band of Chippewa maintain with these forests. Wildlife habitat, water quality, and culturally significant species were degraded in the process. This IFM project seeks to reverse those impacts by restoring more ecologically diverse and culturally grounded forest conditions—supporting carbon sequestration, protecting biodiversity, and re-establishing tribal stewardship rooted in Ojibwe values and traditional ecological knowledge.

d. Land Tenure and Rights

The Bois Forte (or “strong wood”) was the French name given to the Indians living in the densest forests of what is now extreme northern Minnesota. The reservation is divided into three sectors, Nett Lake, Vermillion, and Deer Creek. 50% of the Nett Lake sector, where the 27,565 acres of the lands in this plan exist, is a wetland and is said to be the largest producer of wild rice in the United States. The Band’s reservation lands were legally defined in the treaties of 1854 and 1866, later modified by Presidential Executive Order in 1881. Under the Treaty of 1854 the Bois Forte Band retains usufructuary fights (hunting, fishing, and gathering) in both on-reservation and in ceded territories outside of the

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reservation, which are recognized in federal and state law. These rights are inherent and not subject to state regulation, though cooperative management occurs on ceded lands.

The lands covered in this plan are held by the Tribe in fee simple ownership which means they are owned directly by the Tribe and not held in Trust, although they could be converted to Trust through BIA's Fee to Trust process. They can be more readily managed, sold, leased, or mortgaged than lands held in Trust by the US federal government on behalf of the band.

The **Bois Forte Tribal Council** oversees all land-related decisions on trust and fee lands. The Tribal Council is supported by the Forestry Department, the Conservation Committee and other community committees. The Band maintains a **Land Use and Realty Policy Manual**, the Land Use and Zoning Ordinance, and other policies, including lease procedures, and land management standards. Leasing for housing, business, agriculture, and recreation follows tribal procedures and must align with cultural and environmental goals.

3. Tribal Goals and Objectives

The overarching goal for the management of this property is that a tight knit tribal community is protecting biodiverse forest systems while strengthening traditions and connections to the land. Within this overarching goal there are three subgoals related to biodiversity, climate, and community. From a biodiversity perspective, culturally significant species are protected in more mature, healthier and diverse forest and wetland ecosystems. From a climate perspective, carbon is permanently stored in sustainable, diverse, healthy, and resilient ecosystems. From a community perspective, the tribe is deeply rooted in sustainable traditions with promising futures for future generations. Within these goals are three objectives – maintain or enhance a sustainable moose population, maintain or enhance water quality, and maintain or enhance plant community health.

a. Moose (Moozoog)

Moose (Moozoog) are a culturally and ecologically significant species for the Band. Maintenance of thermal cover (conifers), aquatic feeding areas, and young regenerating forests for forage are all required to maintain the population.

The Bois Forte Band's moose ((Moozoog) management goals on the Nett Lake Reservation are guided by cultural traditions, ecological science, and treaty obligations—primarily organized through their participation in the 1854 Treaty Authority. Here is a detailed breakdown supported by tribal and interagency documentation:

Goals of Moose (Moozoog) Management on Nett Lake Reservation

Maintain a Sustainable Moose (Moozoog) Population

Implement limited, bull-only harvests to provide subsistence food while ensuring population stability. Collaborative research, including annual aerial surveys, monitors trends and informs these quotas.

Enhance Moose (Moozoog) Habitat

While the acquisition lands will be primarily passively managed, allowing for adaptation, timber management on Tribal and Allotment lands, that are outside of the project area, will create and maintain early successional habitat preferred by moose. According to the 40% to 50% of the landscape should be maintained at less than 20 years old to provide the highest potential to maintain or enhance the population. Prescribed fire can also be used on a limited basis to support life-cycle habitat needs. Dedicated habitat plots are annually monitored to assess effectiveness. If the passive management approach indicates that the population is declining, limited harvest in the aspen-birch, focusing on birch improvement, forest type may be employed to increase browse.

Support Scientific Data Collection

Support scientific data collection and monitoring through the 1854 Treaty Authority

Tie habitat-focused monitoring to outcomes in population trends.

Honor Treaty-Reserved Subsistence Hunting Rights

Assert legal authority to harvest moose under the 1854 Treaty, maintaining cultural traditions through regulated tribal hunts even when non-tribal hunts are restricted. **The Band should develop and maintain a series of hunter walking trails throughout the forest to provide better access for tribal elders.**

Collaborate on Conservation & Research

Cooperate with other Ojibwe bands, state DNR, university researchers, the 1854 Treaty Authority, and federal partners to protect, understand, and manage moose populations holistically. Currently several organizations are working collaboratively on a Moose Habitat Project Implementation Plan which identifies issues facing moose in northeast Minnesota, a list of potential strategies to address these issues, and shares initial steps that are being taken for implementation of large-scale habitat management. .

Summary Table

Goal	Purpose & Implementation
Sustainable Harvest	Bull-only hunts, ~10 moose cap
Habitat Enhancement	Early successional forests via tools like prescribed fire
Scientific Monitoring	GPS tracking, mortality, population surveys
Treaty Rights Management	Enforce and uphold hunting rights per 1854 Treaty

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Goal	Purpose & Implementation
Interagency Collaboration	Joint research and policymaking through 1854 Treaty Authority

These goals reflect an integrated approach that balances cultural priorities, sustainable harvest, ecological function, and legal sovereignty.

c. Water Quality

Protect and restore riparian buffers, peatlands, and wetland areas that support water filtration and aquatic habitat. One of the priorities identified is to maintain or enhance the water quality of Nett Lake which provides significant economic and cultural values due to its wild rice (manoomin) populations. The passive management of the acquisition lands should increase or maintain water quality. Forest stands adjacent to riparian areas may be monitored regularly to assess EAB mortality or condition of water control structures (e.g. culverts) and corrective measures may be used where water flow is impeded.

d. Maintaining Plant Community Health

The forests on the Nett Lake Reservation support the health of the Bois Forte Band; whether that be direct support through the gathering of plants used for food, medicine, or ceremony (e.g., birch bark, cedar, maple, berries, and wild rice), or indirectly though providing water filtration, forage, shade, or hiding cover for fish and wildlife that also sustain the health and nourishment of the Band members. The passive management of these forests will allow them to heal from past industrial management and to develop more naturally. The forests and plant communities should be proactively monitored to assess if any native plant populations are in decline due to forest pests, changes in sunlight, impeded natural drainage, or expanding invasive species populations. Of particular concern is the health of forest plant communities that have a high density of Black Ash (Baapaagimaak). Emerald Ash Borer (EAB) is a major threat to black ash populations. In 2025, EAB has been detected in southern St. Louis County, and it is only a matter of time before ash mortality will occur on the Nett Lake Reservation.

