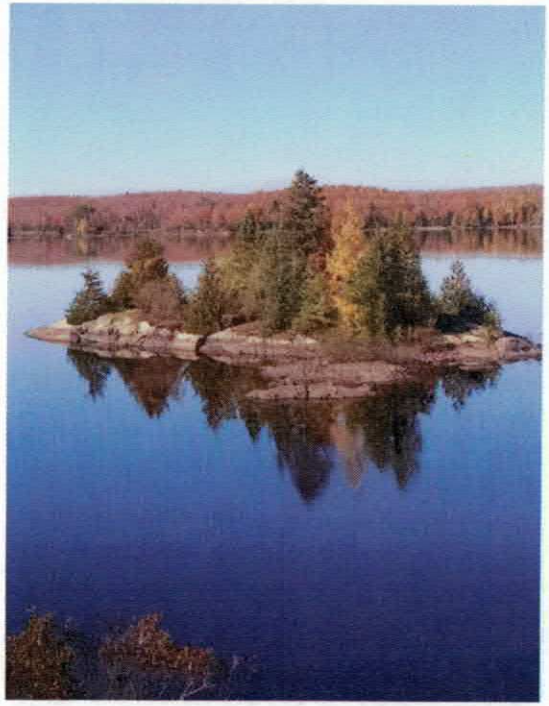
NORTHWOODS LAND TRUST

P.O. BOX 321, EAGLE RIVER, WI 54521-0321

IRON COUNTY CONSERVATION PLAN 2019

Preserve pristine "wild lakes," and natural shorelines on otherwise developed lakes including Lake Superior.

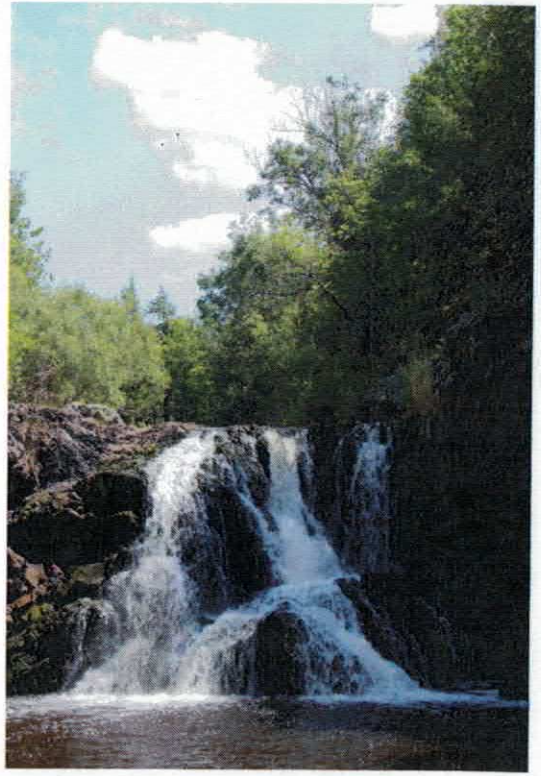


The Gile Flowage is the largest DNR-identified "wild lake" in Iron County.

Preserve remaining old growth forest and habitats for rare, endangered and threatened species.

Old growth yellow birch tree near Sack Lake.

Protect wild & scenic northern rivers and streams.



Interstate Falls on the Montreal River

WORKING TO KEEP THE NORTHWOODS THE NORTHWOODS!

NORTHWOODS LAND TRUST
IRON COUNTY CONSERVATION PLAN
2019

Plan Summary

The Northwoods Land Trust (NWLT) Board of Directors adopted an updated 2016-2020 Five-Year Strategic Plan in December 2016. One of the goals of that plan was to prepare a Conservation Plan for Iron County, Wisconsin, as the next phase planning project that would eventually include the remaining counties in the land trust's service territory.

The purpose of the NWLT conservation plans is to provide guidance for the land trust's efforts to permanently conserve the highest priority targeted conservation needs in each county. The Iron County plan will be used to prioritize our land protection projects as we focus our limited financial, staff, and volunteer resources to "get the most bang for the conservation buck" in Iron County. Funding for this conservation plan was provided starting in 2017 by the Wisconsin DNR Lake Protection Grant project #LPT 53717, Iron County Private Shorelands Protection Project.

In 2003, NWLT's Executive Director, Bryan Pierce, participated in a series of site conservation planning workshops as part of an Efroymson Fellowship Program sponsored by The Nature Conservancy and the Land Trust Alliance. Training and practical application on TNC's conservation planning process and MS Excel-based conservation planning workbook were provided during the workshops. The Nature Conservancy's conservation planning process focuses on a Five-S Framework. Those Five S's include:

- Systems - the conservation targets within a landscape and the natural processes that maintain them.
- Stresses - the types of destruction, degradation, or impairment afflicting each of the conservation targets within a landscape.
- Sources - the agents generating the stresses (such as subdivision, residential housing development, etc.).
- Strategies - the types of conservation activities deployed to abate sources of stress (threat abatement) and enhance or restore the system (restoration).
- Success - measures of biodiversity health and threat abatement for that landscape.

As part of the NWLT strategic plan update, a survey of conservation priorities and strategies was developed for the NWLT board and other members and supporters. The survey results and prioritization of strategic plan objectives were used to generate the list of Conservation Targets in Iron County. The highest priority Conservation Targets include:

1. "Wild Lakes" as identified by the Wisconsin Department of Natural Resource's Wild Lakes Program.
2. Large remaining natural shorelines on otherwise developed lakes.
3. Priority river and stream segments identified by the WDNR's Northern Rivers Initiative.
4. Old growth forest stands.
5. Endangered & Threatened Species habitat (included as a "nested conservation target")
6. Large blocks of unfragmented, productive forest lands.

Under the TNC methodology, additional "nested" conservation targets included the following: other river and stream properties, bogs and other wetlands, in-fill or contiguous properties for public or other conserved lands, and habitat managed for wildlife (ex. hunting lands). Additional conservation values such as public recreational use, scientific research areas, natural scenic beauty and productive lands (working forest and farm lands) are also taken into consideration.

The Nature Conservancy's Conservation Planning Excel Workbook was utilized to consider the stresses and sources of stress for each of the conservation targets. Priority strategies to abate each of the threats also came from the NWLT strategic planning survey. Such strategies include the use of donated conservation easements, acquisition of conservation easements, donations of land, acquisition of land, the conservation buyer/ seller program, registry program, landowner and public education, and media publicity to raise public awareness. Viability assessments of each of the conservation targets, their threats, and their strategies are included in the following pages as printouts from the TNC Excel workbook.

This Iron County Conservation Plan highlights the breadth of the Northwoods Land Trust's efforts in the coming years. The focused conservation targets and strategies will help us do a more effective, efficient and strategic job of "Keeping the Northwoods the Northwoods." We will also use this plan to help us more effectively partner with other conservation organizations and agencies, including the Iron County Lakes & Rivers Alliance, Iron County Land & Water Conservation Department, Iron County Outdoor Recreation Enthusiasts, local lake organizations, The Nature Conservancy, The Trust for Public Land, The Conservation Fund, Wisconsin Board of Commissioners of Public Lands, U.S. Forest Service, Wisconsin Department of Natural Resources, Native American tribes and others.

On behalf of the Board of Directors, we hope that you will join us in helping to conserve natural shorelands, woodlands and wetlands in the heart of Wisconsin's beautiful northwoods. If you have any questions on the Northwoods Land Trust's Iron County Conservation Plan, or on any of our activities, please contact our office at (715) 479-2490.

Prepared by: Bryan Pierce, Executive Director
Drafted - 5/9/2019
Adopted by the NWLT Board - 6/21/2019

Conservation easement property on Lower Springstead Lake granted by Meta Reigel Brandt on December 28, 2005.

Iron County Overview

Iron County is located in the historic "northwoods" of north central Wisconsin. The county borders Lake Superior to the north. The Montreal River forms the northeast boundary along the Upper Peninsula of Michigan. The county includes parts of two Native American Reservations - the Bad River Indian Reservation on the northwest corner and the Lac du Flambeau Indian Reservation on the southeast corner.

According to the Iron County Land & Water Resource Management Plan (2010-2019), Iron County, Wisconsin, has an overall land base of about 516,310 acres. Iron County has had a relatively low population density. The US Census indicated a total county population of 6,297 in 2015, basically flat in population since the 1970 Census. The highest population density occurred during the 1910s to 1930s due to both the mining and logging industries. The county sustained significant population losses in the 1940s through 1960s with the closures of mines.

