URBAN FORESTRY TREE BOARD PROCEEDINGS
March 4, 2020
Government Center Room 204

Members Present: Nick Nelson, Ruth Ludwig, Robert Quené, Justin Holmes, Richard Kaufman, Jane Anklam

Also present: Linda Cadotte, Angie Harker, Russ Behlings, Ryan Magana, Shelley Nelson, Tom Nicodemus

1. Approval of the January 16, 2020 minutes.

MOTION by Quené, seconded by Holmes and carried, to approve the Urban Forestry Tree Board Minutes of January 16, 2020.

2. Municipal Forest Management Plan – Update.
The draft stewardship plan for the municipal forest was distributed via email prior to the meeting. Parks, Recreation and Forestry Director Linda Cadotte and WI DNR Forester Terry Asleson (who was unable to attend the board meeting) developed the draft. Cadotte explained that this is a very early draft and it is not ready for public comment at this time. Board members discussed the draft and recommended the document start by stating the purpose of the plan. Listing short and long term goals was suggested, as well as outlining the overall vision for the forest. A number of other topics were discussed and Cadotte asked that members continue to review the document and email her their comments and questions.

MOTION by Ludwig , seconded by Quené and carried, to send all updates and thoughts to Cadotte, come back to the next meeting in April with a more developed plan and be ready to take action on it.

3. Dwight's Point and Pokegama Wetlands State Natural Area – Discussion.
Ryan Magana of the WI DNR gave the history of State Natural Areas (SNAs) in the State of Wisconsin, explaining different categories and the purpose of SNAs, which is to protect, restore and conserve. He briefly discussed the 1997 Dwight's Point and Pokegama Wetlands SNA and presented a draft plan, (which had been emailed to the members earlier). There was a lengthy discussion and question and answer period related to updating the management plan. Revising the boundaries will be an important component. Members requested a map be brought back to the board showing the current versus proposed boundaries. Additionally members suggested that some of the visuals from Terry Asleson's presentation at the January meeting be brought back, so that those can be reviewed. Cadotte indicated the goal would be to have an updated plan completed in 2020 in tandem with the forest stewardship plan.

MOTION by Ludwig, seconded by Holmes and carried, to hold in committee the Dwight's Point and Pokegama Wetlands State Natural Area, to give Cadotte and Magana further time to develop the management plan.

Agenda item #5 was taken up before #4 to allow for printing of the draft 2020 brush pickup schedule.

5. 2020 Communities in Bloom/Arbor Day Event – Update.
Cadotte indicated that the most recent utility mailer that was sent out had the date of the Arbor Day event, with information about the grant and the opportunity to volunteer. One person has reached about volunteering as a result of that. Additionally Cadotte has a call tomorrow with Husky Energy to discuss their employees volunteering for the event. Also, Mentor Superior was looking for a project at the end of May, and Cadotte plans to look into partnering with them to get youth involved, which would be one on one (youth working with their mentor) and would alleviate safety concerns about young people working near the highway. The dates of Tuesday and Thursday, April 28 and April 30 have been set, weather dependent, with the 30th being the rain date. ESD is helping with the t-shirt sizing, ordering and snacks. Everyone will meet at the estuarium at noon, have a presentation about the planting and split up into five groups to plant. 52 trees and 193 shrubs will be planted. The aim is to be finished by 3:30 – 4 p.m. in time to convene for food and refreshments. An actual celebration of the planting needs to happen in October when the grantor comes to Superior. Anyone who helped with the planting will be invited to that event. Cadotte encouraged board members to participate in both events and also welcomed them to attend continued planning meetings. March 26th is the next planning meeting, at 9:30 a.m. at ESD in their media room.