Black ash plays a vital ecological role in wetland forest systems, where its deep roots help stabilize soil and regulate the water table. This hydrological function contributes to maintaining the saturated conditions necessary, especially near Nett Lake, for *manoomin* (wild rice) to thrive, reinforcing the interdependence of culturally significant plant species in Ojibwe landscapes. Black ash (Baapaagimaak) is vital for basket making and spiritual practices.

While not yet available through Minnesota institutions, the University of Wisconsin - Madison has created a landsat-based imagery system based on the unique reflectance of Ash foliage. The system allows for mapping relative density of ash across the landscape, allowing land managers to be proactive in managing forests where rapid loss of the ash canopy from EAB infestations could adversely affect local hydrology, and lead to swamping

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of the site, or expansion of pre-existing invasive species populations. Changes in hydrology proximal to waterways the feed into Nett Lake can affect temperature, dissolved oxygen, and water levels in Nett Lake and have adverse impacts on the wild rice (manoomin) resource. It is recommended that through inventory or the use of such a remote sensing system that relative densities of ash be identified to prioritize local silvicultural treatments. EAB populations should also be monitored to time silvicultural treatments.

4. Inventory – Summary of Cover Types and Age Classes

Figures 2-5, below, symbolize and summarize the spatial boundaries and relative proportions (acreage) of forest cover types and stand age class distributions across the Acquisition lands. Figure 6 summarizes the average species composition across the four primary forest cover types; this data was specifically derived from the fifty stands inventoried in 2024 to support the carbon project, also distributed across Acquisition lands.

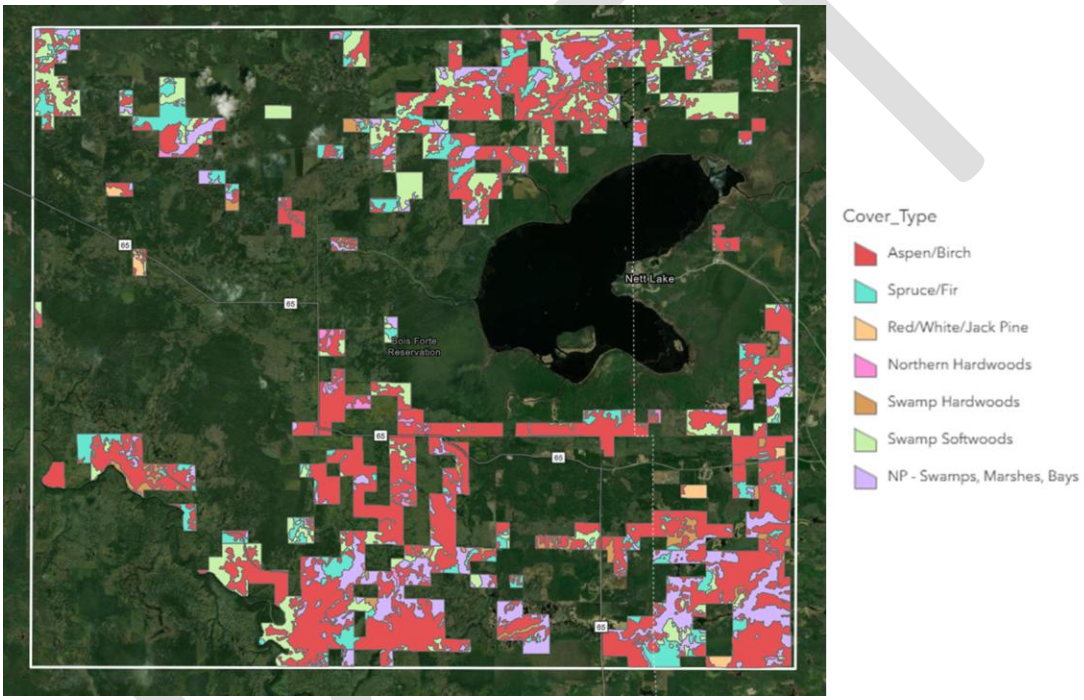

Fig 3. Spatial representation of primary forest cover types across Acquisition lands.

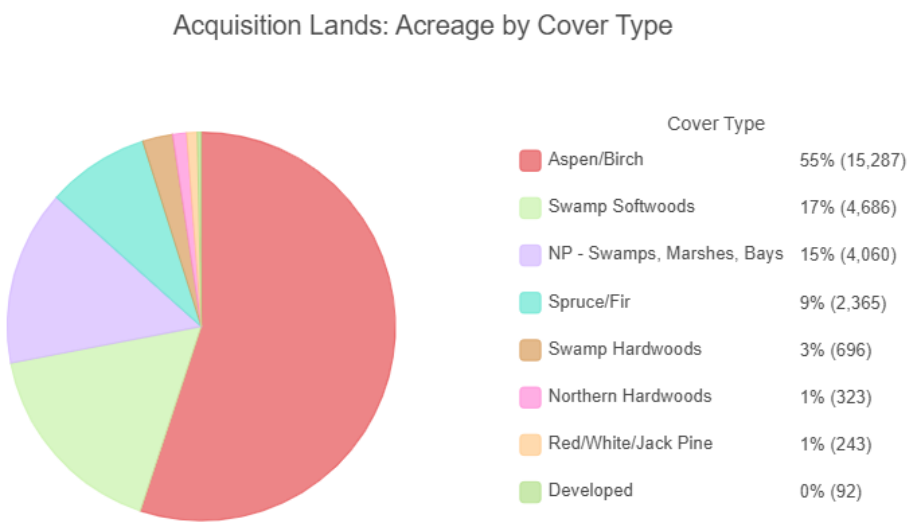

Fig 4. Areal proportions (acreage) estimates, by forest cover types, across Acquisition lands on the Reservation. NP = non-productive

