

CHIPPEWA COUNTY**LAND CONSERVATION & FOREST MANAGEMENT COMMITTEE****REGULAR MEETING****OCTOBER 20, 2021****CHIPPEWA COUNTY COURTHOUSE, RM 302****4:30 PM****1. CALL TO ORDER****2. ROLL CALL**

Attendee Name	Organization	Title	Status	Arrived
Dean Gullickson	Chippewa County	District 7 (Chair)	Present	
Harold Steele	Chippewa County	District 1 (Vice-Chair)	Present	
Glen Sikorski	Chippewa County	District 2	Absent	
Ken Schmitt	Chippewa County	District 3	Present	
Don Hauser	Chippewa County	District 6	Present	
James Pingel	Chippewa County	Citizen Rep	Present	

The Chair noted that all supervisors and representative were present except Supervisor Sikorski.

Agency staff present throughout the meeting were R. Scholz (Co. Administrator), T. Pauls (Corporation Counsel), D. Hutchison (DNR), K. Clow, M. Hansen, K. Klingberg, J. Larson, D. Masterpole, C. Meyer, and J. Schemenauer (Recorder) - LCFM.

There were no members of the public present.

3. MEMBERS OF THE PUBLIC WISHING TO BE HEARD

There were no members of the public wishing to be heard.

4. CONSENT AGENDA

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Harold Steele, District 1 (Vice-Chair)
SECONDER:	Ken Schmitt, District 3
AYES:	Gullickson, Steele, Schmitt, Hauser, Pingel
ABSENT:	Sikorski

1. Approve the Agenda

2. Approve the Minutes

Land Conservation & Forest Management Committee - Regular Meeting - Sep 15, 2021 4:30 PM

3. Schedule Next Meeting Date - November 17, 2021

5. REPORTS

Land Conservation & Forest Management Committee

Minutes
Regular Meeting

Chippewa County Courthouse, Rm 302

October 20, 2021
4:30 PM

1. Overview & Announcement of Proposed Fall 2021 Timber Sale & Bids Opening - M. Hansen

M. Hansen introduced the proposed Fall, 2021 Timber Sales. He reported that:

1. There are eleven (11) numbered tracts in the County Forest that are scheduled for public notice and bidding under the 2021 Fall Timber Sale. Nine (9) of the sales are new sales and two (2) are resales.
2. Bids will be opened in November, 2021, with a bid summary to be presented to the LCFM at their November 17, 2021, meeting for Committee action.

The report was supported by the following materials:

1. Map titled: Chippewa County Forest 2021 Fall Sales Locations Map, (LCFM - Distributed 10/14/21 - copy on file & attached).
2. Prospectus & map titled: Chippewa County Timber Sale Tract #24-21, Sand Lake Sale, (LCFM - Distributed 10/14/21 - copy on file & attached).
3. Prospectus & map titled: Chippewa County Timber Sale Tract #25-21, Fishpole Lake Drainage Selection Harvest, (LCFM - Distributed 10/14/21 - copy on file & attached).
4. Prospectus & map titled: Chippewa County Timber Sale Tract #27-21, Right Flank Sale, (LCFM - Distributed 10/14/21 - copy on file & attached).
5. Prospectus & map titled: Chippewa County Timber Sale Tract #28-21, Big Ash Sale, (LCFM - Distributed 10/14/21 - copy on file & attached).
6. Prospectus & map titled: Chippewa County Timber Sale Tract #29-21, Gilberts 56 Oak Clearcut, (LCFM - Distributed 10/14/21 - copy on file & attached).
7. Prospectus & map titled: Chippewa County Timber Sale Tract #30-21, Robinson Lake Aspen, (LCFM - Distributed 10/14/21 - copy on file & attached).
8. Prospectus & map titled: Chippewa County Timber Sale Tract #31-21, Too Steep Oak Harvest, (LCFM - Distributed 10/14/21 - copy on file & attached).
9. Prospectus & map titled: Chippewa County Timber Sale Tract #32-21, Compaction Aspen Sale, (LCFM - Distributed 10/14/21 - copy on file & attached).
10. Prospectus & map titled: Chippewa County Timber Sale Tract #33-21, Kenyon Release Overstory Removal, (LCFM - Distributed 10/14/21 - copy on file & attached).
11. Prospectus & map titled: Chippewa County Timber Sale Tract #34-21, Knickerbocker Overstory Removal, (LCFM - Distributed 10/14/21 - copy on file & attached).
12. Prospectus & map titled: Chippewa County Timber Sale Tract #35-21, Long Hike Sale, (LCFM - Distributed 10/14/21 - copy on file & attached).

There was general discussion.

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2. Overview of Initial Agreement on Hickory Ridge Mountain Bike Connector & Update on Continuing Negotiations of Full Trail Layout - M. Hansen

M. Hansen presented an oral report. The report was supported by the following materials:

1. Map titled: Agreed to Connector to Hickory Ridge, (LCFM - Distributed 10/14/21 - copy on file & attached).
2. Map titled: Requested Mountain Mike Expansion North of Hickory Ridge Approximately 21.7 Miles of Trail Via Current Route Request, (LCFM - Distributed 10/14/21 - copy on file & attached).
3. Map titled: Requested Mountain Bike Expansion Preferred Expansion Areas- Goal is to Reduce Trail Crossings and Visual Interactions (LCFM - Distributed 10/14/21 - copy on file & attached).
4. Map titled: Hickory Ridge Trailhead Improvement, (LCFM - copy on file & attached).
5. Map titled: Revised Layout Following 10/20/21 Site Visit, (LCFM - copy on file & attached).
6. Photo of a section of Dark Lake road used by several different recreational users (LCFM - copy on file & attached).

There was general discussion. Discussion focused on:

1. A staff recommendation to immediately implement the Agreed to Connector to the Hickory Ridge Bike Trail to minimize current user conflicts.
 2. A staff recommendation to reduce the speed for motorized vehicles on sections of the Hickory Ridge Trail due to safety concerns, pending Committee approval.
 3. The process to be used to formally authorize a broader proposal for Hickory Ridge Bike Trail Network Expansion, pending Committee approval.
 4. Proposed improvements to the Hickory Ridge trailhead.
- ## 3. Overview of Lake Wissota Stewardship Project; Components & Time/Deliverable Tracking - D. Masterpole & C. Meyer

D. Masterpole & C. Meyer presented an oral report. The report was supported by the following materials:

1. Power Point report titled: Overview of Lake Wissota Stewardship Project Components, (LCFM 10/20/21 - copy on file & attached). The report provides an overview of the contributing components of the Lake Wissota Stewardship Project and the cumulative accomplishments to date.
2. LCFM Personnel Activity and Time Reports, as compiled for individual staff positions. The reports illustrate the different categories now used by LCFM staff to track time by major program area (Copy on file & attached).

There was general discussion. Discussion focused on:

1. The administration of the Lake Wissota Stewardship Project.

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2. The utility of the time tracking system to document service costs and reimbursable expenses.

4. Overview of 2022 Groundwater Study; Status Update - D. Masterpole

D. Masterpole presented an oral report. The report was supported by the following materials:

1. Map titled: Groundwater Nitrate Concentrations that Exceed 10 mg/L in Proximity to Permitted Manure Storage Structures & Associated Cropland with a Nutrient Management Plan, (LCFM 7/2020 - Distributed 10/14/21 - copy on file & attached).
2. Map developed by UW-Stevens Point College of Natural Resources showing nitrate source determinations in Chippewa County, based on the results of the 2016 Chippewa County Groundwater Quality Inventory.

There was general discussion. Discussion focused on:

1. The 2022 Groundwater Study, including the proposed objectives and project design.
2. The contributing components of the Chippewa County Groundwater Inventory, as currently maintained to monitor groundwater elevations and groundwater chemistry.
3. Opportunities to capture additional groundwater chemistry results generated through Dept. of Public Health and Planning & Zoning water sampling programs.

5. Overview of Non-Metallic Mining Reclamation Ordinance Revision; Status Update - D. Masterpole

D. Masterpole provided an oral report. The report was supported by the following materials:

1. Power Point report titled: Overview of Proposed Revisions to the Chippewa County Non-Metallic Mining Reclamation Ordinance, (LCFM 9/15/21 Updated - copy on file & attached).
2. Written and verbal comments received at the 9/15/21 Non-Metallic Mining Reclamation Ordinance public hearing process (Distributed 10/14/21 - copy on file & attached).
3. An anticipated schedule to present the proposed ordinance revisions to the LCFM Committee (11/17/21) and County Board (12/14/21 & 1/11/21).

There was limited discussion.

6. BUSINESS ITEMS

7. AGENDA ITEMS FOR FUTURE CONSIDERATION

Future agenda items for consideration include:

1. Discussion of groundwater management in the County.
2. Presentation by DNR on proposed controlled burn in County Forest.

8. ADJOURN

Motion to adjourn: Schmitt/Steele. Motion carried at 6:45 p.m.

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RESULT:	APPROVED [UNANIMOUS]
MOVER:	Ken Schmitt, District 3
SECONDER:	Harold Steele, District 1 (Vice-Chair)
AYES:	Gullickson, Steele, Schmitt, Hauser, Pingel
ABSENT:	Sikorski

CHIPPEWA COUNTY**LAND CONSERVATION & FOREST MANAGEMENT COMMITTEE****REGULAR MEETING****SEPTEMBER 15, 2021****CHIPPEWA COUNTY COURTHOUSE, RM 302****4:30 PM****1. CALL TO ORDER****2. ROLL CALL**

Attendee Name	Organization	Title	Status	Arrived
Dean Gullickson	Chippewa County	District 7 (Chair)	Present	
Harold Steele	Chippewa County	District 1 (Vice-Chair)	Present	
Glen Sikorski	Chippewa County	District 2	Present	
Ken Schmitt	Chippewa County	District 3	Present	
Don Hauser	Chippewa County	District 6	Present	
James Pingel	Chippewa County	Citizen Rep	Late	4:35 PM

Agency staff present throughout the meeting were R. Scholz (Co. Administrator), T. Pauls (Corporation Counsel), D. Hutchison (DNR), K. Clow, M. Hansen, C. Meyer, D. Masterpole, and J. Schemenauer - Recorder (LCFM).

Members of the public present, as identified, were C. Anderson (Mathy Construction), D. Barrickman, D. Carlson, J. Gaier (Kramer Mining & Materials), T. Klein (Pheasants Forever), C. Nagle, and B. Wierman.

3. MEMBERS OF THE PUBLIC WISHING TO BE HEARD

B. Wierman, Treasurer of the Lake Wissota Improvement & Protection Association (LWIPA), addressed the Committee. He expressed support for a proposal to extend the cooperative agreement between Chippewa County and LWIPA to administer the Lake Wissota Stewardship Project.

C. Nagle, representative of Save the Cobban Bridge, addressed the Committee. He presented a conceptual proposal to salvage a portion of the historic Cobban Bridge, and use it on the Old Abe Trail. He requested that this proposal be scheduled as an agenda item for Committee discussion.

4. CONSENT AGENDA

1. Approve the Agenda
2. Approve the Minutes

Land Conservation & Forest Management Committee - Regular Meeting - Aug 18, 2021 4:30 PM

3. Schedule Next Meeting Date - October 20, 2021

5. PUBLIC HEARING TO SOLICIT COMMENTS ON ORDINANCE TO AMEND CHAPTER 30, ARTICLE II OF THE CHIPPEWA COUNTY CODE OF ORDINANCES; NONMETALLIC MINING RECLAMATION

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1. Overview of Nonmetallic Mining Reclamation Ordinance Amendments - D. Masterpole
D. Masterpole presented an oral report. The report was supported by the following materials:
 1. Power Point report titled: Overview of Proposed Revisions to the Chippewa County Non-Metallic Mining Reclamation Ordinance, (LCFM 9/15/21 - copy on file & attached).
 2. Public hearing draft titled: Ordinance to Amend Chapter 30, Article II, Division 3, Sections 30-79, 30-81, and 30-82; Chapter 30, Article II, Division 4, Sections 30-102, 30-108 and 30-111; and Chapter 30, Article II, Division 5, Section 30-135 of the Chippewa County Code of Ordinances, (LCFM - Distributed 9/10/21 - copy on file & attached).

Staff addressed questions.

2. Open Public Hearing.
The Chair opened the public hearing at 4:59 p.m.
3. Public Comment.
The following individuals provided verbal testimony for the hearing record: C. Anderson and J. Gaier.

The Chair distributed copies of written comments submitted for the hearing record from B. Arendt, C. Kaiser, and P. Popple (copies on file).

The Chair indicated that the comment period for the hearing record will remain open for seven (7) days.
4. Close Public Hearing.
The Chair closed the public hearing at 5:05 p.m.

A transcript of the verbal and written comments will be prepared, posted, and provided to the Committee.

6. REPORTS

1. Overview of Permit for Access Through County Forest Land; Makela (Former Homme) Parcel, T32N, R8W, Sections 28 & 29 - M. Hansen
M. Hansen provided an oral report. The report was supported by the following materials:
 1. Draft agreement titled: Access Permit Agreement, (LCFM - Distributed 9/10/21 - copy on file & attached). The agreement will allow the Makela's use of a secondary County Forest Road to access a parcel of land they intend to purchase, currently owned by the Hommes, in the SE SE of Section 29, T32N, R8W. This permit is nearly identical to the Access Permit Agreement offered to the current owners of the property.
 2. Map titled: Exhibit A - Access Permit Agreement with Grant & Melissa Makela, (LCFM - Distributed 9/10/21 - copy on file & attached). The map shows the location of the property, the access corridor and the County Forest boundary.
There was limited discussion.
2. Overview of Lake Wissota Stewardship Project; 2020-2021 Annual Report - C. Meyer

Minutes Acceptance: Minutes of Sep 15, 2021 4:30 PM (Consent Agenda)

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C. Meyer, Watershed Specialist/Project Manager, presented an oral report. The report was supported by a Power Point report titled: Overview of Lake Wissota Stewardship Project & Status of Program Implementation, (9/15/21 - Distributed 9/10/21 - copy on file & attached).

There was limited discussion. Discussion focused on:

1. The structure of the Lake Wissota Stewardship Project lake/watershed management business model.
 2. The defined roles and responsibilities of the County and Lake Wissota Improvement & Protection Association.
 3. The water quality modeling and monitoring being conducted as a contributing component of the project.
3. Overview of Request to Extend Cooperative Agreement Between Chippewa Co. & the Lake Wissota Improvement & Protection Association to Administer the Lake Wissota Stewardship Project - D. Masterpole

D. Masterpole presented an oral report. The report was supported by the following materials:

1. Correspondence from A. Gordon, (Former President of Lake Wissota Improvement & Protection Association) to R. Scholz (County Administrator), (Received 2/1/21). The correspondence conveys the LWIPA's interest to extend the Lake Wissota Stewardship Project agreement, (Distributed 9/10/21 - copy on file & attached).
2. Email correspondence from D. Barrickman (Current president of Lake Wissota Improvement & Protection Association) to R. Schlotz (Co. Administrator), (9/9/21). The correspondence further conveys the LWIPA's interest to extend the Lake Wissota Stewardship Project, and provides additional detail on a funding proposal, (Copy on file & attached).
3. Proposal titled: A Conceptual Proposal to Extend the Lake Wissota Stewardship Project Contract Using a Soft Close, Pay-As-You Go Funding Approach, (LCFM 9/15/21 - copy on file & attached).

There was general discussion. Discussion focused on:

1. The structure of the lake/watershed business model, and the purpose of the existing agreement and contract with the LWIPA.
 2. The financial arrangement between LWIPA and the County, and funding sources used to administer and implement the Lake Wissota Stewardship Project.
 3. Project budgeting and time tracking.
4. Overview of Current & Required Covenants & Discuss Application for Chippewa Co. Stewardship Program Matching Grant to Acquire Land for Conservation and Public Use in T31N, R9W, Sec. 12 & 13, Submitted by Pheasants Forever - D. Masterpole

D. Masterpole presented the following materials:

1. Cover letter from M. Moses (Pheasants Forever) to the LCFM Committee regarding submittal

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of a Chippewa County Stewardship Program application (Distributed 9/10/21 - copy on file & attached).

2. Application titled: Chippewa County Stewardship Program Application for Nonprofit Conservation Organizations submitted by Pheasants Forever regarding the project named: McCann Creek Fishery Area Addition, (7/8/21), (Distributed 9/10/21 - copy on file & attached).
3. Report titled: Staff Review of an Application Submitted by Pheasants Forever, Inc. for a Chippewa County Stewardship Fund - Match Grant in the Amount of \$50,000 Towards the Purchase of ~182.5 Acres in Sections 12 & 13, T31N, R09W, Town of Bloomer, (LCFM 7/15/21 - Distributed 9/10/21 - copy on file & attached). The report outlines the PF proposal, explains the proposed match grant request, and outlines the extent to which the program aligns with program goals, management objectives, and actions established in the Chippewa County Land & Water Resource Management Plan, (2019-2023).
4. Map titled: Proposed McCann Creek Fishery Area Addition - Site Map, (LCFM - copy on file & attached). The map shows the various covenants on the proposed acquisition.

There was limited discussion.

5. Overview of Current Livestock Facility Projects & Permitting Status - K. Clow
K. Clow presented an oral report. The report was supported by a Power Point report titled: Overview of Current Livestock Facility Projects & Permitting Status, (LCFM 9/15/21 - copy on file & attached). The report provided an update on the status of livestock facility projects now receiving technical or financial assistance through the LCFM.

There was limited discussion.

7. BUSINESS ITEMS

1. Consider Application for Chippewa Co. Stewardship Program Matching Grant to Acquire Land for Conservation and Public Use in T31N, R9W, Sec. 12 & 13, Submitted by Pheasants Forever - D. Masterpole Motion to approve (Pheasants Forever, Inc. application for Chippewa Co. Stewardship Program Matching Grant funds to acquire land for conservation and public use in T31N, R9W, Sec. 12 & 13): Steele/Schmitt. Roll call vote called: Supervisor Steele - Yes, Supervisor Sikorski - No, Supervisor Hauser - Yes, Supervisor Schmitt - Yes, FSA Representative Pingel - Yes, Chair Gullickson - No. Motion passes 4-2.

RESULT:	APPROVED [4 TO 2]
MOVER:	Harold Steele, District 1 (Vice-Chair)
SECONDER:	Ken Schmitt, District 3
AYES:	Steele, Schmitt, Hauser, Pingel
NAYS:	Gullickson, Sikorski

8. AGENDA ITEMS FOR FUTURE CONSIDERATION

Future agenda items for consideration include discussion of groundwater management in the County.

Minutes Acceptance: Minutes of Sep 15, 2021 4:30 PM (Consent Agenda)

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9. ADJOURN

Motion to adjourn: Schmitt/Steele. Motion carried at 6:43 p.m.

RESULT:	APPROVED [UNANIMOUS]
MOVER:	Ken Schmitt, District 3
SECONDER:	Harold Steele, District 1 (Vice-Chair)
AYES:	Gullickson, Steele, Sikorski, Schmitt, Hauser, Pingel

Minutes Acceptance: Minutes of Sep 15, 2021 4:30 PM (Consent Agenda)



**STATEMENT OF EXPLANATION
OVERVIEW & ANNOUNCEMENT OF PROPOSED FALL 2021 TIMBER SALE
& BIDS OPENING**

The LCFM, acting through the Forest and Trails Division (FT), manages the Chippewa County Forest for multiple public objectives in accordance with the Chippewa County Forest Comprehensive Land Use Plan and WI Stats. Chapter 28. These objectives include management of the Co. Forest system for sustainable timber production, public recreation, and environmental conservation.

Chippewa Co. manages the Co. Forest to optimize forest health by applying standard silvicultural treatments to designated timber stands. These treatments are implemented through timber sale contracts with logging contractors.

Timber stands that are scheduled for harvest are evaluated by WI DNR and FT Foresters. These foresters identify the trees to be harvested and estimate the volume of the trees to be harvested within each timber stand sale tract.

A timber sale prospectus is then prepared for each timber stand sale tract and competitive bids are sought from private sector logging contractors for the value of the raw wood products (i.e. stumpage) within each sale tract.

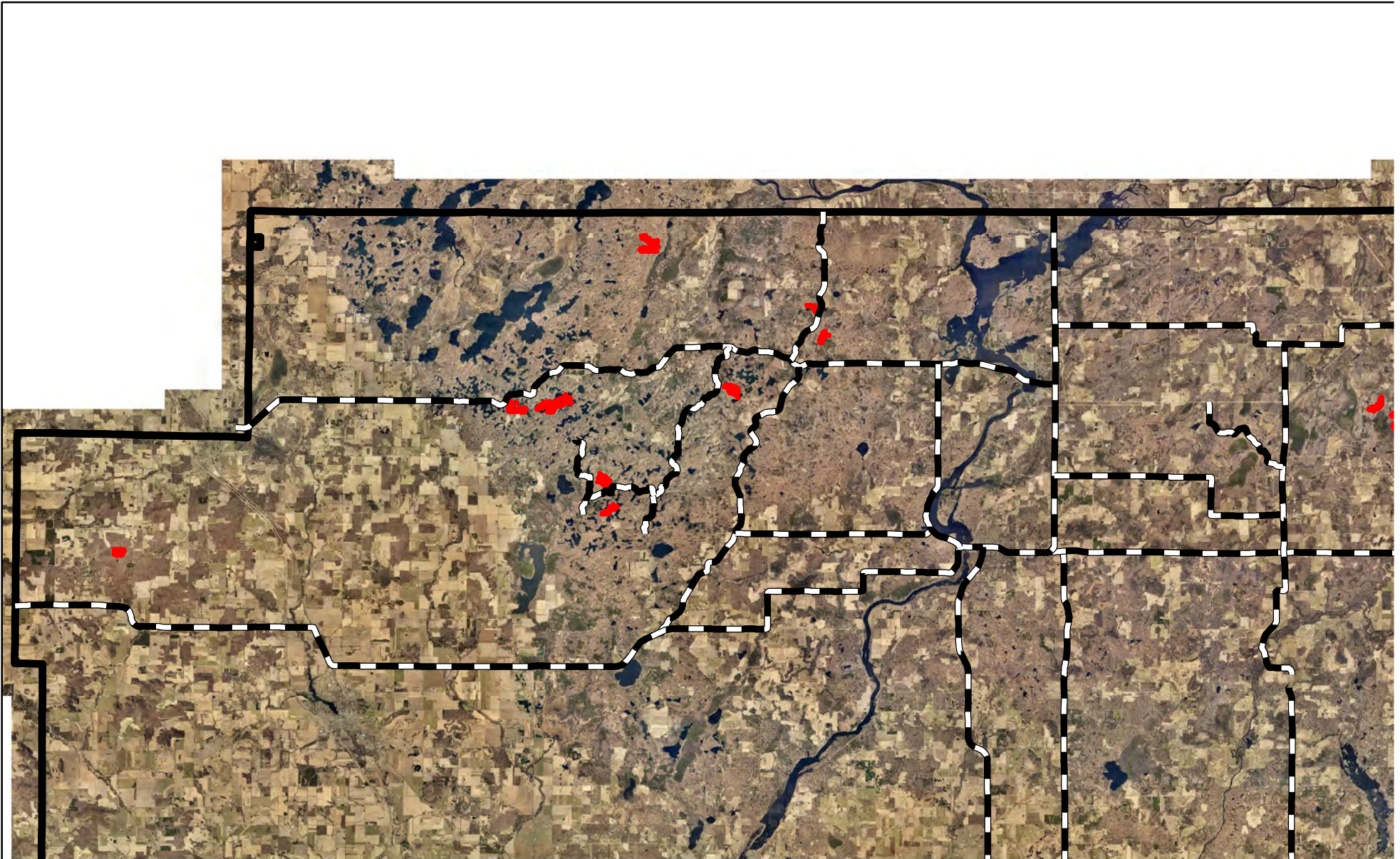
Timber from the Chippewa County Forest is certified to meet sustainable forestry standards. Additionally, "Best Management Practices for Water Quality and Invasive Species" are followed by the County and by logging contractors.

