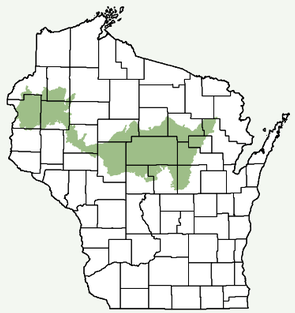
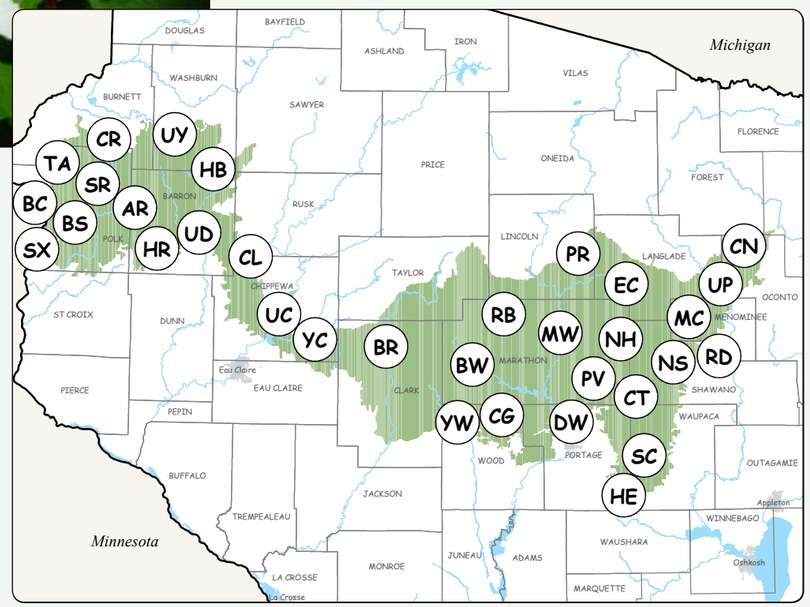
Forest Transition

ecological landscape

THOMAS MEYER

Great White Trilliums (*Trillium grandiflorum*) blanket a forest floor in Wood County





Attributes and Characteristics

In pre-settlement times, this landscape was almost entirely covered with mesic to wet-mesic forests of hemlock and sugar maple, with some yellow birch, red pine, and white pine. There were pockets of conifer swamps, often near the headwaters of streams, containing white cedar, black spruce and tamarack. With a combination of productive soils and more moderate climate, this band across the state marks the northern extent of predominantly agricultural land use. Remaining forests tend to occur as fragments and are often quite small. Soils are diverse and range from sandy loam to loam and shallow silt loam (both poorly drained and well drained).

Small kettle lakes are common on the moraines in the western lobe of this ecological landscape. These lakes are readily accessible to the residents of the Twin Cities and other population centers and are experiencing increasingly intensive development pressure. Further east, in Clark and western Marathon Counties, very few lakes exist, and the land takes on a more rolling nature. Along with the extensive dairy operations here, there is ginseng production centered around Wausau. Many small creeks and rivers flow across the plain, creating a dendritic drainage system. Major rivers include the Big and Little Rib, Trappe, Big and Little Eau Pleine, and the Wisconsin.

At the eastern end of this landscape, which was covered by the Green Bay lobe of the last glacier, many lakes occur, the soil is not as favorable for farming, and more forests are present. Many of the streams in this area support excellent brook trout populations.

Legacy Places

- AR Apple River
- BS Balsam Branch Creek and Woodlands
- BW Big Eau Pleine River Woods
- BC Big Rock Creek
- BR Black River
- CG Central Wisconsin Grasslands
- CN Chequamegon-Nicolet National Forests
- CL Chippewa Glacial Lakes
- CR Clam River
- CT Comet Creek and Woodlands
- DW Dewey Marsh and Woods
- EC East and West Branches of the Eau Claire River
- HE Hartman & Emmons Creeks
- HB Haugen-Birchwood Lakeland
- HR Hay River
- MC Menominee County Forests
- MW Middle Wisconsin River
- NH Norrie-Hatley Wetlands
- NS North Branch of the Embarrass River
- PV Plover River
- PR Prairie River
- RD Red River
- RB Rib River
- SC Sand Country Trout Streams
- SC St. Croix River
- SR Straight River Channel
- TA Trade River Wetlands
- UC Upper Chippewa River
- UD Upper Red Cedar River
- UP Upper Wolf River
- UY Upper Yellow River
- YC Yellow (Chippewa) River
- YW Yellow (Juneau) River