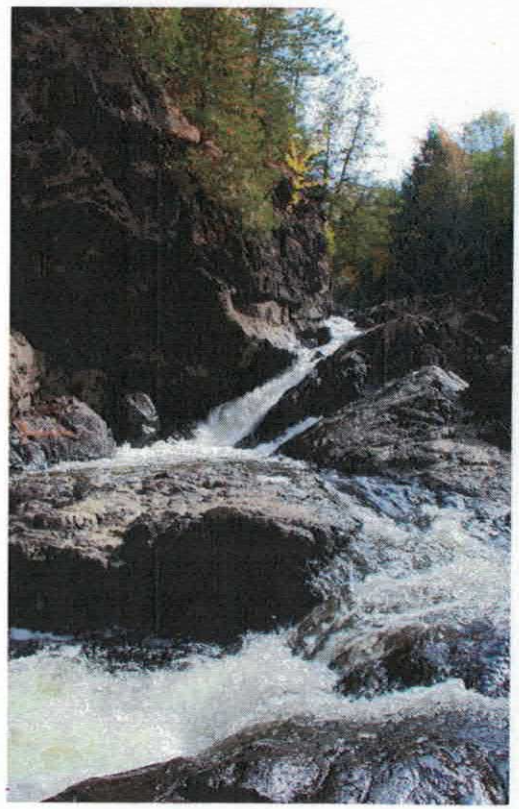
Iron County is generally rural. The 2015 population density was just over 8 people per square mile, compared to a statewide average of 99 per square mile. Iron County includes two cities, Hurley and Montreal, and 10 unincorporated towns. According to the 2015 population estimates, the cities of Hurley (1,440) and Montreal (770) make up 35 percent of the county's population. Overall the resident population has declined in the past century.

Iron County is divided by the Penokee-Gogebic range, two parallel ridges running southwesterly from Hurley, that separate the Lake Superior lowland plain to the north from the Northern Highlands to the south. Iron and other ore deposits were mined extensively in these highlands from the 1880s through the 1960s. The elevation slopes generally downward from the Penokee highlands northward to Lake Superior, forming a large coastal plain. Numerous rivers and streams flow through this area. Topography to the south of the highlands consists of undulating terrain with many lakes and wetlands.

Lake Superior has the largest surface area of any freshwater lake in the world. Iron County includes about 7.5 miles of Lake Superior shoreline. About 3.6 miles, or nearly half of the county's total Lake Superior shoreline, consists of tribal ownership as part of the 125,000-acre Bad River Indian Reservation. Saxon Harbor is the largest developed area on Iron County's Lake Superior shoreline, and was hard hit by recent major flooding events on the Montreal River.

The watershed drainage system includes eleven watersheds in two major drainage basins. The northern half of the county drains to Lake Superior in five major watersheds - the Lower Bad River, Montreal River, Potato River, Tyler Forks and Upper Bad River. The county's southern half drains to the Upper Chippewa Basin (Mississippi River) in six major watersheds - the Bear River, East Fork of the Chippewa River, Flambeau Flowage, Manitowish River, Upper North Fork of the Flambeau River and Upper South Fork of the Flambeau River. There are about 724 miles of perennial rivers and streams.

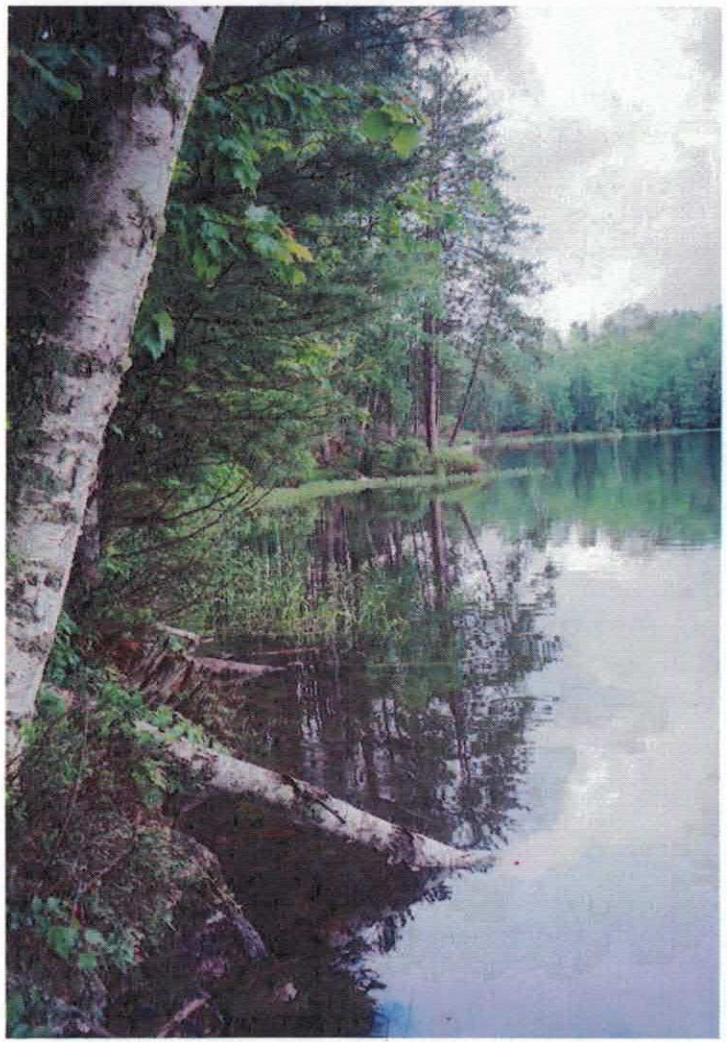
Because of the high gradients along many rivers and streams, the Iron County Asset-Based Community Development Strategy (October 2017) indicated that Iron County features 17 named waterfalls and numerous other areas of rapids and smaller falls. These waterfalls are significant tourism attractions.



This Potato River waterfall was protected by Jim & Joy Perry in 2016.

Approximately six percent of Iron County's total surface area (29,902 acres) is covered by water. According to the WDNR's Wisconsin Lakes publication, Iron County features 494 lakes. There are 217 named lakes with a total estimated 28,856 acres of surface area, and an additional 277 unnamed lakes with a surface area of 1,046 acres. Of these lakes, 78 are impoundments. There are an estimated 740 miles of lake shorelines.

The highest lake densities in Iron County are found in the southern half of the county, particularly in the "Border Lakes" area including the towns of Mercer and Sherman. The largest waterbody is the 13,545-acre Turtle-Flambeau Flowage. The Gile Flowage is an additional 3,384 acres. These two flowages together make up about 57% of the total surface water in the county.



This Charnley Lake Shoreline was conserved in perpetuity by Dr. Terry & DiAnne Hatch

Seven waterbodies in Iron County are classified as Outstanding Resource Waters for the purpose of point source discharge permtting. These include Catherine Lake, Cedar Lake, Hewitt Lake, Owl Lake, Trude Lake, the Turtle-Flambeau Flowage and the North Fork of the Flambeau River from the flowage downstream to the Ashland County line. Another 15 rivers and streams are listed as Exceptional Resource Waters.

Surface water quality in Iron County is generally considered to be very good. However, during periods of high runoff, water quality is impacted by sediment runoff from the red clays found in the northern part of the county. Mercury contamination is the pollutant the Wisconsin DNR identified within 9 lakes and flowages in Iron County and listed on the federal Clean Waters Act Section 303(d) Impaired Waters List.

In spite of the low resident population, development pressures particularly on lakes have continued over recent decades through demand for new permanent and seasonal water-front homes. About 38% of the housing stock in the county is for seasonal, occasional or recreational use. The county is serving as a location for vacation and second homes.

A report by the Wisconsin Public Interest Research Group (March 2006) predicted that most of the remaining undeveloped lake shorelines in northern Wisconsin will be developed by 2015. Subdivision and residential development pressures are the most critical threat to lake and river resources.

The Wisconsin Wetland Inventory (WWI), completed in 1985, mapped wetlands of two acres or larger. The WWI found that swamps, bogs, marshes and other wetlands make up over 150,000 acres, or about 31.8% of the surface area of Iron County. These wetlands are the third highest percentage for counties in Wisconsin. Forested wetlands are dominant including black spruce/tamarack, black ash, green ash and silver maple swamps in bog and floodplain habitats.

About 60 percent of the land in Iron County is forested (about 309,000 acres). The Iron County Forest includes about 174,159 acres. State lands include roughly 84,310 acres, with the largest amount (about 30,000 acres) in the Northern Highland - American Legion State Forest followed by the 19,000-acre Turtle-Flambeau Scenic Waters Area. Private industrial and non-industrial forest lands enrolled in the state's Managed Forest Law program include about 73,914 acres. About 43% of the forested lands in Iron County are privately owned.

Agricultural activities in Iron County peaked during the 1930s, but the post-depression era saw a steady decline in the number and acreage of farms. Agricultural areas have historically been located in the northern tier of towns, which has continued. According to the Wisconsin Agricultural Statistics Service, in 1970 there were an estimated 90 farms including 21,000 acres. The USDA National Agricultural Statistics Service indicated in 2017 that the agricultural crop land had declined to just 5,377 acres, just 1% of the county's total land surface area.

The Wisconsin Department of Natural Resources' *Land Legacy Report* (2006) identified "Legacy Places" in Wisconsin that are most important for meeting the state's conservaiton and recreation needs for the next 50 years. Within Iron County, the following Legacy Places were identified: Penokee-Gogebic Iron Range, Gile Flowage, Montreal River, Moose Creek Hemlock Woods, Border Lakes Region, Turtle-Flambeau Flowage, Northern Highland-American Legion State Forest and the Upper Forks of the Flambeau River.