4. Brush Pick-up – 2020 Proposed Schedule.
The 2020 proposed brush pickup schedule was distributed and reviewed. Cadotte explained that the north end of the city has always been first for pickup and complaints are received from residents in that area who don't have the same amount of time as other residents to complete their brush work in the spring. Therefore the schedule was shifted by moving the top week of the schedule to the bottom. This same shifting will continue in future years and would not be brought back to the board for approval each year, if the board found that to be acceptable.

MOTION by Ludwig, seconded by Nelson and carried, to approve the current brush schedule and the method for rotating in the future.

6. Parks, Recreation & Forestry Director's Report.
Cadotte mentioned the State of Wisconsin 2020 Forest Action Plan, and she indicated that she had emailed a link to the document to the board members. She stated members could review that if they wished and could forward their comments to her by the end of the month when the comment period ends. She will be attending a state tree board meeting next Friday in Milwaukee. The Douglas County Leadership Program has a group this year working on promoting recreation and tourism in the municipal forest. The group plans to do marketing and produce maps as part of their project. Finally Cadotte informed the board that Administrative Assistant Angie Harker has taken another position in the city and this would be Harker's last meeting.

Park Superintendent Behlings indicated that 300 trees have been ordered. This number is reduced by about 100 trees, which will allow more time for the crew to get back to pruning, etc. A new vendor, Chestnut Ridge will be fulfilling the order this year. Behlings briefly discussed the Wisconsin Arborist's Association conference that he and other staff attended recently. He highlighted a few topics of interest including learning more about trees and stormwater issues and also about rigging practices. He stated new rigging equipment has been ordered which will be very helpful with pruning larger branches and doing clean up after storm events. The bucket

truck is being replaced with a new model this year which will increase safety. The crew is working on trees that were damaged from snow banks and plowing this winter (re-staking, pruning, etc.)

7. Next meeting April 16, 2020 @ 4:30 p.m.

Ludwig announced the meeting adjourned at 5:59 p.m.

Minutes submitted to the Council Meeting of March 17, 2020.

Superior Municipal Forest
Stewardship Plan

Wisconsin is fortunate to have more than 15 million acres of forestland. During the last century, we learned the phenomenal value of our forests after nearly losing them to land use conversion and fires. Future social, economic and environmental pressures will be different, but we have a duty as a society to find ways to meet our needs without imperiling the productivity of forests for future generations. That is the goal of sustainable forestry and the forest stewardship program.

Forestry Stewardship is to encourage the long-term stewardship of nonindustrial private forest lands, by assisting these owners to plan for and more actively manage their forest and related resources. The Forest Stewardship Program aids owners of forest lands and other lands where good stewardship will enhance and sustain the long-term productivity of multiple forest resources. The program provides landowners with the professional planning and technical assistance they need to keep their land in a productive and healthy condition.

Stewardship Purpose

The Forest Stewardship Program is a program that promotes ecologically responsible resource management through the following actions and values:

1. Managing for long-term forest health, productivity, diversity, and quality.
2. Conserving or enhancing water quality, wetlands, soil productivity, biodiversity, cultural, historical and aesthetic resources.
3. Following a strategy guided by well-founded silvicultural principles to improve timber quality and quantity when wood products are a goal.
4. Setting high standards for foresters, loggers and other operators as practices are implemented; and minimizing negative impacts.
5. Learning how woodlands benefit and affect surrounding communities, and cooperation with neighboring owners to accomplish mutual goals when practical.

Background:

The Superior Municipal Forest was created in 1949 by transfer of property from county control to the City of Superior, with the original vision to return funds to the city through forest products and Christmas tree sales. On March 6, 1951 the land obtained from Douglas County was zoned Forestry by the city council, and since this time the Municipal Forest has evolved into a community resource of ecological, recreational, and natural space unique on a national scale. Also, in 1951 the Municipal forest was registered in the community forest program that outlines cooperative forest stewardship with the Wisconsin Department of Natural Resources. Requirements of the community forest program are having a management plan and following generally accepted silviculture practices.