Each year, the County plans and administers two (2) bid openings consisting of 6-10 timber sale tracts each. The bid openings typically occur in April/May and October/November.

Following this process the FT Division has prepared eleven (11) County Forest Timber Sales totaling approximately 399 acres. At the 10/20/2021 LCFM Committee meeting, staff will provide the Committee with an aerial overview and summary of the intended silvicultural treatment for each timber sale.

The timber sales will be publicly advertised with a public bid opening in November, 2021. Bids will be compiled and reported to the LCFM Committee for approval at the November, 2021, LCFM meeting.

Chippewa County Forest 2021 Fall Sales Locations Map



Attachment: Fall 2021 Timber Sales (6632 : Overview & Announcement of Proposed Fall 2021 Timber Sale

SAND LAKE SALE

Located in Sec. 10 T31N - R8W Town of Cleveland

Total Sale Area: (approximately 27 acres)

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 24-21 is \$ 15,550.00**

Species	Amount	
	tons	MBF
Oak Cordwood	300	
Mixed Hardwood Cordwood	200	
Red Oak logs		42
Mixed Hardwood logs		3

Sale Area Description: (Please see the sale map on the back of this page)

The boundaries of this sale are marked by a red paint line. This is a selection harvest to manipulate structure and enhance health of northern hardwoods and oak. Canopy gaps will be created in select locations to promote oak regeneration. Conifers present will be retained for seed production to increase the conifer component over time.

Cutting Requirements:

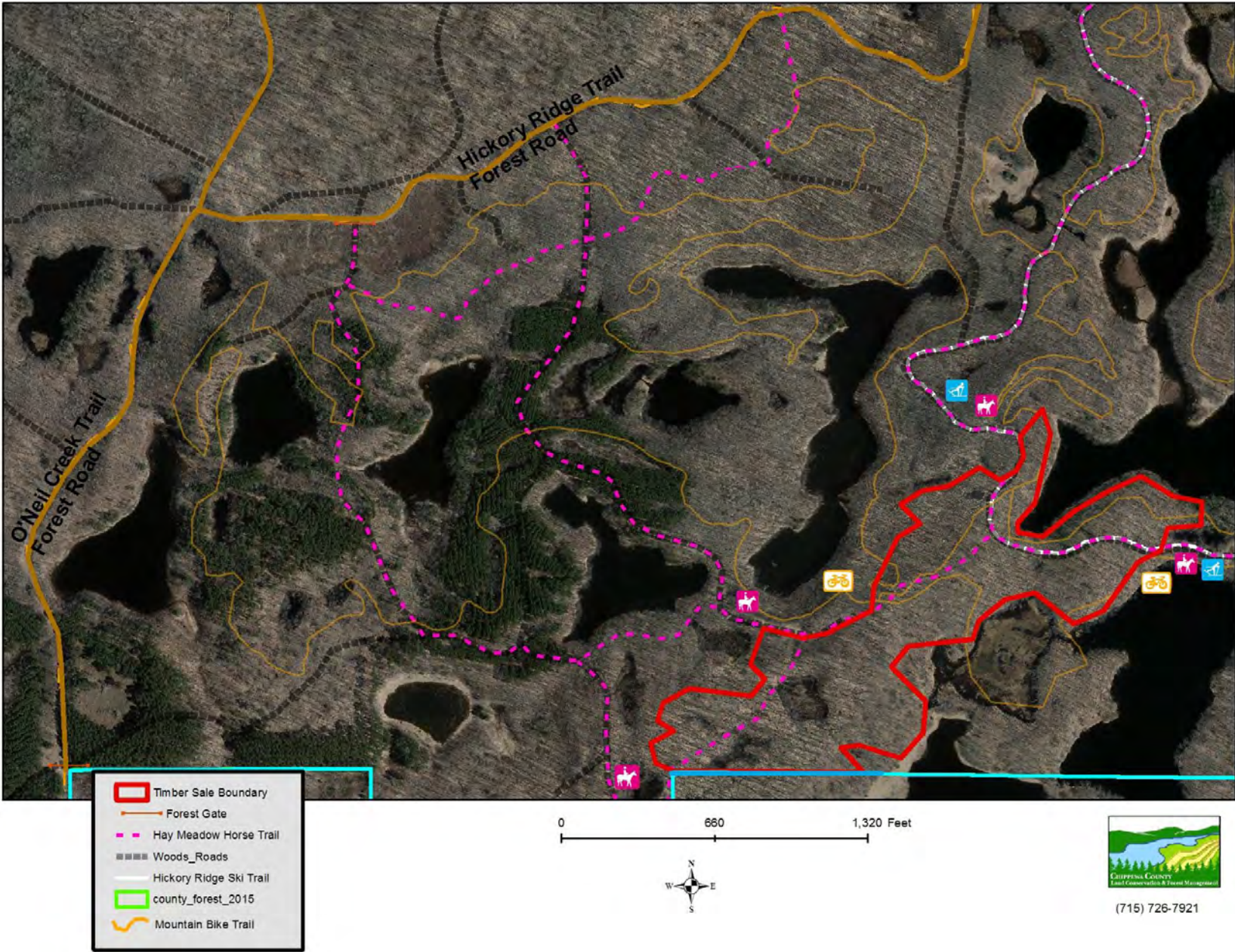
Cut all trees marked with orange paint. Do not cut sale boundary trees (red, blue, or yellow paint). ***Do not cut or damage any conifers.***

Special Conditions:

- **Harvest activity is only permitted from August 10 to December 1. The sale can be actively harvested after December 1 provided there are no operations on or adjacent the Ski Trail.**
- The sale is located adjacent to the Hickory Ridge Trail System (i.e. ski, horse, mountain bike). The trails must be kept free of slash and logging debris and leveled when sale operations are complete.
- The County must approve all landings.
- There are wetlands located within the sale area— a buffer around these wetlands is designated as Riparian Management Zone (RMZ) and are identified by yellow paint. No equipment operation is allowed within the Riparian Management Zones.
- No harvesting activity will be allowed if rutting occurs.
- All hardwood logs, (except aspen) 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.
- All logging debris must remain within the sale boundaries and kept from wetlands, lakes and trails.
- The contract length is approximately 2 years.
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor. (ie) down logs greater than 12 inches in diameter.*
- The site is accessible via woods roads off of the Hickory Ridge Trail County Forest Road or via woods roads off of the O'Neil Creek Trail County Forest Road.

Map is included on the following page.

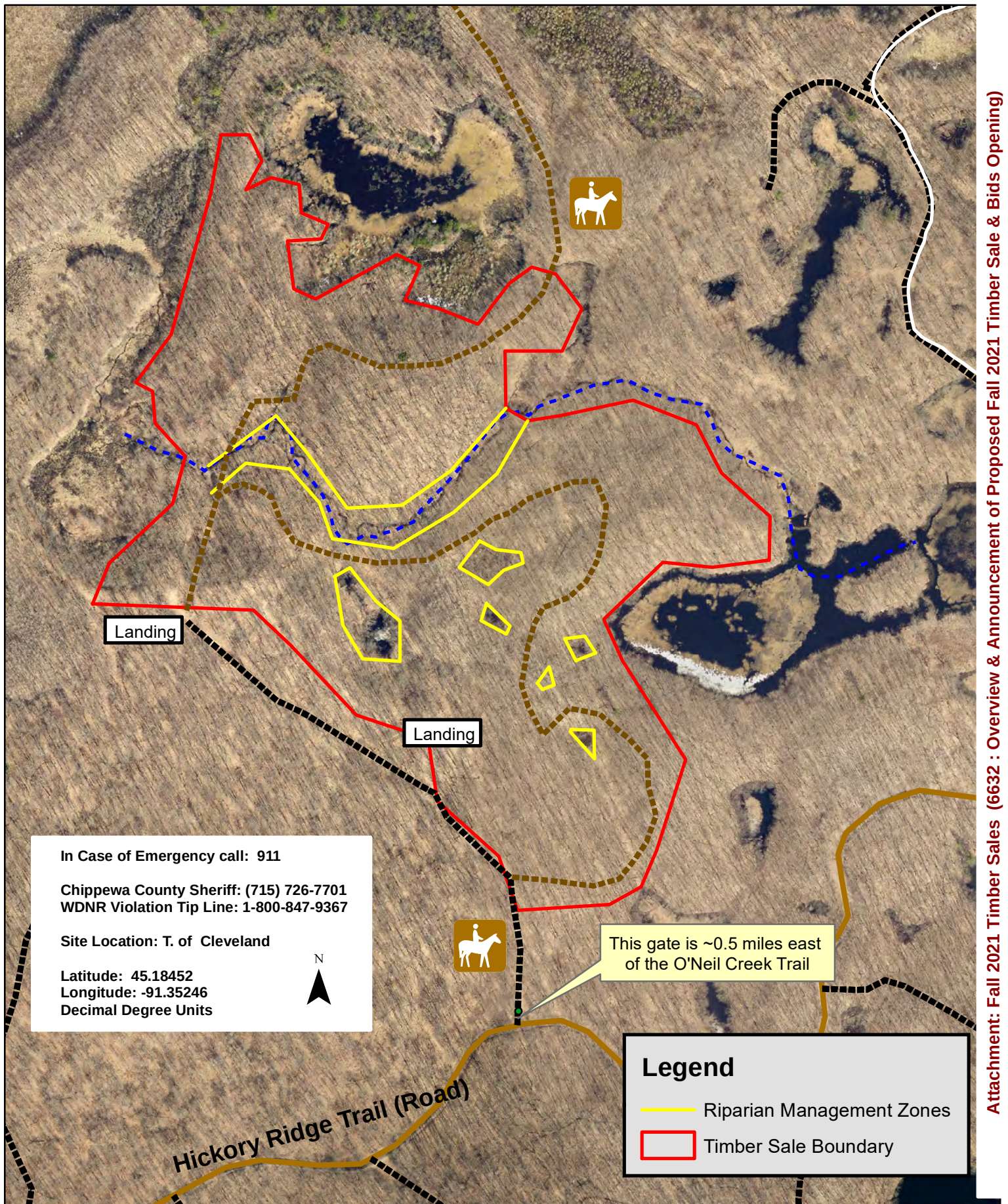
Sand Lake Thinning w/ Canopy Gaps (approximately 27 acres)
Stand is approximately 0.3 miles south of the Hickory Ridge County Forest Road



Tract 25-21 Fishpole Lake Drainage Selection Harvest

5.1.a

Approximately 45 acres



Attachment: Fall 2021 Timber Sales (6632 : Overview & Announcement of Proposed Fall 2021 Timber Sale & Bids Opening)

CHIPPEWA COUNTY TIMBER SALE TRACT 25-21**Fishpole Lake Drainage Selection Harvest**

Located in Sec. 3 and 10 T31N R8W Town of Cleveland

Total Sale Area: (approximately 45 acres)

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 25-21 is \$ 19,500.00.**

Species	Amount	
	Tons	MBF
Mixed Hardwood cordwood*	350	
Oak cordwood	430	
Red Oak logs		49
Mixed Hardwood logs*		6

*Includes all hardwoods other than Oak.

Sale Area Description:

The boundaries of this sale are marked with red paint lines. The topography of this site contains well-drained hills, wetland depressions and a perennial stream running through the timber sale area. Oak and northern hardwoods will be thinned with canopy gaps designed to encourage oak regeneration. The Hay Meadow Horse Trail runs through the stand.

Cutting Requirements:

Selection Harvest Area: Cut all trees marked with orange paint, including marked non-commercial trees. Do not cut sale boundary trees (red paint) or trees that are marked with yellow paint to identify riparian management zones subject to equipment limitations.

Special Conditions:

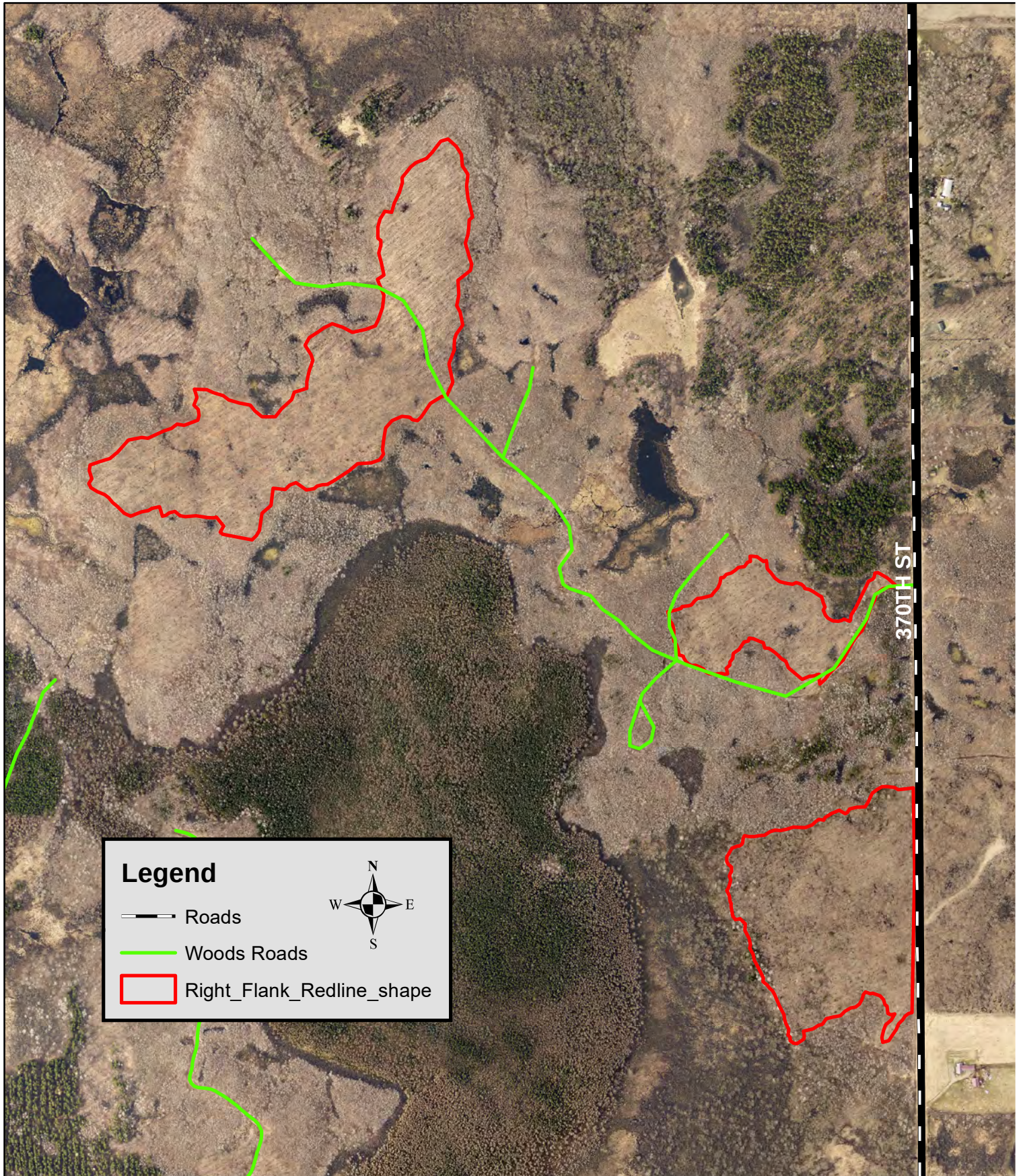
- Oak Wilt and NHI Restrictions apply, no operations are allowed between April 1 and August 10.
- No harvesting activity will be allowed if rutting occurs.
- The sale is located adjacent to the Hay Meadow Horse Trail. Contractors must exercise caution when operating near the trail. The trail must be kept free of slash and logging debris. The horse trail will be marked with ribbon to assist the logging contractor with identification of the trail.
- A temporary crossing of timber mats will be required, the location and installation/removal of mats must be approved by County Staff. The County has timber mats available for use at no charge.
- No equipment operation is allowed within riparian management areas or wetlands. The County has identified these areas with a yellow paint.
- All logging debris must remain within the sale boundaries and kept from wetlands, streams and trails.
- There are two existing landings to facilitate operations.
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor. (ie) down logs greater than 12 inches in diameter.*
- All hardwood logs, (except aspen) 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.
- The contract length is 2 years.

MAP IS LOCATED ON THE BACK

Tract 27-21 Right Flank

5.1.a

Approximalty 64 acres



Attachment: Fall 2021 Timber Sales (6632 : Overview & Announcement of Proposed Fall 2021 Timber Sale & Bids Opening)

Map Not To Scale

CHIPPEWA COUNTY TIMBER SALE TRACT 27-21

Right Flank

Located in Sec. 36 and 25 T32N R5W Town of Ruby

Total Sale Area: (approximately 64 acres)

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 27-21 is \$ 39,850.00.**

Species	Amount	
	Tons	MBF
Mixed Hdwd cordwood*	2800	
Oak cordwood	280	
Oak logs		41
Mixed Hardwood logs*		81

*Includes all hardwoods other than Oak.

Sale Area Description:

The boundaries of this sale are marked with red paint lines. This sale consists of 3 separate northern hardwood stands of approximately 64 acres total. The stands will be thinned using uneven-aged management silviculture, utilizing single tree selection with canopy gaps. This sale is accessed from 370th ave on the eastern border of Chippewa County. Existing logging roads are in place.

Cutting Requirements:

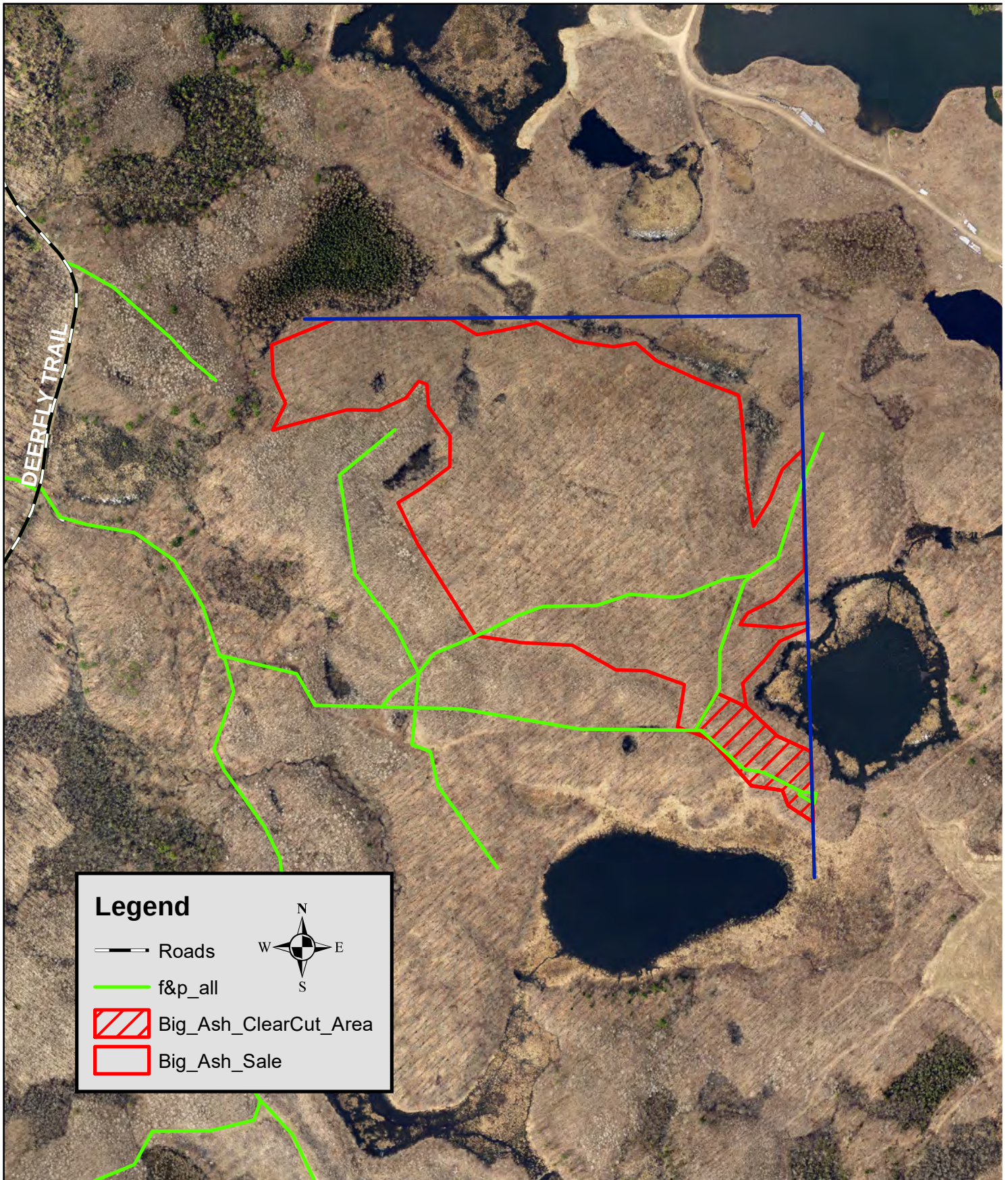
Selection Harvest Area: (64 Acres) Cut all trees marked with orange paint, including non-commercial trees marked with orange paint. Do not cut sale boundary trees (red paint)

Special Conditions:

- Restricted to frozen ground conditions.
- No harvesting activity will be allowed if rutting occurs.
- All logging debris must remain within the sale boundaries and kept from wetlands and trails.
- All landing locations must be approved. All merchantable timber that is removed must be utilized and accounted for through mill slips or log scales.
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor. (ie) down logs greater than 12 inches in diameter.*
- All hardwood logs, 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.
- All cordwood shall be utilized to a 4" top diameter.
- The contract length is 2 years.

Big Ash Sale Tract 28-21

41 acre Single Tree Selection 2 acre Clearcut



Attachment: Fall 2021 Timber Sales (6632 : Overview & Announcement of Proposed Fall 2021 Timber Sale & Bids Opening)

Map Not To Scale

CHIPPEWA COUNTY TIMBER SALE TRACT 28-21

Big Ash Sale

Located in Sec. 30 T32N R7W Town of Birch Creek

Total Sale Area: (approximately 43 acres)

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 28-21 is \$ 35,390.00.**

Species	Amount	
	Tons	MBF
Mixed Hdwd cordwood*	628	
Oak cordwood	570	
Oak logs		78
Mixed Hardwood logs*		40

*Includes all hardwoods other than Oak, 42% Ash.