Jim McEvoy

Figure 66a: Legacy Places and public conservation lands of the Forest Transition

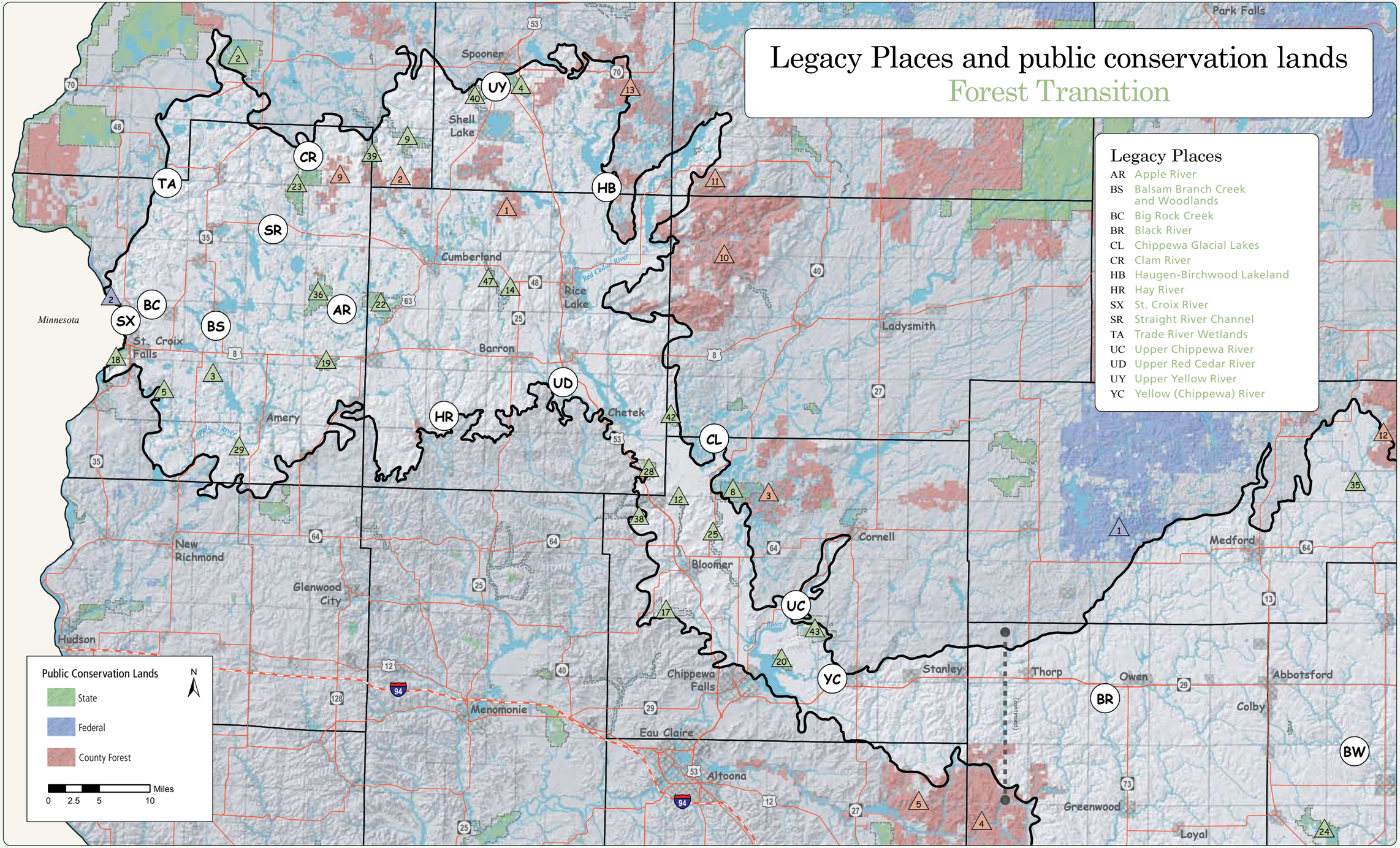