The Superior Municipal Forest is the third largest forest within a city in the United States, comprised of almost 4500 acres, which provides unique character and resource for the public to enjoy. The forest contains rare and important wetland and upland habitats and is important to the community for its natural beauty and recreational opportunities. Included in the forest is a 2620-acre designated State Natural Area. Dwight's Point and Pokegama Wetlands retains their biological diversity and represents one of the few boreal forests in Wisconsin. The forest provides an array of outdoor recreation opportunites. It includes an extensive network of motorized and non-motorized trails, a dog park, disc golf course, an outdoor classroom, an opportunity for public hunting to list a few.

Contained within the forest is the Lake Superior National Estuarine Research Reserve, which was established to provide long-term research, education, and interpretation. The Reserve has developed a strategic plan to guide the development and management of the National Estuarine Research Reserve, which includes strong partnerships between NOAA, state agencies and universities, and other local partners. The Reserve should implement an ecosystem- based management approach, which integrates science, education and stewardship to maximize the benefit of coastal management (Estuarine Research Reserve p 16).

Through the recent comprehensive outdoor recreation plan, a policy and regulatory framework was developed *to manage the Superior Municipal Forest and Wisconsin Point as a unique ecological, recreational, natural open space resource that provides a variety of active and passive recreational and educational activities and preserves an area of geological diversity and natural wildlife habitat, as appropriate for a state designated natural area. To provide or improve walking, hiking, and street connections between different neighborhoods and between neighborhoods and the waterfront.* (rec plan p16).

The objective of the Municipal Forest Stewardship plan is to provide an outline that meets the vision statement set by the comprehensive outdoor recreation plan, consider management implications to the Lake Superior shoreline and river systems, while sustainably managing the forest: **To increase the sustainable year- round access for multi- use activities while managing for long-term conservation.**

Definition of *conservation: a careful preservation and protection of something especially**:** planned management of a natural resource to prevent exploitation, destruction, or neglect*

Sustainability means meeting the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable forestry is a proactive form of management that provides for the multiple uses of the forest by balancing a diversity of both present and future needs.

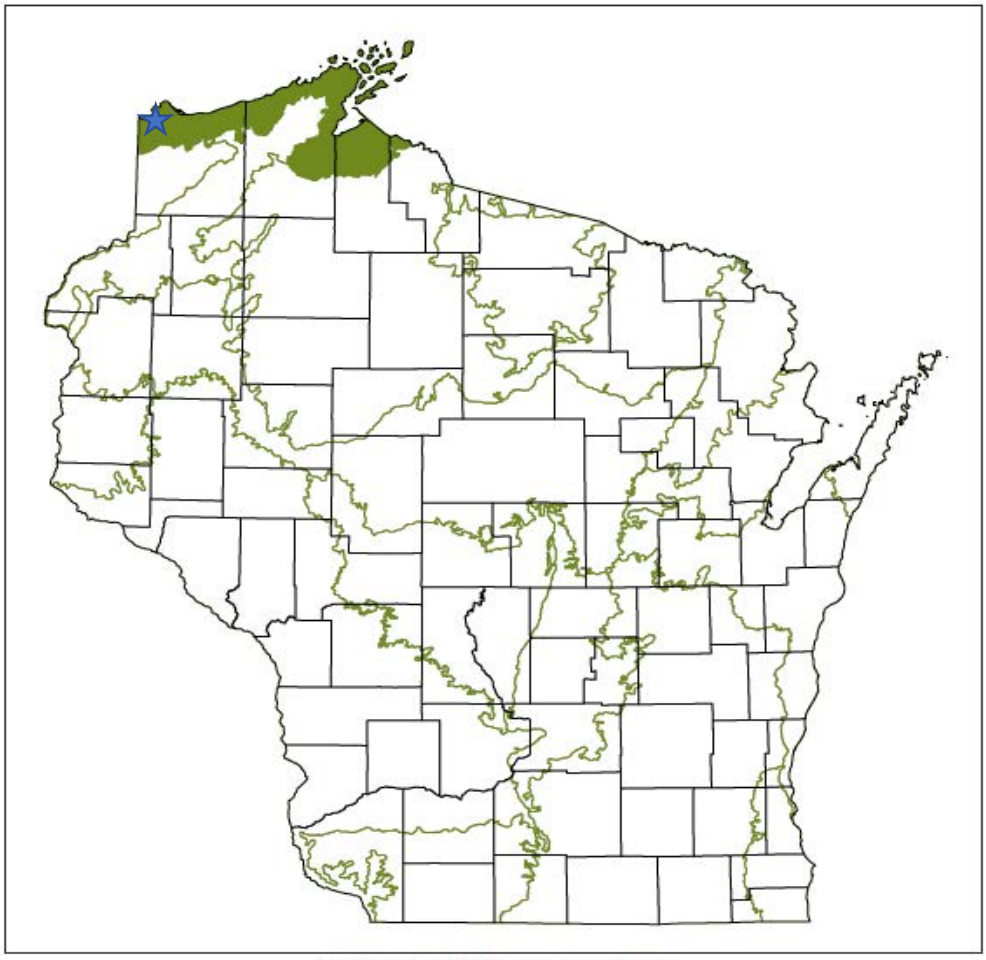
The City's management plan blends goals with site capabilities and Forest Stewardship program standards (sustainable guide your land management). The following areas were identified as the Municipal forest goals:

