

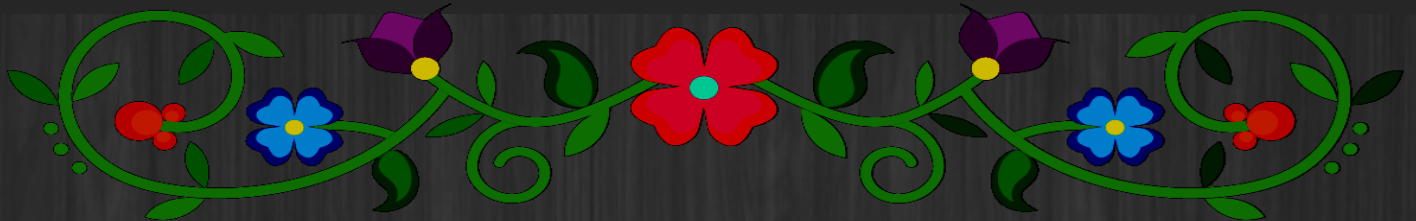


BAY MILLS INDIAN COMMUNITY

# BIOLOGICAL SERVICES NEWSLETTER

WINTER 2023

ISSUE 16



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## News: Biological Services Department Recognized for Land Stewardship

This winter the local Chippewa Luce Mackinac Conservation District (CLMCD) Board of Directors selected Bay Mills Biological Services as their 2022 Land Steward of Year! Land Steward of Year award is given to an individual or organization that practices responsible governance and care for the sustainability of our natural resources. The Bio Dept has been selected for this year's award.

CLMCD is recognizing the Bio Dept for their efforts and long-term partnership they have held with CLMCD for many years.

Since 2010 Bay Mills Biological Services has been a key partner in Three Shores CISMA. BMIC Biological Services hosts its own invasive species program and has been an influential model for protecting tribal lands from invasive species threats. BMIC also serves on the steering committee.

BMIC has also worked with CLMCD to promote conservation on the watershed level. In 2020 the Waishkey River Watershed Plan was completed in cooperation with local entities including the

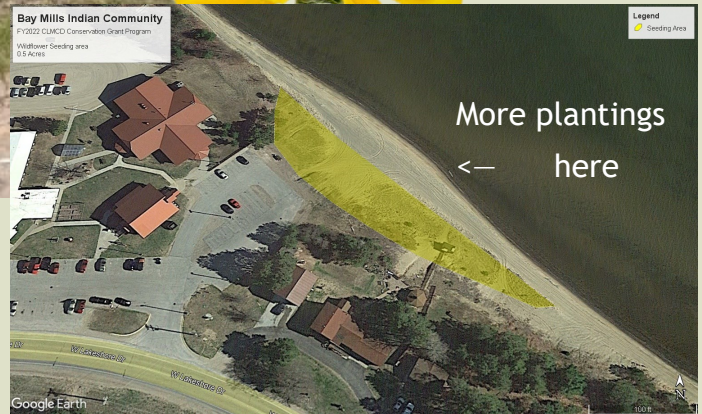
Conservation District. This plan is a big start to an even bigger mission to restore and protect. The Bio Dept has continued to promote collaboration with federal and local agencies in order to prioritize and complete projects that benefit the Waishkey River and BMIC.

BMIC also partnered the Natural Resources Conservation Service (NRCS) over the last few years was re-establishing historical manoomin (wild rice) beds on Spectacle Lake in 2021 and Waishkey Bay in 2022. The seed was then broadcast by hand by BMIC members, Conservation District staff, NRCS staff, and volunteers by kayak and canoe in both 2021 and 2022.

The Biological Services Department appreciates the recognition for the hard work our staff puts in. Chi-miigwetch to the CLMCD!



# INVASIVE SPECIES PROGRAM UPDATE



## MORE PLANTS FOR POLLINATORS COMING TO BMCC BEACH

The Bay Mills Biological Services Invasive Species Program was awarded a Chippewa Luce Mackinac Conservation District 2022 Conservation Grant in the amount of \$800.00 for the establishment of pollinator habitat. This grant funded the purchase of native wildflower seed that was seeded on the dune behind Bay Mills Community College in fall 2022. This dune has been the focus of invasive species management efforts, mainly for Spotted Knapweed, for a number of years. Spotted Knapweed has an adaptation making it harder for other species to grow near it. In 2017 the Biological Services spread many native plant seeds on the dune, but it wasn't until summer 2021 that the first evidence of those seeds germinating was evident. It was the intensive management and removal of the last four years which finally allowed native plants to sprout.



