

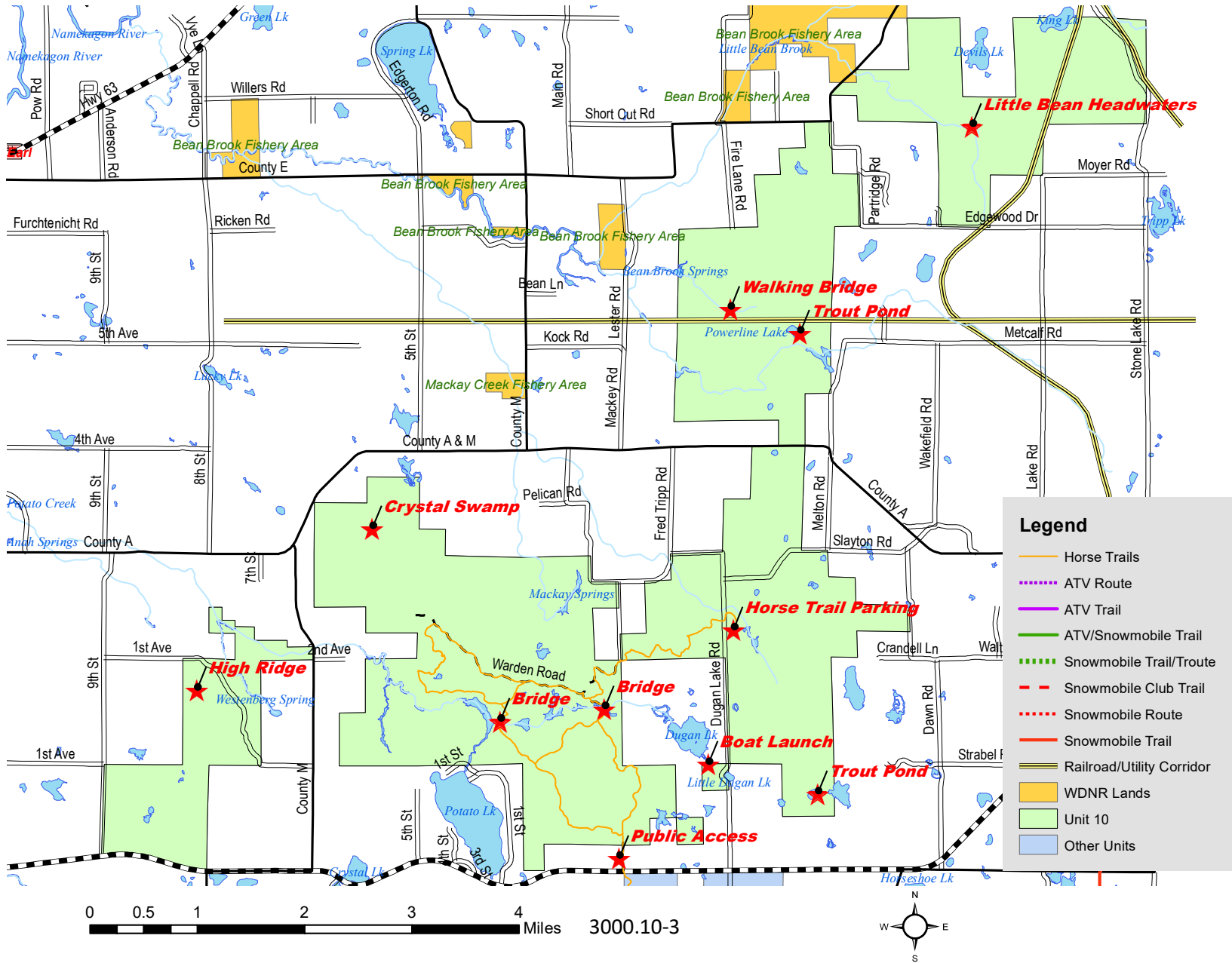
WASHBURN COUNTY FOREST COMPREHENSIVE LAND USE PLAN
INTEGRATED RESOURCE MANAGEMENT UNITS
CHAPTER 3000.10 – DUGAN UNIT