Sale Area Description:

The boundaries of this sale are marked with red paint lines. These Northern Hardwood stands of approximately 43 acres will be thinned using uneven-aged management silviculture, utilizing single tree selection with canopy gaps. This sale is accessed from the Deer Fly Trail. Existing woods roads will need improvements for trucks to access the sale area.

Cutting Requirements:

Selection Harvest Area: (41 Acres) Cut all trees marked with orange paint, including non-commercial trees marked with orange paint. Do not cut sale boundary trees (red paint) or property boundary trees marked with blue paint.

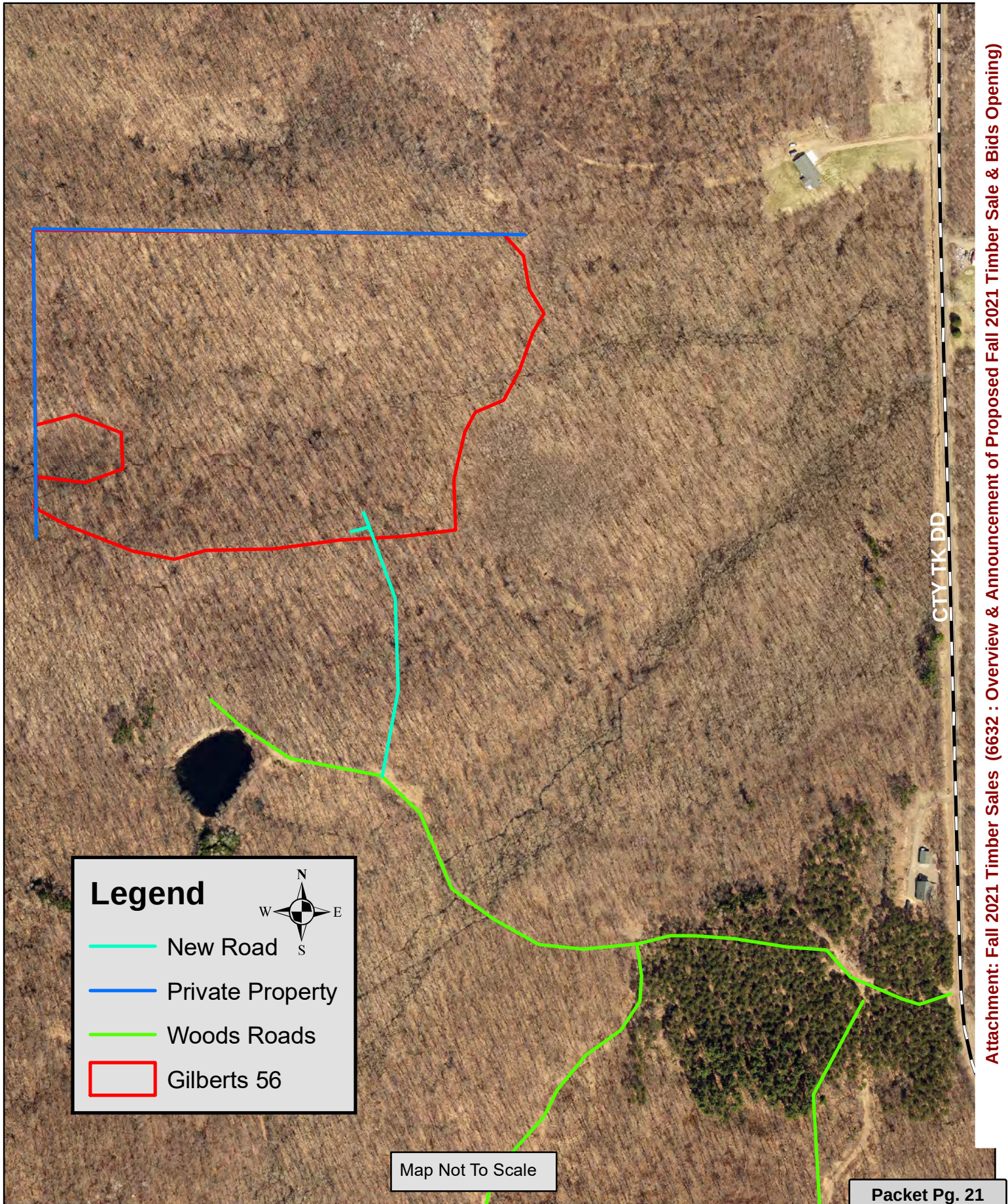
Clear Cut Area: (2 Acres) Cut all trees 1" and larger. Do Not Cut or Damage oak saplings up to 4" in diameter. Do not cut sale boundary trees (red paint) or property boundary trees marked with blue paint.

Special Conditions:

- No harvesting activity will be allowed if rutting occurs.
- Oak Wilt and Restrictions apply: No harvesting or other operation is allowed within the site between April 15 and July 15.
- All logging debris must remain within the sale boundaries and kept from wetlands and trails.
- All landing locations must be approved. All merchantable timber that is removed along landings or skid trails must be utilized and accounted for through mill slips or log scales.
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor. (ie) down logs greater than 12 inches in diameter.*
- All hardwood logs, 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.
- The contract length is 2 years.

Gilberts 56 Tract 29-21

Approximately 30 Acres. Located west of New Auburn on CTH DD



CHIPPEWA COUNTY TIMBER SALE TRACT 29-21

Gilberts 56 Oak Clearcut

Total Sale Area: (approximately 30 acres)

Located in T31N R10W Section 21, Town of Auburn

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 29-21 is \$ 40,950.00.**

Species	Amount	
	tons	MBF
Oak cordwood	940	
Red Maple Cordwood	355	
Red Maple logs		26
Red Oak logs		60
White Oak logs		38

Oak cordwood includes red and white oak.

Sale Area Description:

The boundaries of this sale are marked with red and blue paint lines. This oak stand totaling 30 acres will be clear-cut to promote an even aged stand of oak. Existing oak regeneration and some stump sprouting will result in a new stand of oak on this site. A very limited amount of Oak leave trees are marked with green paint along the southern boundary of this sale.

Cutting Requirements:

Clear-Cut: Cut all trees 1" or greater. Do not cut reserve trees marked with green paint, sale boundary trees (red or blue paint). ***Do not cut or damage any conifers.***

Special Conditions:

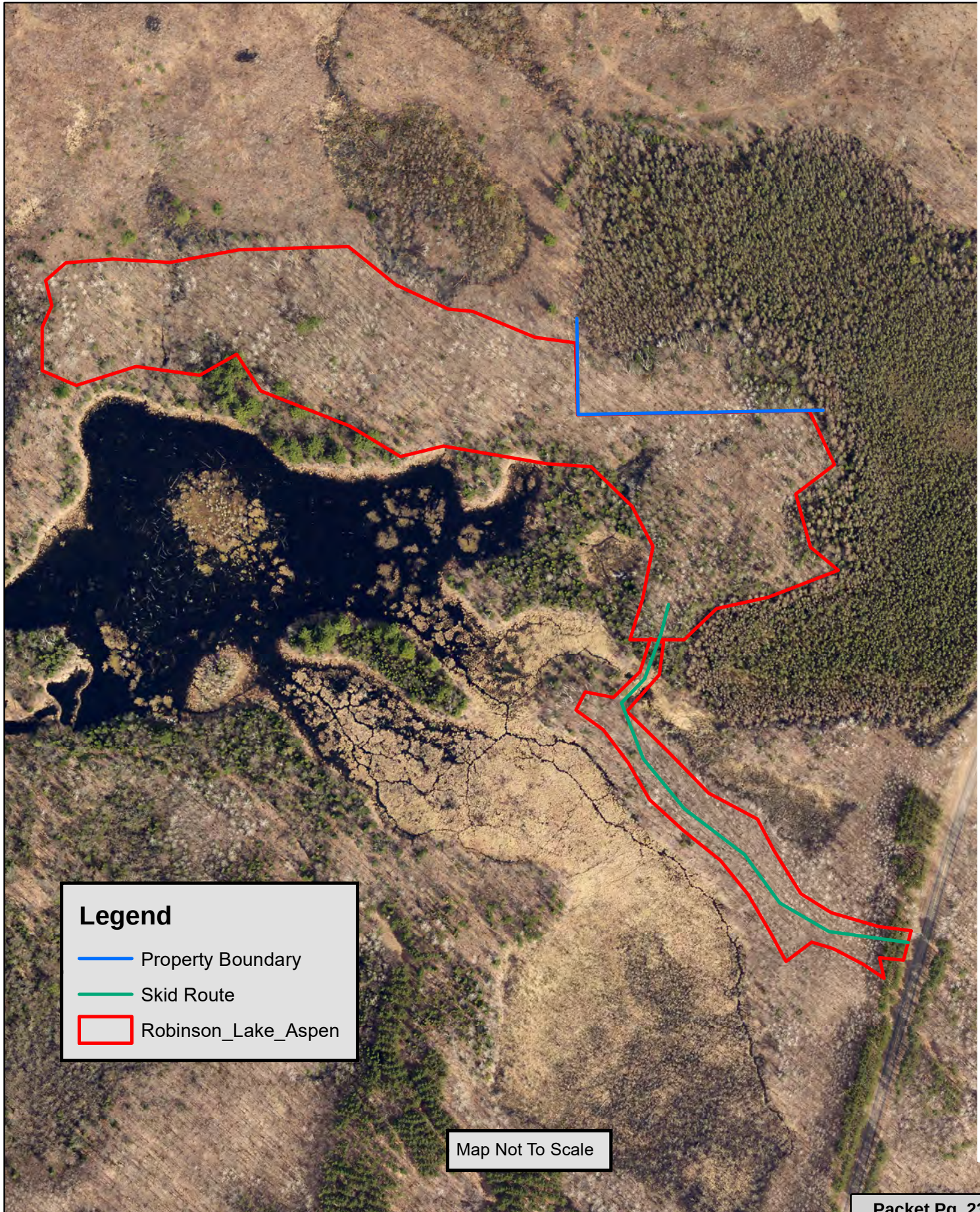
- No harvesting activity will be allowed if rutting occurs.
- Oak Wilt Restrictions apply: No harvesting is allowed between April 15 and July 15.
- All logging debris must remain within the sale boundaries and kept from wetlands, lakes and trails.
- All landing locations must be approved. All merchantable timber that is removed along landings or skid trails must be utilized and accounted for through mill slips or log scales.
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor. (ie) down logs greater than 12 inches in diameter.*
- All hardwood logs, (except aspen) 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.
- The contract length is 2 years.

MAP IS LOCATED ON THE BACK

Robinson Lake Aspen Tract 30-21

5.1.a

Approximatly 13 acres



Attachment: Fall 2021 Timber Sales (6632 : Overview & Announcement of Proposed Fall 2021 Timber Sale & Bids Opening)

CHIPPEWA COUNTY TIMBER SALE TRACT 30-21**Robinson Lake Aspen**

(approximately 13 acres)

Located in T32N R7W Section 16, Town of Birch Creek

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 30-21 is \$ 8,850.00.**

Species	Amount	
	Tons	MBF
Aspen cordwood	380	
Mixed Hdwd cordwood	100	
Mixed Hardwood logs		5

Sale Area Description:

This sale will be a clear-cut to coppice the aspen in the stand. The boundaries of this sale are marked with red paint line and red to delineate wetland boundaries with blue paint to represent the property line. The sale is accessed from Hwy E. There is currently no existing road. A road/ landing will need to be constructed at the location. The landing must be located outside of the aesthetic zone or hidden to the road by the red pine plantation. The sale is made up of a hogsback which ends at a wetland and a larger area across the wetland. Frozen ground conditions will be required to cross this wetland to reach the rest of the sale.

Cutting Requirements:

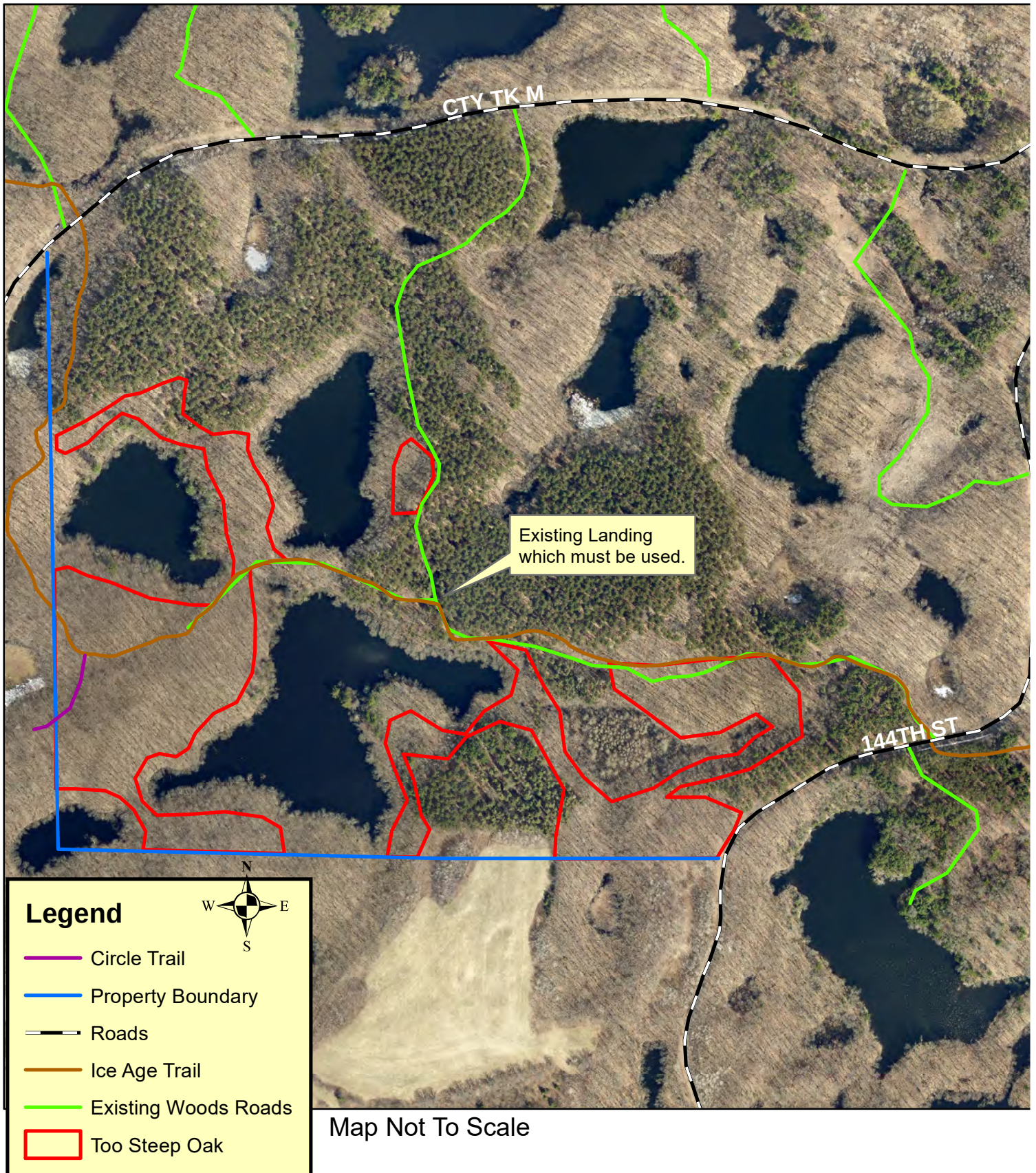
Aspen Harvest Areas: (13 acres) Cut all trees one inch in diameter and larger. **Do not** cut any boundary trees or conifers.

Special Conditions:

- The contract length is 2 years.
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor.* (ie) down logs greater than 12 inches in diameter.
- In the event that timber mats will be required County timber mats are available for use, at no charge, on a first come first served basis.
- All logging debris must remain within the sale boundaries and kept from wetlands.
- All landing locations must be approved. All merchantable timber that is removed along landings or skid trails must be utilized and accounted for through mill slips or log scales.
- All hardwood logs, (except aspen) 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.

Too Steep Oak

Seed Tree Harvest Approximately 26 Acres



Attachment: Fall 2021 Timber Sales (6632 : Overview & Announcement of Proposed Fall 2021 Timber Sale & Bids Opening)

CHIPPEWA COUNTY TIMBER SALE TRACT 31-21**Too Steep Oak Harvest**

Total Sale Area: (approximately 26 acres)

Located in T32N R8W Sections 30, 31, 32, Town of Sampson

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 31-21 is \$ 69,850.00.**

Species	Amount	
	tons	MBF
Oak cordwood	1450	
MX HW cordwood	70	
Red Oak Logs		204
MX HW logs		7

Sale Area Description:

The boundaries of this sale are marked with red and blue paint lines. 26 acres will be cut as an oak seed tree harvest system implemented to regenerate an oak stand. Scarification by logging equipment will be encouraged. This sale can be accessed from Hwy E to the north or 144th St/Ice Age Drive to the east. The existing woods roads make a full loop from one road to the other. The Ice Age Trail runs east and west through the sale and will remain open during harvest operations part of the circle trail also connects on the far west end of the sale.

Cutting Requirements:

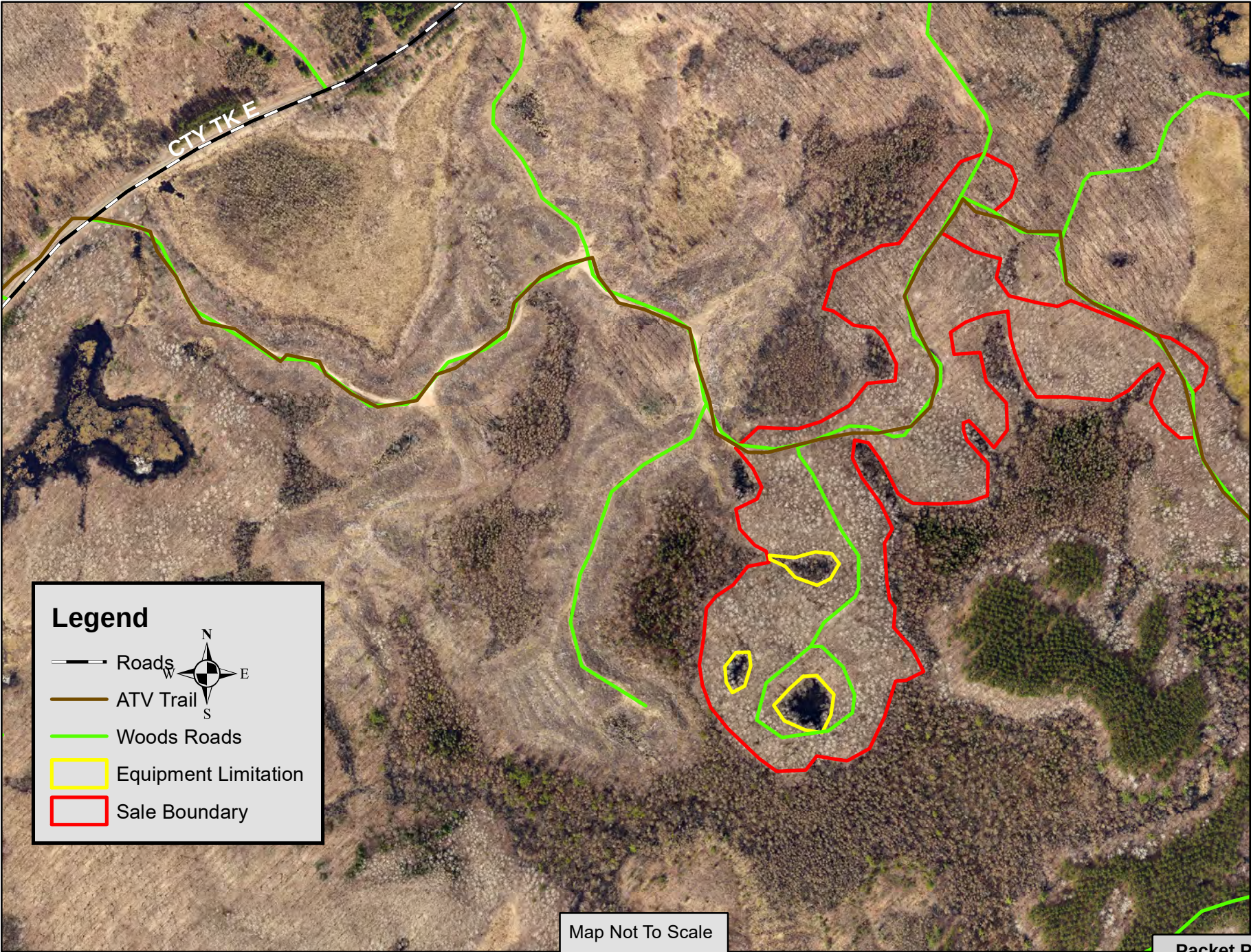
Seed Tree area: (26 acres) Cut all trees 1" or greater. Do not cut reserve trees marked in with green paint or sale boundary trees (red or blue paint). The existing landing shown on map must be used. No new landings west of this point will be allowed.

Special Conditions:

- No harvesting activity will be allowed if rutting occurs.
- Oak Wilt and NHI Restrictions apply: No harvesting is allowed between April 1 and July 31.
- All recreational trails will remain open to the public during sale operation, must remain free of slash and passable to trail users during the duration of the harvest operation.
- In the event that timber mats will be required County timber mats are available for use, at no charge, on a first come first served basis.
- Garlic Mustard is known to be in this sale area. Equipment must be washed prior to leaving this site.
- All logging debris must remain within the sale boundaries and kept from wetlands, lakes and trails.
- All landing locations must be approved. All merchantable timber that is removed along landings or skid trails must be utilized and accounted for through mill slips or log scales.
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor.* (ie) down logs greater than 12 inches in diameter.
- All cordwood shall be utilized to a 4" top diameter.
- All hardwood logs, (except aspen) 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.
- The contract length is approximately two years.

Tract 32-21 Compaction Aspen

Approximatly 20 acres



CHIPPEWA COUNTY TIMBER SALE TRACT 32-21**Compaction Aspen**

(approximately 20 acres)

Located in T32N R7W Sections 21 and 22, Town of Birch Creek

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 32-21 is \$ 24,850.00.**

Species	Amount	
	Tons	MBF
Aspen cordwood	1200	
Mixed Hdwd cordwood	170	

Sale Area Description:

This sale will be a clear-cut to coppice the aspen in the stand. The boundaries of this sale are marked with red paint line and yellow to delineate wetland boundaries. Some oak trees are marked with purple paint to designate leave trees. The sale is accessed on the ATV trail from Hwy E.

Cutting Requirements:

Aspen Harvest Areas: (20 acres) Cut all trees one inch in diameter and larger. **Do not** cut any boundary trees, trees marked with purple paint or conifers.