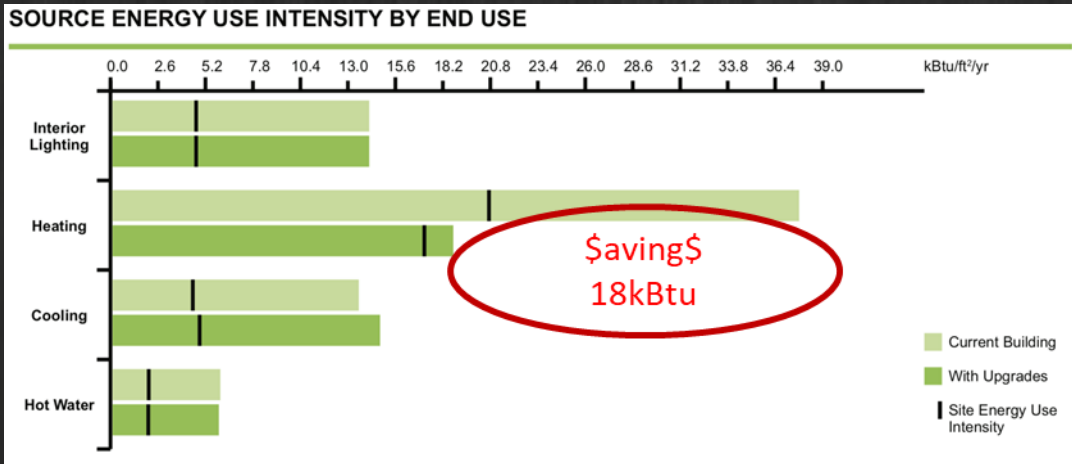
This grant was a great opportunity to add some new native species to the dune including Common Milkweed, Lance Leaf Coreopsis, Pearly Everlasting, Harebell and Frost Aster for Monarch Butterflies and other pollinators.

# GETTING GREENER: SPECIAL ASSESSMENTS AND INITIATIVES

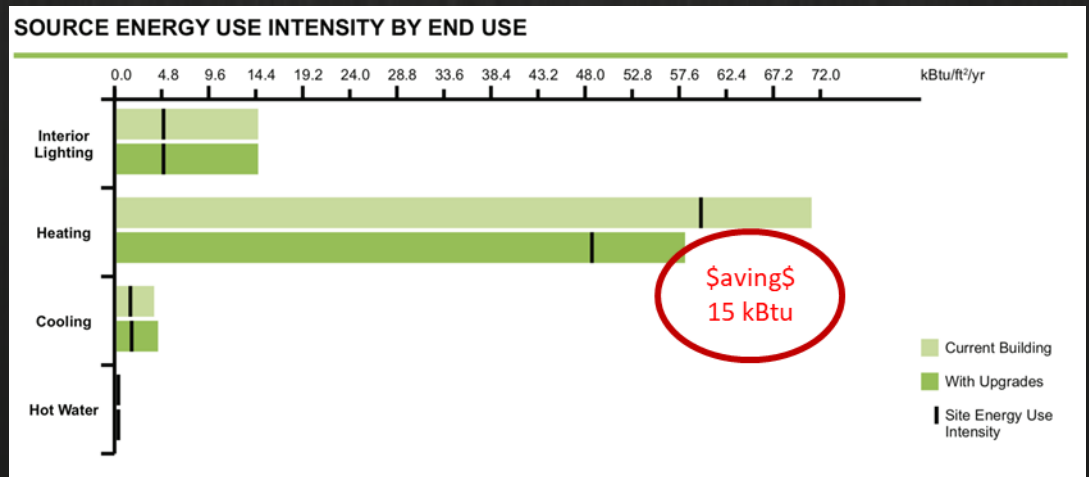
## BMIC BUILDINGS ASSESSED FOR ENERGY EFFICIENCY

During the summer of 2022, BMIC worked with Great Lakes Climate Corps to evaluate 27 buildings for energy efficiency. Lighting, whole building envelope (window, wall, roof, floor), HVAC systems (including roofs, walls, windows, floors, and HVAC systems), hot water systems, and HVAC distribution systems (air handlers and zone equipment) were all investigated as part of the study. Each building was then given an energy efficiency score and recommendations for how to best improve the efficiency of each building. This information can now be used to prioritize buildings for energy efficiency upgrades and determine the most beneficial systems to replace or upgrade.