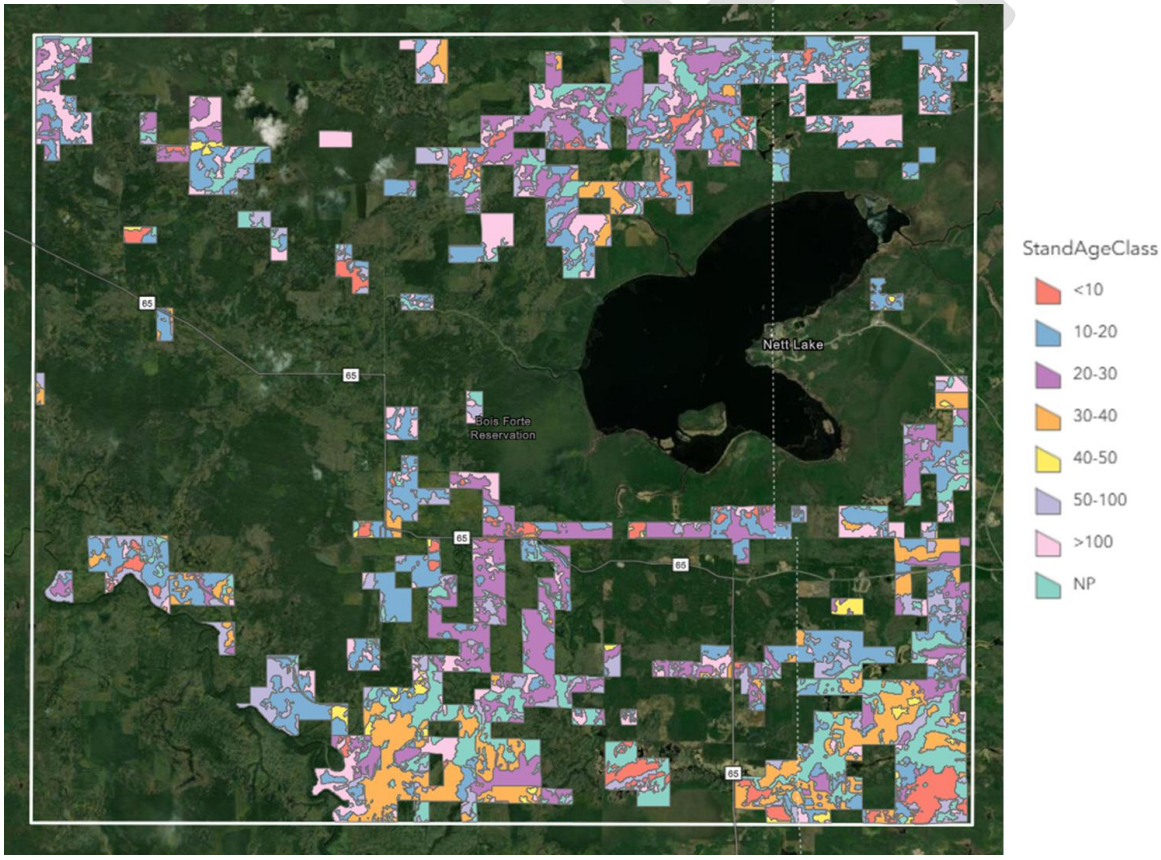

Fig 5. Spatial representation of forest stand age classes across Acquisition lands on the Reservation. NP = non-productive.

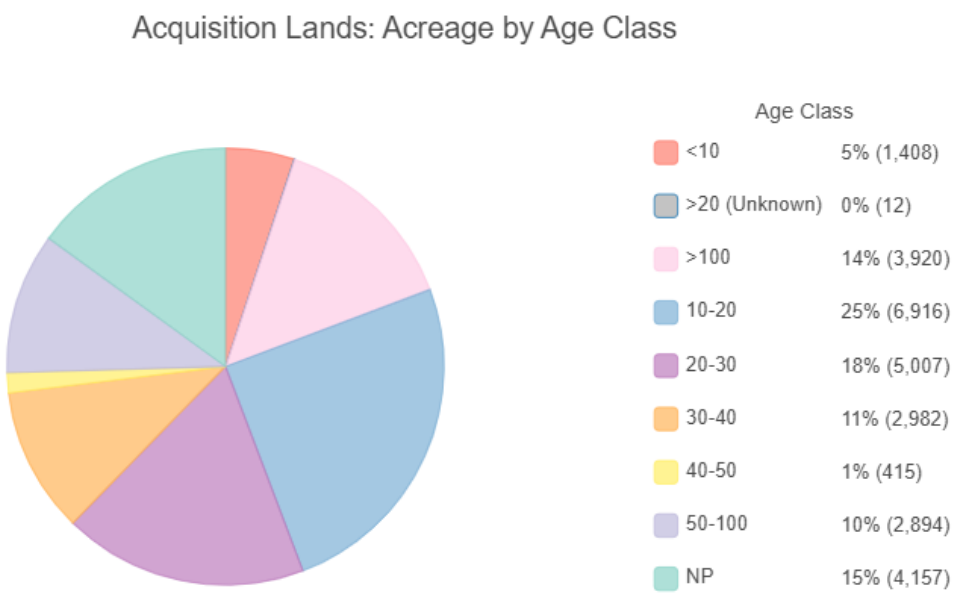

Fig 6. Areal proportions (acreage) estimates, by forest stand age class, across Acquisition lands on the Reservation. NP = non-productive.