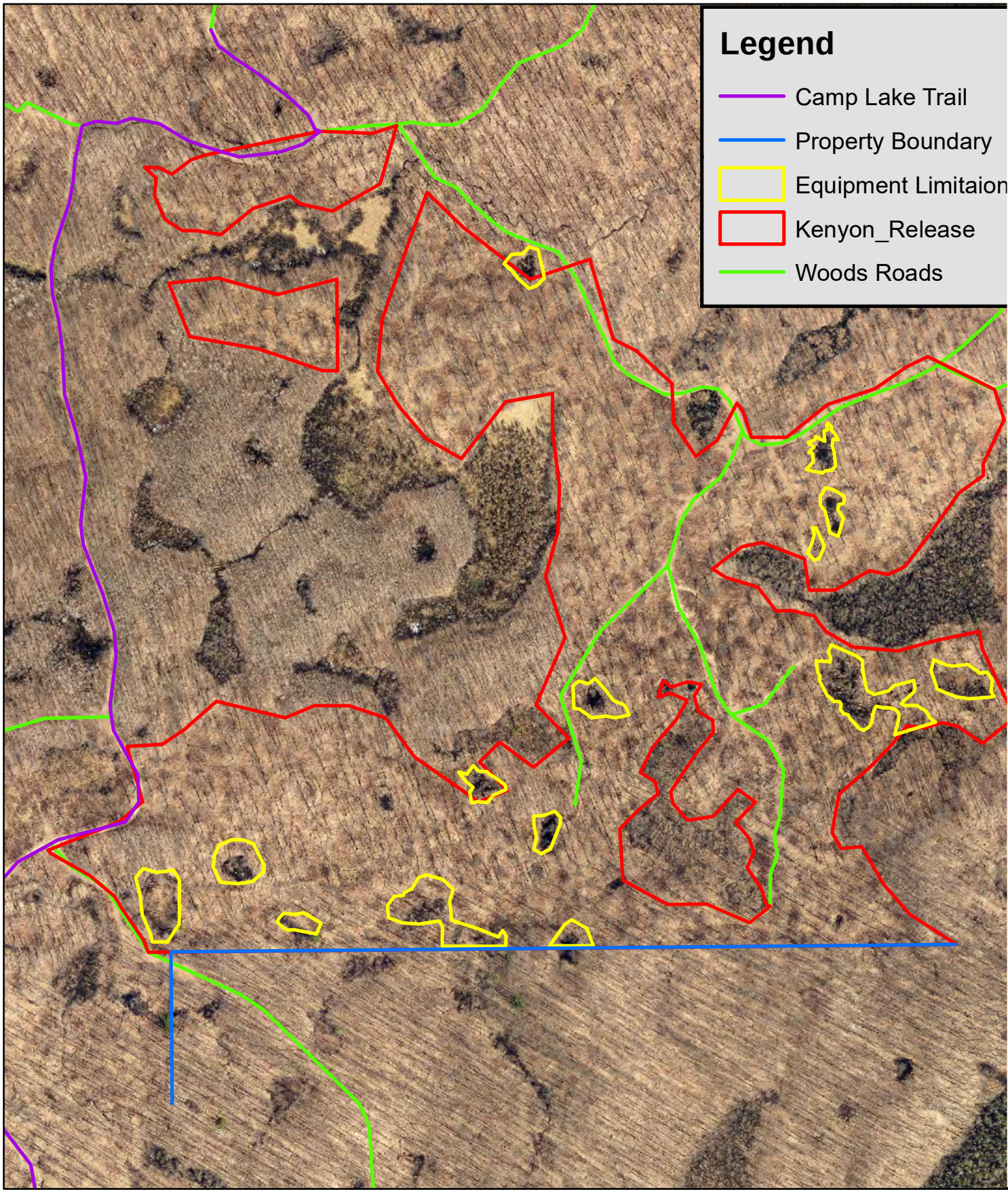
Special Conditions:

- The contract length is 2 years.
- No equipment allowed beyond yellow painted wetland equipment limitations.
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor. (ie) down logs greater than 12 inches in diameter.*
- All logging debris must remain within the sale boundaries and kept from wetlands.
- All landing locations must be approved. All merchantable timber that is removed along landings or skid trails must be utilized and accounted for through mill slips or log scales.
- All hardwood logs, (except aspen) 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.

Tract 33-21 Kenyon Release

Approximatly 61 acres overstory removal

5.1.a



Attachment: Fall 2021 Timber Sales (6632 : Overview & Announcement of Proposed Fall 2021 Timber Sale & Bids Opening)

Map Not To Scalet

CHIPPEWA COUNTY TIMBER SALE TRACT 33-21**Kenyon Release Overstory Removal**

Located in T32N R8W Section 2, Town of Sampson

Total Sale Area: (approximately 61 acres)

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 33-21 is \$ 96,250.00.**

Species	Amount	
	tons	MBF
Oak cordwood	2200	
MX HW cordwood	160	
Aspen Cordwood	60	
Red Oak Logs		268
Other Oak Logs		15
MX HW logs		4

Other Oak contains White and Black Oak

Sale Area Description:

The boundaries of this sale are marked with red and blue paint lines. This sale is an oak shelterwood overstory removal. This sale will release existing oak regeneration. The southern border of this sale is marked with blue paint to represent the private property line boundary. The sale is access from the Camp Lake Trail.

Cutting Requirements:

Overstory removal area: (61 acres) Cut all merchantable trees $\leq 5"$. Do not cut sale boundary trees (red or blue paint)

Do not cut or damage any conifers or advanced oak regeneration.

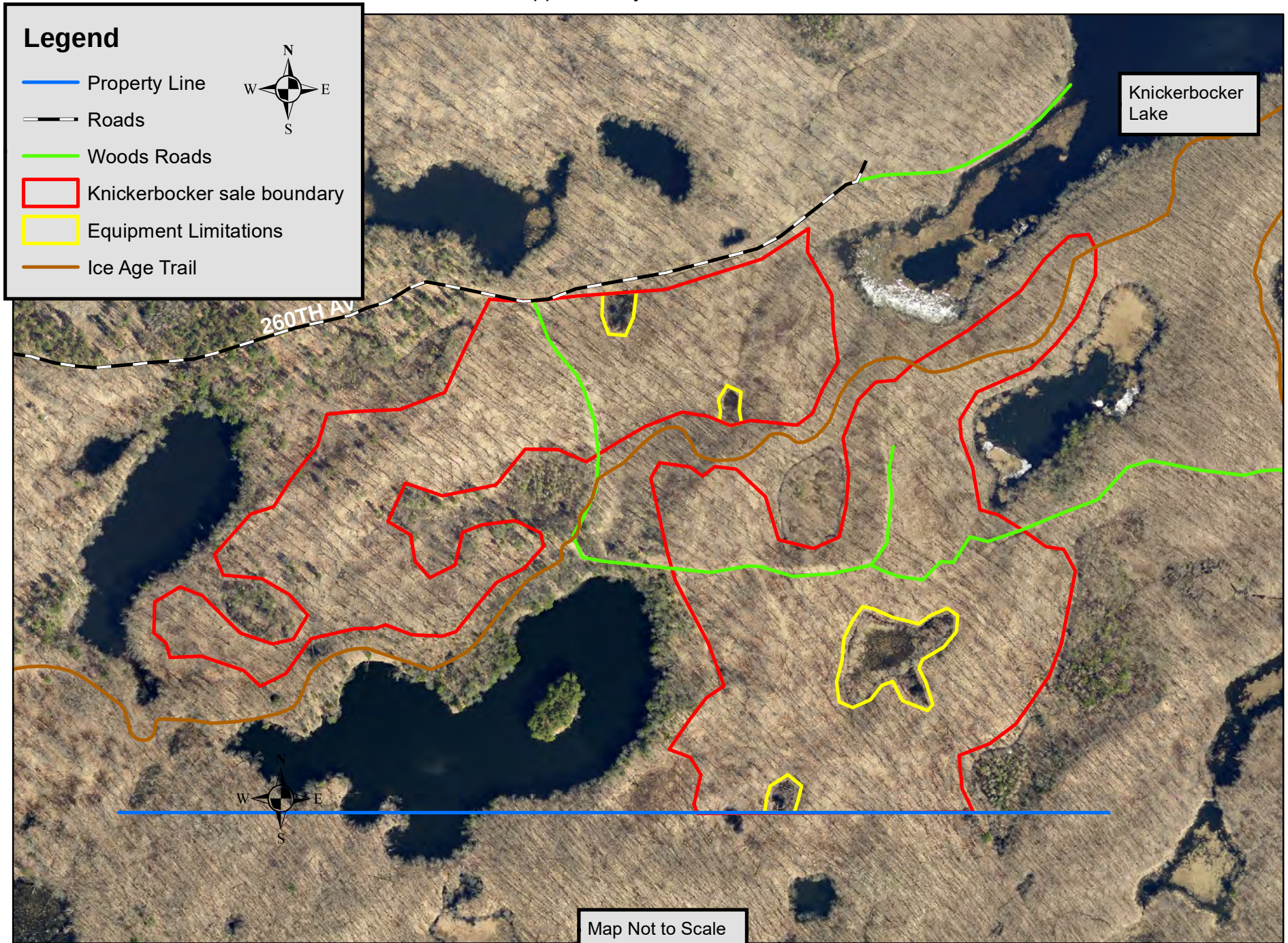
Special Conditions:

- No harvesting activity will be allowed if rutting occurs.
- Oak Wilt and NHI Restrictions apply: No harvesting is allowed between April 1st and August 10th.
- In the event that timber mats will be required County timber mats are available for use, at no charge, on a first come first served basis.
- No equipment operation is allowed within wetland areas delineated by yellow paint.
- All logging debris must remain within the sale boundaries and kept from wetlands, lakes and trails.
- Any new road or landing location must be approved. All merchantable timber that is removed must be utilized and accounted for through mill slips or log scales.
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor, (ie) down logs greater than 12 inches in diameter.*
- All cordwood shall be utilized to a 4" top diameter.
- All hardwood logs, (except aspen) 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.
- The contract length is approximately two years.

Map is Located on Back

Knickerbocker Overstory Removal

Approximatly 43 acres



CHIPPEWA COUNTY TIMBER SALE TRACT 34-21**Knickerbocker Overstory Removal**

Total Sale Area: (approximately 43 acres)

Located in T32N R8W Sections 29 and 32, Town of Sampson

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 34-21 is \$ 79,000.00.**

Species	Amount	
	tons	MBF
Oak cordwood *	780	
Red Oak Logs		242
White Oak logs		10

* Oak Cordwood contains approximately 2% Mixed Hardwood

Sale Area Description:

The boundaries of this sale are marked with red and blue paint lines. This sale is an oak shelterwood overstory removal. This sale will release existing oak regeneration. The southern border of this sale is marked with blue paint to represent the private property line boundary. The sale is accessed from 260th Ave.

Cutting Requirements:

Overstory removal area: (43 acres) Cut all merchantable trees ≤ 5" DBH. Do not cut sale boundary trees (red or blue paint)

Do not cut or damage any conifers or advanced oak regeneration.

Special Conditions:

- No harvesting activity will be allowed if rutting occurs.
- Oak Wilt and NHI Restrictions apply: No harvesting is allowed between April 1st and August 10th.
- All recreational trails will remain open to the public during sale operation, must remain free of slash and passable to trail users during the duration of the harvest operation.
- In the event that timber mats will be required County timber mats are available for use, at no charge, on a first come first served basis.
- No equipment operation is allowed within wetland areas delineated by yellow paint.
- All logging debris must remain within the sale boundaries and kept from wetlands, lakes and trails.
- All landing locations must be approved. All merchantable timber that is removed must be utilized and accounted for through mill slips or log scales.
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor. (ie) down logs greater than 12 inches in diameter.*
- All cordwood shall be utilized to a 4" top diameter.
- All hardwood logs, (except aspen) 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.
- The contract length is approximately two years.

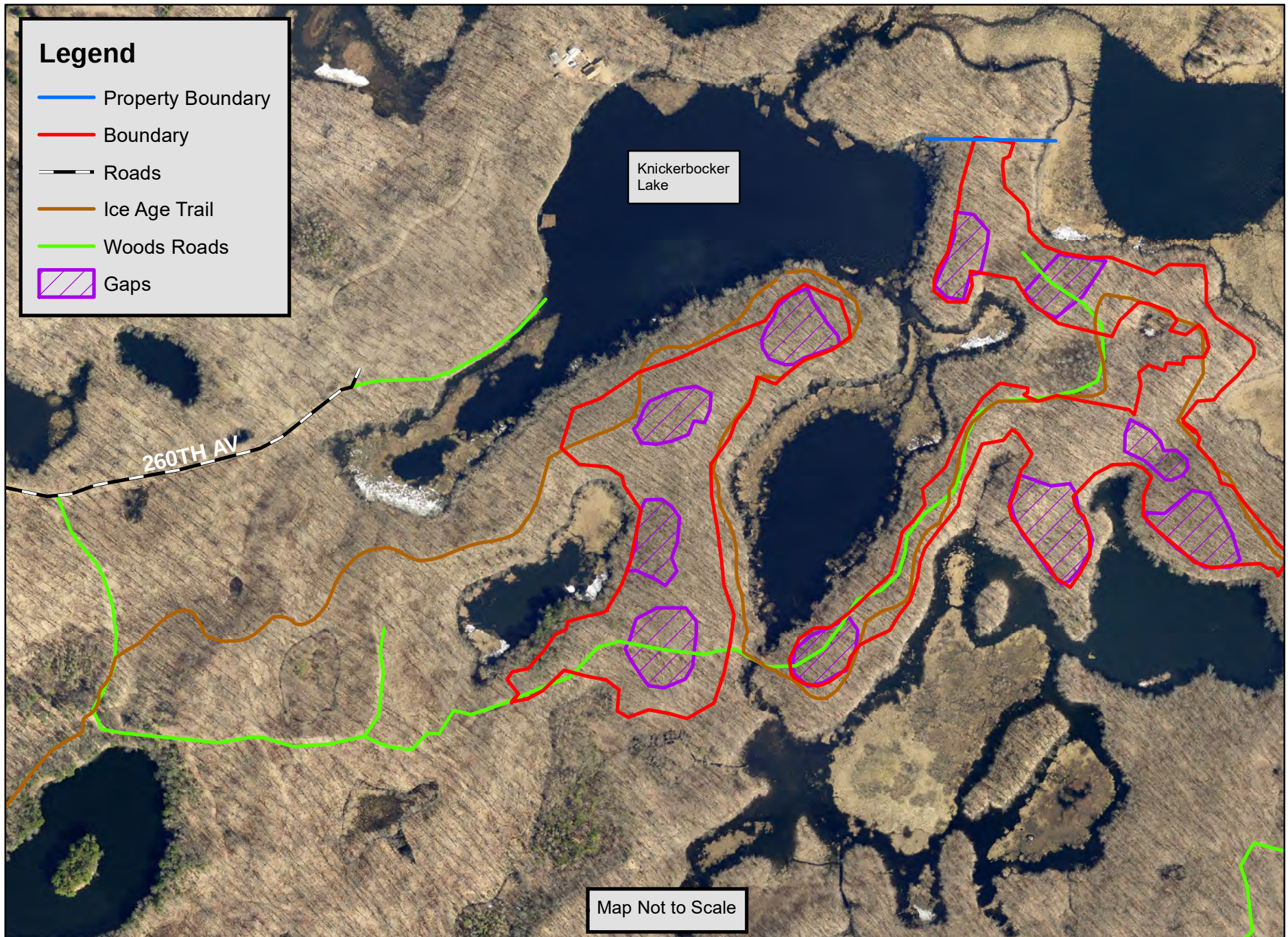
Map is Located on Back

Tract 35-21 Long Hike Sale

Approximatly 27 Acres



5.1.a



Long Hike

Located in Sec. 28,29,33 T32N - R8W Town of Sampson

Total Sale Area: (approximately 27 acres)

The table below contains an estimate of the amount of each species/product. There is no minimum bid for each species; however **the total minimum bid that is acceptable for Tract 35-21 is \$ 29,900.00.**

Species	Amount	
	tons	MBF
*Oak Cordwood	740	
Mixed Hardwood Cordwood	110	
*Red Oak logs		95

*Red oak logs and oak cordwood contain approximately 10% white oak. Red oak logs also contain under 5% MX hardwood

Sale Area Description:

The boundaries of this sale are marked by a red paint line. The boundary between County and private land is marked by a blue paint line. The patch clear cuts are marked by a purple paint line. The objective of this management is to promote oak using a combination of individual tree selection and patch clear cuts. The terrain consists of well-drained hills surrounded by wetlands and lakes. There is a good system of existing woods roads and historic skid routes.

Cutting Requirements:

Cut all trees marked with orange paint throughout the timber sale area. Cut all trees within the patch clear cut areas, except conifers, snags, and oak saplings. Do not cut sale boundary trees (red, yellow, or purple paint). **Do not cut or damage any conifers.**

Special Conditions:

- **Oak wilt and NHI restrictions apply. Harvest activity is prohibited between April 1 and August 10.**
- *Leave all snags (dead trees) unless they present a safety hazard. Use caution to limit the disturbance of Course Woody Debris (CWD) on the forest floor. (ie) down logs greater than 12 inches in diameter.*
- All hardwood logs, (except aspen) 10" or larger on the small end will be charged at the appropriate saw log stumpage rate.
- All recreational trails will remain open to the public during sale operation, must remain free of slash and passable to trail users during the duration of the harvest operation.
- All landing locations must be approved. All merchantable timber that is removed must be utilized and accounted for through mill slips or log scales.
- No harvesting activity will be allowed if rutting occurs.
- All logging debris must remain within the sale boundaries and kept from wetlands, lakes and trails.
- All cordwood shall be utilized to a 4" top diameter.
- All haul roads must be graded to the satisfaction of the County when operations are complete.
- The contract length is approximately 2 years



STATEMENT OF EXPLANATION
OVERVIEW OF INITIAL AGREEMENT ON HICKORY RIDGE MOUNTAIN
BIKE CONNECTOR & UPDATE ON CONTINUING NEGOTIATIONS OF FULL
TRAIL LAYOUT

The Chippewa County Forest hosts multiple recreation trails, many with multiple uses and several trails designated for a single use. Often these trail are in separate areas and sometimes uses are separated by time of use (cross-country skiing vs. horseback riding).

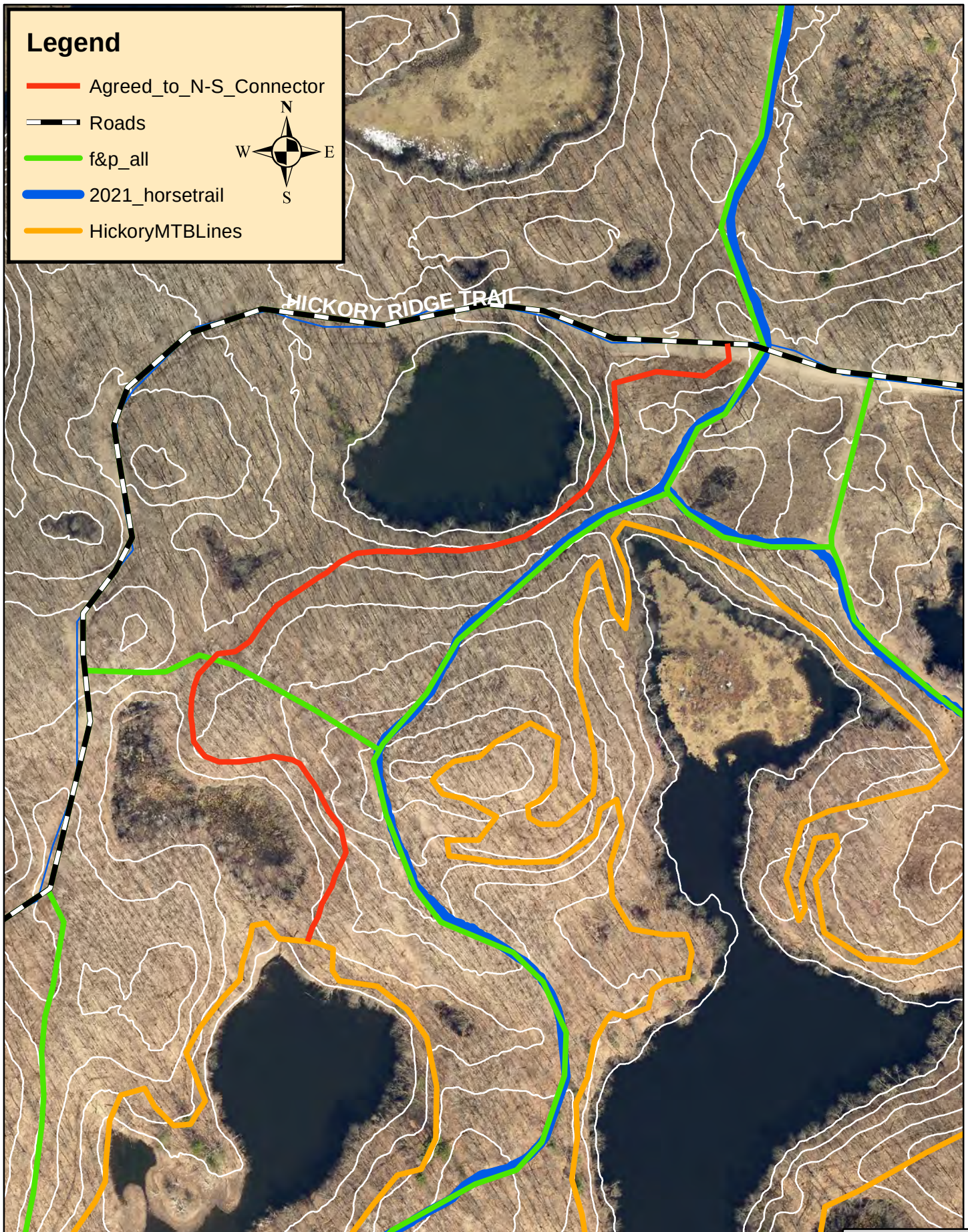
The mountain bike trails and horseback riding trails are both used at the same time of year and are very close in proximity in certain locations. This can cause disturbance to the user experience if trail layout is not designed to minimize conflict and overlapping uses.

The Committee has been made aware of the request for and has incorporated the idea of an expanded mountain bike trail network in the 2021-2035 County Forest Comprehensive Land Use Plan.

The County Forest Administrator has been working with representatives of the Chippewa Off Road Bike Association and the Chippewa Valley Trailriders Horse Club to minimize user conflicts through improved trail layout.