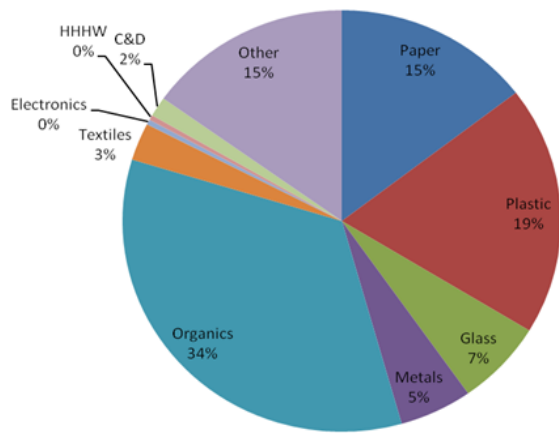
For example, these graphs show current energy use from four systems at the Culture Department building and the Four Seasons grocery store. Using this information, we can see that the best place to find efficiencies is to upgrade the heating systems.



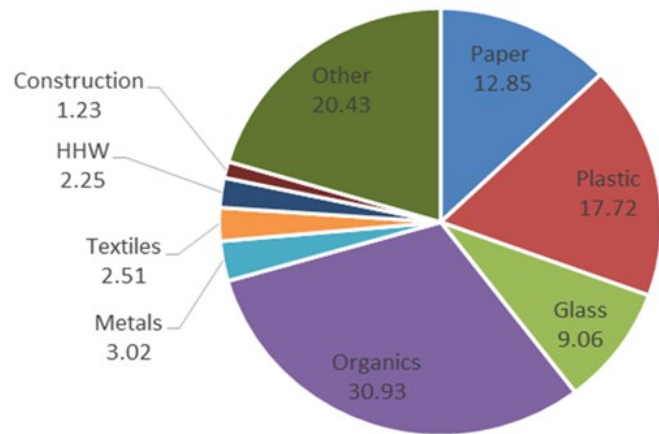
The BMIC Culture Department, finished in 2016, was rated 10 out of 10 on the DOE asset assessment.



The Four Seasons Market & Deli, acquired in 2020, received a 10 out of 10 on the DOE asset assessment.



Community Study 2020



BMRC Study 2022

## RECYCABLES IN THE GARBAGE: A WASTE CHARACTERIZATION ASSESSMENT

In 2020 and 2022 Biological Services conducted two waste characterization studies for the Bay Mills Community and the Resort and Casino. These studies involved collecting trash for a pre-determined amount of time, then spending a day sorting the waste into 26 different categories. The information from these studies showed what types of materials could have been recycled or composted and which materials were appropriate for the landfill. We learned that recycling efforts throughout the community have improved since the last study was completed in 2011. For example, cardboard used to make up a significant amount of garbage, but now, that cardboard is diverted and recycled. However, there are still improvements that can be made when it comes to recycling. Currently one area where a lot of waste could be diverted from the landfill include organic wastes such as food waste and compostable materials like paper towels. Currently there are no good options for handling organic waste in the local area. However, this information provides important data and documentation for seeking and justifying funding sources to support an organic waste program in the future.



Photo of Biological Services staff and partners sorting and characterizing waste destined for landfill.





# INDOOR AIR PROGRAM

## WINTER IS THE TIME TO TEST YOUR NEST

Its that time of year! Where we spend about 90% of our time in our homes with the doors and windows shut. Which is why it is important to consider how indoor air quality may impact your everyday health.

### INDOOR AIR POLLUTANTS to CONSIDER



**Radon (Rn):** Every home has the potential for high levels of radon. When inhaled radon particles can cause lung cancer. Radon can only be detected by testing your home.

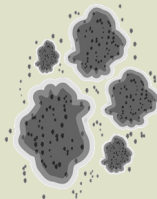
**Grab your FREE home test kit from the Tribal Admin office today!**



**Carbon Monoxide (CO):** CO is an odorless colorless and toxic gas. Sources include gas and kerosene heaters and stoves, leaking chimneys and furnaces. CO alarms should be placed in sleeping areas of the home.



**Secondhand Smoke:** Secondhand smoke exposure poses a serious health risk to children and adults. It contains more than 7,000 substances and can travel between rooms of a home.



**Mold:** The key to mold control is moisture control. Prevent mold from growing by fixing moisture issues. Clean surfaces with dish soap solutions and keep humidity levels below 60% to prevent mold from growing.