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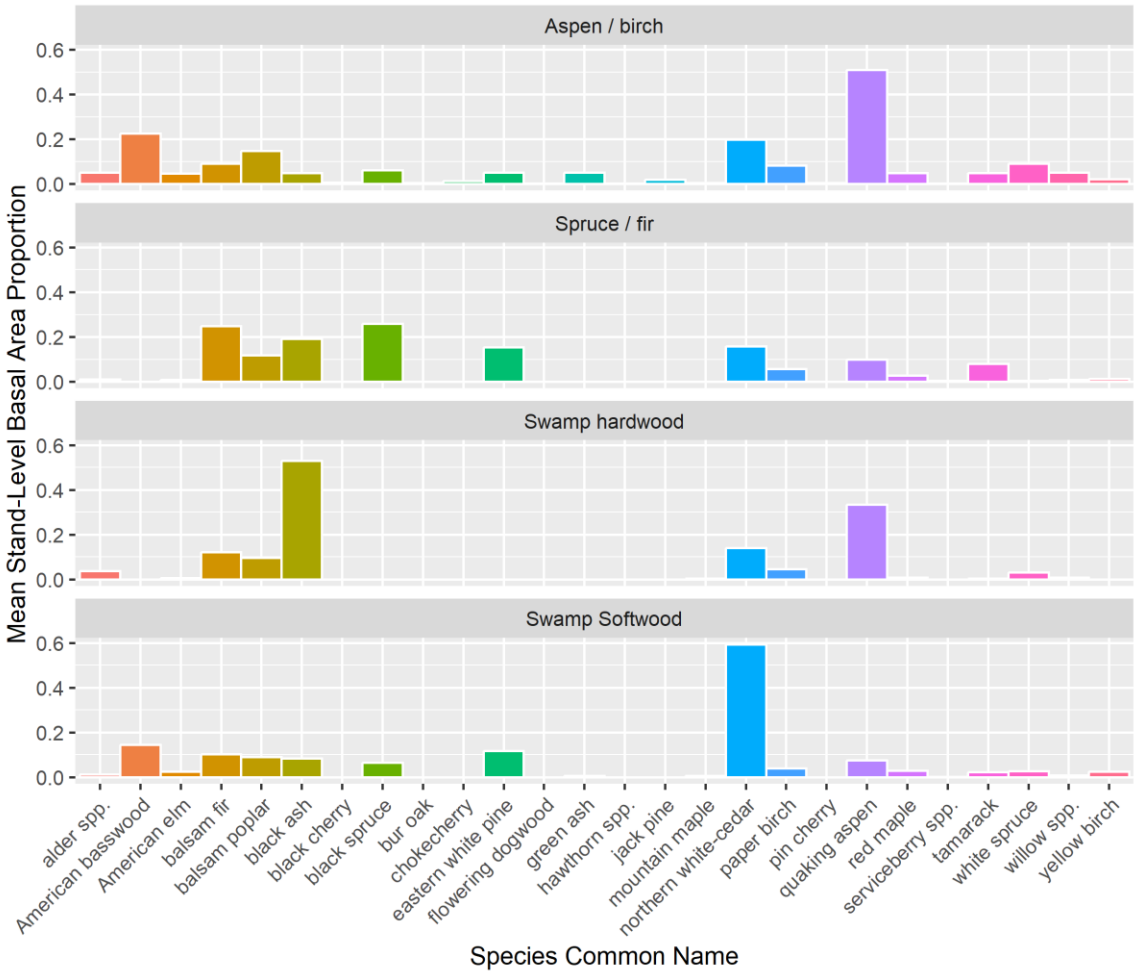

Fig 7. Average species composition (mean stand-level basal area proportion) across the four major forest cover types on the Reservation.

5. Forest Threats/Protection

a. Non-Native, Invasive Plants

The spread of invasive plant species—such as **common buckthorn** (*Rhamnus cathartica*), **non-native honeysuckle** (*Lonicera* spp.), **reed canary grass** (*Phalaris arundinacea*), and others—poses a serious threat to the ecological integrity of Bois Forte forest and wetland ecosystems. These aggressive species outcompete native understory vegetation, reduce biodiversity, degrade wildlife habitat, and disrupt traditional plant communities that hold medicinal, ceremonial, and subsistence value.

Invasive species often thrive in disturbed areas, including forest edges, trails, logging roads, and riparian corridors, where they form dense monocultures that alter soil chemistry, hydrology, and fire behavior. Their spread is exacerbated by climate change, altered fire regimes, and fragmented land use, making proactive and sustained management critical.

For the Bois Forte Band of Chippewa, the loss of native plant communities due to invasive species is not just an ecological issue, but a cultural one. It severs the long-standing relationships between people and the land—limiting access to traditional foods and medicines, diminishing the teaching value of ancestral landscapes, and threatening the sovereignty of Indigenous land stewardship.

Management Strategy

The Bois Forte Band will pursue a multi-pronged, adaptive approach to invasive species control with an emphasis on restoring native plant communities, re-establishing cultural connections, and minimizing ecological harm.

Key actions include:

- **Manual and Mechanical Removal:**
  Prioritize hand-pulling, cutting, and digging of invasive shrubs (e.g., buckthorn and honeysuckle) in sensitive cultural areas, ceremonial sites, and near high-value native plant populations. Mechanical removal will be limited to areas where soil disturbance can be minimized.

- **Targeted Herbicide Application:**
  Apply herbicide selectively—using cut-stump, basal bark, or foliar methods—during optimal treatment windows to maximize effectiveness while reducing non-target impacts. Herbicide use will follow all applicable environmental regulations and be guided by tribal ecological priorities.

- **Ecological Restoration with Native Species:**
  Following removal efforts, replant or encourage regeneration of culturally and ecologically important native species such as sweetgrass (*wiingashk*), hazelnut (*bagaan*), wild rice (*manoomin*), and traditional medicinal plants. Species selection will reflect site conditions, climate adaptation, and traditional use.