Additional data and maps providing an overview of Iron County are included in the Iron County Land and Water Resource Management Plan (2010-2019) prepared by the Iron County Land and Water Conservation Department. That summary includes information on location, climate, geography and topography, soils, groundwater, watersheds, lakes, rivers and streams, wetlands, invasive species, impaired waters, national, state & county scientific and natural areas, demographics, land use and ownership, soil erosion and sedimentation. Additional resource information was included in the Iron County Comprehensive Plan and the Iron County Asset-Based Community Development Strategy (October 2017). These documents will not be repeated in NWLT's plan document, but copies are on file in the NWLT office. Excerpts from this information will be included where appropriate in discussions of the Conservation Targets below.

Conservation Targets ("Systems")

1. Wild Lakes

As part of the Wisconsin DNR's Northern Initiatives, the Wild Lakes Program identified and rated lakes over 10 acres in size with little or no existing development. These lakes would qualify as "irreplaceable jewels of the north that could be put in trust for the public to use and enjoy in perpetuity." With its relatively low population and housing density, it is not surprising that Iron County includes a number of rated Wild Lakes that could receive enhanced protection.

A total of 40 lakes were identified as "Wild Lakes" in Iron County. The largest of the Wild Lakes identified is the Gile Flowage, in spite of the existing development. The Wild Lakes are highlighted on the attached map.

The Gile Flowage is a Legacy Place, Wild Lake and Outstanding Resource Water.

Some of the listed Wild Lakes have been protected with publicly-owned shorelines or through recent conservation easements (ex. Lake Evelyn, Caroline Lake, North and South Twin Lakes). Other lakes have been significantly subdivided and developed since the Wild Lakes Program was initiated including Hewitt Lake, Pardee Lake, Virgin Lake, Cranberry Lake and part of Owl Lake.

The Gile Flowage has its own unique threat in that most of the shoreline is owned by Northern States Power Company (Xcel Energy). The dam on the flowage is used to retain water for a more uniform flow to a hydro-dam downstream. Although maintained under a Federal Energy Regulatory Commission license, operation of the dam may be deemed no longer essential or profitable by the power company. Removal of the dam would greatly affect the Gile Flowage as a "Wild Lake."

Most of the Norma Lake shoreline will remain wild forever thanks to Dr. Terry & DiAnne Hatch.

Stresses & Sources: Subdivision and development are the key threats to protecting Wild Lakes, based on increasing seasonal and year-round residential development in Iron County. The DNR Northern Initiatives report in 1996 noted that at the current rates of development, nearly all privately-owned lakes in northern Wisconsin would have some level of development within the next 10-15 years. The 2008 recession and slow-down in the real estate market has only delayed that development trend for a brief period.

2. Large Remaining Natural Shorelines on Otherwise Developed Lakes

According to the *Wisconsin Land Legacy Report*, "Wild, undeveloped lakes are not the only ones worthy of conservation and protection efforts. Many lakes with housing along their shore, even substantially developed ones, have ecological and environmental value."

The Northwoods Land Trust recently conducted a project to identify all of the privately owned properties in Iron County that have about 500 feet or more of natural lake shoreline frontage remaining. A geographic information system analysis of digital orthophotos, coupled with a digital parcel map layer, was used to generate town maps illustrating the natural frontage parcels.

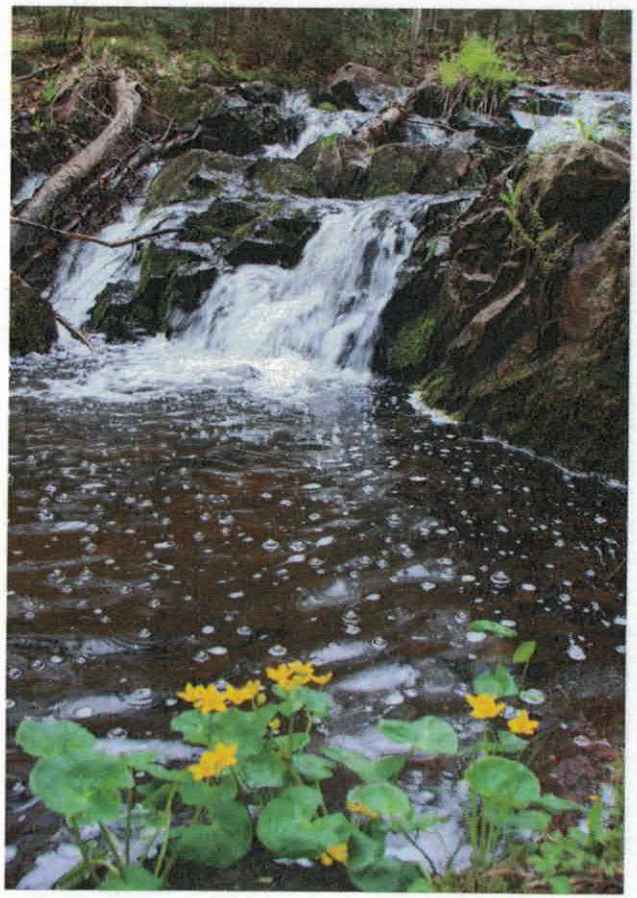
When linked with the property tax rolls, a listing of property owners was generated for those natural lake shoreline parcels. A direct mailing of NWLT's *Landowner's Conservation Guide - Protecting Your Northwoods Property* was conducted in May of 2019 to the shoreland property owners identified. A total of 572 parcels were identified on the lakes in Iron County with 500 feet or more of undeveloped shorelines. Those parcels were owned by 276 landowners. A map of those selected lakefront parcels is attached.

The extensive lake shoreline development in Iron County has resulted in some lakes with little or no natural shoreline remaining. Protection of even small pieces of natural frontage may be critical on those lakes for such ecological functions as bass and panfish spawning areas and green frog reproduction. WDNR research studies have indicated that green frogs were gone when the average lake lot size was reduced to the state shoreland

zoning standards of 100 feet of minimum frontage. Nutrient enrichment from phosphorus runoff and sediment loading into lakes due to development impacts seriously threatens water quality, resulting in increased importance for protection of natural vegetative shoreland buffers. A 2016 *Journal of Fisheries* article on "A Fish Habitat Conservation Framework for Minnesota Lakes" noted that "a density of 10 docks/km of shoreline was selected as the level of shoreline disturbance where significant detrimental effects to fish communities and habitat are expected to occur." This level of development translates to approximately 328 feet of shoreline per dock.

Seven waterbodies in Iron County have been listed by WDNR as Outstanding Resource Waters (ORW) for the purpose of regulating point-source pollution discharge permits. These ORW waters receive the highest level of protection. The ORW waterbodies include five lakes and the Turtle-Flambeau Flowage. No point-source discharge is allowed to these waters unless the quality of the discharge equals or surpasses the quality of the receiving water body. No lowering of current water quality is allowed.

Stresses & Sources: Similar to Wild Lakes, subdivision and development are the primary threats (stresses) on the remaining natural lake shorelines. Now is a critical time to protect some of these last remaining natural shorelands. On developed lakes, seasonal and recreational housing has moved beyond the typical small summer cottage or single-family residence, to "starter castles" over ten thousand square feet in size, as well as large multi-family developments.



Cominski Creek in the Interstate Falls property is a brook trout spawning stream.

3. Priority river and stream segments

Starting in 1997, as part of the Northern Initiatives, WDNR began a Northern Rivers Initiative to identify a prioritized list of river and stream corridors that warrant additional protection based on their high ecological significance, outstanding natural scenic beauty or special recreational values. A total of 1,494 river and stream segments were ranked in 20 northern counties. In Iron County, a total of 40 river and stream segments were identified as priorities, with the Flambeau River from the Turtle-Flambeau Flowage downstream to the Upper Park Falls flowage, Tyler Forks, Bear River and Manitowish River being the top-ranked segments.

The Upper Forks of the Flambeau River, Manitowish River and Hewitt Lake complex were identified as priority aquatic sites within the Central Upper Peninsula and Southern Superior Uplands ecological drainage units of the Great Lakes Ecoregion by The Nature Conservancy's 2002 *The Superior Mixed Forest Ecoregion: A Conservation Plan*. The Upper Forks of the Flambeau River were also identified as Legacy Places within the 2006 *Wisconsin Land Legacy Report*. The Upper Forks of the Flambeau River consists of the stretches of the North and South Forks upstream from the Flambeau River State Forest. In particular, "the North Fork provides one of the longest river wilderness experiences in the state. Currently river users can paddle from the Northern Highland-American Legion State Forest, through the Turtle-Flambeau Flowage, and down to the Flambeau River State Forest. Significant portions of this 65-mile stretch are in public ownership and managed to provide a wild setting along the water." The Montreal River includes

two main forks draining out of the northern highlands. "After cutting through the Penokee-Gogebic Range, the river's considerable drop provides a spectacular valley studded with whitewater, waterfalls, and steep cliffs."

Exeptional Resource Waters (ERW) may be impacted by point or non-point sources of pollution but exhibit the same high quality resource values as Outstanding Resource Waters. ERWs listed in Iron County include 15 river and stream segments. WDNR has classified just three streams as Class 1 trout streams - Alder Creek, Apple Creek and Bell Creek.