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*Approved by Washburn County Board of Supervisors October 19, 2021
No Revisions*

3000.10.1 RESOURCE MAP



3000.10.2 COMPARTMENTS

18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 113

3000.10.3 ACRES

11,606 (former units 20, 21, 30, and parts 19)

3000.10.4 FOREST TYPES

FOREST TYPE	1995 ACRES	1995 PERCENT	2005 ACRES	2005 PERCENT	2020 ACRES	2020 PERCENT
ASPEN	5448	47.8%	5521	48.4%	5582	48.2%
RED OAK	1315	11.5%	1265	11.1%	1316	11.4%
LOWLAND BRUSH	776	6.8%	835	7.3%	909	7.8%
NON FORESTED WETLAND	938	8.2%	919	8.1%	886	7.6%
NORTHERN HARDWOOD	860	7.5%	850	7.5%	819	7.1%
SWAMP CONIFER	407	3.6%	425	3.7%	478	4.1%
SWAMP HARDWOOD	420	3.7%	407	3.6%	396	3.4%
RED PINE	373	3.3%	374	3.3%	371	3.2%
FIR / SPRUCE	221	1.9%	227	2.0%	226	1.9%
TAMARACK	163	1.4%	174	1.5%	164	1.4%
WHITE BIRCH	78	0.7%	90	0.8%	119	1.0%
WHITE PINE	83	0.7%	83	0.7%	116	1.0%
WATER	113	1.0%	115	1.0%	103	0.9%
ROW	0	0.0%	0	0.0%	63	0.5%
GRASS	78	0.7%	74	0.6%	25	0.2%
UPLAND BRUSH	44	0.4%	34	0.3%	20	0.2%
JACK PINE	89	0.8%	13	0.1%	13	0.1%
TOTAL	11406	100.00%	11406	100.00%	11606	100.00%

**changes from 1995 to 2005 are to be used for general comparison. Certain data sets are calculated due to restructuring of IRMU units in 2020. Other changes may reflect changes in mapping accuracy or changes in forest type definitions. 1995 and 2005 data is an estimate based on prior reported percentages applied to current acreage.*

The major acreage change from 1995 to 2020 results from the acquisition of the 200 acre Washburn County Lakes and Rivers property.

3000.10.5 ECOLOGICAL LANDSCAPES

The eastern and northeast corner of the unit lies in the North Central Forest. This landscape provides opportunities for mesic forests such as northern hardwood, oak, aspen/birch on the uplands as well as swamp conifer and swamp hardwood in the lowlands. There may be some opportunities to promote hemlock-hardwood, yellow birch, and natural white pine.

The west and central areas lie within the Northwest Sands. This landscape indicates management opportunities for dry forests such as jack pine, red pine, scrub oak, and associates such as aspen.

There are also opportunities to mimic barrens characters by emulating historic fire patterns

through harvesting practices. There may be some opportunity to provide for presumed climax overstory by managing some sites towards white pine, red pine types.

The far southern edge lies within the Forest Transition Landscape. This landscape allows for management opportunities of a wide variety of forests ranging from dry-mesic, mesic to wet mesic types. Management is generally driven by forest habitat types and current stand conditions.

3000.10.6 LANDFORMS

Landforms within this unit are undulating outwash plain with isolated moranic hills and ridges (*Spooner Plains LTA*); hilly collapsed moraine (*Telemark Washed End Moraine LTA*); and rolling collapsed moraines with outwash terraces and ice walled lake plains (*Late St. Croix Moraines LTA*).