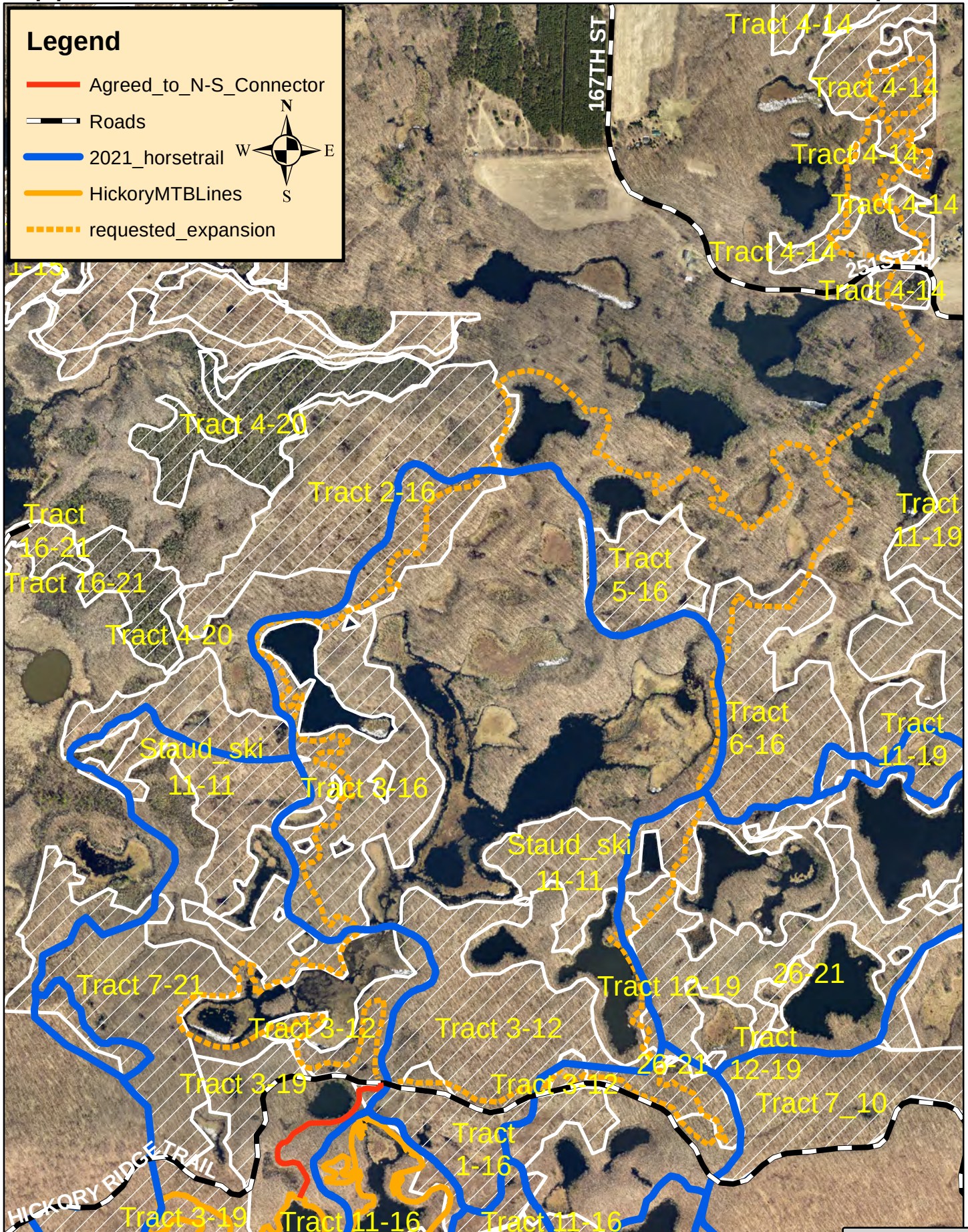
This agenda item will be used to provide an overview of planning efforts to date and to introduce where design improvements will likely need to be made, before the final trail layout can be brought to the Committee for approval.

Agreed to Connector to Hickory Ridge



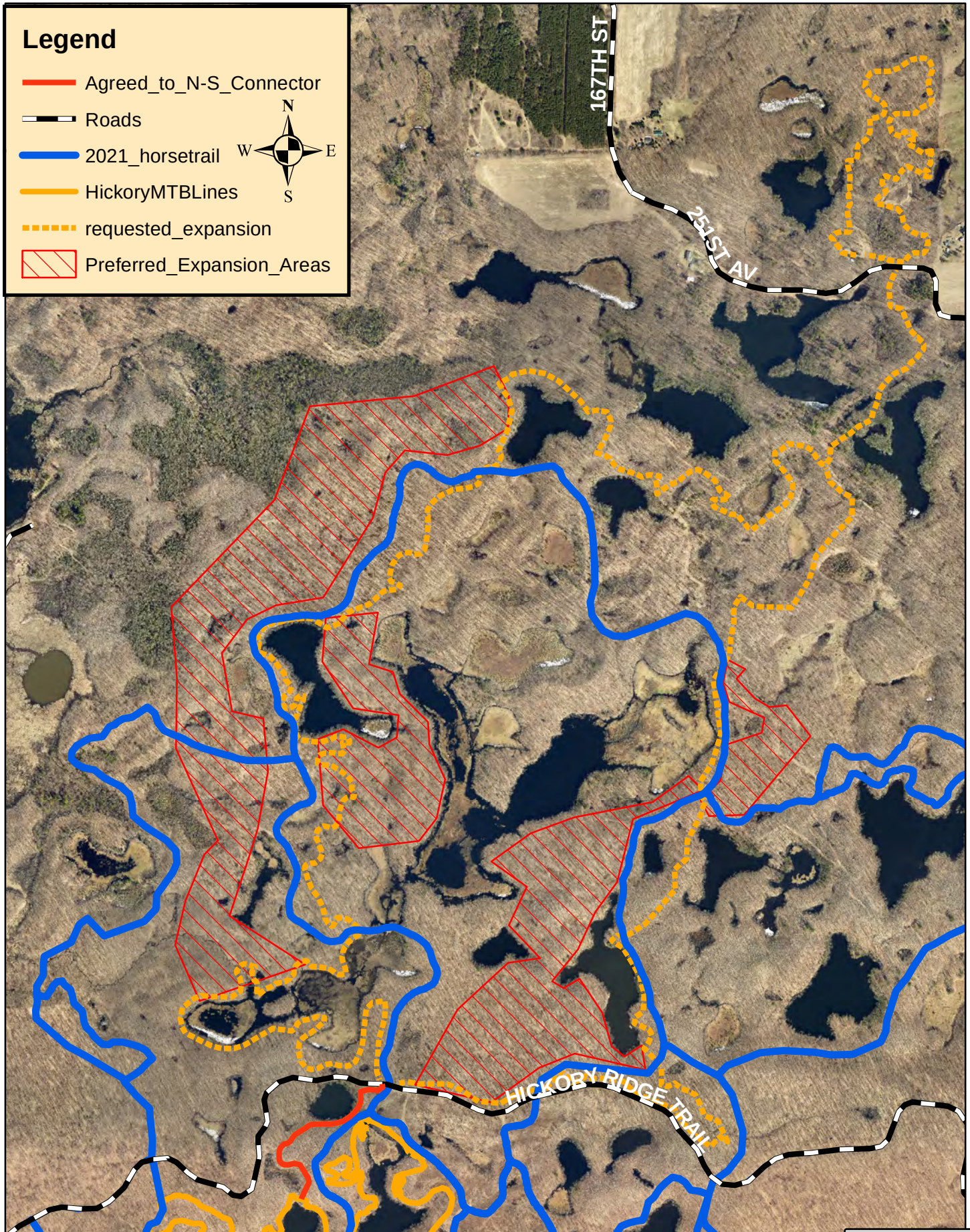
Requested Mountain Bike Expansion North of Hickory Ridge

Approximately 21.7 miles of trail via current route request



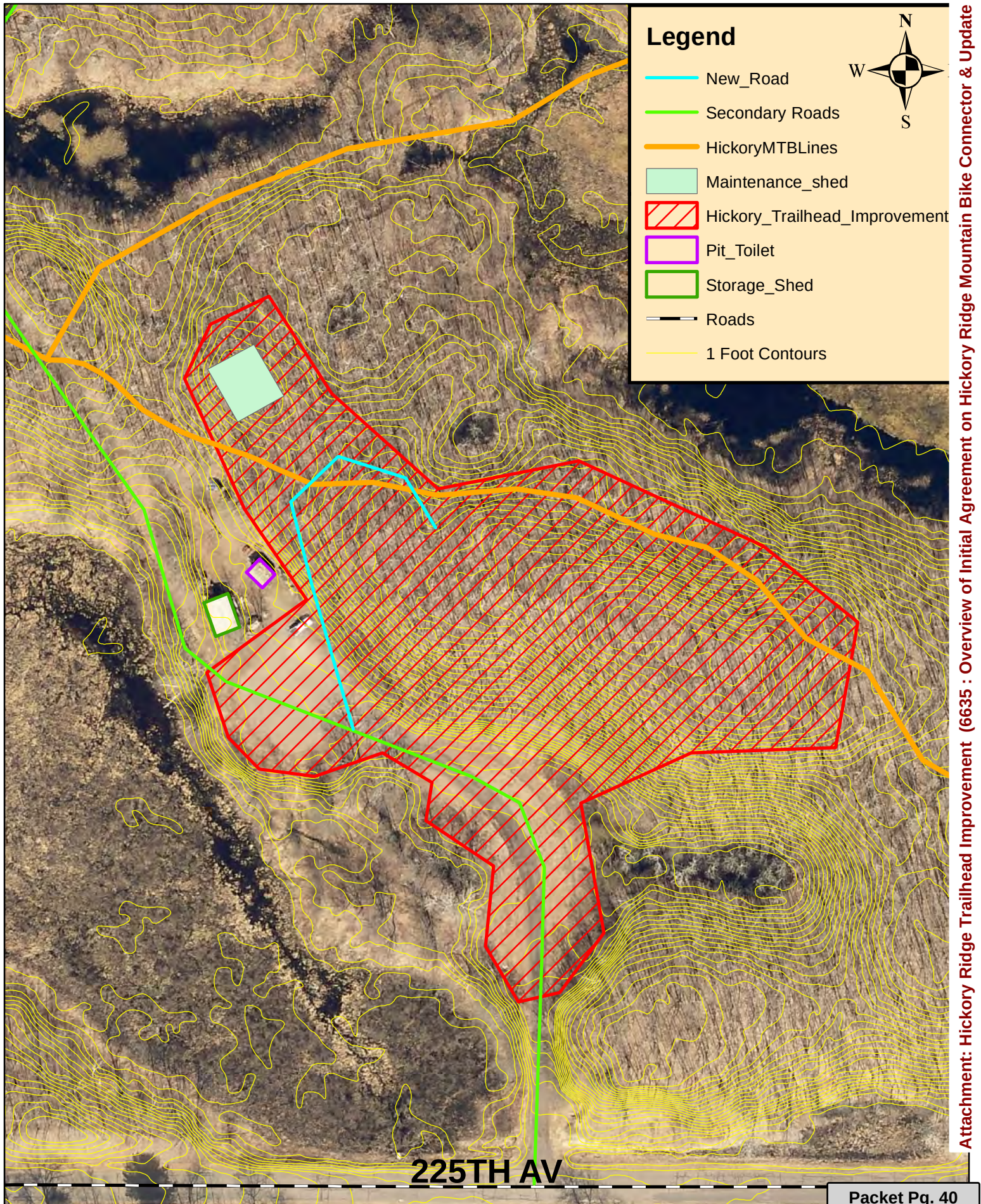
Requested Mountain Bike Expansion Preferred Expansion Areas

Goal is to reduce trail crossings and visual interactions

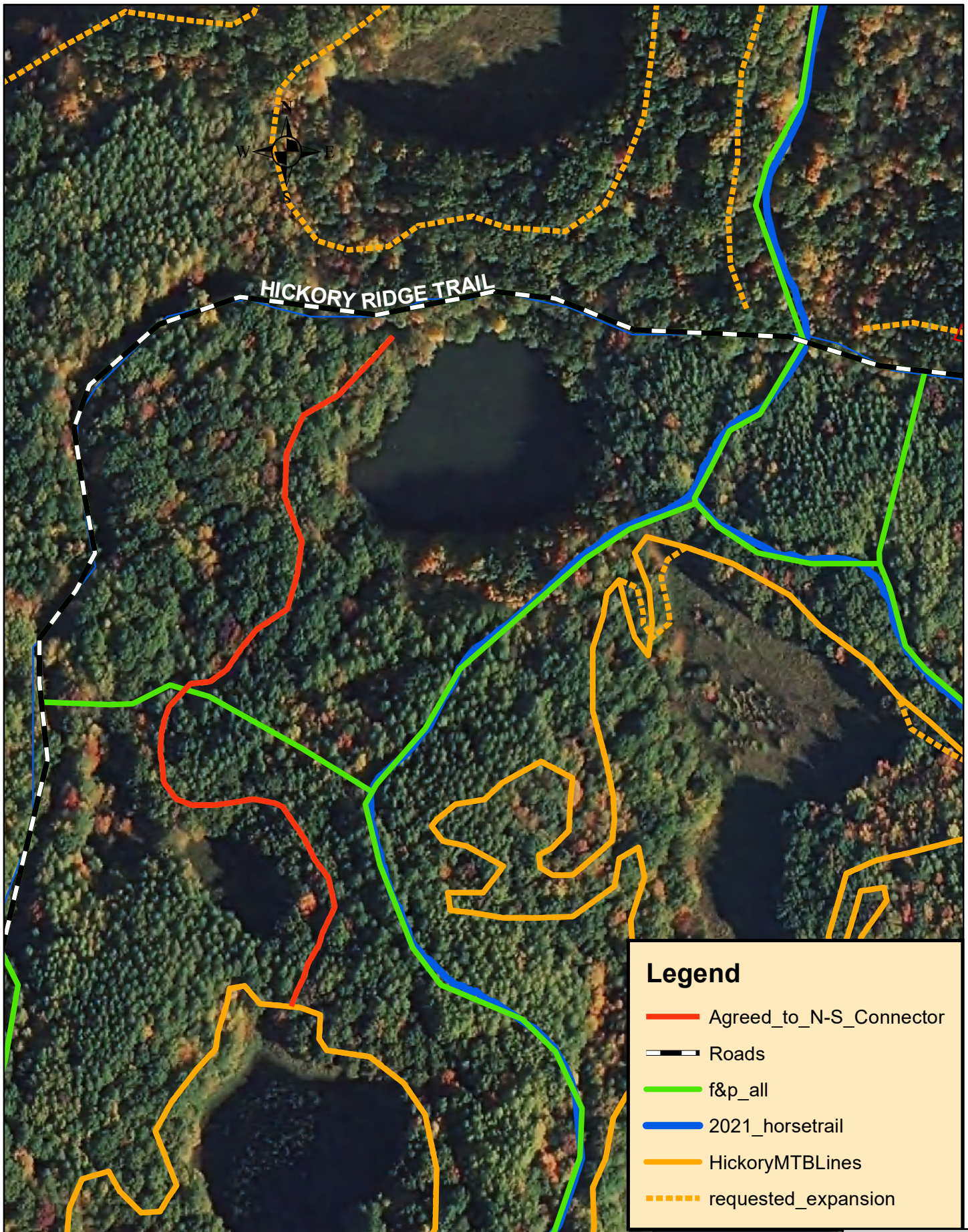




Hickory Ridge Trailhead Improvement



Revised layout following 10/20/21 site visit[†]





STATEMENT OF EXPLANATION OVERVIEW OF LAKE WISSOTA STEWARDSHIP PROJECT; COMPONENTS & TIME/DELIVERABLE TRACKING

5.3

"The Lake Wissota Stewardship Project is a business-based watershed model, co-sponsored by the Lake Wissota Improvement & Protection Association (LWIPA) and the Chippewa County Land Conservation & Forest Management Committee (LCFM), to improve water quality on designated embayments of Lake Wissota, by reducing runoff pollution from contributing watersheds.

The Lake Wissota Stewardship Project has three operating components: community outreach, "conservation on the land" to reduce runoff pollution, and water quality monitoring".

On 9/15/21, a Power Point report was presented to provide a general overview of the project with a focus on project structure, funding sources, and 2021 accomplishments.

This agenda item will be used to provide a more in-depth overview of the project components, and the procedures used to track time, products deliverable and the type and location of conservation practices being installed by project participants.

Personnel Activity Report (PAR)

Activity Period FY 2021
Chippewa County, Wisconsin

Department: LCFM

Employee: Ketty Clow

Pay Period		Total Hours	Ag General	Ag Permit	LWSP Admin	Ag TRM: Reimb	Urban SW:Ord	Urban SW: Muni Services	Mining: New Permit	Mining: Annual Permit	Recycling- County	Recycling-City	Forest Mgmt	Rec./Non- Forest Mgmt	Other: Comm. & Proj.	PTO/Holid- ay
Begin	End	Worked														
12/27/2020	1/9/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/10/2021	1/23/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/24/2021	2/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/7/2021	2/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/21/2021	3/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/7/2021	3/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/21/2021	4/3/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/4/2021	4/17/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/18/2021	5/1/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/2/2021	5/15/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/16/2021	5/29/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/30/2021	6/12/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/13/2021	6/26/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/27/2021	7/10/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/11/2021	7/24/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/25/2021	8/7/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/8/2021	8/21/2021	80	3.5	10	0	8.5	2	2	1	3	0	0	0	0	7	43
8/22/2021	9/4/2021	80	0	36	0	8	1	7	0	14.5	0	0	0	0.5	13	0
9/5/2021	9/18/2021	83	3	37	0	10	0	1	0	14	0	0	0	0	10	8
9/19/2021	10/2/2021	80	0	59	0	0	4	0	0	10	0	0	0	0	7	0
10/3/2021	10/16/2021	42	0	9	0	0	0	0	0	4	0	0	0	0	5	24
10/17/2021	10/30/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/31/2021	11/13/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2021	11/27/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2021	12/11/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/12/2021	12/25/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/26/2021	1/8/2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		365.00	6.5	151	0	26.5	7	10	1	45.5	0	0	0	0.5	42	75
			2%	41%	0%	7%	2%	3%	0%	12%	0%	0%	0%	0%	12%	21%

Personnel Activity Report (PAR)

Activity Period FY 2021
Chippewa County, Wisconsin

Department: LCFM

Employee: Trenton Shutter

Pay Period		Total Hours	Ag General	Ag Permit	LWSP Admin	Ag TRM: Reimb	Urban SW:Ord	Urban SW: Muni Services	Mining: New Permit	Mining: Annual Permit	Recycling- County	Recycling-City	Forest Mgmt	Rec./Non- Forest Mgmt	Other: Comm. & Proj.	PTO/Holid ay
Begin	End	Worked														
12/27/2020	1/9/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/10/2021	1/23/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/24/2021	2/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/7/2021	2/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/21/2021	3/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/7/2021	3/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/21/2021	4/3/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/4/2021	4/17/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/18/2021	5/1/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/2/2021	5/15/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/16/2021	5/29/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/30/2021	6/12/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/13/2021	6/26/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/27/2021	7/10/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/11/2021	7/24/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/25/2021	8/7/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/8/2021	8/21/2021	65	0	1	0	0	9	28	1	26	0	0	0	0	15	0
8/22/2021	9/4/2021	68	0	3	0	0	0	44	0	12	0	0	0	9	12	0
9/5/2021	9/18/2021	52.5	0	0	0	0	0	23	0	29.5	0	0	0	0	12	16
9/19/2021	10/2/2021	69	0	1	0	0	2	28	0	38	0	0	0	0	11	0
10/3/2021	10/16/2021	39	0	2	0	0	0	6	0	31	0	0	0	0	9	0
10/17/2021	10/30/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/31/2021	11/13/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2021	11/27/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2021	12/11/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/12/2021	12/25/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/26/2021	1/8/2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		368.50	0	7	0	0	11	129	1	136.5	0	0	0	9	59	16
			0%	2%	0%	0%	3%	35%	0%	37%	0%	0%	0%	2%	16%	4%

Personnel Activity Report (PAR)

Activity Period FY 2021
Chippewa County, Wisconsin

Department: LCFMEmployee: Collin Klaubauf

Pay Period		Total Hours	Ag General	Ag Permit	LWSP Admin	Ag TRM: Reimb	Urban SW:Ord	Urban SW: Muni Services	Mining: New Permit	Mining: Annual Permit	Recycling-County	Recycling-City	Forest Mgmt	Rec./Non-Forest Mgmt	Other: Comm. & Proj.	PTO/Holiday
Begin	End	Worked														
12/27/2020	1/9/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/10/2021	1/23/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/24/2021	2/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/7/2021	2/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/21/2021	3/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/7/2021	3/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/21/2021	4/3/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/4/2021	4/17/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/18/2021	5/1/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/2/2021	5/15/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/16/2021	5/29/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/30/2021	6/12/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/13/2021	6/26/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/27/2021	7/10/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/11/2021	7/24/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/25/2021	8/7/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/8/2021	8/21/2021	71	5	0	0	0	66	0	0	0	0	0	0	0	1	0
8/22/2021	9/4/2021	70	63	0	0	0	7	0	0	0	0	0	0	0	2	0
9/5/2021	9/18/2021	71	69	0	0	0	2	0	0	0	0	0	0	0	1	0
9/19/2021	10/2/2021	75	40	0	0	0	35	0	0	0	0	0	0	0	2	0
10/3/2021	10/16/2021	30.5	12.5	0	0	0	18	0	0	0	0	0	0	0	3	0
10/17/2021	10/30/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/31/2021	11/13/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2021	11/27/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2021	12/11/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/12/2021	12/25/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/26/2021	1/8/2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		326.50	189.5	0	0	0	128	0	0	0	0	0	0	0	9	0
			58%	0%	0%	0%	39%	0%	0%	0%	0%	0%	0%	0%	3%	0%

Personnel Activity Report (PAR)

Activity Period FY 2021
Chippewa County, Wisconsin

Department: LCFMEmployee: Malcolm Gregory

Pay Period		Total Hours	Ag General	Ag Permit	LWSP Admin	Ag TRM: Reimb	Urban SW:Ord	Urban SW: Muni Services	Mining: New Permit	Mining: Annual Permit	Recycling- County	Recycling-City	Forest Mgmt	Rec./Non- Forest Mgmt	Other: Comm. & Proj.	PTO/Holid ay
Begin	End	Worked														
12/27/2020	1/9/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/10/2021	1/23/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/24/2021	2/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/7/2021	2/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/21/2021	3/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/7/2021	3/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/21/2021	4/3/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/4/2021	4/17/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/18/2021	5/1/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/2/2021	5/15/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/16/2021	5/29/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/30/2021	6/12/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/13/2021	6/26/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/27/2021	7/10/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/11/2021	7/24/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/25/2021	8/7/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/8/2021	8/21/2021	80	0	0	0	0	0	80	0	0	0	0	0	0	0	0
8/22/2021	9/4/2021	72	0	0	0	0	0	72	0	0	0	0	0	0	0	0
9/5/2021	9/18/2021	80	0	0	0	0	0	80	0	0	0	0	0	0	0	0
9/19/2021	10/2/2021	80	0	0	0	0	0	64	0	16	0	0	0	0	0	0
10/3/2021	10/16/2021	40	0	0	0	0	0	0	0	40	0	0	0	0	0	0
10/17/2021	10/30/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/31/2021	11/13/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2021	11/27/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2021	12/11/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/12/2021	12/25/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/26/2021	1/8/2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		352.00	0	0	0	0	0	296	0	56	0	0	0	0	0	0
			0%	0%	0%	0%	0%	84%	0%	16%	0%	0%	0%	0%	0%	0%