- **Mapping and Monitoring:**
  Develop and maintain GIS-based inventories of invasive species locations and treatment areas. Conduct annual monitoring to track efficacy, spread, and restoration progress. Include community members in data collection and stewardship activities.

- **Community Education and Stewardship:**
  Engage youth, harvesters, and elders in invasive species walks, restoration workshops, and plant identification trainings to strengthen intergenerational land knowledge and long-term care. Develop signage and interpretive materials for high-use areas to increase public awareness.

Long Term Goals

- Protect and revitalize native plant communities as living cultural resources.

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- Reduce the long-term ecological footprint of invasive species across forest and wetland systems.
- Foster community-based stewardship grounded in Ojibwe knowledge and relationships with the land.

b. Insect and Disease

Several insect pests pose serious threats to forest health and cultural resources on Bois Forte lands. The most pressing include:

- **Emerald Ash Borer (EAB, *Agrilus planipennis*)** – A highly destructive invasive beetle responsible for widespread mortality of black ash (*Baapaagimaak)*. EAB presents a direct threat to culturally significant black ash stands traditionally used for basketry and closely tied to wetland ecosystem function.
- **Spruce Budworm (*Choristoneura fumiferana*)** – A native insect that periodically reaches outbreak levels, causing defoliation and increased mortality in balsam fir and spruce-dominated stands. This pest threatens both timber value and structural forest integrity.
- **Forest Tent Caterpillar (*Malacosoma disstria*)** – A native defoliator affecting aspen and other broadleaf species. While generally not fatal to trees, repeated defoliation events can weaken stands and affect regeneration.

Management Strategy

To address these threats in a way that supports ecological integrity and cultural continuity, the Bois Forte Band will implement an **Integrated Pest Management (IPM)** framework. IPM emphasizes prevention, monitoring, and targeted response, while minimizing ecological disruption.

Key components include:

- **Early Detection and Monitoring:**
  Establish a regular surveillance program for EAB using traps, tree health surveys, and community-based observations. Track budworm and tent caterpillar populations through coordinated aerial surveys and ground checks during outbreak years.
- **Silvicultural Interventions:**
  Promote species and structural diversity across stands to reduce host dominance and increase resilience to pest outbreaks. This includes mixed-species planting, variable-density thinning, and avoiding monoculture regeneration.
- **Conservation of Culturally Significant Species:**
  Identify and prioritize high-value *Baapaagimaak* (black ash) stands for protection.

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Explore propagation of potentially resistant genotypes and establish seed banks and restoration areas to ensure future availability for cultural use.

- **Biological and Mechanical Controls:**
  Where feasible and culturally appropriate, consider biological control agents (e.g., parasitoids for EAB) or pheromone-based mating disruption (e.g., for spruce budworm). Mechanical removal of infested trees may be used to slow localized spread.

- **Community Engagement and Education:**
  Engage Bois Forte community members in pest monitoring, training, and management planning. Incorporate traditional ecological knowledge (TEK) to guide response strategies and decision-making, especially for black ash protection.

Long Term Goals

- Enhance forest resilience to insect disturbance under changing climate conditions.
- Protect culturally important species and practices from pest-related loss.
- Foster adaptive management based on continuous learning, monitoring results, and incorporation of both scientific data and Indigenous knowledge systems.

c. Fire

Fire has long played a critical role in shaping and maintaining the health of northern forest ecosystems. For the Bois Forte Band of Chippewa, fire is not merely an ecological process—it is a traditional management tool deeply rooted in Ojibwe cultural knowledge, land stewardship, and seasonal lifeways. Historically, Indigenous firekeepers applied controlled, low-intensity burns across the landscape to promote food and medicinal plant availability, improve wildlife habitat, reduce pest populations, and maintain open understory conditions for travel, hunting, and gathering.

These intentional fires sustained **fire-adapted ecosystems**, including **pine barrens**, **oak stands**, **aspen-birch complexes**, and **savannas** that supported a rich diversity of plant and animal life. In particular, species like blueberry (*miinan*), sweetgrass (*wiingashk*), and hazelnut (*bagaan*) flourish under fire regimes and hold both cultural and subsistence value.

Colonial suppression of Indigenous burning practices, along with decades of fire exclusion, have led to increased fuel loads, altered successional patterns, and growing risk of high-intensity wildfires that threaten both ecological function and community safety.

Management Strategy

To restore balance and reassert traditional stewardship, the Bois Forte Band will prioritize the reintroduction of **prescribed fire**—applied through both modern and culturally grounded techniques—across appropriate forest types and ecological zones.

Key goals include:

- **Maintain and Restore Fire-Adapted Ecosystems:**
  Use prescribed burning to mimic natural disturbance patterns and promote regeneration of fire-tolerant species such as red pine, jack pine, and bur oak. Fire will also be used to maintain early successional habitats beneficial to moose, grouse, and other culturally significant wildlife.

- **Reduce Hazardous Fuel Loads and Wildfire Risk:**
  Apply controlled burns in areas with excessive surface fuels or dense understory growth to lower wildfire intensity and protect adjacent communities and infrastructure.

- **Integrate Traditional Ecological Knowledge (TEK):**
  Partner with Bois Forte knowledge holders, fire practitioners, and youth to restore traditional burning practices. Burns will be planned with ceremony, seasonality, and cultural intent, reinforcing intergenerational learning and spiritual connection to the land.

- **Collaborative Fire Planning:**
  Coordinate with interagency partners (e.g., MN DNR, U.S. Forest Service) while centering tribal sovereignty in fire decision-making. Develop shared burn plans where appropriate while ensuring tribal objectives take precedence on Bois Forte-managed lands.

- **Monitoring and Adaptive Management:**
  Establish pre- and post-burn ecological monitoring plots to track vegetation response, fuel reduction, and biodiversity outcomes. Adjust prescriptions based on results and community feedback.