3000.10.7 SOILS

Uplands soils are primarily sandy loams (*Keweenaw-Pence complex; Haugen-Rosholt complex; Fremstadt, stony-Cress complex and others*), with areas of loamy sands fairly common throughout (*Keweenaw-Sayner-Vilas complex; Graycalm-Menahga complex; and Meehan Loamy Sand*), and scattered inclusions of sand soils (*Menahga and Mahtomedi soils*). Hydric Soils are scattered throughout and are mostly peat soils (*Loxley Muck Peat; and Loxley, Beseman and Dawson soils*), with lesser components of muck (*Seelyeville and Markey soils; Lupton, Cathro and Tawas soils; and others*).

3000.10.8 FOREST HABITAT TYPES

This unit contains a mix of habitat types, but overall, a majority of the area is comprised of AVDe habitats. AVDe provides opportunities for early successional management of primarily aspen, as well as opportunity for red oak management, although on a shorter rotation basis and generally lower quality and less vigorous growth. Pine management, both natural and plantation are also options on a limited basis.

There are scattered areas of AAt. AAt is the principal habitat for hardwood management in the area. The potential for oak management is high and aspen and birch show excellent growth. Northern hardwood, while not optimal for the sites, can show good growth.

There are also areas of PArVAm. PArVAm opportunities are generally limited to aspen and jack pine. Red and white pine management opportunities may be present. Oak can be managed but since it would likely be northern pin oak, pushing stands towards oak is not recommended.

See Section 800.1.3 for more detailed information on forest habitat types.

3000.10.9 WATER RESOURCES

Most of the water resources in this unit are part of the Middle Namekagon, Trego Lake watershed, with water generally flowing northerly into the Namekagon River, above Lake Trego and then westerly to the St. Croix. The far western block in this unit is part of the Shell Lake, Yellow River watershed and water resources generally flow southwesterly into the Yellow River, then westerly to the St. Croix.

Lakes with County Forest Frontage

Name	Acres	Frontage	Fishery	Designations
King Lake	25.0	0.6 miles	Yes	None

Lakes within County Forest

Name	Acres	Fishery	Designations
Westenberg Springs	2.1	Yes	Class III Trout
Solar Pond	4.2	Stocked Trout	None
Powerline Lake	7.1	Stocked Trout	None
Mackay Springs	7.6	Stocked Trout	None
Little Dugan Lake	3.2	Yes	None
27 unnamed ponds	72.8	No	None

Rivers and Stream within County Forest

Name	Miles	Type	Fishery	Designations
Westenberg Creek	0.8	Cold Water	Class III Trout	None
S. Fork Bean Brook	1.0	Cold Water	Class I Trout	ERW
Potato Creek	3.8	Warm Water	No	None
Mackay Creek	1.2	Cold Water	Class II Trout	None
L. Bean Brook	2.9	Cold Water	Class I Trout	ERW
Godfrey Creek	2.4	Cold Water	Class II Trout	None

Dugan Run	1.5	Warm Water	No	None
Bean Brook	0.5	Cold Water	Class I Trout	ERW
6 unnamed	4.3	Warm Water	No	None

3000.10.10 RECREATION

- The northern portion of the Dugan Run Horse Trail loops through 2 of the geographic areas of this unit. A parking area and trailhead are on the east side of Dugan Lake Road. The trail is a mixture of single track and logging roads.
- Parts of this unit receive fairly high hunting pressure due to the close proximity to Spooner.
- There are trout fishing opportunities associated with Westenberg Creek, Westenberg Spring and Mackay Springs and Mackey Creek.
- There are trout fishing opportunities associated with Godfrey Creek and South Fork Bean Brook.
- Powerline Lake and Solar Pond has a stocked trout fishery.

3000.10.11 HISTORICAL, CULTURAL, ARCHEOLOGICAL

- The area has several historical sites associated with late 1800's pine extraction.
- Many of the streams in this unit served to float logs into the Namekagon River.
- Evidence of abandoned homesteads are common within the unit.