Figure 67a: Legacy Places and land cover of the Forest Transition

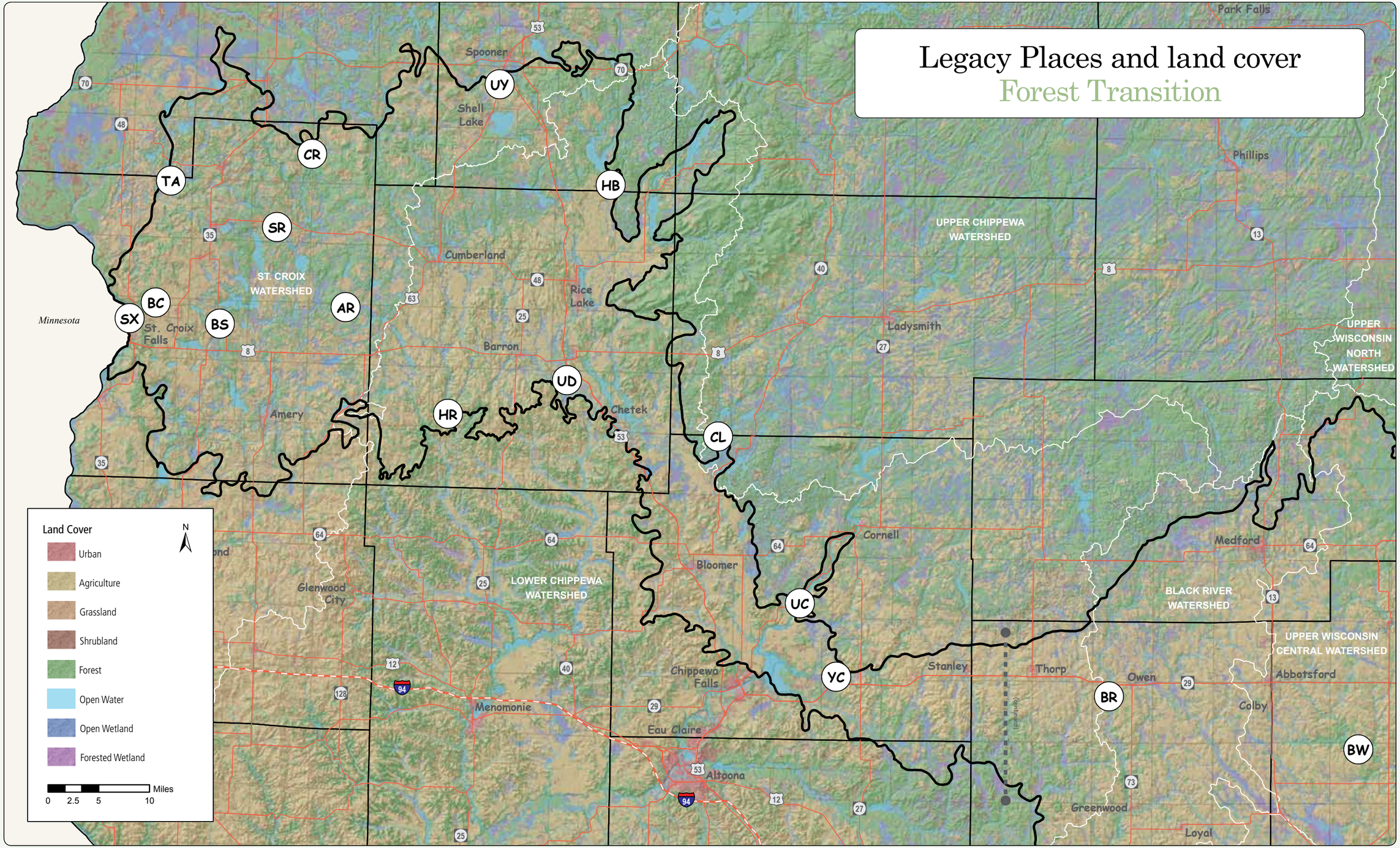


Figure 66b: Legacy Places and