Personnel Activity Report (PAR)

Activity Period FY 2021
Chippewa County, Wisconsin

Department: LCFM

Employee: Matt Hansen

Pay Period		Total Hours	Ag General	Ag Permit	LWSP Admin	Ag TRM: Reimb	Urban SW:Ord	Urban SW: Muni Services	Mining: New Permit	Mining: Annual Permit	Recycling-County	Recycling-City	Forest Mgmt	Rec./Non-Forest Mgmt	Other: Comm. & Proj.	PTO/Holiday
Begin	End	Worked														ay
12/27/2020	1/9/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/10/2021	1/23/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/24/2021	2/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/7/2021	2/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/21/2021	3/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/7/2021	3/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/21/2021	4/3/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/4/2021	4/17/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/18/2021	5/1/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/2/2021	5/15/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/16/2021	5/29/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/30/2021	6/12/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/13/2021	6/26/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/27/2021	7/10/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/11/2021	7/24/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/25/2021	8/7/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/8/2021	8/21/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/22/2021	9/4/2021	72	0	0	0	0	0	0	0	0	0	0	33	39	0	8
9/5/2021	9/18/2021	75	0	0	0	0	0	0	0	0	0	0	6.5	68.5	0	8
9/19/2021	10/2/2021	79	0	0	0	0	0	0	0	0	0	0	28	51	0	0
10/3/2021	10/16/2021	32	0	0	0	0	0	0	0	0	0	0	24	8	0	32
10/17/2021	10/30/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/31/2021	11/13/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2021	11/27/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2021	12/11/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/12/2021	12/25/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/26/2021	1/8/2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		306.00	0	0	0	0	0	0	0	0	0	0	91.5	166.5	0	48
			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	54%	0%	16%

Personnel Activity Report (PAR)

Activity Period FY 2021
Chippewa County, Wisconsin

Department: LCFM

Employee: Dan

Pay Period		Total Hours	Ag General	Ag Permit	LWSP Admin	Ag TRM: Reimb	Urban SW:Ord	Urban SW: Muni Services	Mining: New Permit	Mining: Annual Permit	Recycling-County	Recycling-City	Forest Mgmt	Rec./Non-Forest Mgmt	Other: Comm. & Proj.	PTO/Holiday
Begin	End	Worked														ay
12/27/2020	1/9/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/10/2021	1/23/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1/24/2021	2/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/7/2021	2/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2/21/2021	3/6/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/7/2021	3/20/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3/21/2021	4/3/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/4/2021	4/17/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4/18/2021	5/1/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/2/2021	5/15/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/16/2021	5/29/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5/30/2021	6/12/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/13/2021	6/26/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/27/2021	7/10/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/11/2021	7/24/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/25/2021	8/7/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/8/2021	8/21/2021	30	5	0	6	0	0	14	0	1	2	0	2	0	46	4
8/22/2021	9/4/2021	51	6	8	5	0	0	8	2	12	4	2	4	0	27	2
9/5/2021	9/18/2021	45	4	16	1	0	0	6	4	13	0	0	1	0	27	8
9/19/2021	10/2/2021	41	4	8	6	0	0	6	0	7	4	0	6	0	37.25	1.75
10/3/2021	10/16/2021	55	4	17	2	0	0	0	0	24	0	1	3	4	31	2
10/17/2021	10/30/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/31/2021	11/13/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/14/2021	11/27/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/28/2021	12/11/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/12/2021	12/25/2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/26/2021	1/8/2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		408.00	23	49	20	0	0	34	6	57	10	3	16	4	168.25	17.75
			6%	12%	5%	0%	0%	8%	1%	14%	2%	1%	4%	1%	41%	4%

Lake Wissota Stewardship Project



Overview of Lake Wissota Stewardship Project Components

LCFM Committee Meeting
10/20/2021
C. Meyer



Lake Wissota Stewardship Project



Presentation Outline

- LWSP Component Overview
- Locations of “Conservation on the Land”
- Locations of Monitoring Sites

Lake Wissota Stewardship Project



Lake Wissota Stewardship Project Components

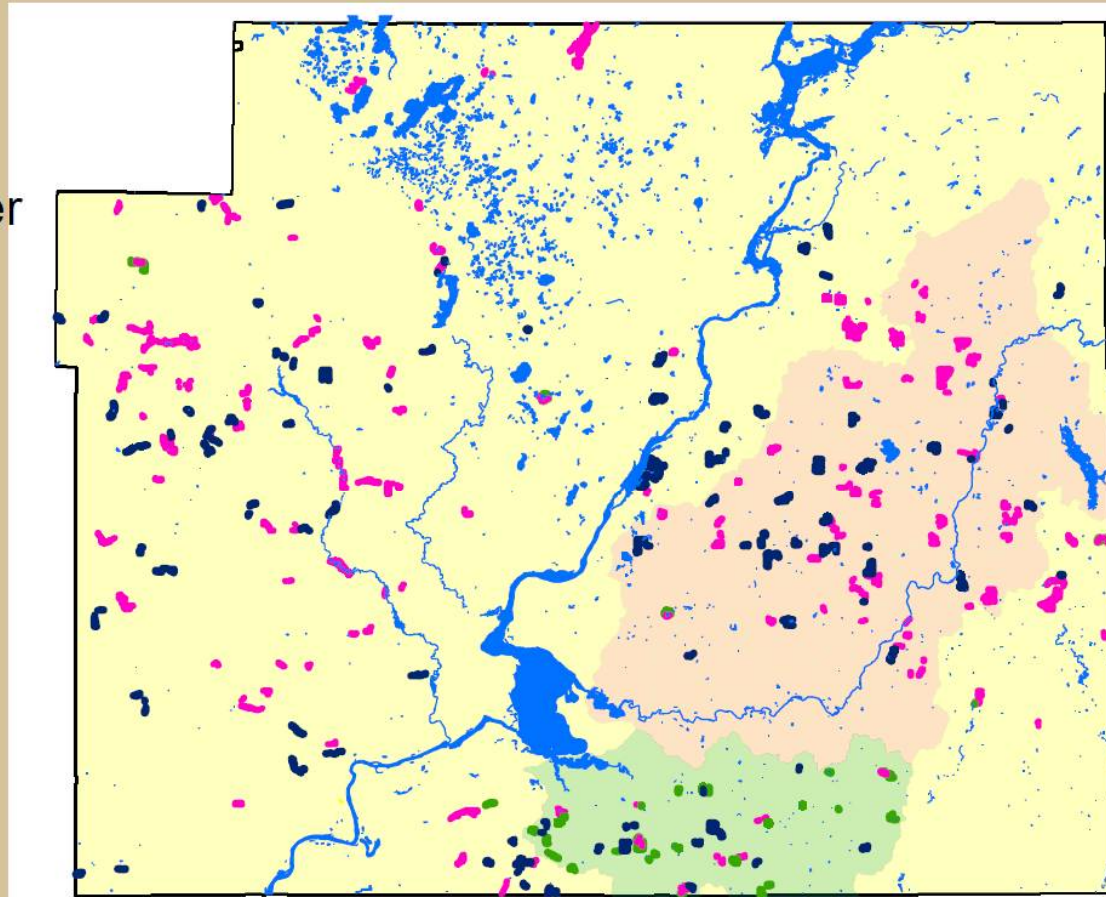
- “Conservation on the Land”
- Resource Monitoring
- Community Outreach



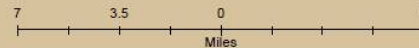
Lake Wissota Stewardship Project



Location of County
Held Conservation
Easements and
15-Year CREP Buffer
Agreements

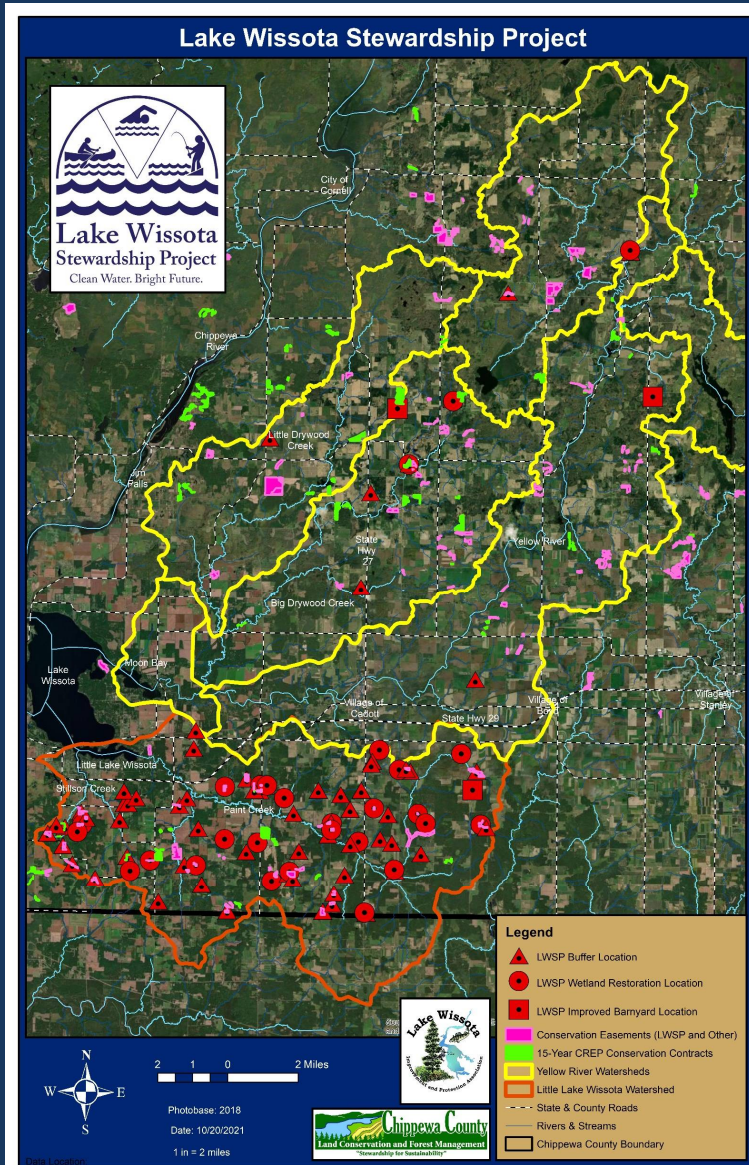


October 2021



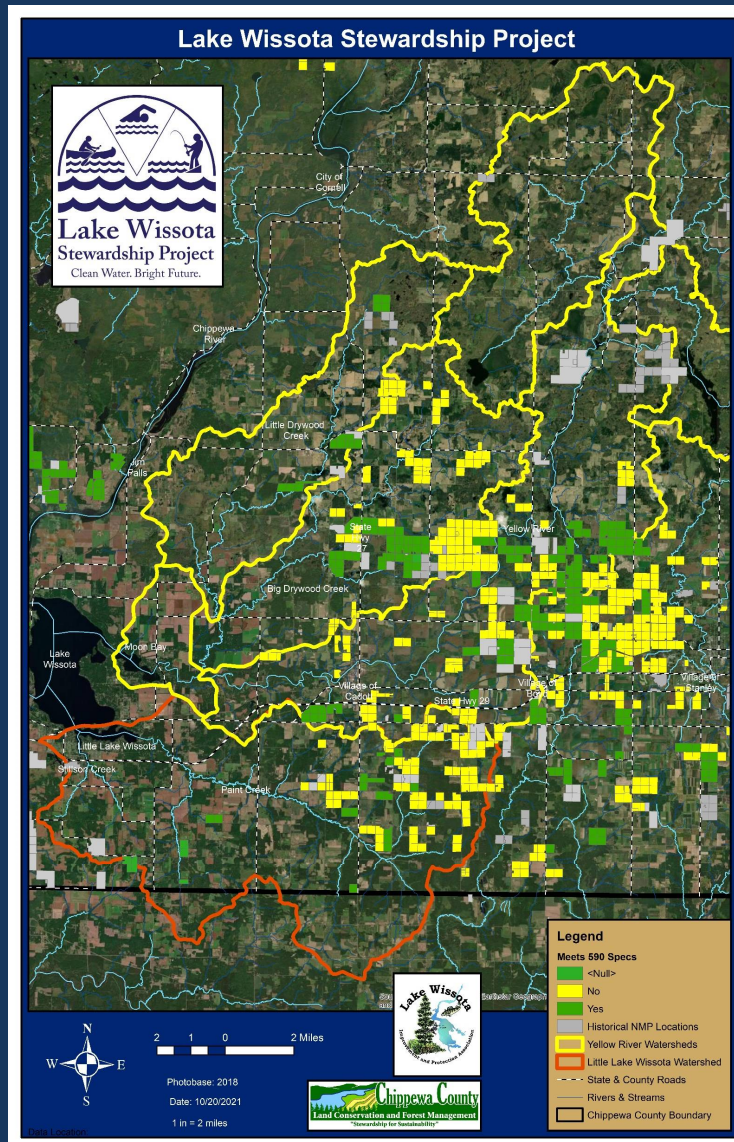
Location of CREP County Wide

Lake Wissota Stewardship Project



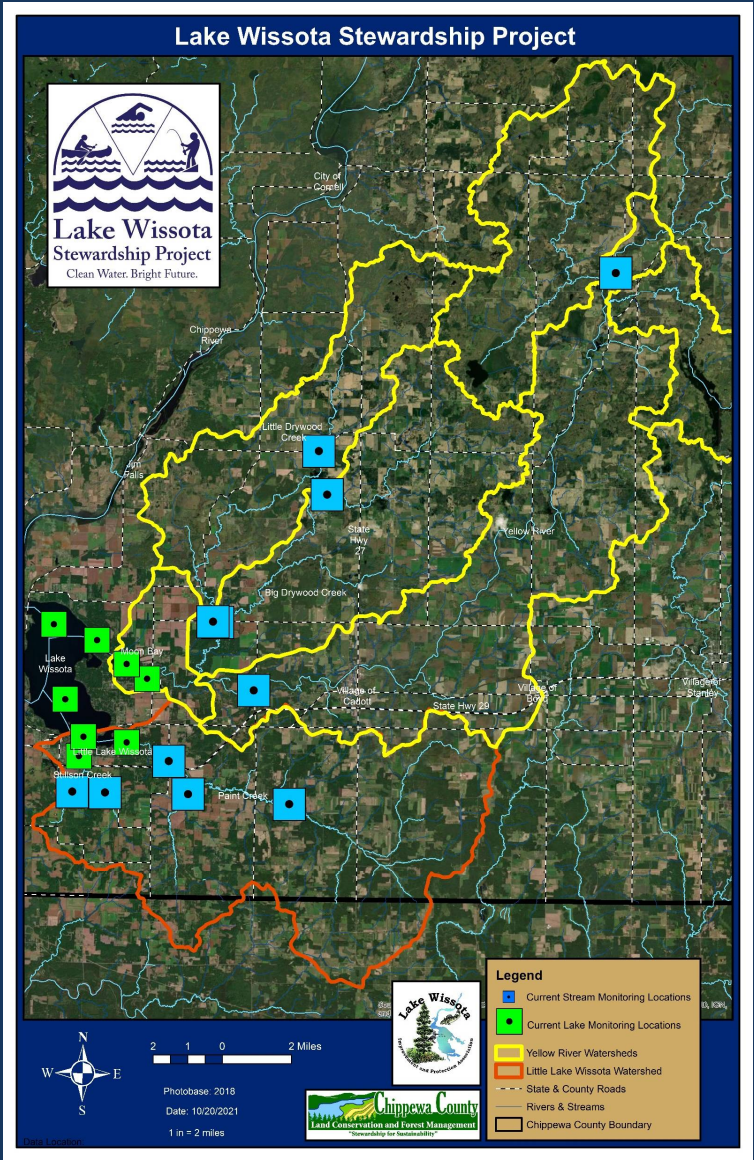
Location of Conservation Practices Installed

Lake Wissota Stewardship Project



**Location of LCFCM
Held Nutrient
Management Plans
Meeting USDA Plan
Specs. In 2021**

Lake Wissota Stewardship Project

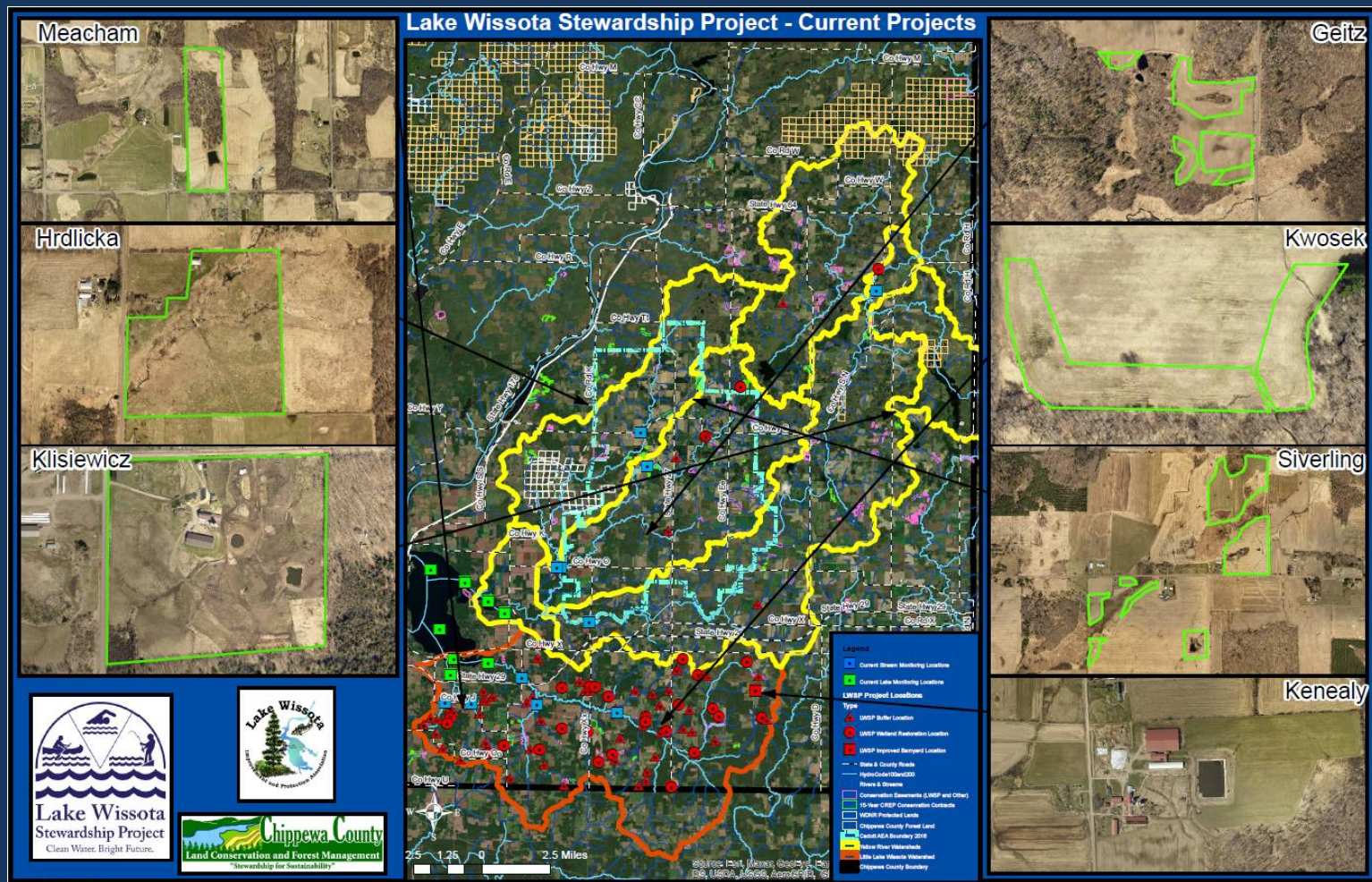


Location of Water Quality Monitoring Sites

Lake Wissota Stewardship Project



2022 Planned Conservation Practice Installations



Lake Wissota Stewardship Project



Conclusion

- The LWSP is a case example of the Public/Private Watershed Business Model
- The Project is Transferable between sponsors and Expandable to other watersheds
- Success of the project depends on community support
- The project is well positioned to pursue and implement goals and objectives over the coming years based upon available resources



STATEMENT OF EXPLANATION OVERVIEW OF 2022 GROUNDWATER STUDY; STATUS UPDATE

5.4

The Chippewa County Land & Water Resource Management Plan (2019-2023), establishes public policy and objectives to manage groundwater quality and quantity in Chippewa County.

The Chippewa County Groundwater Inventory (adopted as Chapter 30 of the Chippewa County Code of Ordinances) outlines mechanisms and provides an administrative framework to systematically collect data used to monitor groundwater quality and groundwater quantity in Chippewa County through time.

The Chippewa County Groundwater Inventory has been developed (in part) through the use of a series of benchmark water sampling studies that have been conducted by the Wisconsin Geological and Natural History Survey (WGNHS) and the UW System to document baseline conditions and to identify areas of management concern and to evaluate changes through time.

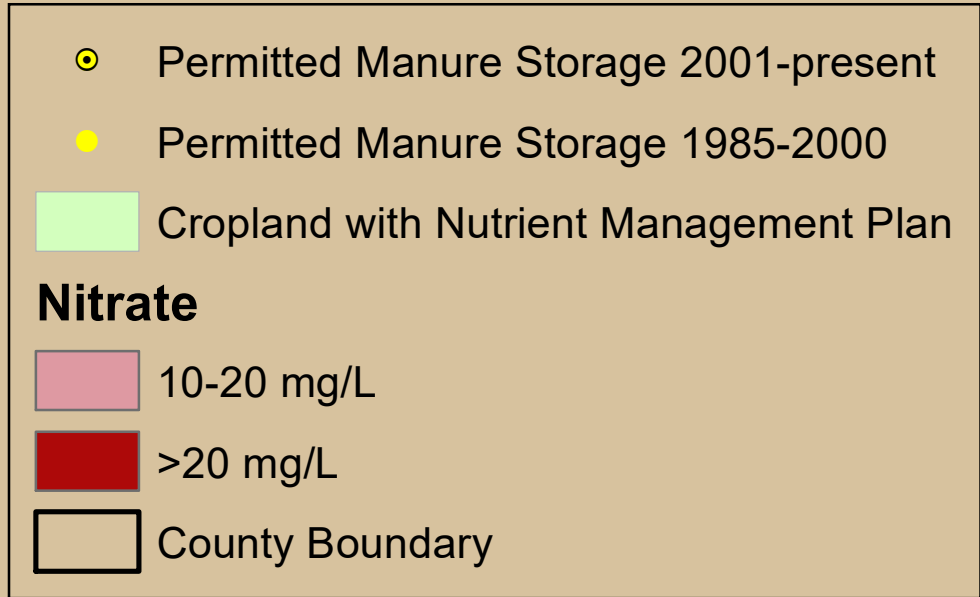
Benchmark water quality sampling studies have been conducted in 1985, 2007, and 2016.