3000.10.12 PROTECTION NEEDS

- Wildfire risk is generally low due to the dry mesic and mesic hardwood components within the unit.
- The South Fork of Bean Brook Springs is unique in that these springs originate from the base of a hilly moraine deposit. It is recognized as an exceptional resource on the forest and warrants protection. *See Section 835.3.4.*
- This unit contains the Crystal Swamp. This swamp is a classic example of peatland development in shallow lake basins. It is recognized as an exceptional resource on the forest and warrants protection. *See Section 835.3.5.*
- The unit contains high percentages of northern red oak. Monitor for oak wilt infestations.

3000.10.13 AESTHETICS

- Highway 70 is an Aesthetic Zone. While there are not specific mitigating techniques prescribed here, management will generally be tailored to minimize the aesthetic impact of even aged harvests. As a general philosophy, management will not be hidden, but visual impact should be mitigated through staggered harvest, irregular boundaries, and possibly conversion to northern hardwood types.
- The Namekagon National Scenic Riverway Zone is managed as an aesthetic zone, with requirements defined in Section 530.2.3.

3000.10.14 LAND CONTROL

Easements to County

- SESE 31 T39N-R10W. Washburn County took tax deed parcel and retained east 66 feet as easement when property was sold tax sale. Recorded 218707 as part of Washburn County to Paine deed.
- SESE 19 T39N-R10W. Washburn County purchase parcel and retained east 66 feet under easement. Recorded 203053 under original deed and easement retained under 212085 when property sold.

Utility Easements/Agreements

- SWSE 9, NWNE 16 T39N-R10W. Electrical easement to Barron Electric. Unknown date. No evidence of recorded document.
- NENE 32 T39N-R10W. Electrical easement on west side of town road to Barron Electric in 1981. No evidence of recorded document.
- SWSE, SESE 12; SESE 11 T40N-R10W. Electrical easement to Barron Electric. Unknown date. No evidence of recorded document.
- Section 11 T40N-R10W. Electrical easement to Public Service Commission/ATC for 345 KV powerline in 2005. Recorded 314633
- Section 25 T40N-R10W. Electrical easement to Public Service Commission/ATC for 345 KV powerline in 2005. Recorded 314632

Encroachments

- East line SWNW Section 26 T40N-R10W – Road encroachment
- West line NESW Section 33 T40N-R10W – Field encroachment
- East line NENE Section 9 T39N-R10W – Field and debris encroachment
- East line SENE Section 9 T39N-R10W – House and yard encroachment

- West line SWNE Section 5 T39N-R10W – Field encroachment
- West line SENW Section 20 T39N-R10W – Field encroachment
- West line NWSE Section 23 T39N-R10W – Field encroachment
- West line NWNE Section 26 T39N-R10W – Field encroachment
- South line SESW and SWSE Section 36 T39N-R10W – Field encroachment

Road Use Agreements to Private

- NWNE 12 T40N-R10W. Access to NESE 12 T40N-R10W from Rainbow Road. Issued to Sinak. Expires 12/01/2020.

DOT

SWSE Section 33 T39N-R11W. Driveway permit on north side of Hwy 70.

Other

- SWSE, SESE 11 T40N-R10W. Approximately 4.8 acres deeded to Lee Peterson to satisfy adverse possession claim in 1994. Recorded 236324.
- Section 11 T40N-R10W. Withdrawal of 29.7 acres of scattered parcels between town roads and lakeshore lots on Beaver Lake. Parcels sold directly to adjoining owners. Withdrawal approved in 2015. Recorded 236324