public conservation lands of the Forest Transition

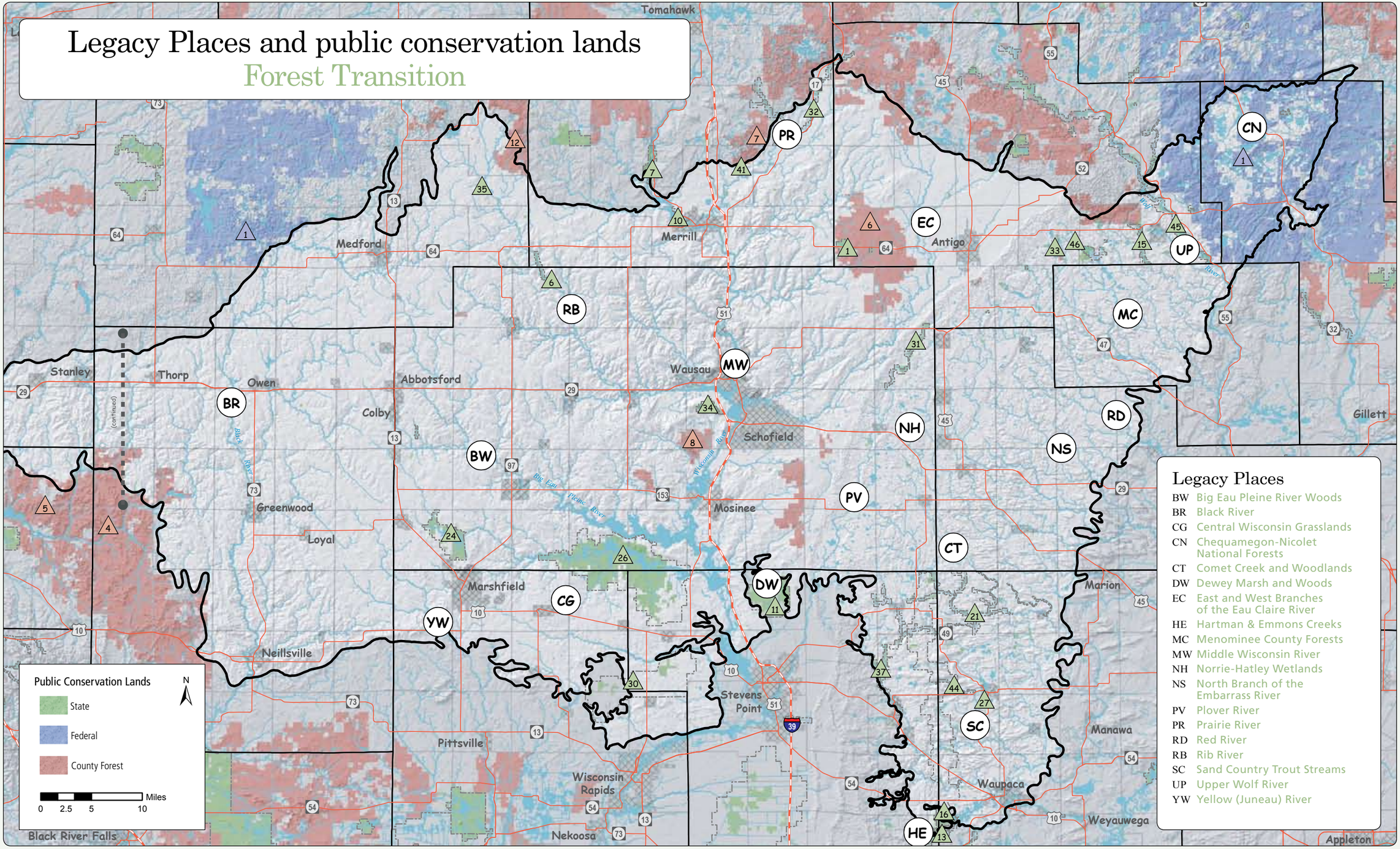
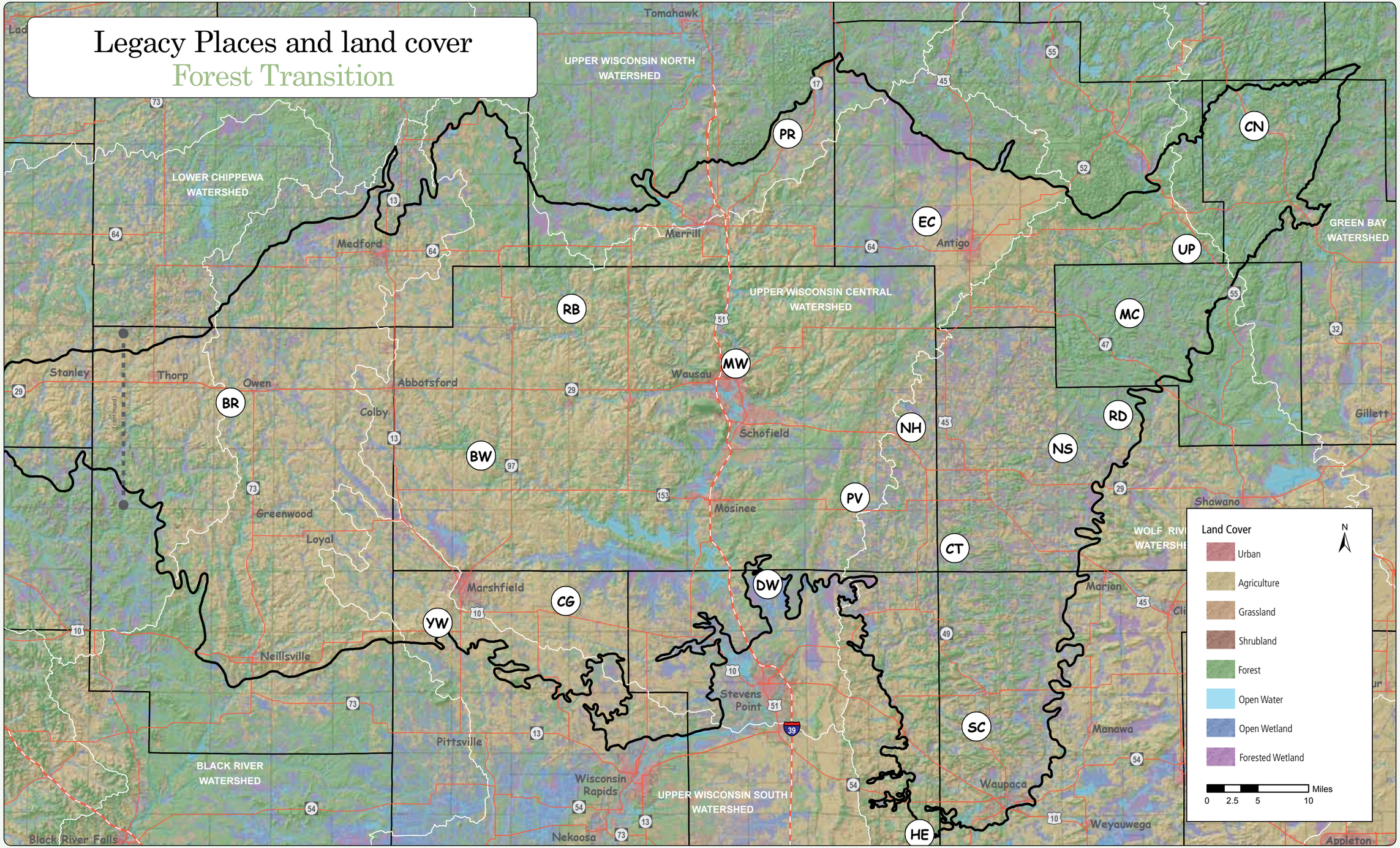