- Maintain species and habitat diversity: promote boreal forest species like white spruce, white pine, and white cedar
- Promote a healthy forest resilient to climate change
- Provide an educational site for the community and school
- Provide year-round access for multi-use recreation and limit user conflicts
- Restore and protect water quality
- Develop a management plan for the State Natural Area

The management practices in this plan include practices that should enhance the growth rate and species composition of the City forest; provide for the establishment of a new stand of trees; improve wildlife habitat and recreational activities; increase carbon sequestration; reduce fire hazards on the property; improve access; and help meet the City's other goals.

ECOLOGICAL CHARACTERISTICS AND MANAGEMENT OPPORTUNITIES

The Municipal Forest is located within the Superior Coastal Plain. The Superior Coastal Plain (SCP) region is 1,416 square miles in Douglas, Bayfield and Ashland counties. Lake Superior has had an enormous influence on the climate, landforms, soils, vegetation and economy of the Superior Coastal Plain. Freshwater estuaries are present along the coast. Inland lakes are rare, but lagoons, some of them quite large, occur behind the coastal sandspits. Important rivers include the St. Louis, Nemadji, Bad, White, Amnicon and Bois Brule.



Superior Coastal Plain Ecological Landscape

Coldwater streams originate in the aquifers at the northern edge of the Northwest Sands in Bayfield County and flow north across the Superior Coastal Plain before emptying into Lake Superior. Many of the streams flowing across the clay plain suffered severe damage to their banks and beds during the era of heavy logging in the late 19th and early 20th centuries. Some of them have not yet recovered and their slumping banks continue to dump sediments into the main channels, and ultimately, into Lake Superior. Water (and soil) management can be challenging in this Ecological Landscape.

The region is known for its unique, poorly-drained reddish lacustrine clay soils on either side of the Bayfield Peninsula. The reddish soil here is found nowhere else in Wisconsin. The clay deposits include lenses of sand or coarse-textured till; these areas are especially erosion-prone when they are cut by streams.

Two prominent features in the Superior Coastal Plain Ecological Landscape are considered significant on both a Wisconsin and global scale: the Lake Superior shoreline (including unique coastal estuaries and river corridors) and the Apostle Islands. The unique red clay wetlands and the Boreal Forests of the Superior Coastal Plain are considered significant both in Wisconsin and in the United States as a whole. These distinctive landscape features play a critical role in maintaining Wisconsin's unique biological diversity.