Long Term Goals

- Reaffirm the cultural legitimacy and ecological necessity of fire as a stewardship tool.

- Support the resurgence of Indigenous fire knowledge as a living practice.

- Create more resilient, diverse, and culturally meaningful forest landscapes for current and future generations.

d. Sensitive/Protected Areas

The Bois Forte landscape holds deep spiritual, cultural, and historical significance for the Band and its citizens. Forests, wetlands, lakes, and ridgelines are not just ecological features—they are places of ceremony, medicine gathering, burial, storytelling, and identity. Many culturally sensitive sites remain undocumented or known only within families or

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through oral tradition, requiring a respectful and place-based approach to land management.

At the same time, the landscape contains **ecological hotspots**—areas of exceptional biodiversity, rare habitat types, and species of concern—such as old-growth remnants, undisturbed wetlands, and wildlife corridors. These areas often overlap with cultural sites, reinforcing the Ojibwe understanding that ecological richness and cultural meaning are interconnected.

Colonial land management practices have historically disregarded the presence and importance of these places, leading to damage, degradation, and restricted access. As the Bois Forte Band exercises its sovereign right to steward the land, protecting these sites is a fundamental act of cultural survival and ecological responsibility.

Management Strategy

The Bois Forte Band will proactively **identify, map, and buffer culturally sensitive areas, sacred sites, and ecological hotspots** through a respectful, collaborative process that centers Indigenous knowledge, community input, and ecological science.

Key actions include:

- **Community-Based Site Identification:**
  Work with elders, knowledge keepers, and land users to identify areas of cultural importance, including traditional burial grounds, medicine gathering zones, ceremonial sites, and historical village locations. Incorporate oral histories, archival research, and place names where appropriate and with consent.

- **Ecological Survey and Habitat Mapping:**
  Conduct biological assessments to locate high-conservation-value areas, such as rare plant communities, intact wetlands, wildlife denning areas, and old-growth forest patches. Use GIS to integrate these areas into forest planning and management prescriptions.

- **Establish Protective Buffers:**
  Define and implement protective zones around identified sites. Buffer size and management approach will vary depending on site sensitivity, cultural guidance, and ecological function. Buffers may include limited or no-harvest zones, low-impact forestry techniques, or prescribed fire management when culturally appropriate.

- **Cultural Stewardship Protocols:**
  Develop internal protocols for how cultural sites are visited, documented, and protected during forest operations. This may include restricted data access, ceremonial permissions, or season-specific limitations on activities near sensitive areas.

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- **Tribal Sovereignty and Consent:**
  Ensure that any access, mapping, or management of sacred and sensitive areas is led by or done in full partnership with the Bois Forte Band. All decisions will reflect the principle of **Free, Prior, and Informed Consent** (FPIC) and affirm the Band's inherent rights to control cultural knowledge and land stewardship.

Long Term Goals

- Reaffirm and protect sacred relationships between people and place.
- Prevent damage or disturbance to culturally and ecologically significant areas during forest activities.
- Integrate Ojibwe ways of knowing into long-term landscape planning and forest health monitoring.
- Establish a legacy of respectful, informed stewardship for future generations.

6. Forestland Management - Silvicultural Guidelines by Cover Type

a. Aspen-Birch

The Aspen-Birch cover type totals approximately 15,300 acres and 55% of the acquisition forestland. The site index for aspen ranges from 35 to 95, with an overall average of 64. Based on the Forest Cover Type Guidelines from Minnesota Department of Natural Resources, for that average site index and since the predominant markets in that part of the state are for pulp, the recommended rotation age would be between 35 and 50 years of age, being younger on more productive sites and older on less productive sites. Stands can grow to 80 years of age and still be regenerated successfully, especially on higher site indexes. In absence of disturbance, these forests can increase their component of white spruce and balsam fir. Within this cover type on the Nett Lake Reservation, quaking aspen is the predominant species with lesser components of American basswood, northern white cedar, balsam poplar, white spruce, balsam fir, and paper birch (in order of relative density).

Quaking Aspen (Populus tremuloides) (Azaadi)

- Most common species in this cover type.
- Fast-growing, shade-intolerant, and colonizes quickly after disturbance.

Basswood (*Tilia americana*) (Wiigob)

- Fast-growing and more nutrient-demanding.
- Frequently sprouts from stumps after harvest.

Northern White Cedar (Thuja occidentalis) (Giizhik)

- Found in richer swamp sites.

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- Important for both ecological and cultural reasons to the Bois Forte Band.

Balsam Fir (Abies balsamea) (Zhingob)

- Occurs in slightly better-drained parts of swamp margins or in mixed stands.
- In absence of disturbance, it can overtop and succeed aspen and birch.

White Spruce (Picea glauca) (Gaawaandag)

- Rare in true swamp conditions but may occur on hummocks or transitions to uplands.

Paper Birch (Betula papyrifera) (Wiigwaasaatig)

- A co-dominant in many stands.
- Shade-intolerant and often regenerates after fire or logging.
- The Bois Forte Band traditionally uses birch bark for canoes, baskets, containers, and artwork.
- Important browse and cover species for moose, deer, snowshoe hare, and ruffed grouse.

b. Swamp Softwoods

The Swamp Softwoods cover type inhabits approximately 4700 acres (17% of the forest) and typically refers to forested wetlands dominated by **coniferous (softwood) species** that are adapted to saturated, poorly drained soils. This cover type is common in lowland areas, especially in peatlands, bogs, and swampy sites and is managed under low impact, long rotation systems. The average site index of white cedar on the Nett Lake reservation is 44 feet, which based on the Forest Cover Type Guidelines from Minnesota Department of Natural Resources, the rotation age would be approximately 110+ years. Harvesting is largely restricted to frozen ground conditions. The primary tree species found in this cover type include Northern white cedar, American basswood, eastern white pine, balsam fir, and balsam poplar (in order of relative density).