As part of the 2022 budget, the County Board approved a capital improvement (CIP) allocation to fund a "Groundwater Quality Well Sampling Project Update", as a contributing component of the Chippewa County Groundwater Inventory.

To advance this project, the Department of LCFM has worked through the UW Stevens Point Groundwater Center to develop a project design and service contract to conduct groundwater sampling of select domestic wells in 2022.

This agenda item will be used to provide an overview of the project design, methods, and schedule.

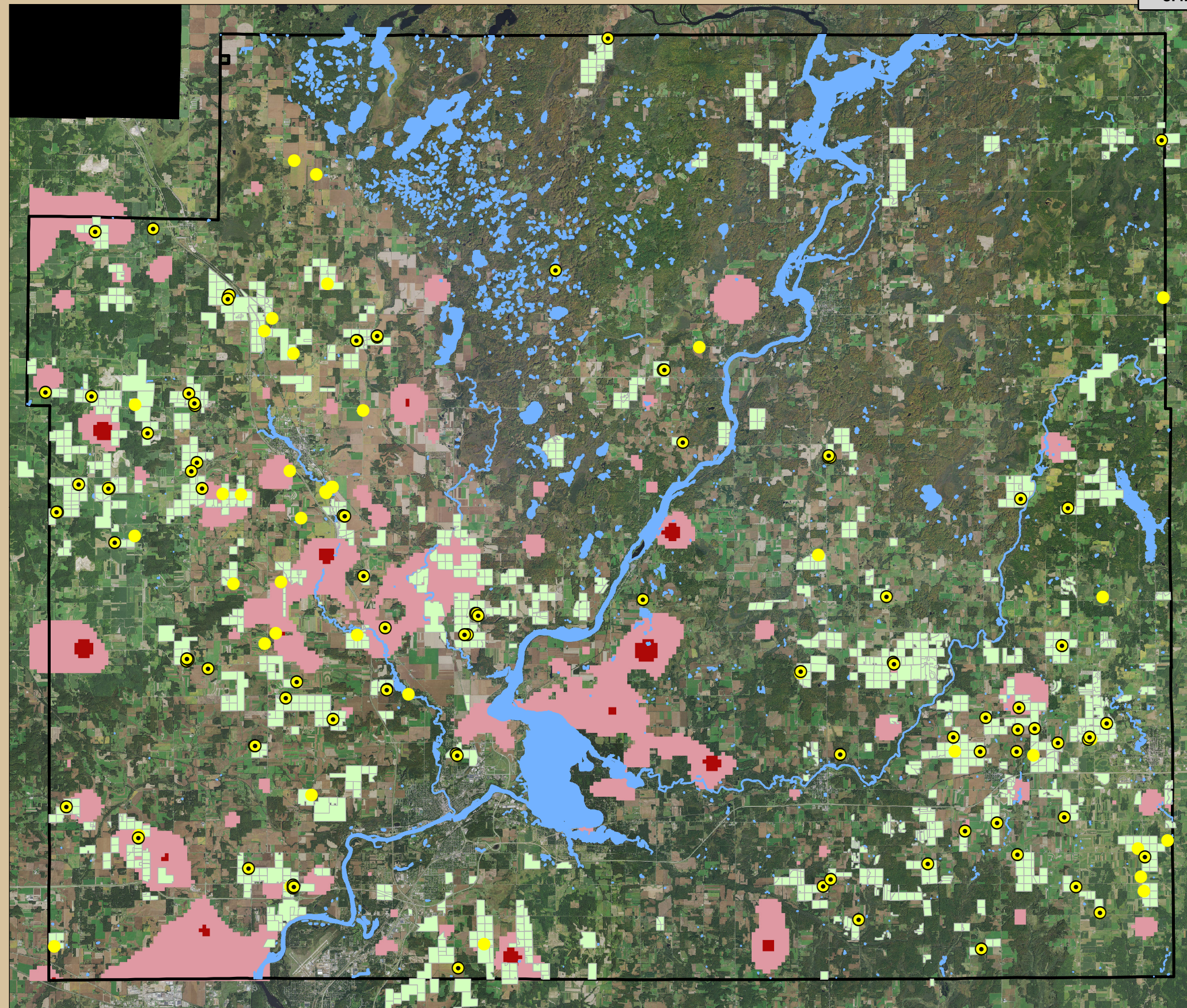
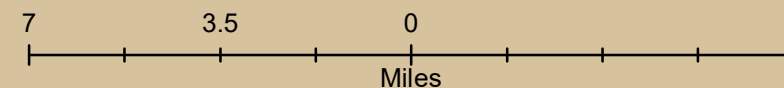
Groundwater Nitrate Concentrations that Exceed 10 mg/L in Proximity to Permitted Manure Storage Structures & Associated Cropland with a Nutrient Management Plan



Source: Nitrate information provided by K. Masarik, 2016 UWSP Groundwater Study



1 in = 4 miles



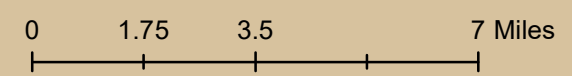
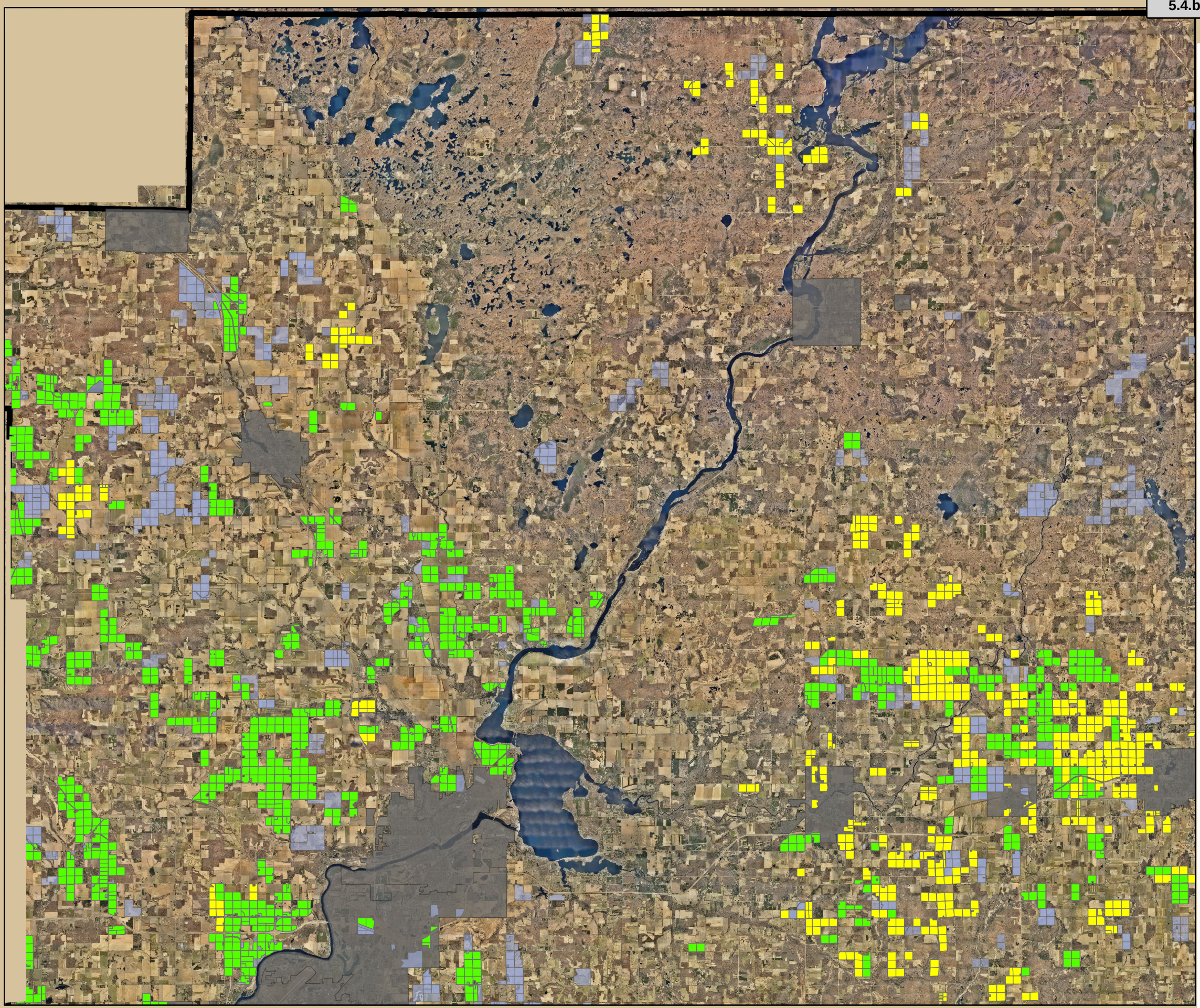
Aerial Photo 2014



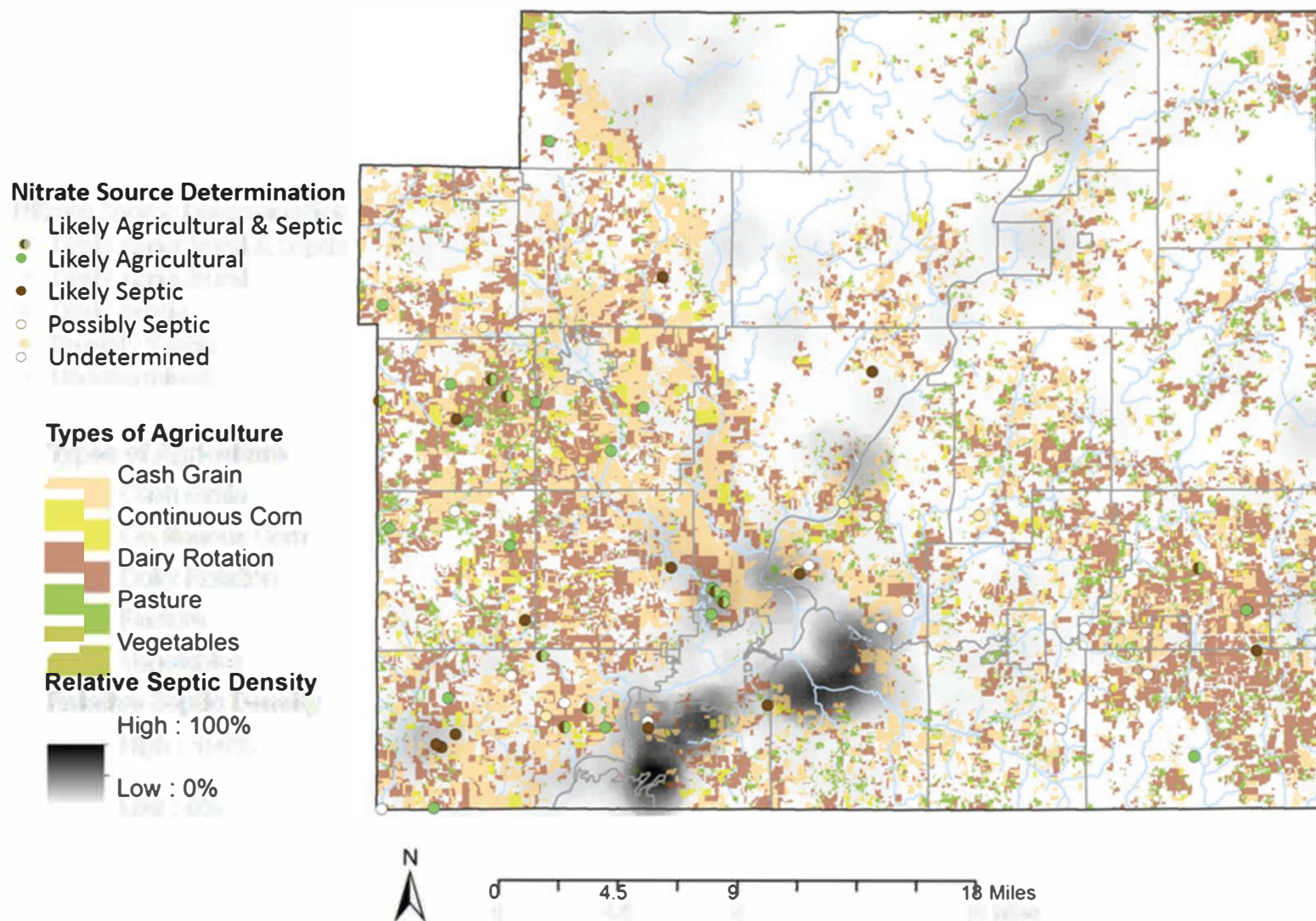
2021 Nutrient Management Plans: Reviewed to Determine Compliance with 590 Nutrient Management Plan Specifications

Parcels Operated and Reviewed for Compliance with the 590 Standard

-  Compliant with 590 Specificaitons
-  Non-Compliant with 590 Specificaitons
-  Historical NMP Acres
-  CITY
-  VILLAGE
-  County Boundary



Date: 10/14/2021





STATEMENT OF EXPLANATION
OVERVIEW OF NON-METALLIC MINING RECLAMATION ORDINANCE
REVISION; STATUS UPDATE

5.5

The LCFM is responsible for administering and enforcing the Chippewa Co. Non-Metallic Mining Reclamation Ordinance and an associated mine reclamation program.

The Chippewa County Land and Water Resource Management Plan (2019-2026), adopted 5/14/19 by the Chippewa County Board, sets a scheduled objective to update the Non-Metallic Mining Reclamation Ordinance in 2020.

On 7/17/19, the Department of LCFM provided a Power Point report that introduced administrative guidance that has been developed over time that is being used by the County to encourage use of standardized definitions of post-mining land use, and to establish the methods and criteria used to define "reclamation success".

On 8/21/19, the Department of LCFM provided a report that introduced several changes to the Chippewa County Non-Metallic Mining Reclamation Ordinance that would incorporate this guidance.

On 9/25/19, the Department of LCFM provided a report that introduced several policy issues to be considered as part of the proposed changes to the Chippewa County Non-Metallic Mining Reclamation Ordinance.

On 10/16/19, the Department of LCFM presented and the Committee reviewed a policy paper which outlined four (4) policy issues to be addressed as the non-metallic mining reclamation is revised.

On 6/17/20, the Department of LCFM presented and the Committee reviewed a proposed schedule to update the Non-Metallic Mining Reclamation Ordinance in Quarters 3 and 4 of 2020.

On 9/16/20, the Department of LCFM presented and the Committee reviewed a Power Point that provided an update on the Non-Metallic Mining Reclamation Ordinance status and schedule, and provided examples how key changes will be applied to meet state requirements and to improve non-metallic mine reclamation.

On 10/21/20, the Department of LCFM presented and the Committee reviewed proposed revisions to the current Non-Metallic Mining Reclamation Ordinance.

On 1/20/21, the LCFM postponed this agenda item to be considered and a special meeting was scheduled for 2/24/21. The 2/24/21 meeting was subsequently canceled.

On 3/17/21, the LCFM Committee instructed Corporation Counsel to perform a legal review of the draft ordinance for language and format.

On 4/21/21, the LCFM Committee was informed that the DNR had been notified of the County's intent to update the County's Non-Metallic Mining Reclamation Ordinance under NR 135.45, and that outside counsel would be retained for legal review, prior to formal submittal to DNR.

On 6/16/21, the LCFM Committee was provided an update on the status of the outside legal review, and the formal submittal to DNR.

On 9/15/21, a public hearing was held to obtain comments on the proposed changes to the Nonmetallic Mining Reclamation Ordinance.

This agenda item will be used to provide an update on the status of the efforts to revise the Non-Metallic Mining Reclamation Ordinance, including the status of the formal submittal and communications with DNR.

September 14, 2021

To Chippewa County Land Conservation and Forest Management Committee,

My name is Barb Arendt, I live on 50th Street in Cooks Valley. I am a landowner that is located next to a sand mine and have 2 other mines within 2 miles.

The Frac Sand Mines have been inactive in the area for some time. I see piles of sand sitting exposed to the elements which has been a concern to me. I have also worried about if and when the mines would be reclaimed and how successful this would be. I fully support and applaud the actions Chippewa County continues to take to assure that the reclamation will be a success. The proposed plan to standardize types of reclamation, define performance measures of when reclamation is complete and raising the standard of post mining land use by monitoring the status for 3 to 10 years depending on the type of land use should allow the land a better chance to recover and habitat to thrive.

Chippewa County has been an excellent role model throughout the Frac Sand Mining boom. I am very grateful for all the hard work and dedication the team has put forth. Thank you so much for taking care of Chippewa County citizens.

Carolyn Kaiser
 Town of Wheaton
 Chippewa County, WI
Crkaiser369@mail.com

These comments are shared in response to the announcement of public hearing -Chapter 30, Article II, of the Chippewa County Code of Ordinances Non-Metallic Mining.

Article II. Nonmetallic Mining

Public Hearing: September 15, 2021 at Chippewa Co. Land Conservation and Forest Management Committee Meeting at 4:30 p.m.

Due to the health status of Chippewa County I am sharing comments via email for members of the LCFM committee to review and take into consideration. It is a step that one can 'listen' to the county board meetings; I have not seen an option available for committees. I am sure you are aware numerous other counties are providing citizen input by continuing the option that they can give comment via technology. They recognize the importance and legal implications to keep the public in the loop.

I noted in listening to the County Board meeting on September 14th, 2021 where there was also public hearing(s), I heard no voices. I am not sure if anyone submitted written testimony or not. In committees we don't have the opportunity to know if our words are shared either. It is a bit frustrating to feel so in the dark at this point when the issue is such a priority.

I was appreciative of the draft being sent out ahead. Please allow me a few minutes to focus on a few of the points.

- 1) I noted the word 'compliance' numerous times. That sounds great on paper; bottom line is that someone/ some department needs to enforce the compliance with public lands, the zoning, the water, and the entire public health status.
- 2) When we review what other area counties are doing to give the next generation hope in regards to clean water, clean air, and viable land, I see Chippewa County as one that needs to step up the game. Getting this on paper is a start. Now the hard work begins.
- 3) You may know that when people are reviewing their insurance policies, one of the *Exclusions* in some policies is 'silica exclusion.' The policy goes on to define 'silica' to include *crystalline silica, silica dust, industrial sand, silica sand, quartz, quartz dust cristobalite, tridymite, Tripoli, and silica missed with other compounds. *amorphous silica and silica gel; and silica dust mixed with other dust particles. Therefore '*they*' do not pay for 'bodily injury' arising out the actual alleged or threatened ingestion, inhalation, or absorption of 'silica'. There is more to the exclusion section; but I sure you get the drift. I would like to see the LCFM committee take a lead in recognizing the seriousness involved 'close to home' in the past approximately Re12 years. So how does affect persons who have lived close to the sand mines? We know the fear that exists in some folks who are scared of revenge if they are honest about how their health

has changed. Some are fearful of dividing family. Wouldn't it be a positive to have LCFM and public health work together to be their voice? The departments have access to much more data than the general citizen.

- 4) This brings me to the reclamation aspect. By now company practice is fairly well-known. We know the game on declaring bankruptcy, selling off, changing names, doing practice on the cheap, allowing sand to blow across the land/ highway bearing no responsibility, etc. Therefore I would like to make sure the regular taxpayer of the Chippewa County is not held accountable for damages because the inept practice of some Industrial sand mine company, who ran away from their responsibilities. The County and State could work together to see that accounting practices are above board. Yes, CPA is needed on the team. The Industrial sand mines need to have a financial plan that is transparent in the beginning. They need to allocate enough monies for the correct reclamation process.

I look for pro-active planning from the LCFM committee members as they set their agenda for upcoming meetings. I ask that you look for ways that the committee will not hold Chippewa County taxpayers liable for issues that industrial sand is responsible for.

I look for ways and a listening ear in involving public health as part of the team.

I ask that you all take conservation as a serious matter.

Thank You for your time.

Patricia J. Popple

561 Summit Avenue

Chippewa Falls, WI 54729

sunnyday5@charter.net 715-723-6398

September 15, 2021

Public Hearing: draft of Chapter 30, Article II, of the Chippewa County Code of Ordinances,

Article II. Nonmetallic Mining

**Public Hearing: September 15, 2021, at Chippewa Co. Land Conservation and Forest Management
Committee Meeting at 4:30 p.m. Room 303**

Due to the pandemic, this paper is written without the benefit of accessing information at the meeting, hearing verbal statements, and visualizing the Power Point. The purposes, processes, thoughts, critical thinking skills, and expertise that have been utilized in the development of the information presented are not accessible to the public given that Chippewa Co. is at a severe level regarding Covid 19 and related variants. Technological advances should be made available to the public to safely respond.

1. Given that public health, safety, and welfare has long been a concern in this battle with frac sand mining issues, it is good to see the statement: "Compliance with public health, safety and welfare regulations" even though the words have been in the ordinance (Chapter 30 Environment). The words are "key" to every decision made. Health, safety, and welfare apply to all elements of the document including wind erosion (respirable crystalline silica dust), heavy metals in the water and air caused by chemical interactions with sandstone formations, and the steps to a highly sophisticated reclamation at each of the mining and related facility locations. It is expected that the people overseeing the heavy industry in the county will not only document violations but report them to the authorities who have responsibility for investigation, citations, and enforcement and then reporting out the information to the public, so violations are not repeated. Citizen volunteers can play a role in that responsibility if given the proper training and materials. Monitors can also become a part of the protocol so there is no doubt generated about the source of any of the problems. Financial support should become a responsibility of the industry, the county or the state for the monitoring efforts as arranged by the authorities in charge.
2. Mention is made several times regarding the use of a "site specific engineering analysis" or "consultant", or "working independently", or "professional engineer". It is critical that engineering professionals or any of those in the above categories are respected, trustworthy, licensed, competent, independent, and capable of non-biased and scientific interpretation of information and that they be hired to present safety, health and welfare information that serves the people to the greatest extent possible. Often industrial people hire "industrial" engineers who have the industry's interest at heart but not that of the citizen! Those so called "experts" must be avoided completely. Throughout the years the industry has entered this

county (and others), many have observed and documented incorrect information, biases, incompetency, and questionable rationale for many of the practices and procedures. Environment, safety, health, and welfare issues have suffered as a result. None of us can afford any additional “mistakes” regarding industries such as the these made in allowing, permitting, and encouraging frac sand mines and related extraction industries to come into Chippewa County or any other county in the state.