Stresses and sources: In general, development has been slower on rivers and streams than on lakes. That is rapidly changing however as available undeveloped lakefront property is becoming more scarce. Subdivision and development of river and stream riparian areas is the greatest threat to protection of these systems as demand for new seasonal and year-round residential development increases. Waterfalls are also important special natural and tourism resources for Iron County, and warrant enhanced protection.

4. Old-growth forest stands

By far the vast majority of Iron County forests have been cut-over and burned within the last century. However, pockets of hemlock-sugar maple-yellow birch forests and other old-growth habitat types do exist, sometimes in isolated parcels and along protected lake shorelines. There are no federally-designated Wilderness Areas within Iron County, although stands of protected old-growth forest do exist in DNR State Natural Areas. Other old-growth sites exist on Wisconsin Board of Commissioners of Public Lands' (BCPL) properties, including a number of tracts of land that were never sold to private entities for logging.

This 46" diameter old growth white pine tree is located on BCPL property near Mercer.

The Moose Creek Hemlock Woods is listed as a Legacy Place within the *Wisconsin Land Legacy Report.* As indicated in the report, "this is one of the largest blocks of mature to old growth hemlock-hardwood forest known to occur in Wisconsin with two State Natural Areas currently protected in the area. The woods are adjacent to Iron County Forest and the Turtle-Flambeau Flowage and opportunity exists to have several thousand acres of old-growth forest in one unbroken block. Many rare plants are found in the area and the forest is also an important warbler breeding area."

More recently, large outright acquisitions by The Conservation Fund and conservation easements purchased by WDNR have helped to block in protection of this area, although most of these areas will continue to be managed as industrial "working forest" land.

Iron County is also the site of seven State Natural Areas designated by the WDNR Bureau of Endangered Resources as tracts of land in a natural or near-natural state: Moose Lake, Frog Lake and Pines, Bass Lake Preserve, Lake

Evelyn, Caroline Lake, Springstead Muskeg, and the Turtle-Flambeau Flowage State Natural Area. Several of these SNAs have an old-growth forest component.

NWLT may be able to play a cooperating role in helping to permanently conserve additional old-growth and/or State Natural Area quality sites in partnership with the USDA Forest Service, WDNR, BCPL, The Nature Conservancy, Trust for Public Lands and other agencies and organizations. Strategies could include dentification of remaining old-growth sites on private lands and protection of BCPL parcels of natural area quality otherwise under threat of sale at public auction. Several BCPL parcels with old-growth forest components have been identified already.

The *Wisconsin Land Legacy Report* also identifies the Penokee-Gogebic Range as a Legacy Place with the highest levels of conservation significance and recreational importance. "The Penokee-Gogebic Range supports a high qulaity forest matrix with several patches of old-growth hemlock-hardwood forest... The Range acts as an ecological corridor between the Chequamegon National Forest and the national forests in the Upper Peninsula of Michigan. This corridor is an important travel route for moose and wolves to and from the Upper Peninsula. The area's highly varied topography offers many opportunities to maintain a mosaic of forest habitats."

Remaining privately-owned old-growth forest stands are likely to be small, isolated tracts. To the extent possible, protection of those tracts that are "buffered" by maturing, second-growth northern hardwoods and conifers would be preferable, especially when those tracts may be "in-fill" properties or contiguous with other public lands. NWLT is not aware of any maps identifying remaining old-growth forest stands on private lands. Identification of old-growth protection opportunities will likely occur during on-site visits with interested landowners.

Northeast corner of the BCPL Sack Lake Hemlocks.

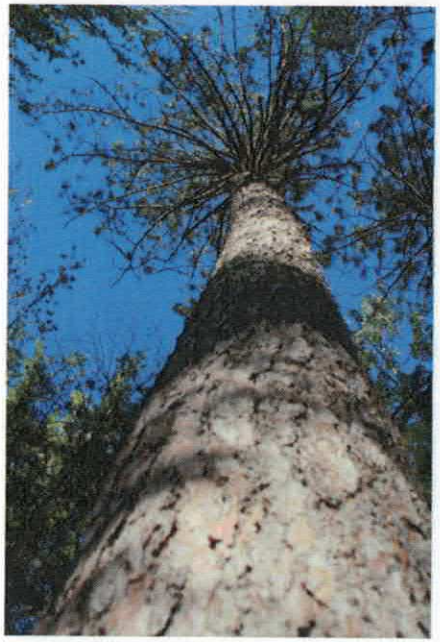
Stresses and sources: Habitat fragmentation of old-growth forest stands is the biggest threat to protecting these tracts. By its nature, logging is incompatible with protection of old-growth forests. Once logged, it can take hundreds of years for forest stands to regenerate into true, old-growth forest conditions. However, forestry practices may benefit some stands that are regrowing toward old-growth conditions by encouraging management for mature, climax forest species.

The greatest irreversible fragmentation threat to retaining old-growth forest tracts is conversion by subdivision for seasonal and year-round residential development. As lake and riverfront properties become less available and less affordable, more wooded backlands are being subdivided throughout the region.

5. Large blocks of unfragmented, productive forest lands

The *Wisconsin Land Legacy Report* noted that just over one million acres of privately-owned forest lands in Wisconsin that have been enrolled in one of the forest tax programs (Managed Forest Law or Forest Crop Law) are open to the public for hunting and fishing. In the past, most of these lands have been re-enrolled after their 25- and 50-year contracts expired. "However, these large working forests are now undergoing rapid ownership changes and a significant number of acres are being withdrawn from the programs. Over 90% of the industrial forest lands have been sold in the last few years." Industrial and corporate forest lands enrolled in the MFL or Forest Crop Law programs include nearly 74,000 acres in Iron County.

As noted earlier, the Moose Creek Hemlock Woods, Penokee-Gogebic Range and others were identified as Legacy Places. "The Moose Creek Hemlocks are part of a much larger, high quality forested landscape running from the Turtle-flambeau Flowage north to the Penokee-Gogebic Range. Much of this larger area is very wild (it is perhaps the best moose habitat in the state) and, although development pressure is increasing, it is currently owned primarily by industrial forest companies and Iron County Forest."



Old-growth red pine located on a conservation registry property.

Fragmentation (parcelization) of large blocks of productive forest lands threatens to literally change the landscape for forest-based industries and traditional public outdoor recreational uses. As the economics of the forest industry have changed over the past decades, and sales values for residential development sites along lakes and rivers have rapidly increased, the property tax benefits of the forest tax programs are not preventing the large working forest blocks from being fragmented and developed.

Both industrial and non-industrial private woodland owners often own lands which are contiguous with, or in-fill properties within, larger blocks of state, tribal and county forest lands. Iron County is the largest owner of forest lands and manages about 174,159 acres. Significant conservation benefits can accrue from protecting private lands adjacent to or within other public lands, especially related to forest fragmentation and protection of environmental corridors. These large blocks are critically important for ecosystem "resilience" to climate change impacts.

Large blocks of unfragmented forest lands can also provide critical habitats for "nested conservation targets" including endangered and threatened species. These forest lands also protect lakes, rivers, streams, wetlands and other water resources, and conserve significant habitat areas that can be managed for wildlife and plant communities. Examples of nested conservation targets are listed below.

Stresses and sources: Habitat destruction or conversion of these large blocks of productive forest lands through subdivision for residential development is the greatest threat to protecting these habitats. Many of the large forest blocks contain valuable lake and riverfront shorelands, which are highly sought after by developers. As undeveloped lake and river properties become scarce, there is also increasing pressure for development of wooded subdivisions, increasing the demand for parcelization and conversion of forested backlands.

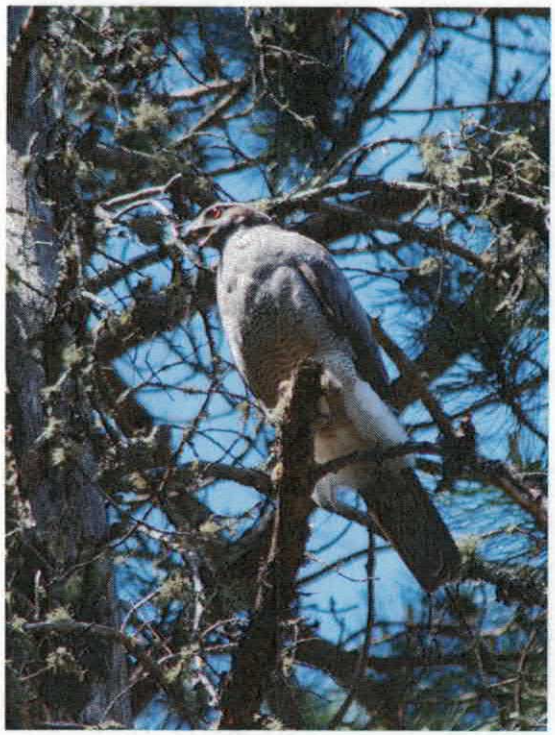
Nested Conservation Targets

Critical habitats for endangered and threatened resources are recognized as ecologically important sites for conservation. Identification of endangered and threatened species and their habitats is one of the components of the documentation of conservation values that occurs within the ecological

baseline information for each NWLT project area. A WDNR Natural Heritage Inventory listing of known occurrences of rare species and natural communities is included within the Iron County Comprehensive Plan on file at the NWLT office. Recognizing the sensitivity of information on critical habitats for endangered and threatened species, detailed maps have not been produced. Many of these sites already overlap with the above primary conservation targets, but would provide added incentive to making conserving these lands a priority.