3000.10.15 FOREST MANAGEMENT GOALS AND GUIDELINES

1. The primary goal for this unit is retaining the red oak acreage.
2. Stands on PArVAm and those AVDe habitats that are on the drier/less nutrient rich range, should be analyzed carefully to make sure that they are not dominated by northern pin oak. Pin oak sites should be converted to other types.
3. Red oak stands on PArVAm and AVDe types should be analyzed within the framework outlined in Section 825.9.3.2 and 825.9.3.3 to develop regeneration plans.
4. Red oak stands on AAt types should be analyzed within the framework outline in Section 825.9.3.1 and 825.9.3.2.
5. Given that most of the oak in this unit is on drier and less nutrient rich soils, stands should be given priority for some of the younger rotation ages on the forest. Look for opportunities during good acorn years to conduct site preparation and shelterwood harvests.
6. There are numerous northern hardwood stands within the unit. Most are associated with the scattered AAt types, but some are associated with AVDe. Northern hardwood should be

considered as very important to maintain, even those that could be considered as “off-site” within the AVDe habitats.

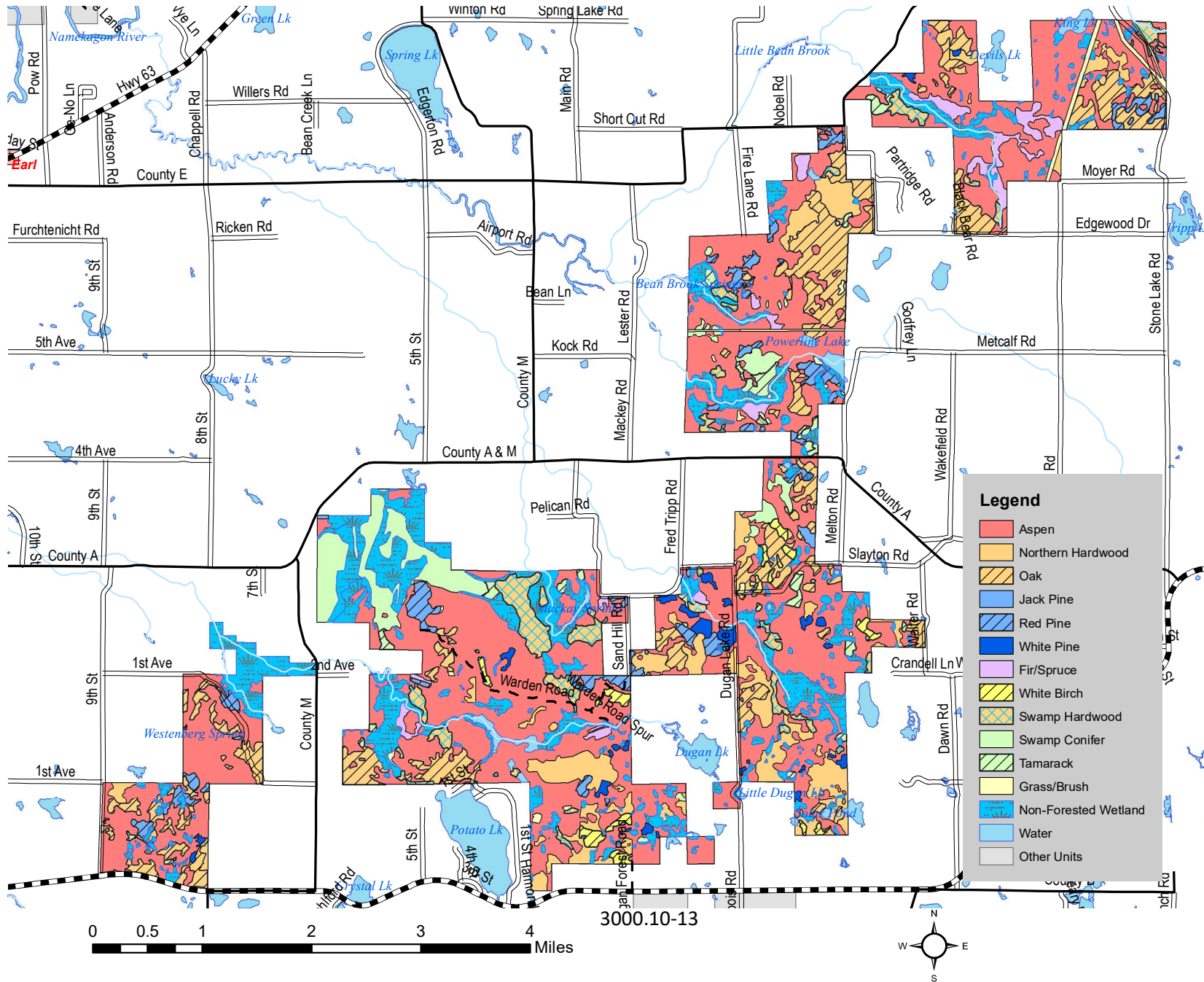
7. Aspen stands comprise almost half of the upland forest types within the unit. While aspen is an important resource on the Washburn County Forest, reductions to aspen acres is allowable providing that it is part of a goal to diversify the unit.
8. Retain existing acreage of red pine plantation
9. Promote, enhance, and protect natural stands of red/white pine.
10. Look for opportunities to promote white birch.
11. There is a single jack pine stand within the unit that should be regenerated back to jack pine when scheduled for management/harvest.