Figure 67b: Legacy Places and land cover of the Forest Transition



Forest Transition
ecological landscape

Key characteristics:
- » Fragmented landscape that marks the transition from northern mesic forest to agriculture
- » Conifer swamps associated with some headwater streams
- » Numerous kettle lakes in the western part of the ecological landscape
- » Large river corridors connecting northern and southern Wisconsin

Size:
- » 7,280 square miles
- » 4,657,400 acres (13.0% of Wisconsin)

Population:
- » 392,000 (7.4% of Wisconsin's population)

Notable species:
- » Waterfowl and other wetland birds
- » Trumpeter swan
- » Prairie chicken and other grassland birds
- » Rainbow darter
- » Redside dace
- » Ginseng
- » Deam's rockcress
- » Assiniboine sedge

Natural communities:
(*See Appendix B for descriptions*)
- » Northern mesic forest
- » Northern wet-mesic forest
- » Northern wet forest

Public Conservation Lands

Map#	Property Name	Size (acres)[1]
State		
1	Ackley State Wildlife Area	1,100
2	Amsterdam Sloughs State Wildlife Area[2]	375
3	Balsam Branch State Wildlife Area	175
4	Beaver Brook State Wildlife Area	1,280
5	Behning Creek State Fishery Area	120
6	Big Rib River State Fishery Area	730
7	Bill Cross State Wildlife Area[2]	330
8	Chippewa Moraine State Recreation Area[2]	235
9	Clam River State Fishery Area[2]	1,900
10	Council Grounds State Park	480
11	Dewey Marsh State Wildlife Area[2]	840
12	Duncan Creek State Fishery Area	360
13	Emmons Creek State Fishery Area[2]	280
14	Engle Creek Springs State Fishery Area	190
15	Evergreen River State Fishery Area	1,060
16	Hartman Creek State Park[2]	1,010
17	Hay Creek State Fishery Area	230
18	Interstate State Park	430
19	Joel Marsh State Wildlife Area	1,225
20	Lake Wissota State Park	1,050
21	Little Wolf River State Fishery Area	2,360
22	Loon Lake State Wildlife Area	2,850
23	McKenzie Creek State Wildlife Area	5,550
24	McMillan State Wildlife Area	4,140
25	McCann Creek State Fishery Area	430
26	Mead State Wildlife Area	27,630
27	Myklebust Lake State Natural Area	170
28	New Auburn State Wildlife Area[2]	1,020
29	Parker Creek State Fishery Area	190
30	Paul Olson State Wildlife Area[2]	870
31	Plover River State Fishery Area	1,450
32	Prairie River State Fishery Area[2]	1,350
33	Rabes Lake State Fishery Area	120
34	Rib Mountain State Park	1,180
35	Rib River State Fishery Area	170
36	Rice Beds Creek State Wildlife Area	3,130
37	Richard A Hemp State Fishery Area[2]	1,220
38	Sand Creek State Fishery Area[2], Chippewa Cnty	195
39	Sand Creek State Fishery Area, Polk Cnty	1,400
40	Sawyer Creek State Fishery Area[2]	640
41	Spring Lake State Fishery Area	240
42	Ten Mile Creek State Wildlife Area	410
43	Tom Lawin State Wildlife Area[2]	1,440
44	Trout-Nace Creek State Fishery Area	170
45	Upper Wolf River State Fishery Area[2]	3,180
46	Woods Flowage State Fishery Area	1,220
47	Yellow River State Fishery Area	700
	Miscellaneous Lands[3]	10,490

Map#	Property Name	Size (acres)[1]
Federal		
1	Chequamegon-Nicolet National Forest[2]	81,200
2	St. Croix National Scenic Riverway[2]	2,720
	Waterfowl Production Areas	830
County Forest[4]		
1	Barron County Forest[2]	9,020
2	Burnett County Forest[2]	3,790
3	Chippewa County Forest[2]	120
4	Clark County Forest[2]	9,700
5	Eau Claire County Forest[2]	1,190
6	Langlade County Forest[2]	37,810
7	Lincoln County Forest[2]	170
8	Marathon County Forest	24,760
9	Polk County Forest[2]	5,700
10	Rusk County Forest[2]	585
11	Sawyer County Forest[2]	670
12	Taylor County Forest[2]	3,970
13	Washburn County Forest[2]	17,520
Total		**287,070**

[1] Actual acres owned in this Ecological Landscape.
[2] This property also falls within adjacent Ecological Landscape(s).
[3] Includes public access sites, fish hatcheries, fire towers, streambank and non-point easements, lands acquired under statewide wildlife, fishery, forestry, and natural area programs, small properties under 100 acres, and properties with fewer than 100 acres within this Ecological Landscape.
[4] Locations and sizes of county owned parcels enrolled in the Forest Crop Law are presented here. Information on locations and sizes of other county and local parks in this Ecological Landscape is not readily available and is not included here, except for some very large properties.

THOMAS MEYER

Centennial Bedrock Glade State Natural Area in Polk County

ROBERT READ

Wild Ginseng (*Panax quinquefolius*)

Figure 68: Land cover of the Forest Transition

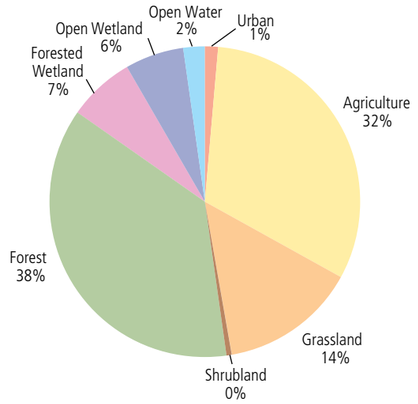


Figure 69: Public conservation and other land ownership in the Forest Transition

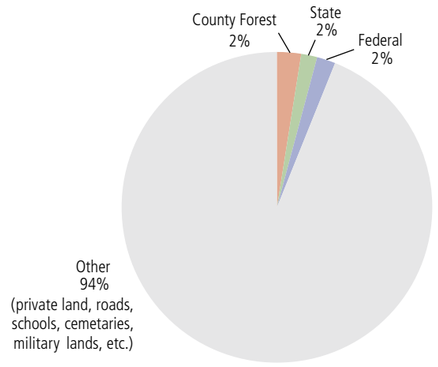
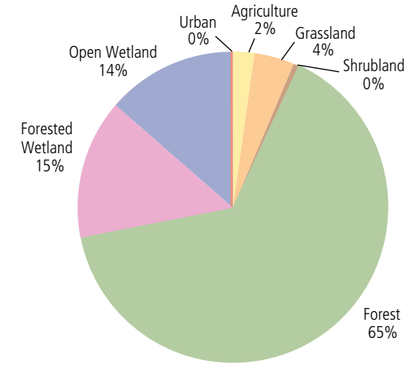


Figure 70: Land cover of public conservation lands in the Forest Transition



Conservation Needs and Opportunities

Although a significant portion of this landscape is in agricultural production, many opportunities exist to restore and maintain important forest resources here. In the western section, in addition to protecting the numerous kettle lakes, there is a need to maintain open space between the mostly small, scattered state wildlife and fisheries areas. Although some rivers run through this area, establishing functional connections between these conservation properties may be more effective following existing forest corridors.