Interior forest species such as the pine marten, nothern goshawk, red-shouldered hawk, and bobcat can be considered nested conservation targets within old-growth forest and large unfragmented forest tract conservation targets. Such species are particularly vulnerable to the effects of climate change on their habitats. Protecting large blocks of habitat will help to maximize the resilience of their habitats.

Important Bird Areas (Wisconsin Bird Conservation Initiative 2007) inlcude 88 critical sites identified for the conservation and management of Wisconsin's birds. The Flambeau Headwaters, Manitowish Peatlands, Moose Lake Old-growth Forest-Muskeg, Penokee Range, and Central Northern Highlands in Iron County were recognized for their importance to birds. On the Flambeau Headwaters, "The lakes and wetlands host concentrations of waterbirds and provide breeding habitat for osprey. The conifer-dominated forests are rich in neotropical migrants such as olive-sided flycatcher, yellow-bellied flycatcher, wood thrush, golden-winged warbler, black-throated blue warbler, and Canada warbler. This site contains significant populations of blue-headed vireo, Blackburnian warbler, Magnolia warbler, and pine warbler. Old red and white pine stands provide excellent habitat for evening grosbeak, red crossbill, and white-winged crossbill." On the Moose Lake IBA "old-growth stands host high numbers and densely packed territories for species such as blue-headed vireo, brown creeper, Northern parula and magnolia warbler. Rare or uncommon species found here include Northern goshawk, long-eared owl, black-backed woodpecker, gray jay, boreal chickadee and palm warbler."



Northern Goshawk

The Wisconsin Wildlife Action Plan (WDNR 2006) recognizes several Conservation Opportunity Areas (COA) within Iron County. Conservation Opportunity Areas are places in Wisconsin that contain ecological features, natural communities, or Species of Greatest Conservation Need (SGCN) habitat for which Wisconsin has a unique responsibility for protection when viewed from the global, continental, upper Midwest, or state perspective. The globally significant COAs include the Great Lakes and their Shorelines (Lake Superior shoreline) and the Northern Highland Kettle Lakes and Pines. One COA having continental significance are the Large Blocks - Old Deciduous-Coniferous Forest (climate change significantly resistant forest systems). Within the Upper Midwest, COAs in Iron County include Large Blocks of Predominately Older Northern Forest, Large Sedge Meadows and Medium-sized Rivers and Streams.

Large blocks of significant habitat areas that can be managed for wildlife (ex. areas managed for game species) and other native plant communities (ex. natural bogs and other wetlands), may be conserved as added benefits through projects focused on the primary conservation targets. Since retention of natural shoreland frontage is ecologically important on all lakes, rivers and streams, protection of significant stretches on lower priority waterways should also be considered where opportunities arise.

Conservation Strategies

As noted earlier, strategies to abate each of the threats were also prioritized in the NWLT strategic planning survey. In priority order, these strategies included the following:

#1 - Donations of perpetual land protection agreements (conservation easements).
#2 - Donations of conservation land to NWLT (ex. bequests, outright gifts or reserved life estates)
#3 - Acquisition of perpetual land protection agreements (public grant funding and/or bargain sales)
#4 - Purchase of conservation land (may use public grant funding and/or bargain sales)
#5 - Conservation buyer program linking conservation-minded land buyers and sellers
#6 - Registry programs such as the Old-growth Legacy Forest

Following are brief descriptions of the specific conservation strategies. More complete descriptions of the land protection tools can be found in NWLT's packet of information provided to landowners: *Landowner's Conservation Guide Protecting Your Northwoods Property.*

Jim & Joy Perry celebrate signing their land protection agreement with NWLT Executive Director Bryan Pierce.

Land protection agreements - The top priority strategy, and the one NWLT has used most successfully to date for permanent land protection, is the use of donated land protection agreements, also known as conservation easements. These agreements run with the deed of the land in perpetuity, providing lasting protection. The land remains private property and may or may not be accessible to the public (most donated easements to date are not open to public access). The land can be sold or passed on to heirs, but the conservation terms of the easement remain in place forever. The land trust takes on the responsibility to annually monitor and legally defend each conservation easement. This strategy is appropriate to abate threats of subdivision, development and fragmentation for all of the conservation targets.

The Northwoods Land Trust currently holds six perpetual conservation easements in Iron County. These easements conserve over 3 miles of lake shorelines on Charnley Lake, Boot Lake, Norma Lake, Lower Springstead Lake, Sack Lake and Twin Lakes. The land protection agreements also preserve another 2 miles of river and stream frontage.

Donations of land - Landowners who wish to conserve their property, but who may not physically be able to manage it, who do not have any heirs to pass it down to, or who have heirs who they know would want to convert the property for development, are potential candidates for land donations to NWLT. These can be done outright (with income tax deductions for the full fair market value of the property), through a reserved life estate, or a bequest in a will. This conservation strategy helps to abate threats of subdivision, development and fragmentation for all conservation targets.

Purchase of land protection agreements - In instances where landowners cannot afford to donate the full value of a conservation easement, NWLT may be able to purchase conservation easements, possibly at a bargain sale rate (the landowner contributes part of the value of the easement while the land trust purchases the remaining value). NWLT's limited resources can be leveraged through state, federal or foundation grant programs such as the state Stewardship Fund, Lake and River Protection Grant programs, federal Forest Legacy program and private foundation grants. This conservation strategy is an appropriate tool to abate threats of subdivision, development and fragmentation for all of the conservation targets. However, due to high costs of acquisition, this strategy may be most appropriate for the highest priority projects or where grant funding is available.

Interstate Falls on the Siebert Scenic Conservation Area was dedicated in June of 2016.

Purchase of land - Land acquisition through fee simple purchase is another conservation strategy suitable for all conservation targets, especially acquisition at a bargain sale. NWLT could take on the long-term stewardship responsibilities for the property purchased, or could serve as an intermediary for eventual transfer of the property to a unit of government or other conservation entity for protection and management. High initial transaction and on-going management expenses, issues related to property tax exemption, and conservation priorities are all factors that should be weighed in deciding whether or not to pursue land acquisition. Some state, federal and foundation grant support may be available to leverage NWLT's limited resources. Other conservation partners (Trust for Public Land and Conservation Fund) may be able to provide short-term loans for acquisitions that must be transacted before other funds are secured. To date, NWLT has only utilized this strategy for three properties due to the high overall costs. Outright purchase of land is likely to be utilized only rarely.

NWLT's first outright purchase of conservation land was the 38.7-acre Interstate Falls property (above) near Hurley in 2015. Funding assistance was provided from the Knowles-Nelson Stewardship Fund program, grants from several private foundations, and numerous local contributions. NWLT then gifted this property to the local Town of Kimball in 2016 to serve as a visitor scenic area. NWLT also raised funds and completed a variety of improvements to the site including site cleanup of old vehicles, re-routing a trail, installing a short boardwalk, clearing and contructing a gravel parking lot, contracting for construction of safety railings, stairs and a viewing platform by the falls, and installation of an interpretive trailhead kiosk.

Conservation buyer/seller program - The conservation buyer/seller program links conservation-minded land buyers with sellers of land they would like to see conserved rather than split up and developed. Conservation sellers can place a conservation easement on their property before listing their property for sale, ensuring that the conservation values will remain intact regardless of who owns the land in the future. People interested in purchasing these conserved properties can benefit by enjoying the privacy, seclusion and natural setting the easement property offers, and may also be able to purchase larger properties at less cost due to the reduction in fair market value associated with a conservation easement. NWLT does not replace the need for real estate professionals, nor does it get involved in any direct negotiations. The land trust may, however, serve as a conduit to link interested conservation buyers with conservation sellers. Properties sold with conservation easements on them, or to conservation buyers who will then put a conservation easement on them, can be an effective tool to limit subdivision and development threats to all of the conservation targets.

Registry program - The conservation area registry program is a non-binding, handshake agreement where the landowners express their interest in land conservation and the land trust provides technical assistance. NWLT's field work, mapping and document drafting results in a basic land registry plan for the property. While the landowners enrolled in the registry program do not commit initially to conservation in perpetuity, the land registry program does serve as a more intensive landowner education process and first step toward more permanent preservation. This conservation strategy is relevant for all conservation targets, but does not directly result in abatement of threats to conserving the property. The registry program is provided as requested only. The Old-Growth Legacy Forest registry is focused on educating landowners about their highly valuable remaining old-growth forest habitats and the voluntary conservation strategies they can use to protect these critical and scarce resources.