3. Many elements of the documents point to the externalities of mine sites, and how they appear to the naked eye once reclamation has begun or has occurred. More emphasis must be placed on what goes into these mines and how “sludge”, industrial waste materials, flocculants, chemicals, heavy metals and more eventually will impact the waters inside the mines or beneath them and beyond as water moves, although slowly, eventually into people’s wells, the surface waters of the state, and/or the ground water and aquifers that clearly have an impact on all of life. Decisions at the top level are often based upon short term fixes rather than long term impacts. Every effort must be made to look at the long term.
4. Soil erosion at mine and other frac sand facility sites is a very real occurrence!!! In NR135, this type of erosion that takes away the mineral or the dust from that mineral or any other type of soil that has been and will be there in ages to come is not legal. (Witness the vast open areas at the mine located on DD and Highway 64. It was well over a year ago when this was witnessed and yet it is in the same condition today.) Respirable crystalline silica dust is “real”. It cannot always be seen! Sometimes it may travel with larger particulates, but PM2.5 particles and smaller are truly invisible. Land Conservation Departments do not want to recognize the problem these small particulates can cause with human, animal, and plant health! In some states, there is a standard. Wisconsin does not have a standard. The information they use is that entertained by the EPA. Both Michigan and Minnesota have standards. The Chippewa County Land Conservation Department could be influential in working with legislators and the DNR to obtain legislation which would allow a standard acceptable to Wisconsin’s efforts and concentrating these mines in the NW part of the State.....and by the way, the County could also request that the state have a tax on industrial complexes that remove minerals from the state and transport them across the border lines into other areas of the county and the world. Minnesota has such a “severance” tax, and it was more recently enacted in their state legislature. In addition, Chippewa Co. residents are entitled to have someone from the Chippewa Co. Health Department to speak on their behalf. Blasting (and many times without notification), causes great disruption in terms of generating particulates in the air! Fine particulates are easily inhaled into the deep lung and can travel to other body organs where the particulates can easily settle to cause disease. It is known in the scientific community that fine particulates in the air contribute to a decrease in longevity. Health departments handle vaccines, smoking issues, drug, alcohol abuse and many diseases, but here in Chippewa County, there is no attention to frac sand mining, processing and transport which involves the mining of silica for use as a proppant in the hydraulic fracturing industry. Careful attention must be given to the health issues which have been and will continue to exacerbate the problem throughout the county with the permission of

intermittent mining, the closing of mines, with reclamation and the generation of even more dust being created further causing more dangerous particulates in the air. Silica dust is a carcinogen!

In addition, some processing continues; transportation of silica continues throughout the county as daily sand cars make the trip from the north into the city limits of Chippewa Falls, through residential areas and to the west and south. I hear them, I see them, and because I live only one and ½ blocks away from the rail, I know the frequency with which they travel day and night. Chippewa County must look at the air quality issues and water quality issues like never as the frac sand industry has contributed to the pollution in that category with the prevalence of arsenic, nitrates, and other heavy metals in the wells, lakes, streams, wetlands, and rivers and other water bodies in the county.

5. The Chippewa County Land Conservation and Forest Management Department, with the approval of the Chippewa Co. Board, should specify the importance of annual evaluations of the financial assurance requirements portion of the ordinances. Professional engineering advice and input from attorneys as well as the research advice of certified public accounts to assure that taxpayers will never have to pay for reclamation expenses through tax dollars. Specifying annual evaluations should assure the public that they will not have responsibilities for paying reclamation costs, a mandated responsibility of heavy industry and the county. The public may have to live with nuisances from these facilities, but they should not have to pay anything for reclamation
6. In terms of reclamation plans, the public deserves to know about progress being made as mining facilities undergo changes and processes to attain reclamation status. One recommendation that might be made is to develop a ranking system for reclaimed acreages. Earlier in the history of frac sand mining reclamation permitting, the cost per acre of the reclaimed area was relatively small to moderate. From what I can gather currently, costs have gone up considerably. There may not be enough funds collected to do an exceptional reclamation. The county may only be able to allow a basic or lower than basic reclamation rating on some huge acreages where topsoil and other fill is not available. Sufficient equipment, tools, and biological systems to restore the health of the overburden may not be available. It may take years for soils to be established, for prairies to grow or to be restored. Water may not be available due to drought conditions, or it may be that heavy rainfalls will cause severe erosion which could take months, maybe years, to restore given the lack of available funding. Some sites may have become too vast to restore completely; they could even be barren of topsoil if winds have carried it away due to exposure. Not all reclaimed mines are realistically going to look alike and therefore, a ranking system might help provide an incentive for mining companies to attain a greater than marginal reclamation.
7. Reducing fees for areas pending certification of completed reclamation only serves to give the power to the frac sand mining companies and related industries and acts as a deterrent for action. If anything, deadlines for reclamation should be in place and companies should be expected to reach that deadline following a timeline that can be pre-arranged.

8. The option for building residences at locations where frac sand mining and reclamation has been done seems to be a poor choice. In a rural area where residents have no choice but to dig wells or provide septic systems for home use, it might be found that heavy metals over time could have created polluted water, or that seepage systems might not perk as it should and thereby causing homeowner problems. The County must steer away from residential choice at all costs. Solar array and wind energy placement choices might be an alternative use of the land.
9. What is meant by “contemporaneous reclamation”? While mentioned many times verbally and in the literature over the past number of years, it is a term needing definition.
10. By enlarge, I appreciate the format of the ordinance plan. The 5 Appendices are very helpful in explaining the rationale for the development of the ordinance additions. This is a positive approach and user friendly particularly for use by the public in understanding the various federal, state, and local practices in place.
11. The actions in this ordinance provide a good beginning to improving past expectations for mining and reclamation operators. It is imperative the effort be sustained over time. It is obvious that the county endorses extractive industries whereas new and modern work at saving this earth will be dominant over the span of many years ahead. We truly cannot “afford” to have additional facilities of this nature in this county given the environmental problems and health problems that have already been created by extractive processes. It will take many years to finalize repairs if that is possible. It is critical that the County look progressively at work that must be done on climate change and the reduction of fossil fuel use if we are to survive economically, socially, and emotionally as we move into the years ahead.

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PUBLIC HEARING VERBAL TESTIMONY**PUBLIC HEARING TO SOLICIT COMMENTS ON ORDINANCE TO AMEND CHAPTER 30,
ARTICLE II OF THE CHIPPEWA COUNTY CODE OF ORDINANCES; NONMETALLIC
MINING RECLAMATION****September 15, 2021***Candy Anderson (Received verbal testimony 9/15/21)*

Thank you. My name is Candy Anderson. I'm with Mathy Construction. I have been working with Chippewa County and the staff for the past 25 years doing reclamation plans, and having been around long enough to start seeing some of the sites be reclaimed. I just wanted to express my support for the changes to the ordinance and Dan already touched on why the changes were made. That's great consistency and it allows new plans being designed to have a better definition of what we need to provide and at the end, when the reclamation process is starting, we have a solid plan that, say, the person that designed the plan isn't around anymore, it's easy to follow.

Thank you.

Jesrin Gaier (Received verbal testimony 9/15/21)

Thank you for your time tonight. I am Jesrin Gaier of Kramer Mining & Materials. I just have a few comments.

I definitely see the intent and the reasoning for the amendments, and I think they all more or less make a lot of sense taking into the intent that the period is quantifiable, which is understandable, with many of the operations going around.

I do just have a few concerns about the charts, mainly the Appendix IV and V charts that were shown at the end. Basically, Appendix IV, which was the chart before this, has minimum performance periods which are quite long. They were more in the footnotes of the sheet, so they're difficult to see, but for conservation land, its being around 3-5 years' time frame and for the working lands, it's between 5-10 years' time frame for the sites to be monitored, and basically, so the two (2) foot notes there on the bottom, it's something where it allows the County to be able to come in and inspect the site, monitor the site and see if the site is holding up to the reclamation standards.

Obviously, if the site has been....had topsoil applied to the site and then the site's been stable, and has vegetation established, I'm kind of wondering what is the reason for such long time frames.

This is a little bit unusual to have this length of a time frame standard, and is not found in other counties in the area. A year-by-year basis is understandable. Come in, the County sees a few issues along the site, we come in and fix those areas, and we postpone the reclamation signoff until maybe the next year or a few months down the road until those areas are stabilized.

It is very helpful to see that portions of the site can be signed off on and that eventually will help with some of this issue here to where 95% of the site is able to be signed off on and then the last 5% might not be able to. That is understandable also.

And then my last item is on Section 30-79(b) where they have high walls. I definitely like the language that they added to this. It makes a lot of sense. There are definitely a few sites around the area that are reclaiming with high walls. Our sites are not included into that. We are grading our high walls down 4:1 slopes.

I just have one nitpicky little item with the word and use of the word “design” when it comes to the field test plot. So language is directly from NR 135, which they are using. In NR 135, the use of the word “design” is not used. I just don’t want to see a test plot have to be designed and implemented because sometimes test plots kind of form as the site is reclaiming. Maybe it wasn’t intended to be used as a test plot in the future but this area has been very stable, the reclamation design changes, or certain plans change that they use the test plot. It might not necessarily designed that but now it can possible be used.

Those are the few comments I had. Overall I am in acceptance of the plan. It is very well thought out and I just had a few thoughts being in the timeframe, information and procedures.

Thank you for your time.

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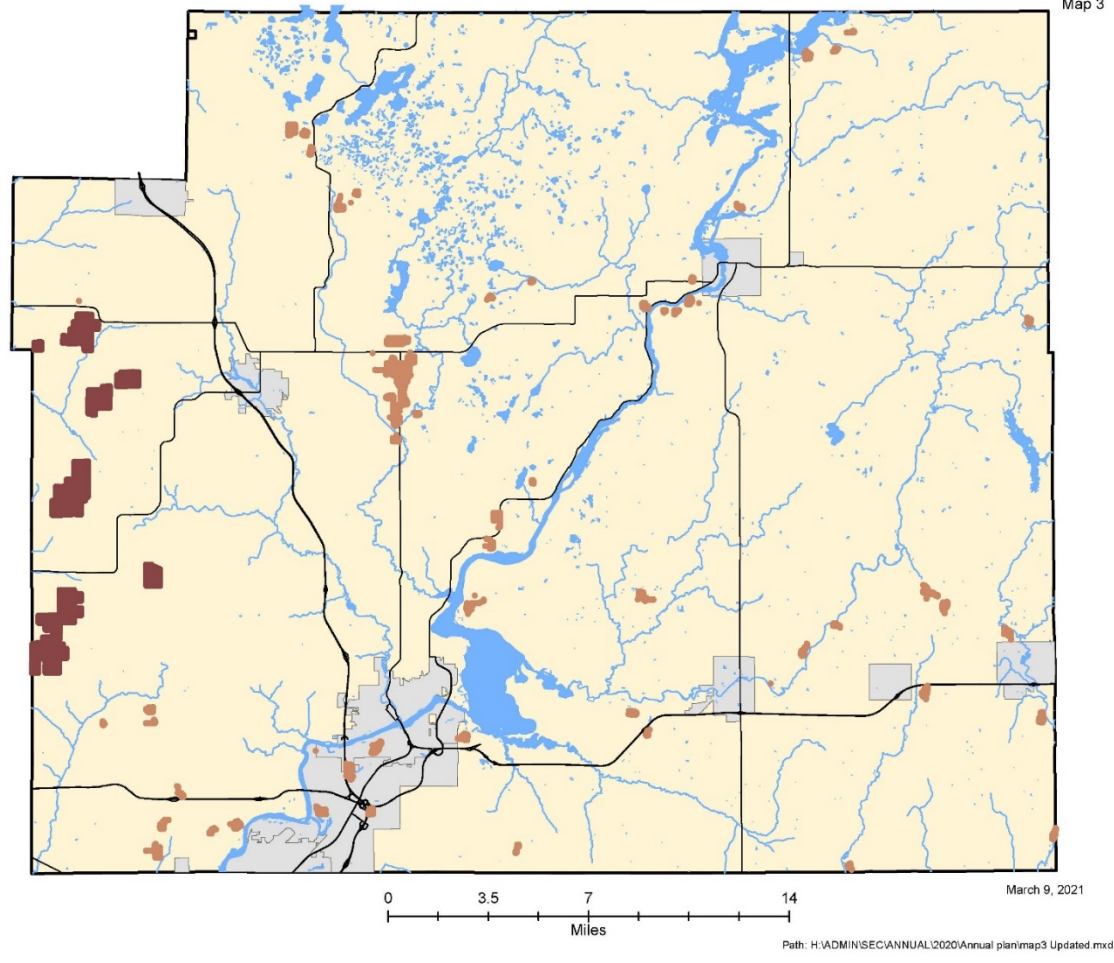
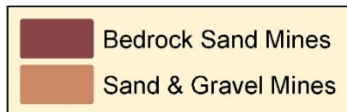
Overview of Proposed Revisions to the Chippewa County Non-Metallic Mining Reclamation Ordinance

Public Hearing Summary
9/15/21

D. Masterpole



Location of Permitted Non-Metallic Mines Meeting State NR-135 Reclamation Standards



Process for Ordinance Revision

9/25/19 - 10/20/20	Conducted LCFM policy review & scoping
10/21/20 - 8/19/21	Drafted revised ord. & completed legal review (internal & external)
8/19/21	Submitted to DNR for formal review & comment (NR 135.45)
9/3/21 - 9/15/21	Issued public notice & conducted public hearing

What changed?

- Added or changed language to better describe Section titles
- Added language to clarify administrative procedures & requirements
- Provided cross references to State Laws & Admin. Rules & to clarify requirements for public safety & environmental protection
- Referenced & incorporated appendixes previously used as “administrative guidance”

Added or changed language to better describe Section titles

- Made minor changes to the titles of Ordinance Sections & Subsections

-Sec. 30-79

-Sec. 30-81

-Sec. 30-81(a)

-Sec. 30-82

OK ✓

Why?

To better describe the purpose of sections

Added language to clarify administrative procedures & requirements

- Added language to clarify how the “net worth option” can be applied to provide financial assurance

-Sec. 30-103

OK ✓

- Added language to clarify process for admin. review of a County decision to issue, deny or modify a non-metallic mining reclamation permit

-Sec. 30-111

OK ✓

Why?

To assure consistency under NR 135.40 and Wis. Stats. 289.41

To provide clarity & assure consistency under NR 135.30 and Wis. Stats. 68 & 227

Added language to clarify administrative procedures & requirements (Continued)

- Provided authority for County to reduce annual permit fees based upon proportion of mine that has been substantially reclaimed & is being monitored prior to certification

-Sec. 30-135

NO

Why?

To provide an incentive for “contemporaneous reclamation” (reclaim as you go) & to meet goal of Wis. Stats. 295

REFERENCE CODE ✓

Provided cross references to State Laws & Admin. Rules

- Added language to clarify methods to assure the stability of highwalls in compliance with requirements of NR 135.10(1)

-Sec. 30-79(b)

NO

- Added language to more explicitly reference State requirements to control noxious weeds & invasive species

-Sec. 30-81(b)

NO

Why?

To better clarify requirements for public safety & environmental protection under State laws

REFERENCE CODE ✓

Added appendixes, previously used as “administrative guidance”, to better clarify the type of information to be used in planning for, measuring, and certifying mine reclamation

NO

- Appendix I – Plan Specifications for Non-Metallic Mines in Chippewa County
- Appendix II – Reclamation Standards for Non-Metallic Mines in Chippewa County
- Appendix III – Plan Content, Specifications and Engineering Requirements for Non-Metallic Mine Construction in Bedrock

(Continued)

-Appendix IV – Standardized Categories of Post Mining Land Uses and Associated Cover Types for Use in Non-Metallic Mine Reclamation

-Appendix V – Standardized Criteria & Performance Measures to be Applied to Post Mining Land Uses and Associated Land Cover Types to Determine Successful Reclamation

Why?

- To assure greater consistency in development of reclamation plans
- To more clearly define the criteria that could be used to determine when a mine has been “successfully reclaimed”

CONTINUED AS POLICY & ADMIN GUIDANCE

Overview of Non-Metallic Mining Reclamation Ord. What Changed?



5.5.c

Appendix IV

LCFM 8/18/21

STANDARDIZED CATEGORIES OF POST MINING LAND USES AND ASSOCIATED COVER TYPES FOR USE IN NON-METALLIC MINE RECLAMATION

POST MINING LAND USE	SUB-CATEGORY		LAND COVER TYPE/PLANT COMMUNITY	MGNT APPROACH/INTENSITY
Conservation Lands ①				
Conservation/Ecological Use	Public Inst.	Forest/Woodland	Defined in soil rehabilitation & vegetation management plan	
		Grassland/Prairie		
		Grassland/Prairie/Forest Savannah		
	Private Inst.	Wet/Sedge Meadow		
		Surface water; Shallow Ponded/Deep Ponded Other		
Working Lands ②				
Forest Production		Even aged species	Defined in soil rehabilitation & vegetation management plan	
		Mixed aged species		
		Other		
Agricultural Production		Pasture	Defined in soil rehabilitation & vegetation management plan	
		Perennial Forage - Conservation Cover		
		Perennial Forage - Hay		
		Cultivated Cropland; Forage Rotation		
		Cultivated Cropland; Row Crop		
		Other		
Developed Lands				
Residential	Low Density		Defined in Site Development Plan	
	Med. Density			
	High Density			
Commercial	Low Intensity		Defined in Site Development Plan	
	Med. Intensity			
	High Intensity			
Industrial	Low Intensity		Defined in Site Development Plan	
	Med. Intensity			
	High Intensity			
Institutional	Public Inst.		Defined in Site Development Plan	
	Private Inst.			
Any other proposed land use category, as defined in an approved comprehensive plan or zoning ordinance, as agreed to by the permitted mine operator and County.		Any other proposed land cover type/plant community, as agreed to by the permitted mine operator and County.		

① To determine successful reclamation, the minimum performance period for post mining land uses reclaimed as conservation lands and cover types extends from 3-5 years, commencing the first year after planting.

② To determine successful reclamation, the minimum performance period for post mining land uses reclaimed as working lands and cover types extends from 5-10 years, commencing the first year after planting.

Attachment: 10-20-21 Power Point NMM Ordinance Changes (6644 : Overview of Non-

Overview of Non-Metallic Mining Reclamation Ord. What Changed?



5.5.c

Appendix IV

LCFM 8/18/21

STANDARDIZED CATEGORIES OF POST MINING LAND USES AND ASSOCIATED COVER TYPES FOR USE IN NON-METALLIC MINE RECLAMATION

POST MINING LAND USE	SUB-CATEGORY	LAND COVER TYPE/PLANT COMMUNITY	MGNT APPROACH/INTENSITY
Conservation Lands ①			
Conservation/Ecological Use	Public Inst.	Forest/Woodland	Defined in soil rehabilitation & vegetation management plan
		Grassland/Prairie	
		Grassland/Prairie/Forest Savannah	
	Private Inst.	Wet/Sedge Meadow	
		Surface water; Shallow Poned/Deep Poned	
		Other	
Working Lands ②			
Forest Production		Even aged species	Defined in soil rehabilitation & vegetation management plan
		Mixed aged species	
		Other	
Agricultural Production		Pasture	Defined in soil rehabilitation & vegetation management plan
		Perennial Forage - Conservation Cover	
		Perennial Forage - Hay	
		Cultivated Cropland; Forage Rotation	
		Cultivated Cropland; Row Crop	
		Other	

Attachment: 10-20-21 Power Point NMM Ordinance Changes (6644 : Overview of Non-

Overview of Non-Metallic Mining Reclamation Ord. What Changed?



5.5.c

Developed Lands				
Residential	Low Density			Defined in Site Development Plan
	Med. Density			
	High Density			
Commercial	Low Intensity			Defined in Site Development Plan
	Med. Intensity			
	High Intensity			
Industrial	Low Intensity			Defined in Site Development Plan
	Med. Intensity			
	High Intensity			
Institutional	Public Inst.			Defined in Site Development Plan
	Private Inst.			
Any other proposed land use category, as defined in an approved comprehensive plan or zoning ordinance, as agreed to by the permitted mine operator and County.			Any other proposed land cover type/plant community, as agreed to by the permitted mine operator and County.	

① To determine successful reclamation, the minimum performance period for post mining land uses reclaimed as conservation lands and cover types extends from 3-5 years, commencing the first year after planting.

② To determine successful reclamation, the minimum performance period for post mining land uses reclaimed as working lands and cover types extends from 5-10 years, commencing the first year after planting.

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Overview of Non-Metallic Mining Reclamation Ord. What Changed?



5.5.c

Appendix V

LCFM 8/18/21

STANDARDIZED CRITERIA & PERFORMANCE MEASURES TO BE APPLIED TO POST MINING LAND USES AND ASSOCIATED LAND COVER TYPES TO DETERMINE SUCCESSFUL RECLAMATION

STANDARDIZED CRITERIA FOR DETERMINING SUCCESSFUL RECLAMATION	QUANTIFIABLE PERFORMANCE MEASURES
Site stability	
Sheet & rill erosion	% area of field surface w/rills & deposition
Channel & gully erosion	% area of concentrated flows w/channel erosion
Mass wasting	% area of field surface & highwall unstable
Plant density and species diversity	
Plant density	1. % ground covered by planted & volunteer species
Species diversity	2. Volume by weight or mass of planted & volunteer species, if applicable
Noxious weeds & invasive plant species	% presence of planted & volunteer species
	% presence of each type; noxious weed & invasive plant species
Soil chemistry	
Soil acidity	pH
Macro nutrient fertility	Concentration of N-P-K (ppm)
Soil organic matter	% O.M.
Soil physical characteristics	
Soil depth	% of original A & B soil horizon depth, measured in comparison to soil survey mapping unit
Soil permeability	Soil permeability measured using 6" infiltration ring (inches/hr)
Plant rooting depth	Minimum soil depth to support unrestricted root growth for selected cover type, as defined in soil rehabilitation & vegetation management plan
Other alternative criteria, as agreed to by the permitted mine operator and County	Other quantifiable performance measures, as agreed to by the permitted mine operator and County

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Attachment: 10-20-21 Power Point NMM Ordinance Changes (6644 : Overview of Non-

Appendix V

LCFM 8/18/2

STANDARDIZED CRITERIA & PERFORMANCE MEASURES TO BE APPLIED TO POST MINING LAND USES AND ASSOCIATED LAND COVER TYPES TO DETERMINE SUCCESSFUL RECLAMATION

STANDARDIZED CRITERIA FOR DETERMINING SUCCESSFUL RECLAMATION	QUANTIFIABLE PERFORMANCE MEASURES
Site stability	
Sheet & rill erosion	% area of field surface w/rills & deposition
Channel & gully erosion	% area of concentrated flows w/channel erosion
Mass wasting	% area of field surface & highwall unstable
Plant density and species diversity	
Plant density	1. % ground covered by planted & volunteer species 2. Volume by weight or mass of planted & volunteer species, if applicable
Species diversity	% presence of planted & volunteer species
Noxious weeds & invasive plant species	% presence of each type; noxious weed & invasive plant species

Overview of Non-Metallic Mining Reclamation Ord. What Changed?



5.5.c

Soil chemistry	
Soil acidity	pH
Macro nutrient fertility	Concentration of N-P-K (ppm)
Soil organic matter	% O.M.
Soil physical characteristics	
Soil depth	% of original A & B soil horizon depth, measured in comparison to soil survey mapping unit
Soil permeability	Soil permeability measured using 6" infiltration ring (inches/hr)
Plant rooting depth	Minimum soil depth to support unrestricted root growth for selected cover type, as defined in soil rehabilitation & vegetation management plan
Other alternative criteria, as agreed to by the permitted mine operator and County	Other quantifiable performance measures, as agreed to by the permitted mine operator and County

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We would be pleased to address any questions.