In the central part of the Forest Transition a primary conservation interest is managing a large network of grasslands, hayfields, and row crops to sustain a viable population of prairie chickens and other grassland species. Several large state wildlife properties occur here and they, along with others in the Central Sand Plains to the south, form an excellent foundation on which to continue recovery efforts for this popular species. The central portion of this ecological landscape is also noteworthy for the several large, good quality rivers that flow through it. The Wisconsin, Black, Plover, Big Eau Pleine, and Prairie Rivers all host important fisheries and act as natural travel corridors for species living throughout central Wisconsin.

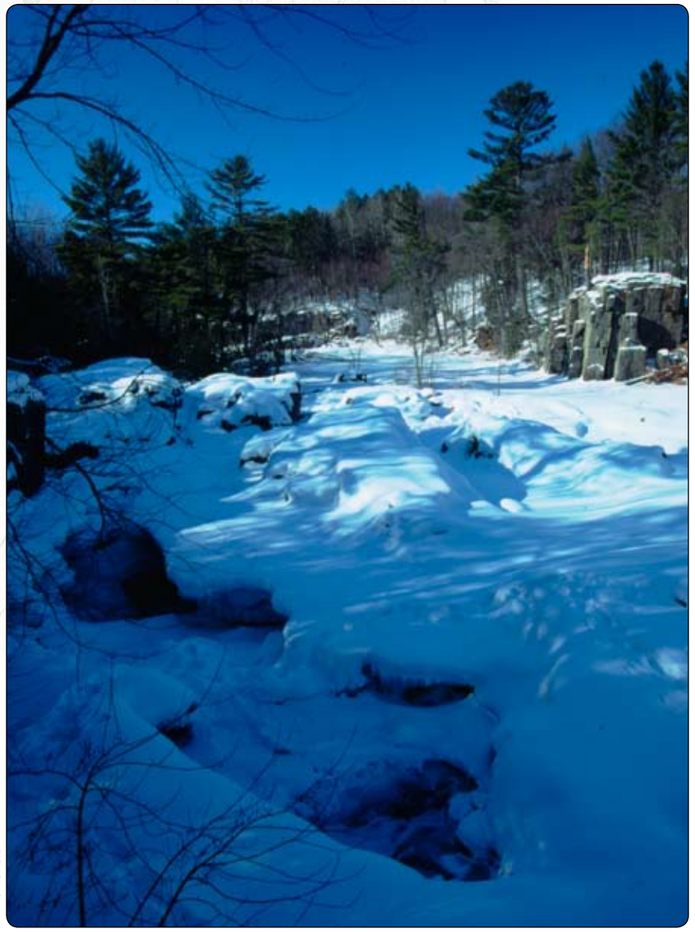
The eastern portion harbors this ecological landscape's most extensive forests. Although often in relatively small ownership parcels, many large blocks of maple, birch, aspen and hemlock forest remain. Large wetlands, most of which are forested with white cedar, spruce, and tamarack, also provide opportunities to minimize fragmentation impacts, particularly for species such as forest interior birds. The numerous high quality trout streams, most of which flow southeasterly out of the cold springs in the moraine, would also benefit from maintaining forest cover in the watershed. Of special note in maintaining this landscape's forest biota are the large, intact forests on the Menominee Indian Reservation.

Recreation Uses and Opportunities

With extensive public recreation lands in adjacent ecological landscapes, this area of the state has historically provided only limited public recreation opportunities. But, with the growth of the Twin Cities, the Fox Valley, and several central Wisconsin cities, this area is under increasing pressure to help meet recreation demands. Given the gentle topography and silt-loam soils, this landscape has great potential to provide off road biking, cross-country skiing, nature study, horseback riding, fishing, hunting, and other outdoor activities. Access to the major rivers for boating and canoeing is in high demand.

Forest Transition
ecological landscape

Legacy Places



THOMAS MEYER

Dells of the Eau Claire in winter

AR Apple River

Size . . . . . Small
Protection Initiated . . . . . Moderate
Protection Remaining . . . . . Moderate
Conservation Significance . . . . . ★★
Recreation Potential . . . . . ★★★

The upper stretches of the Apple River snake through two state properties, the Loon Lake and Rice Beds Creek Wildlife Areas. These two properties support a variety of grasslands, wetlands, numerous small glacial pothole lakes, and oak, aspen, and northern hardwood forests. North of Rice Beds Creek Wildlife Area are large blocks of northern hardwood forest with old-growth characteristics. The area potentially offers a variety of recreation uses.

BS Balsam Branch Creek and Woodlands

Size . . . . . Small
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Moderate
Conservation Significance . . . . . ★
Recreation Potential . . . . . ★★★

This area is characterized by rolling upland and lowland forest, grassland, and wetland. A small existing wildlife area is a mix of restored grassland and forest with a shallow lake in the center of the property. Surrounding the property are sizable woodlands and farmlands interspersed with lakes and streams. South of Balsam Lake lies a large forested block containing a good quality northern hardwoods community. On the north side of Balsam Lake lies Stump Bay, a high quality wetland area. Opportunities exist to maintain open space and provide additional public recreation.

BW Big Eau Pleine River Woods

Size . . . . . Medium
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★★
Recreation Potential . . . . . ★★★

This diverse, high quality hemlock/hardwood forest exists around the Big Eau Pleine River. The corridor of forest along the river provides important pathways for animal species movements. Aquatic resources in the river include several rare invertebrates. The land adjacent to the forest is dominated by farms and open grassland. The area could support a range of low-impact recreation uses.