# GET INVOLVED IN FOREST MANAGEMENT DECISIONS

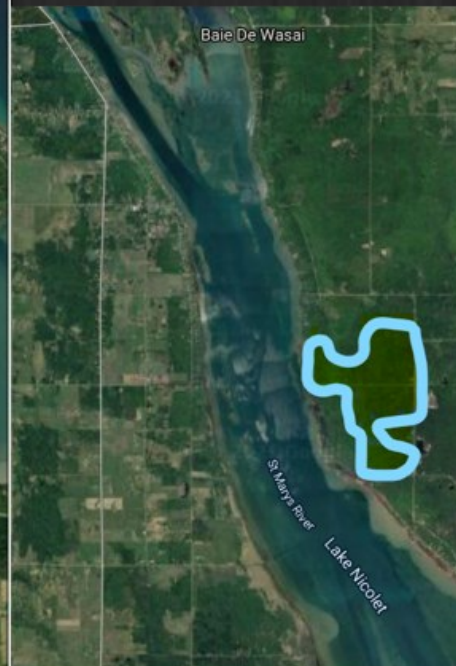
## NOW ACCEPTING PUBLIC COMMENTS ON DRAFT PLAN

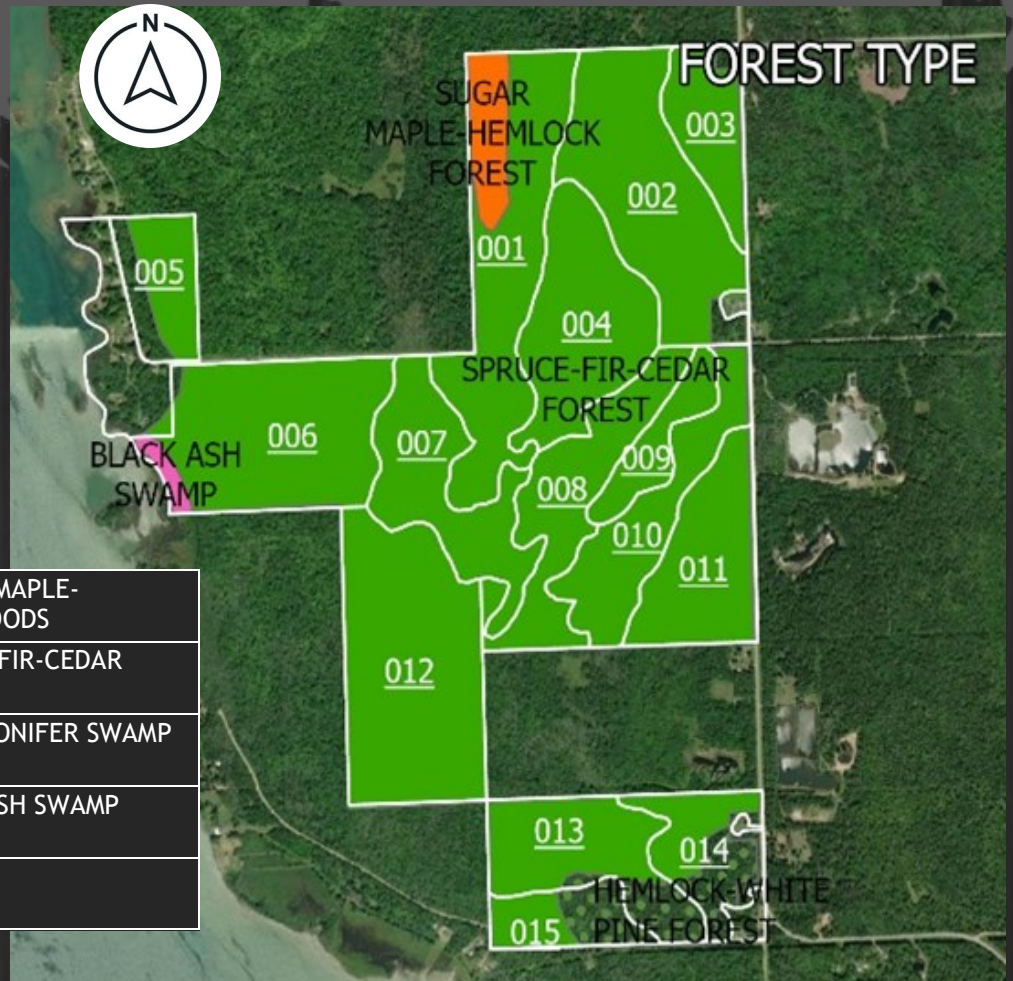
Bay Mills Indian Community has many planning documents which provide a road map of how to reach management goals. Bay Mills is undertaking an update to the trust lands Forest Management Plan, led by the Biological Services Department. Management plans guide the activities of staff, but also help a community pursue grants. A forest management plan identifies challenges or difficulties which these forests may be facing, such as emerald ash borer. This plan also identifies community priorities, such as gathering wild edibles, hunting, paddling, and other cultural practices. BMIC has 1800 acres of forest in trust, much of which is healthy forested wetlands. The plan has been drafted with some community input, but we would like to hear more from you!