Historic vegetation and composition of the boreal forests were characterized by older forests of conifers (e.g. eastern hemlock, eastern white pine, white spruce, balsam fir and northern white cedar). These forests no longer exist in the same magnitude due to the harvesting and slash fires of the late 1800s and early 1900s known as the Great Cutover. Many forests now are relatively young and dominated by aspen and maple. While conifers are currently underrepresented, their increase is the current target of forestry restoration and management practices.

Opportunities for Natural Community Conservation

Opportunities for sustaining natural communities in Ecological Landscapes were developed in 2005 by the Ecosystem Management Planning Team (EMPT, published in 2007) and later focused on wildlife Species of Greatest Conservation Need and their habitat in the Wisconsin Wildlife Action Plan (WDNR 2015). The goal of sustaining natural communities is to manage for natural community types that 1) historically occurred in a given landscape and 2) have a high potential to maintain their characteristic composition, structure, and ecological function over a long period of time.

Specific to the Municipal forest:

Active Forest management is recommended using even aged regeneration harvests (coppice) of aspen and associated species on the level upland sites. It is recommended to start the harvest sequence away from the most populated and 'built up areas'- trail infrastructure. Aspen and other early successional species are regenerated naturally through large disturbances such as fire or wind. Timber harvesting mimics these natural disturbances and opens the canopy allowing for understory development. Harvesting the aspen will encourage young, healthy and vigorous stems. Aspen is a valuable commercial and wildlife species and is well-suited to grow on this site. Aspen is an associated vegetative type typically found on the Superior Coast Plain Ecological Landscape Unit where it provides habitat for Priority Species of Greatest Conservation Need (SGCN).

> *Maintaining the aspen-birch type with a coppice prescription will promote early successional habitat with dense seedling and saplings that provide all habitat needs for American woodcock, black-billed cuckoo, black-throated blue warblers, blue-winged warblers, golden-winged warblers, and least fly catcther, and an abundance of prey for the northern goshawk.*
>
> *Young coppice-harvested stands also provide temporary minor habitat for olive-sided fly-catchers, northern harriers, and sharp-tailed grouse. Managing larger stands of aspen (>80 acres) will be most attractive to harriers and sharp-tailed grouse.*

Mid-aged aspen stands provide pole-timber type habitats attractive to least flycatchers.

As the aspen ages and enters maturity, it provides nesting habitat for northern goshawks and bald eagles as well as all life needs for red-shouldered hawks.

Leaving scattered pine, especially white pine, to develop as super-canopy trees in the future timber stand may improve nesting opportunities for bald eagles.

Species other than aspen, like white pine, white spruce, white cedar, red pine, and scattered white birch will be retained for aesthetics and natural seeding to supplement the coppice sprouting that is expected. Harvesting should be done to maximize vertical structure and age class diversity. Management will pay close attention to protecting the highly erodible soils and water quality. The active management should be used to help achieve other goals of the forest, including increasing access to motorized or unmotorized trails. The current road and trail systems will be utilized to access the forest for harvesting and can also reduce the cost to build forest trails that will be later used for recreation. The roads and future recreation trails should be designed in coordination with timber sale establishment and construction should be administered with the timber sale contract and the by the establishing forester.

Limited if any management is suggested on the side slopes or drainages. It also should be noted these slopes and ravines are the location of most of the conifer and species that we will be promoting through harvest.

The municipal forest is near the city, which experienced an emerald ash borer outbreak. Outward spread and advancement is expected to occur from the exotic insect that targets and kills all our native ash species. The ash resource is at risk within the municipal forest. Harvesting the ash is encouraged to promote young healthy stump sprouts that may not support the insects. Underplanting species like white pine, balsam fir, white spruce and cedar is encouraged to promote a more diverse forest that would be more resilient to an ash borer outbreak. The planted seedlings should be protected from herbivory. Also planting these species through out the forest and encouraging seeding from the natural source would promote the boreal like conditions.