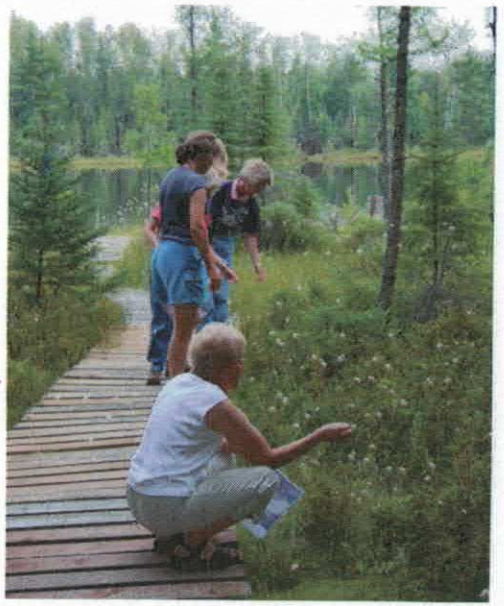
Other strategies:

Managed Forest Law - While not a conservation program of NWLT, the state Managed Forest Law (MFL) is an important tool in this region that can complement and reinforce other conservation protection strategies. MFL enrollment does result in significant property tax benefits to the private landowners, something that conservation easements currently cannot guarantee. NWLT refers interested landowners to the local DNR foresters, and works to ensure that conservation easements placed on appropriate woodlands and swamps are compatible with enrollment in the MFL program.

The MFL program is a 25- or 50-year contract with the Department of Natural Resources and there are some penalties for withdrawal. The program can help to serve as a deterrent to subdivision and development threats for most of the conservation targets (preservation of old growth forest tracts and unproductive wetlands may not be compatible with or eligible for the program). However, many acres of land enrolled in MFL have been removed from the program in recent years regardless of the penalties due to the high development values of the properties. Combining a Managed Forest Law contract with a conservation easement can, however, provide for permanent land protection as well as multiple tax benefits to the owners.

Private landowner education - As a targeted audience, providing landowner education is a key first step in moving toward permanent land protection. The Iron County lake shoreland owner direct mail education project is an example of a NWLT targeted landowner education program. NWLT's *Landowner's Conservation Guide - Protecting Your Northwoods Property* was prepared and printed in 2005, with updates in 2008, 2011 and 2016. Using a geographic information system, as well as Iron County map and tax parcel information, the lake owner project provided direct mail distribution of the landowner's guide to owners of all lake shoreland properties with about 500 feet or more of remaining natural shorelines. The mailing also included all owners of natural shorelines on DNR-listed "wild lakes." This strategy is an appropriate first contact tool for all of the conservation targets. Additional landowner fact sheets and other information can also be produced and utilized with interested landowners to answer further questions and assist with the land protection planning process.

Public education/media - Raising the public's awareness of the need, timeliness, opportunities and options for conserving land is an important component for NWLT's long-term protection efforts. Public awareness is also vital for generating continuing public support for conservation strategies and funding sources. Newspaper press releases, radio and television interviews and public service announcements can all be utilized to raise general awareness. Guided public field tours of already-protected properties are also a highly effective tool for interested participants to learn more about permanent voluntary conservation options. Presentations targeted to other audiences such as lake and other conservation organizations, service clubs, retiree groups and others can also help to generate additional interest and support for NWLT's conservation programs and projects. Participation in selected events with tabletop display materials can also help to raise general public awareness, and should be selected based on potential impact.



A guided public tour to Norma Lake.

Strategic Goals & Objectives for Iron County Conservation Plan

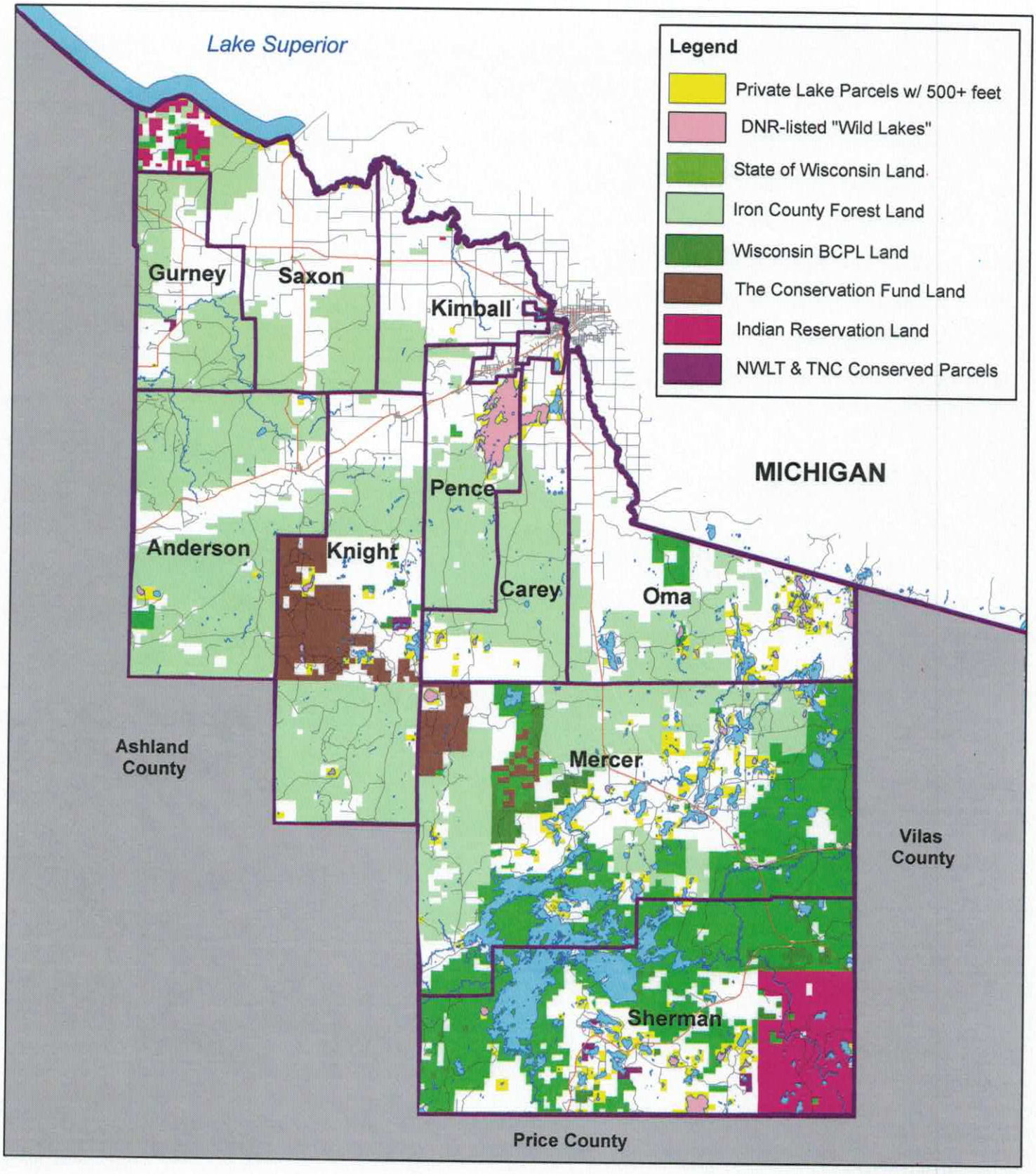
The following pages highlight specific five-year strategic goals, strategies and objectives for Northwoods Land Trust's conservation efforts in Iron County. These planning components were prioritized during NWLT's strategic planning process, and are provided here in more detail.

IRON COUNTY CONSERVATION PLAN Five-Year Strategic Goals & Strategies

TARGETS	STRATEGIES	TIMELINE 2019 2020 2021 2022 2023
1. Wild Lakes	Landowner Education - NWLT's Iron County project to include a direct mailing to all owners of shorelines on the 40 wild lakes in 2019. Conduct landowner face-to-face meetings, site visits and conservation assistance as requested by interested landowners. Permanently protect additional wild lakes through conservation easement donations and land donations.	
2. Remaining natural lake shorelines	Landowner Education - NWLT's Iron County project to include a direct mailing to all owners of 500 feet or more of natural lake shorelines in 2019. Conduct landowner face-to-face meetings, site visits and conservation assistance to permanently protect natural lake shorelines. Permanently protect additional remaining natural lake shorelines on otherwise developed lakes through conservation easement donations and land donations. Partner with local lake organizations whenever possible to fund easement donations and leverage funding resources for any acquisitions.	
3. Old-growth forests	Property identification - NWLT has little information available on privately-owned tracts of old growth forest, so property identification is a critical need. Utilize the Vilas Count pilot project to develop strategies for old-growth site identification. Conduct on-site property visits with interested landowners to identify site-specific old growth stands and natural area quality habitats warranting preservation. Permanently protect additional old-growth forest stands and natural areas through conservation easement donations and land donations. Permanently protect old-growth forest stands through fundraising and acquisitions/ trades for parcels owned by the Wisconsin Board of Commissiners of Public Lands on a prioritized basis.	
4. Priority rivers & streams	Conduct a conservation options direct mailing to Northern Rivers Initiative priority river and stream segment property owners in Iron County in 2020-2022. Utilize the GIS system to identify these landowner contacts.	
5. Forest lands	Develop a landowner outreach program to owners of larger woodland properties in Iron County (2022-2023) based on the GIS system developed for lakes and rivers.	