BC Big Rock Creek

Size . . . . . Small
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Moderate
Conservation Significance . . . . . ★★
Recreation Potential . . . . . ★★★

Big Rock Creek flows into the St. Croix River, with part of the creek classified as Class II trout water. The mostly forested watershed contains one of the largest intact blocks of woods in west-central Polk County. Much of this small, scenic valley is surrounded by farmland and fallow land converting to upland brush. The area is under considerable development pressure and maintaining the mix of forests and farms would provide considerable conservation and recreation benefits. Recreation opportunities could include fishing, hunting, nature study, and other low-impact uses. St. Croix Falls is nearby.

BR Black River

Size . . . . . Large
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★★★
Recreation Potential . . . . . ★★★

The Black River originates in the northern forests of central Taylor County and meanders south for more than 100 miles to its confluence with the Mississippi River. Biological diversity along the corridor is high due to its north-south orientation, association with four ecological landscapes, and the presence of pronounced, intact, wet-to-dry environmental gradients along the length of the river. The floodplain widens downstream from Black River Falls and supports large tracts of high quality southern floodplain forest, numerous oxbow lakes, and shallow marshes.

In this ecological landscape, the river flows through a landscape dominated by farming. The narrow corridor of woods and wetlands along the river, while providing only a modest amount of wildlife habitat, likely serves as an important north-south dispersal corridor for bear, timber wolves and fisher. The river supports a diverse warmwater fishery.

Establishment of a protected corridor along the Black River would serve several purposes. First, it would link several existing public lands: Chequamegon National Forest, Clark and Jackson County Forests, Black River State Forest, Big Creek State Fishery Area, North Bend Bottoms and Van Loon State Wildlife Areas, and the Upper Mississippi River National Fish and Wildlife Refuge. In addition, it would facilitate protection of important wildlife habitats, thus maintaining the value of the corridor for migrating and dispersing wildlife. It would also provide additional opportunities for high quality outdoor recreational experiences in the western part of the state.

CG Central Wisconsin Grasslands

Size . . . . . Large
Protection Initiated . . . . . Moderate
Protection Remaining . . . . . Moderate
Conservation Significance . . . . . ★★★★
Recreation Potential . . . . . ★★★

Stretching in an “S” shape from southeastern Taylor County, between Stevens Point and Wisconsin Rapids, and south to northeastern Adams County, this area is probably the best location in Wisconsin to create a grassland landscape large enough to sustain viable populations of most grassland species. Due to the size, condition, and distribution of the existing grasslands and fallow farm fields, this area is particularly attractive to a diverse community of grassland birds. The state’s largest populations of prairie chicken and Henslow’s sparrow are found here. Other declining or rare grassland birds, including grasshopper sparrow, upland sandpiper, eastern meadowlark, northern harrier, and short-eared owls are locally abundant.

Several large state wildlife properties here, including the McMillan, Mead, and Paul Olson Wildlife Areas, are managed primarily to provide a mosaic of grassland habitats. Many privately owned parcels are also managed for a variety of grassland types and play a crucial role in increasing the amount of useable habitat. Surrounding these properties is a primarily open, agricultural landscape dominated by dairy farming on the gently rolling clay loam soils.

CN Chequamegon-Nicolet National Forests

Size . . . . . Large
Protection Initiated . . . . . Substantial
Protection Remaining . . . . . Limited
Conservation Significance . . . . . ★★★★★
Recreation Potential . . . . . ★★★★★

The National Forest in this ecological landscape contains glacial moraines and till plains with loamy soil that support aspen and northern hardwood forests, and some lowland conifers. Forest ownership is not contiguous. There is a large proportion of private land in the Lakewood area; however, most of it is forested, and together with the National Forest provides a large block of forest habitat. Northern hardwood forests here provide habitat for a number of mesic herbaceous plant species and for forest interior birds during the breeding season. Aspen forests provide habitat for early-successional wildlife species and offer opportunities for ruffed grouse and woodcock hunting. Most lakeshores within this portion of the ecological landscape are privately owned. The Lakewood area is an important recreation destination. Off road vehicle use has been restricted to roads posted for such use, but current guidelines are being revised as part of the National Forest planning process.

HERBERT LANGE

Black Bear (*Ursus americanus*)

CL Chippewa Glacial Lakes

See the North Central Forest ecological landscape.

CR Clam River

See the Northwest Sands ecological landscape.

CT Comet Creek and Woodlands

Size . . . . . Small
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★★★
Recreation Potential . . . . . ★★

Comet Creek, a high quality trout stream for much of its length, is a tributary of the Little Wolf River and flows through an extensive forest. Maintaining this block in forest cover would benefit the many forest interior birds that currently utilize the area. Ground layer composition is rich and rock outcrops add diversity. The streams flowing through the woods have abundant aquatic diversity. Many recreation opportunities are possible.

Although distant from this area, these waters eventually flow into Lake Winnebago, the source of water for the Oshkosh, Neenah, Menasha, and Appleton municipal water systems. As a result, water from this area may affect the raw water quality of those municipal systems, which provide drinking water for approximately 162,000 customers.

DW Dewey Marsh and Woods

See the Central Sand Plains ecological landscape.