Eastern white pine (*Pinus strobus*) (Zhingwaak)

- Prefers well-drained upland soils.
- Tolerates partial shade but thrives in full sun.
- Culturally significant to Ojibwe communities as a spiritual and medicinal tree.

Balsam poplar (*Populus balsamifera*) (Maanazaadi)

- Grows best in moist to wet soils, such as along streams, lowland edges and swamp margins.
- Provides habitat and browse for moose, deer, and beaver.

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c. Spruce-Fir

The Spruce-Fir cover type covers approximately 2365 acres (9% of the forest) and typically represents a key component of the lowland and upland conifer forests of northern Minnesota. These stands are typically late-successional, often forming in cool, moist conditions. The average site index of black spruce on the Nett Lake reservation is 58 feet, which based on the Forest Cover Type Guidelines from Minnesota Department of Natural Resources, the rotation age would be approximately 60 years. The primary tree species found in this cover type include black spruce, balsam fir, black ash, northern white cedar, and quaking aspen (in order of relative density).

Black Spruce (*Picea mariana*) (Zesegaandag)

- Tolerates wet, acidic, and organic soils.
- Often co-dominant with balsam fir in wetland edges or peatland transitions.
- Habitat for moose, snowshoe hare, Canada lynx, spruce grouse, and boreal birds.
- Old spruce-fir forests provide excellent cover, thermal protection, and denning opportunities.

Black Ash (Fraxinus nigra) (Baapaagimaak)

- The dominant swamp hardwood in northern Minnesota and on Nett Lake.
- Thrives in wet, mucky, or organic soils with seasonal flooding.
- Currently threatened by emerald ash borer (EAB) across its range.
- Black ash is used by Ojibwe artisans for basketry and other crafts.
- Important hydrological regulation functions with implications for manoomin near Nett Lake.

d. Swamp Hardwoods

The Swamp Hardwoods cover type covers approximately 700 acres (3% of the forest) and typically represent a distinct and ecologically important forest type found in low-lying, poorly drained areas, especially around stream corridors, wetlands, and peatland margins. These stands are part of the lowland deciduous forest complex and provide valuable wildlife habitat, flood control, and cultural resources for the Bois Forte Band of Chippewa. The Minnesota Department of Natural Resources has specific guidance for managing Black Ash. The Fond du Lac Band of Lake Superior Chippewa also have a specific Black Ash Management Plan (link). The primary tree species found in this cover type include black spruce, balsam fir, black ash, northern white cedar, and quaking aspen (in order of relative density).

7. Future Management

Following discussions with Bois Forte staff and reviewing input from tribal members, the future management of the Akiing Azhenan forest will be based on the principles of passive management (~90-95%) with adaptation (~5-10%) triggered through annual monitoring of forest, plant, and wildlife health and population dynamics. While the property will be

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managed through extended rotation forest management, if monitoring shows an unfavorable loss of culturally important plant or animal species or an influx of non-native invasive species, management will be triggered to address the problem. The actions will focus on non-commercial forest management measures, but, if necessary, will include commercial timber sale operations. Managing the forests of the Nett Lake Reservation through passive management or extended rotation forestry—where natural processes are prioritized and harvest intervals are lengthened or deferred—can provide substantial and long-lasting benefits to the Bois Forte Band of Chippewa. These benefits span a holistic approach to ecological, cultural, social, and economic dimensions, aligned with both tribal values and ecosystem stewardship.

a. Carbon and Climate Benefit

- Increased carbon sequestration: Older, unharvested forests continue to store carbon both in tree biomass and deep forest soils, particularly in peatlands and swamp forests.
- Carbon offset credits can provide steady, low-impact income.
- Protection of forested wetlands (e.g., swamp softwoods/hardwoods) conserves intact peat layers, which are globally significant carbon sinks.
- Avoided emissions: Reduced disturbance limits carbon release from logging, hauling, and site preparation.

b. Wildlife Benefits

- Extended rotation supports the development of late-successional features like large-diameter trees, snags, and downed logs—critical for:
    - Moose, black bear, Canada lynx
    - Cavity-nesting birds (e.g., pileated woodpecker)
    - Boreal songbirds and amphibians
    - Waterfowl as result of positive wild rice and riparian habitat impacts
- Diverse forest structure from natural disturbance (windthrow, insects, aging) supports trophic complexity and more stable wildlife populations.
- Benefit to the Band: Maintains subsistence hunting, trapping traditions, and ecological integrity valued in Ojibwe culture.

c. Water Quality Benefits

- Avoids soil compaction, rutting, and nutrient runoff associated with logging, especially in wetland and lowland conifer forests.
- Protects riparian buffers, improving habitat for aquatic species and maintaining cold, clean water.
- Preserves peatlands and black ash swamps, which function as natural water storage and filtration systems.
- Benefit to the Band: Enhances the quality of fishing waters, wild rice beds, and drinking water sources, contributing to overall ecosystem health.

DRAFT

d. Gathering and Cultural Resource Protection Benefits

- Less disturbance means continued access to traditional non-timber forest products (NTFPs):
    - Birch bark, cedar, maple sap, sweetgrass, wild rice (manoomin), medicinal plants
- Protects spiritually important trees and places, such as elder black ash used for basketry and sugar bush groves.
- Passive management aligns with Ojibwe values of stewardship, reciprocity, and "managing by watching".
- Benefit to the Band: Supports intergenerational cultural practices, ceremonies, and teachings tied to forest knowledge.

f. Biodiversity and Ecological Resilience Benefits

- Encourages natural successional pathways, fostering mixed-species stands with a range of ages and canopy structures.
- Protects rare or sensitive ecosystems, such as:
    - Old-growth remnants
    - Cedar swamps
    - Black ash wetlands (especially important under EAB threat)
- Enhances resilience to pests, disease, and climate change by maintaining complex forest dynamics.
- Benefit to the Band: Safeguards ecological diversity that underpins traditional use and forest health.

g. Social and Community Benefits

- Promotes local connection to land through subsistence, ceremony, and observation.
- Increases opportunities for youth education, language integration, and cultural camps in intact forest areas.
- Avoids conflicts tied to commercial timber sales, while still allowing community-based harvesting, fuelwood gathering, or selective cutting.
- Benefit to the Band: Fosters a community ethic of stewardship and supports self-determination in land management.

h. Economic Alternatives to Logging

- Carbon offset credits can provide steady, low-impact income.
- Ecotourism or cultural tourism (e.g., wildlife watching, guided walks, Ojibwe arts and crafts tours, language immersion in nature) may offer low-footprint economic value.
- Non-timber product economies, such as birch bark goods, maple syrup, wild rice, and medicinal plant harvesting, can be developed sustainably.
- Benefit to the Band: Diversifies income sources while preserving the forest for future generations.