Due to the location of the municipal forest to the population center of the city and school district this would be a great place to document and educate the public through interpretative hikes that can be planned out through a series of harvests. This would be an excellent opportunity to link the outdoor classroom with outdoor recreation.

Management

COPPICE REGENERATION HARVEST. Regenerate this stand by cutting all trees except designated reserved trees. This coppice regeneration method naturally allows trees to regenerate vigorously from root and/or stump sprouts after harvest.

For most Wisconsin forest types, adequate tree reproduction will be established in 3 to 5 years following the regeneration practice or additional management practices may be necessary to ensure successful tree reproduction. Some forest stands may need a longer regeneration period, but these situations should be documented and closely monitored to ensure success.

ADDITIONAL INFORMATION FOR MANAGEMENT OF YOUR PROPERTY

Every year in Wisconsin, thousands of wildfires occur, destroying dozens of structures and threatening to burn hundreds more. An increasing number of people living and recreating in Wisconsin's wildland-urban interface is creating a growing need for fire prevention and planning for fires that will inevitably occur.

Because of their proximity to forested lands, there is the potential for homes and property to be at significant risk of damage or destruction in the event of a wildfire. Best practice is to incorporate fuel breaks into the landscape and know the local burning restrictions. Visit the following website to learn more: *http://dnr.wi.gov and search 'Firewise'.*

Forest Carbon

Forests are a significant piece of the global carbon cycle because of their ability to absorb and sequester carbon dioxide. Learn how your forest adds to the global carbon balance and be aware of the rules affecting your participation in forest carbon markets. For information, visit the US Forest Service website: http://www.na.fs.fed.us/ecosystemservices/carbon/

Information is sourced from numerous documents, including:

• WDNR, January 23, 2012, "The Ecological Landscapes of Wisconsin: an assessment of ecological resources and a guide to planning sustainable management" (WDNR, 2015b) retrieved from https://dnr.wi.gov/topic/landscapes/Book.html

•Wisconsin Natural Heritage Inventory et al, June 2012 Rapid Ecological Assessments (for specific property groups; WDNR) retrieved from https://dnr.wi.gov/files/PDF/pubs/nh/NH0860_ext.pdf

•WDNR, January 24, 2020 Wisconsin Wildlife Action Plan (WDNR 2015-2025) retrieved from https://dnr.wi.gov/topic/wildlifehabitat/actionplan.html

UW Extension, September 2010 "Lake Superior National Estuarine Research Reserve Management Plan" retrieved from https://coast.noaa.gov/data/docs/nerrs/Reserves_LKS_MgmtPlan.pdf

http://www.ci.superior.wi.us/172/Parks-Recreation-and-Forestry

Dwights Point and Pokegama Wetlands State Natural Area Management Plan – 2019

Part 1: Property Assessment

General Property Description

Dwight's Point and Pokegama Wetlands State Natural Area is located within the City of Superior at the confluence of the Pokegama and St. Louis Rivers, near Lake Superior. The 3,153-acre site is owned by the City and comprises a significant portion of the 4,400-acre Superior Municipal Forest in which it is imbedded. It features boreal forest, emergent marsh, and wet clay flats supporting shrub swamp and wet meadow. The natural area borders the St. Louis River estuary, which dissects the uplands into a series of narrow, steep-sided ridges, the largest of which is Dwight's Point. Although the boreal forest was cut over at the turn of the 20th century, it remains today as one of the best examples of its type in the Lake Superior area. The presence and unusual composition of the boreal forest is due to the influence of cool breezes off Lake Superior and the level topography with underlying red clay soils which prevent timely drainage. White pine, paper birch, balsam poplar, white spruce and balsam fir dominate the forest. In some stands, red pine and black ash are important canopy trees. The State Natural Area was designated in 1994.

Dwight's Point is found in the Superior Coastal Plain Ecological Landscape and within the Douglas Lake-Modified Till Plain (212Ya01) land type association. The characteristic landform pattern is undulating modified lacustrine moraine with deep v-shaped ravines.