We will be revising goals through the end of March through outreach events and direct discussions with local groups. For more information about this project, or to share your thoughts, contact Aubrey Maccoux-LeDuc at [amaccoux-leduc@baymills.org](mailto:amaccoux-leduc@baymills.org) or <https://www.baymills.org/forestry>

### DOMINANT GOALS OF THE FOREST PLAN

- Provide cultural use/ non-timber forest products
  - = hunting/ gathering wild edibles/ ceremonies/ etc
- Forest health/ stand exam data
  - = surveys for pests and disease; density
- Recreation
  - = Allows for rec and aesthetics to be priority, but doesn't plan anything.





	SUGAR MAPLE-HARDWOODS
	SPRUCE-FIR-CEDAR
	MIXED CONIFER SWAMP
	BLACK ASH SWAMP
	PINE

## SUGAR ISLAND AREA



Monitor health of trees. Take actions necessary to preserve the health of other trees and forested character of the area. Plant seedling trees under the dying ash trees.



Promote moose habitat by providing young maple, aspen, etc forage. For the dying aspen pocket, clear-fell aspen to promote regeneration.



Provide for suitable habitat of wild edibles, so that harvesting/ gathering may continue. Promote cedar trees with desirable characteristics for cultural use.



Provide for suitable habitat of deer and other wild game. Nurture oak seedlings and plant additional swamp oak to provide forage for deer.

# CHIEF HARDWOODS AREA: north of new housing development.



Provide for suitable habitat of deer and other wild game. Nurture oak seedlings and plant additional oak to provide forage for deer.



Facilitate suitable recreation. Allow for proposed hiking trails; brush out ATV and snowmobile intersections for public safety.



Provide for suitable habitat of wild edibles, so that harvesting/ gathering may continue. Consider actions that may improve the resiliency of the sugarbush.



Manage for wildfire resiliency to protect housing development. Create a fire break along northern and western boundaries by thinning conifers within 50ft of boundary.