IRON COUNTY CONSERVATION PLAN Five-Year Strategic Goals & Strategies (continued)

ALL TARGETS	STRATEGIES	TIMELINE 2019 2020 2021 2022 2023
Conservation Partners	Maintain communications with other active conservation groups in the region. Refer potential projects to other partners as opportunities arise.	
Volunteer Easement Monitoring	Coordinate the volunteer easement and property monitoring program: a. Recruit volunteers and conduct volunteer monitoring training. b. Continue annual volunteer monitoring of conserved properties.	
Conservation Easements	Complete at least two conservation easement projects in Iron County by the end of 2020. Complete other conservation easement projects in Iron County as requested.	
Land Donations	Work with private landowners to receive land donations as outright donations, in wills, as reserved life estates or through other strategies as opportunities arise.	
Easement or Land Purchases	Consider conservation easement or land acquisition projects for protection of the highest priority conservation targets - utilize state and other grant programs for matching funds.	
Conservation Buyer Program	Conservation seller listings on the NWLT website - only as requested. Keep a listing of potential conservation buyer interests and available conservation properties with existing easements for sale or other priority sites.	
Registry Program	Complete additional Conservation Area Registry Program and Old-Growth Legacy Forest enrollments/plans within the NWLT service territory only as requested.	
Landowner Guides	Prepare and distribute conservation guides to interested landowners from contacts received through personal recommendations, telephone, email, web site, media publicity and other sources.	
Landowner Education	Prepare three newsletters annually, featuring completed conservation projects, and distribute to NWLT members, supporters and interested landowners. Utilize the NWLT website and social media, media press releases, public events at conserved sites, event displays, open houses and educational presentations as invited. Conduct field tours of previously protected conservation land and easement project sites open to the public.	



This drawing is neither a legally recorded map nor a survey, and is not intended to be used as one. This drawing is a compilation of records, information and data used for reference purposes only. Parcel lines approximately only. Data source: Iron County GIS Department - 2018.

Iron County, Wisconsin

Map of Private Lake Properties
with approx. 500+ feet of natural shorelines.
DNR Lake Protection Grant Project - LPT53717

N

0 2.5 5 Miles

Map prepared on 1/25/2019 by:
Bryan Pierce, Northwoods Land Trust,
P.O. Box 321, Eagle River, WI 54521

Assessment of Target Viability
Iron County Strategic Conservation Plan

Conservation Targets Enter # of Target		Category	Key Attributes	Indicators	A	B	Indicator Ratings				Current Rating	Desired Rating	Basis for Rating Determinations
			(Documentation: A)	(Documentation: B)			Poor	Fair	Good	Very Good			
1	Wild Lakes	Landscape Context	Numbers of DNR-listed wild lakes protected	Numbers of protected Wild Lakes			**<10%**	10-25%	25-50%	>50%	Poor	Good	Wild Lakes program rating
1	Wild Lakes	Condition	Undeveloped shorelines	Shoreline development			More than 3 structures	**2-3 structures**	1 structure	less than 1 structure	Fair	Good	GIS mapping
1	Wild Lakes	Size	Lake sizes	Range of lake sizes			**None protected >50 acres**	None >100 acres	None >250 acres	None >500 acres	Poor	Good	DNR lake list
2	Remaining Shorelines on Developed Lakes	Landscape Context	Undeveloped shorelines	Feet of undeveloped shoreline frontage			<500 feet	**500-1000 ft.**	1000-5000 ft.	>5000 ft.	Fair	Good	GIS mapping
2	Remaining Shorelines on Developed Lakes	Condition	Intact shoreline vegetation communities	% of developed shoreline			>75%	**26-74%**	1-25%	0%	Fair	Good	GIS mapping
2	Remaining Shorelines on Developed Lakes	Size	Lake sizes	Range of lake sizes with natural shorelines			All private lakes developed	**All lakes over 50 acres developed**	All lakes over 100 acres developed	All lakes over 300 acres developed	Fair	Good	GIS mapping
3	Old Growth Forest Stands	Landscape Context	Connectivity	In-holdings or contiguous with public lands			**Not contiguous**	Contiguous on one side	Contiguous on two sides	Continguous on three or more sides	Poor	Fair	Extent of SNAs
3	Old Growth Forest Stands	Condition	Climax/old growth forest habitat	Loss of remaining Old Growth forest			**>75%**	75-50%	50-25%	<25%	Poor	Fair	Extent of SNAs
3	Old Growth Forest Stands	Size	Size of old growth forest tract	Acreage			**<30 acres**	30-80 acres	80-640 acres	More than 640 acres	Poor	Fair	Extent of SNAs
4	Northern Rivers Initiative Priority Segments	Landscape Context	DNR-listed priority river and stream segments	Miles of priority river corridor protected			<10%	10-25%	**25-50%**	>50%	Good	Good	GIS mapping
4	Northern Rivers Initiative Priority Segments	Condition	Outstanding & Exceptional Resource Waters Classsification	% Protection of ORW, ERW			<10%	10-25%	**25-50%**	>50%	Good	Good	DNR ORW/ERW classification
4	Northern Rivers Initiative Priority Segments	Size	Intact riparian corridor	% of river segment protected			<10%	10-25%	**25-50%**	>50%	Good	Good	DNR mapping
5	Unfragmented Forest Blocks	Landscape Context	Large blocks of forest lands	Industrial or non-ind. woodlands not subdivided <640-acres			<10%	10-25%	25-50%	**>50%**	Very Good	Very Good	DNR mapping
5	Unfragmented Forest Blocks	Condition	Connectivity	In-holdings or contiguous with protected lands			Block is further than one mile	Contiguous on one side or block is within	Contiguous on two sides	**Continguous on three or more sides**	Very Good	Very Good	GIS mapping
5	Unfragmented Forest Blocks	Size	Size of forest blocks	Acreage			<40 acres	40-160 acres	160-640 acres	**>640 acres**	Very Good	Very Good	Practical forest management/MFL guidelines

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Assessment of Target Viability
Iron County Strategic Conservation Plan

Conservation Targets Enter # of Target		Category	Key Attributes (Documentation: A)	Indicators (Documentation: B)	Viability Objective	Current Status June 2019	Basis for Current Status Rating	Viability Objective Met?	Comments
1	Wild Lakes	Landscape Context	Numbers of DNR-listed wild lakes protected	Numbers of protected Wild Lakes	Good	Poor	GIS Mapping, DNR list of wild lakes (approx. 40)	No	Only 4 small wild lakes are protected. Pardee & Hewitt Lakes developed.
1	Wild Lakes	Condition	Undeveloped shorelines	Shoreline development	Good	Fair	DNR Wild Lakes program	No	Most wild lakes have multiple parcels.
1	Wild Lakes	Size	Lake sizes	Range of lake sizes	Good	Poor	DNR Wild Lakes program	No	Gile Flowage is not protected. Only 4 others are >100 acres.
2	Remaining Shorelines on Developed Lakes	Landscape Context	Undeveloped shorelines	Feet of undeveloped shoreline frontage	Good	Fair	GIS Mapping	No	Less than 500 lake parcels have 500+ feet of natural shoreline.
2	Remaining Shorelines on Developed Lakes	Condition	Intact shoreline vegetation communities	% of developed shoreline	Good	Fair	GIS Mapping	No	Most larger lakes have small parcels.
2	Remaining Shorelines on Developed Lakes	Size	Lake sizes	Range of lake sizes with natural shorelines	Good	Fair	GIS Mapping	No	All larger lakes except Turtle Flambeau have development.
3	Old Growth Forest Stands	Landscape Context	Connectivity	In-holdings or contiguous with public lands	Fair	Poor	Within SNAs	No	Remaining BCPL old growth is contiguous with DNR CEs
3	Old Growth Forest Stands	Condition	Climax/old growth forest habitat	Loss of remaining Old Growth forest	Fair	Poor	Unknown	No	Study needed on private lands.
3	Old Growth Forest Stands	Size	Size of old growth forest tract	Acreage	Fair	Poor	Several SNAs with old growth >640 acres	No	Only 1 SNA with old growth is >640 acres - Moose Lake SNA.
4	Northern Rivers Initiative Priority Segments	Landscape Context	DNR-listed priority river and stream segments	Miles of priority river corridor protected	Good	Good	DNR Northern Rivers Initiative	Yes	County and state lands protect much of the NRI rivers and streams.
4	Northern Rivers Initiative Priority Segments	Condition	Outstanding & Exceptional Resource Waters Classsification	% Protection of ORW, ERW	Good	Good	DNR Northern Rivers Initiative	Yes	County and state lands protect much of the ORW/ERW rivers and streams.
4	Northern Rivers Initiative Priority Segments	Size	Intact riparian corridor	% of river segment protected	Good	Good	DNR Northern Rivers Initiative	Yes	County and state lands protect much of the NRI rivers and streams.
5	Unfragmented Forest Blocks	Landscape Context	Large blocks of forest lands	Industrial or non-ind. woodlands not subdivided <640-acres	Very Good	Very Good	DNR Bureau of Forestry	Yes	Needs study to identify all large remaining tracts, but extensive County Forest lands.
5	Unfragmented Forest Blocks	Condition	Connectivity	In-holdings or contiguous with protected lands	Very Good	Very Good	GIS mapping	Yes	DNR easements & Conservation Fund land.
5	Unfragmented Forest Blocks	Size	Size of forest blocks	Acreage	Very Good	Very Good	DNR Forestry	Yes	Very large blocks remain in Co. Forest, industrial forest CEs, state & tribal lands.