3000.10.16 SITE SPECIFIC MANAGEMENT OPPORTUNITIES AND GOALS

1. The County, as a priority, should pursue the following parcels for acquisition if they come available:
 - That part of the NWSE, SWSE and NESE Section 35 T40N-R10W lying north and west of the railroad.
 - NWSW Section 20 T39N-R10W
 - E1/2SE Section 19 T39N-R10W
 - NE1/4, NW1/4, SW1/4 Section 29 T39N-R10W
 - W1/2NE, SENE Section 32 T39N-R10W
 - NESW Section 32 T39N-R10W
 - W1/2 Section 33 T39N-R10W
 - Individual lots in Section 26 T40N-R10W that would provide timber access into the area north of Bean Brook.
 - That part of W1/2NE and SENW Section 27 T40N-R10W lying east of Cty E
 - SESE Section 22 T40N-R10W
 - NENE, NWNE Section 14 T39N-R11W
 - S1/2SE Section 23 T39N-R11W
 - That part NENW Section 20 T39N-R10W lying south and east of town road
2. Pursue land acquisition in the SWNW Section 10 T39N-R10W. Also consider land trade in this area to resolve encroachment issue to the north in exchange for ownership of the access route along the old town road right of way.

3. Attempt to secure legal access into Sections 25, 26 & 27 T40N-R10W. Access is needed from Cty E on the west and across the Wisconsin Central LTD property on the east. Bean brook and associated wetlands make access from the south very difficult.
4. Support trout stocking programs on Solar and Powerline Lakes.
5. The natural pine in Section 20 T39N-R10W should be considered a unique resource with management prescriptions aimed at protecting and enhancing the site.
6. Support any DNR initiatives to enhance trout habitat and trout fishing opportunities associated with Little Bean Brook, its tributaries, or other streams within the unit.
7. Consider educational opportunities at a historic logging camp that lies in close proximity to a town road. Artifacts could be collected, in consultation with the State Historical Society, and building locations signed/identified on site, as part of a self-guided tour.
8. Monitor for invasive species associated with horse trail use.
9. Protect Crystal Swamp and South Fork Bean Brook Springs when forest management occurs adjacent to the sites.
10. Consider options for designating Crystal Swamp as a no-management zone.
11. Prescribed burning may be considered for site maintenance or regeneration of natural red and white pine stands.
12. Support any DNR initiatives to enhance trout fishing opportunities on Mackay Springs.
13. Attempt to secure a legal crossing over the railroad in Section 25 and Section 35 T40N-R10W. Consider requesting access across the W1/2SE Section 35.
14. Continue to manage and maintain the Dugan Horse Trail and associated amenities.

3000.10.17 GENERAL FOREST TYPES MAP



3000.10.18 GENERAL SOIL TYPE MAP