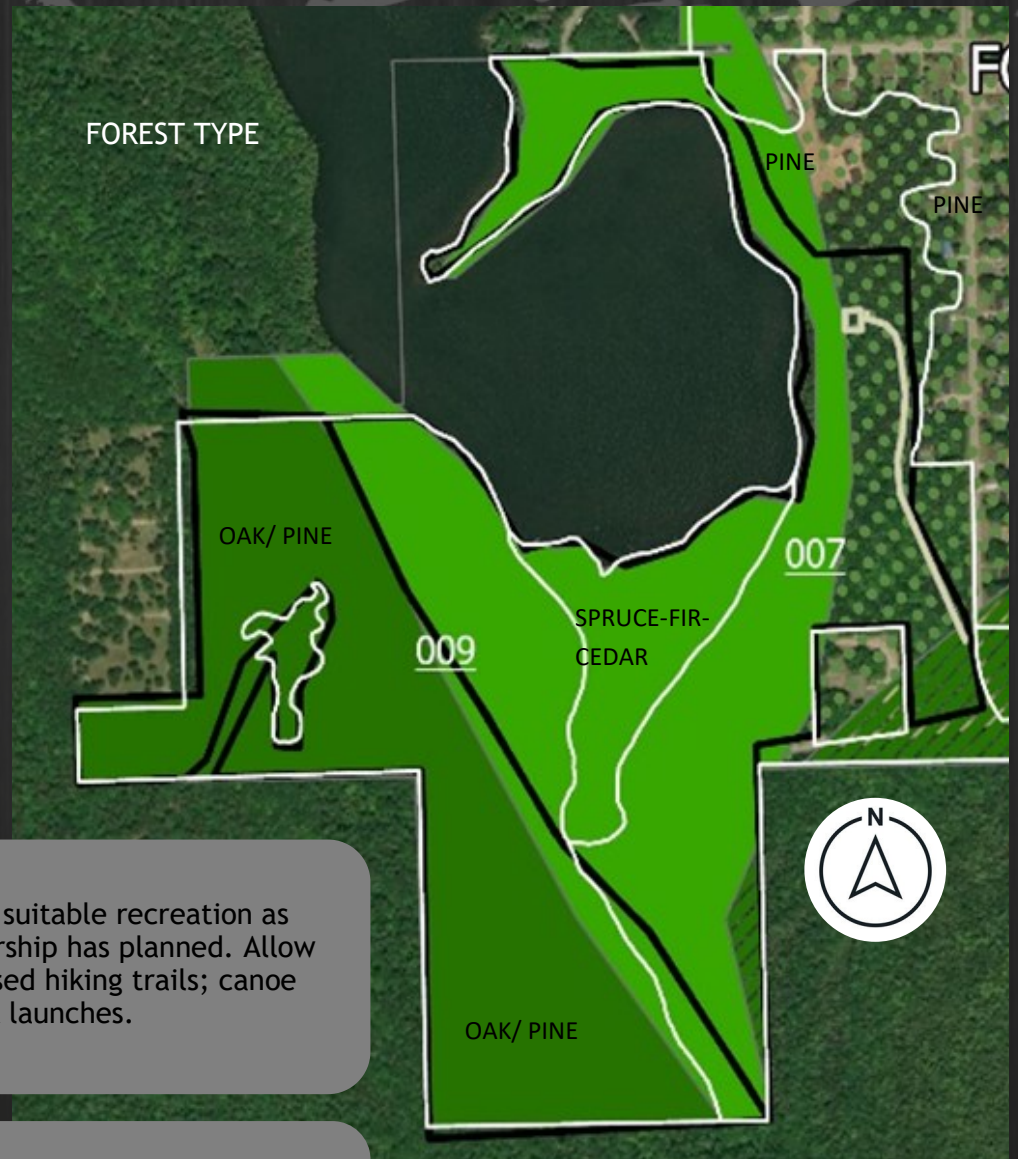


# SPECTACLE LAKE AREA

Goals here include recreation opportunities and gathering/ hunting

We will be revising goals through the end of March through outreach events and direct discussions with local groups. For more information about this project, or to share your thoughts, contact Aubrey Maccoux-LeDuc at [amaccoux-leduc@baymills.org](mailto:amaccoux-leduc@baymills.org)

	SUGAR MAPLE-HARDWOODS
	SPRUCE-FIR-CEDAR
	MIXED CONIFER SWAMP
	PINE
	OAK/ PINE



Facilitate suitable recreation as the leadership has planned. Allow for proposed hiking trails; canoe and kayak launches.



Monitor health of trees. Take actions only necessary to preserve the health of other trees and forested character of the area.



Provide for suitable habitat of wild edibles, so that harvesting/ gathering may continue. Ensure wise land management so that wild rice and cranberries may persist.

The Spirit Stone Trail Committee is seeking thoughts and ideas for future upgrades and improvements at Spectacle Lake! Provide input by filling out this short survey.

[https://docs.google.com/forms/d/e/1FAIpQLSegHfWtz4X92zWkE\\_6HLLJ5VM76vavbRHqyutm2nO7Jn8qyJw/alreadyresponded](https://docs.google.com/forms/d/e/1FAIpQLSegHfWtz4X92zWkE_6HLLJ5VM76vavbRHqyutm2nO7Jn8qyJw/alreadyresponded)



Monitor health of trees. Take actions necessary to preserve the health of other trees and forested character of the area. Plant seedling trees under the dying ash trees.



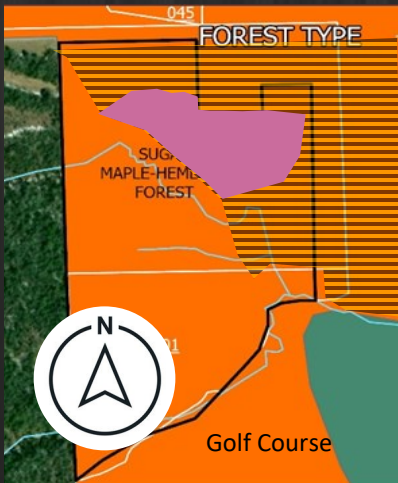
Provide for suitable habitat of deer and other wild game. Nurture oak seedlings and plant additional swamp oak to provide forage for deer.