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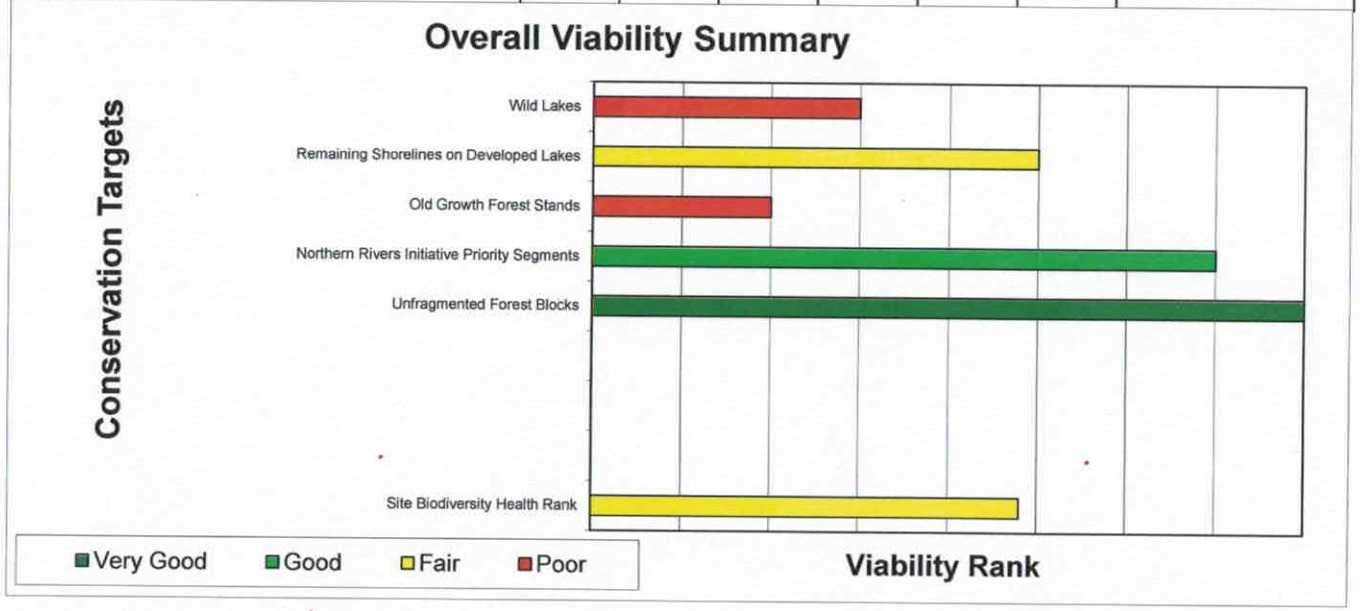
Overall Viability Summary

Iron County Strategic Conservation Plan

	Conservation Targets	Landscape Context		Condition		Size		Viability Rank
		Grade	Weight	Grade	Weight	Grade	Weight	
1	Wild Lakes	Poor	1	Fair	1	Poor	1	Poor
2	Remaining Shorelines on Developed Lakes	Fair	1	Fair	1	Fair	0	Fair
3	Old Growth Forest Stands	Poor	1	Poor	1	Poor	1	Poor
4	Northern Rivers Initiative Priority Segments	Good	1	Good	1	Good	1	Good
5	Unfragmented Forest Blocks	Very Good	1	Very Good	1	Very Good	1	Very Good
6		-	1	-	1	-	1	-
7		-	1	-	1	-	1	-
8		-	1	-	1	-	1	-
Site Biodiversity Health Rank								Fair



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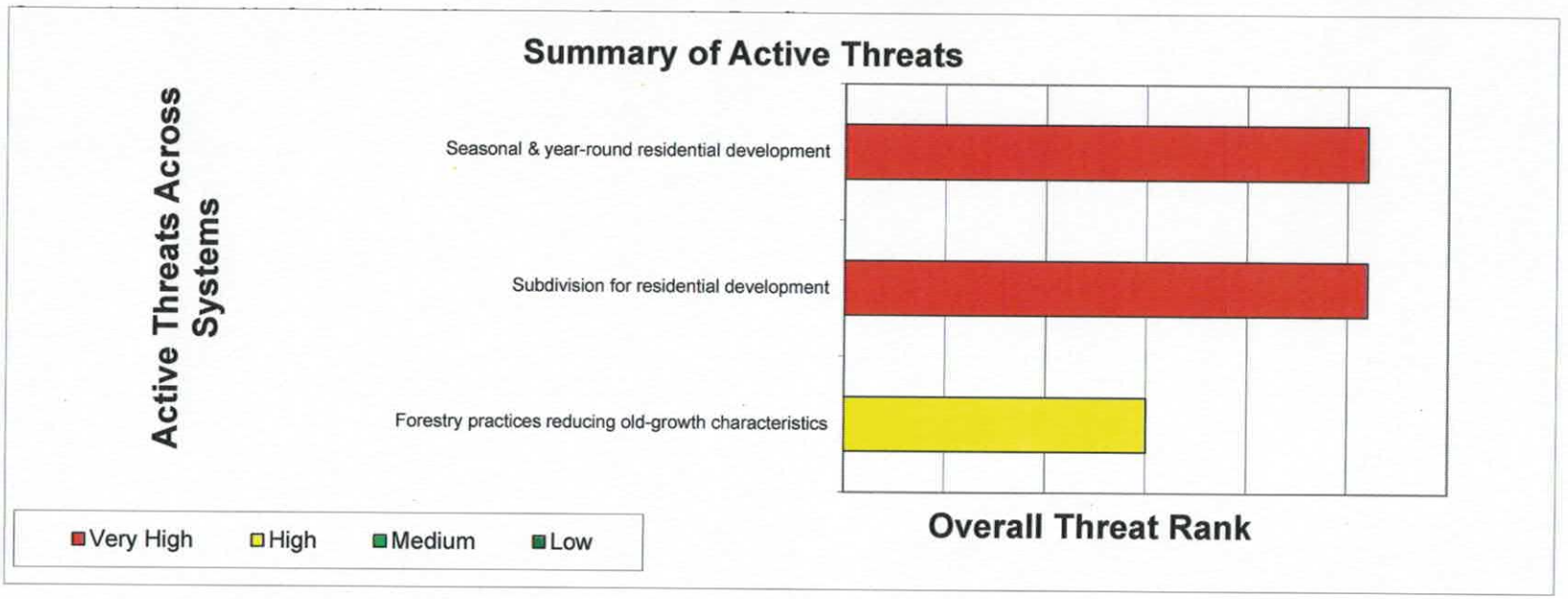
Summary of Active Threats

Iron County Strategic Conservation Plan

	Active Threats Across Systems	Wild Lakes	Remaining Shorelines on Developed	Old Growth Forest Stands	Northern Rivers Initiative Priority	Unfragmented Forest Blocks	-	-	-	Overall Threat Rank	Total Score
1	Seasonal & year-round residential development	Very High	High	Very High	Medium	Medium	-	-	-	Very High	5.20
2	Subdivision for residential development	Very High	High	Very High	Medium	Medium	-	-	-	Very High	5.20
3	Forestry practices reducing old-growth characteristics	-	-	Very High	-	-	-	-	-	High	3.00
Threat Status for Targets and Site		Very High	High	Very High	Medium	Medium	-	-	-	Very High	



Summary of Historical Sources

Summary of Strategies

Iron County Strategic Conservation Plan

	Strategies for Threat Abatement and Restoration	Benefits					Feasibility			Cost	Overall		
		Threat Abatement Benefit	Restoration Benefit	Leverage (default = Low)	Overall Benefits	User Override	Lead Individual/ Institution	Ease of Implementation	Overall Feasibility	Overall Cost	Overall Strategy Rank	Rank#	
1	Donation of conservation easements	-	-	Very High	High		High	High	High	Low	Very High	1	A
2	Land donations	-	-	Very High	High		High	High	High	Low	Very High	1	B
3	Acquisition of conservation easements	-	-	Very High	Medium		Medium	Low	Low	Very High	High	3	A
4	Land acquisition	-	-	Very High	Medium		Medium	Low	Low	Very High	Medium	3	B
5	Conservation buyer/seller program	-	-	Low	Low		Low	Low	Low	Low	Low	5	A

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Site Measures of Conservation Success

		Viability Rank	Active Threat Rank
Site:	Iron County Strategic Conservation Plan		
Ecoregion:	North Central Forest & Northern Highland		
Targets: #1:	Wild Lakes	Poor	Very High
#2:	Remaining Shorelines on Developed Lakes	Fair	High
#3:	Old Growth Forest Stands	Poor	Very High
#4:	Northern Rivers Initiative Priority Segments	Good	Medium
#5:	Unfragmented Forest Blocks	Very Good	Medium
#6:		-	-
#7:		-	-
#8:		-	-
Site Biodiversity Health Rank		Fair	
Overall Active Threat Rank			Very High
Overall Project Resource Grade		High	