DRAFT

8. Risk Considerations of Passive Forest Management

Passive forest management, particularly using extended rotation or minimal-intervention strategies, offers significant ecological and cultural co-benefits. However, several risks must be considered to ensure long-term forest health, cultural access, and climate resilience. The following outlines key risk categories and potential mitigation strategies.

a. Wildfire Risk

Concern: Passively managed forests may accumulate substantial amounts of downed wood and ladder fuels, increasing the risk of high-severity wildfire, especially under warmer and drier future climate scenarios.

Mitigation:

- Monitor fuel accumulation in older stands.
- Use strategic thinning or prescribed fire in fire-prone areas where culturally appropriate.
- Maintain access for fire response crews.
- Consider off-takes of slash and downed fuels for biochar, and/or pellet and fiber products for community and/or external markets, etc.

b. Insect and Disease Vulnerability

Concern: Without active intervention, forests may be vulnerable to pests such as emerald ash borer (EAB), spruce budworm, or fungal pathogens like root rot. Older forests can also suffer from windthrow and structural decline.

Mitigation:

- TEK practices including cultural burns, etc.
- Establish long-term monitoring plots.
- Develop rapid response plans for invasive species or outbreak events.
- Allow selective salvage only when necessary to prevent ecosystem collapse.

c. Ecological Simplification

Concern: Some forest types, particularly those dominated by early successional species like aspen or birch, may transition to shade-tolerant monocultures (e.g., balsam fir), reducing overall biodiversity and structural diversity.

Mitigation:

- Allow natural disturbances like windthrow or ice storms to create gaps.
- Incorporate occasional low-impact treatments (e.g., group selection or patch openings) where diversity is declining.
- Maintain a mixed cover type landscape through spatial planning, cultural burns, and ARR (Afforestation, Reforestation, and Revegetation) treatments.

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d. Limited Access or Encroachment

Concern: Lack of roads, trails, or active use can lead to overgrowth, impeding access for cultural gathering, hunting, or monitoring. It may also increase the risk of trespassing or unauthorized use.

Mitigation:

- Maintain a managed trail network and clearly marked boundaries.
- Involve community members in site planning, stewardship and use monitoring.
- Identify and protect culturally important gathering areas.

e. Climate Change Vulnerability

Concern: Slow-adapting forest systems may struggle with rising temperatures, changing precipitation patterns, and shifts in pest and disease dynamics.

Mitigation:

- Promote species diversity and genetic resilience across stands.
- Identify and prioritize climate refugia for sensitive species.
- Plan for gradual transition to more climate-resilient native species through TEK and ARR as conditions shift.

f. Community Perception and Engagement

Concern: Some community members may view passive management as neglect or underutilization, especially in comparison to past forestry practices.

Mitigation:

- Provide educational materials and signage explaining passive management goals.
- Host guided walks, community meetings, or land stewardship gatherings.
- Integrate Traditional Ecological Knowledge (TEK) into outreach and decision-making.

9. Road/Access Management

Minimize new road construction; upgrade existing roads for erosion control; decommission unneeded routes; maintain access for traditional harvest and cultural use. Maintain a network of minimally improved, hardened, and/or mowed trails for tribal members to access the forest for hunting, gathering, and personal use.

10. Stakeholder Engagement

Engage tribal members, elders, youth, and technical staff in planning and monitoring. Consider joint projects with regional partners when aligned with tribal sovereignty. Partner with tribal and non-tribal K-12 schools, colleges, technical schools and universities in curriculum development, STEM, experiential education, and training for general civics,

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technical, and professional pathways in natural resources stewardship, forestry, and related career paths based on Ojibwe cultural values, principles, and practices such as TEK.

11. Summary/Recommendations

• **Center long-term forest stewardship rooted in Ojibwe values, cultural continuity, and ecological integrity**—prioritizing forest health over short-term extractive gains.

• **Honor the principle of minimal intervention** by managing the landscape with a non-harvest approach across approximately 90–95% of the forest, while retaining space (5–10%) for responsive, community-guided actions that support carbon sequestration, biodiversity, and cultural co-benefits.

• **Actively care for black ash (Baapaagimaak) stands threatened by emerald ash borer (EAB)** through culturally informed strategies that prevent ecological collapse, protect wetland function, and ensure access for future generations.

• **Safeguard habitat for culturally significant species**—including moose (*mooz*), wild rice (*manoomin*), and medicinal and subsistence plants—as identified by community members and guided by seasonal knowledge and relational responsibility.

• **Reinvest carbon revenue in land healing initiatives**, such as restoring native plant communities, natural stream flows, and other systems disrupted by colonization and industrial land use.

• **Ensure that Traditional Ecological Knowledge (TEK) and Indigenous science remain foundational** to all management decisions, alongside appropriate use of Western forestry tools, with full respect for Ojibwe knowledge systems and sovereignty.

• **Acknowledge that while the forest will not be commercially harvested,** implementation of restoration, access, and long-term monitoring activities will require sustained community investment and infrastructure support.

• **Increase capacity within the Bois Forte Natural Resources Program** by creating two (2) additional full-time staff positions dedicated to forest and cultural resource stewardship—grounded in mentorship, intergenerational knowledge-sharing, and Indigenous workforce development.

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