Provide for suitable habitat of wild edibles, so that harvesting/ gathering may continue. Promote cedar trees with desirable characteristics for cultural use.

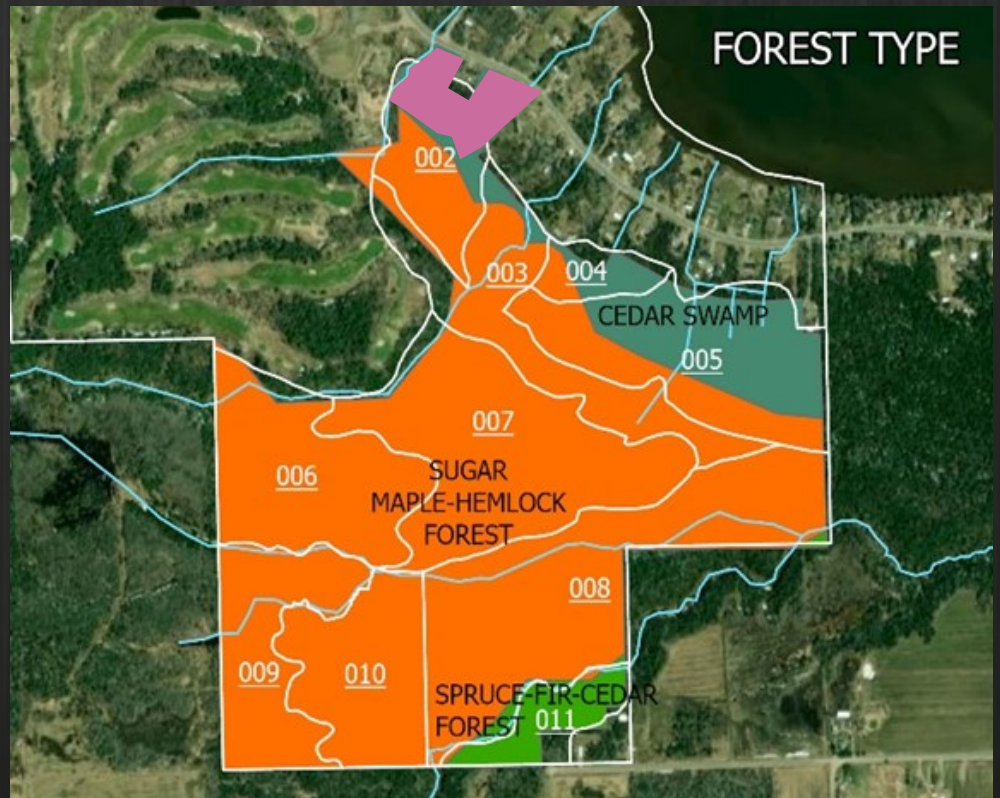


Map pools and springs. Maintain intact forest cover to shade streams/ wetlands.



**SOUTH PLANTATION:**  
south of Bio/ Conservation offices

Goals here include replanting seedling trees beneath the dying ash.



**LITTLE WAISHKEY HEADWATERS AREA:**  
south of golf course

Goals here include replanting seedling trees beneath the dying ash and monitoring eroding stream banks.

We will be revising goals through the end of March through outreach events and direct discussions with local groups. For more information about this project, or to share your thoughts, contact Aubrey Maccoux-LeDuc at [amaccoux-leduc@baymills.org](mailto:amaccoux-leduc@baymills.org)