- History of land use and past management and management responsibility
- Rare species: Clustered bur reed, small yellow water crowfoot, sweet coltsfoot, Vasey's rush, wood turtle, common tern, blackburnian warbler, Cape May warbler, bald eagle, northern harrier
- Invasive species: Purple loosestrife, common carp, river ruffe
- Soils are somewhat poorly drained clay over calcareous clay till or loamy lacustrine.

Commented [MRJ1]: Linda – Please fill some brief history here. Doesn't have to be extensive.

Cultural Considerations

The Department's Archaeological database does not contain any known cultural resources for the Dwight's Point area.

Dwights Point and Pokegama Wetlands State Natural Area Management Plan – 2019

Part 2: Future Land Management and Recreation

Land Management Objectives

Maintain a contiguous block of minimally developed upland, wetland and aquatic natural communities, including Emergent Marsh and Boreal Forest. Develop characteristics associated with old growth forest including large trees grown to biological maturity, abundant snags and downed coarse woody debris. Provide opportunities for education and research of old growth Boreal Forest.

Land Management Prescriptions

- Passively manage the entire site, with the exception of invasive species control.
- Active management will be limited to clearing existing trails and those recreational features that are outlined in this plan.
- In the event of a natural disaster such as catastrophic blowdown, timber salvage operations may take place if it is determined that doing so will mitigate potential impacts from wildfire, insect/disease outbreaks or public safety concerns. The decision to salvage will be made by the City, following consultation with resource professionals from the City of Superior and Department of Natural Resources.
- Periodically monitor the site for the presence of additional invasive species and develop a control strategy if any are found.
- Vegetative monitoring plots -These were outlined in the 1997 plan, but I cannot locate any data or whether they were ever established. I suggest we do not include this in the current plan.

Dwights Point and Pokegama Wetlands State Natural Area Management Plan – 2019

Recreation Objectives

Provide recreational opportunities, including trails for hiking, cross country skiing and snowmobiling. Maintain a primitive campsite, as well as two designated day-use picnicking areas. Provide water access points for small watercraft.

Recreation Prescriptions

- Maintain the existing primitive campsite near the end of Dwight's Point, with watercraft access.
- Maintain 2 designated day-use picnicking sites with fire ring, picnic table and bench.
- List all trails by name and allowable uses – Linda: please fill in brief descriptions of the trails and allowable uses. We assume no motorized use other than snowmobile
- Archery range – the proposed range is on the edge of the SNA. Linda: Could just carve this out of the SNA, which would be my suggestion.
- Also mentioned in the 1997 plan are the following: 1. Limitations on mowing frequency of the ski trails 2. Language addressing signs, boundary markers 3. Prohibition on use of firearms Linda: We do not think that #1 is within the scope of the plan and is not needed in this draft Possibly #2 could stay in, in order to address aesthetics concerns – personally I am a fan of as few signs as possible. #3 would not be needed on our end, but we understand if you want it to be in this draft
- Prohibition on permanent tree stands – Linda: IF we include language in the plan about tree stands (not needed in our opinion), my suggestion would be to use the Departments tree stand policy for north of Hwy 64 – I can get you the policy language, if interested. Of course, if the City would like the prohibition to remain in place, we understand.
- 1997 Plan: "Breeding bird surveys once every one to two years". Linda - I would not include this either, as the Department will not be conducting these surveys
- Environmental education and interp center – mentioned in the 1997 plan; Linda: does the City still intend to construct this feature? We are fine with leaving this in or taking it out, your call.

- Any other rec/public use features to mention here?

Approvals:

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Northwest District Ecologist, Bureau of Natural Heritage Conservation Date

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Director, Bureau of Natural Heritage Conservation Date

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Director, City of Superior Parks, Recreation and Forestry Date

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Mayor, City of Superior Date