## GUMSHOES WETLAND AREA

Goals here include recreation opportunities and gathering/ hunting



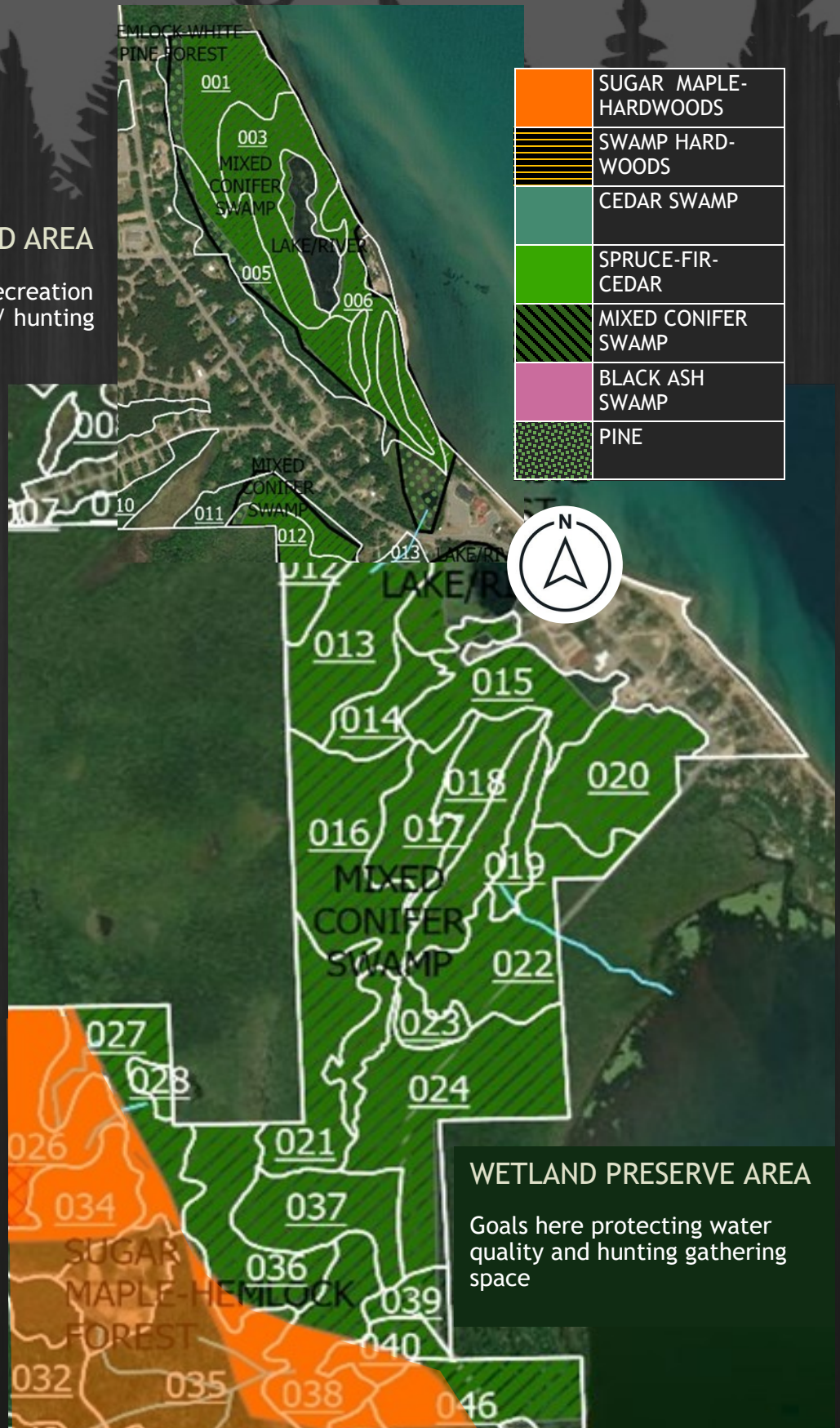
Facilitate suitable recreation as the leadership has planned. Allow for proposed hiking trails; canoe launches; camping desires.



Monitor health of trees. Take actions necessary to preserve the health of other trees. Promote cedar.



Provide for suitable habitat of wild edibles, so that harvesting/ gathering may continue.



## WETLAND PRESERVE AREA

Goals here protecting water quality and hunting gathering space

## Join our summer staff!

Every year Biological Services brings on entry-level assistants to help with summer projects and field work. Perfect for youth, teachers, and some elders. High school diploma and driver's license are preferred. Contact Bay Mills Human Resources for more information about joining our team.



Jesse Wesolek, Air Quality and Environmental Response Specialist

## STAFF CHANGES in BIOLOGICAL SERVICES

Jesse Wesolek is an outdoor enthusiast enjoying hiking, fishing, running, kayaking, cross country skiing, and snowshoeing, snapping nature pictures and looking for aquatic insects. Being from Northern Michigan and always near the water, Jesse has been instilled with a passion for protecting the Great Lakes. Jesse earned her Bachelor of Science in Fisheries and Wildlife Management with a concentration in fisheries management from Lake Superior State University and her Master of Science in aquatic ecology from Grand Valley State University. Jesse has a variety of work and research experience including managing science labs, working with threatened and endangered species and environmental response.

Jesse is excited to take on the new role of Air Quality and Environmental Response Specialist for the Bay Mills Indian Community!

Welcome Jesse!

***For questions about fishing/hunting licenses, current regulations, or to report poaching, please contact Conservation Officers at 906-248-8640.***



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