EC East and West Branches of the Eau Claire River

Size . . . . . Medium
Protection Initiated . . . . . Moderate
Protection Remaining . . . . . Moderate
Conservation Significance . . . . . ★★
Recreation Potential . . . . . ★★★

Originating in the large wetlands and small lakes near Kempster, these streams are productive trout waters. The large wetland in the headwater area,

ROBERT QUEEN

Rock climbing at Interstate State Park

known as Bogus Swamp, is a high quality open bog that supports rare butterflies and a diverse assemblage of plants. The water quality in the East Branch in particular has improved recently and is supporting higher numbers of trout. There are several public properties located in these corridors, including Langlade County Forest, the old Crystal Springs Hatchery, Peters Marsh Wildlife Area and some scattered fishery properties.

HE Hartman & Emmons Creeks

Size . . . . . Small
Protection Initiated . . . . . Substantial
Protection Remaining . . . . . Limited
Conservation Significance . . . . . ★★★
Recreation Potential . . . . . ★★★

Hartman Creek State Park and Emmons Creek Fishery and Wildlife Areas, two heavily used recreation areas, provide prime Karner Blue butterfly habitat. Protecting a larger area here could expand the populations of this federally rare species and provide additional recreation opportunities including multiple trail uses. Maintaining the existing open space surrounding these public properties, currently a mix of farms and forest, is important in preserving the area's exceptional scenic values.

HB Haugen-Birchwood Lakeland

Size . . . . . Large
Protection Initiated . . . . . Substantial
Protection Remaining . . . . . Moderate
Conservation Significance . . . . . ★★★
Recreation Potential . . . . . ★★★

Lying between Lake Chetak and Long Lake is an area of kettle lake topography containing an exceptionally high density of small, mostly undeveloped lakes. It was formed primarily while the Chippewa lobe of the most-recent continental glaciation was melting back from its maximum extent. The lakes formed when large, buried blocks of glacial ice melted and left deep depressions. The surrounding wooded uplands support many rare birds. Some of the area is owned and managed as County Forest. Many of the small lakes in the County Forest are accessible only by foot and provide a remote, wilderness experience

THOMAS MEYER

Silver Maple (*Acer saccharinum*) flower

for visitors. Fishing in of these lakes, many of which are less than 30 acres in size but more than 25 feet deep, is excellent.

Extending a protected corridor south to near Birchwood and west to Haugen could alleviate user conflicts currently occurring on the Tuscobia State Trail, which passes south of this area. Such a corridor could provide a scenic alternative route for the Ice Age Trail and protect similar kettle topography formed by the Lake Superior lobe.

HR Hay River

Size . . . . . Medium
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★★★★
Recreation Potential . . . . . ★★★★

The Hay River system harbors both free-flowing large river habitat and numerous smaller coldwater resources. Upland vegetation adjacent to these waters consists of farmland and forests of oak, maple, and basswood, with remnant stands of native white pine. Lowland areas consist of high quality wetland complexes, floodplain forest and backwater oxbows. The area offers excellent warmwater and coldwater fishing, hunting, wildlife watching, and trail uses. The area is mainly rural now, but is under development pressure given its close proximity to the Twin Cities, Eau Claire, and Chippewa Falls.

MC Menominee County Forests

Size . . . . . Large
Protection Initiated . . . . . Substantial
Protection Remaining . . . . . Limited
Conservation Significance . . . . . ★★★★★
Recreation Potential . . . . . ★

Entirely within the Menominee Indian Reservation, this large forest block harbors many interesting features. The forest changes from southeast to northwest in the county. East of the Wolf River soils are sandier supporting primarily an oak-pine forest; west of the river the land cover is primarily hemlock-hardwood forest with several large areas of white pine. Nearly all the animals known from the hemlock-hardwood region of Wisconsin can be found in the county.

The forests here are managed differently than most in the state with an emphasis on maintaining nearly every tree species to its biological rotation age (growing the tree until the heartwood begins to decay). The result is a dense canopy with many large diameter trees. The Menominee County forest provides a source population for many Neotropical migrants.

MW Middle Wisconsin River

Size . . . . . Large
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★★★
Recreation Potential . . . . . ★★★★

As the Wisconsin River meanders across this ecological landscape it flows through a number of communities, including Merrill, Wausau, and Mosinee. Surrounding land use is a mix of agricultural and forested land. Numerous hydroelectric facilities are found throughout this reach of the river. The middle portion of the Wisconsin River is an important biological and recreation corridor linking northern and southern Wisconsin.

Due to the proximity of several large population centers, this portion of the river receives substantial public use with recreational boating, fishing and waterfowl hunting being particularly popular activities. Large numbers of anglers take advantage of the river's robust warmwater fishery, which includes muskies in the upper stretches, and walleye, smallmouth bass, and several other species elsewhere. The black redhorse is found below the dam in Wausau, the only place in the state that it is known to occur.

Upland forests in the area typically contain a mix of oaks, aspen, and conifers, while the floodplain forests dominated by silver maple, green ash, and hackberry. In concert with associated marshes, these forests provide important habitat for a variety of resident and migratory wildlife. In addition to its aesthetic value, maintaining natural shoreline along the river is important for maintaining and improving water quality. A protected corridor could possibly allow for the establishment of a network of recreation trails.

NH Norrie-Hatley Wetlands

Size . . . . . Small
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Moderate
Conservation Significance . . . . . ★★★
Recreation Potential . . . . . ★★

This is a large open to forested wetland that harbors many species typically found much further north. Two softwater seepage lakes occur within the wetland. Vegetation present includes open bog, muskeg, black spruce swamp, and calcareous white cedar/tamarack swamp with several rare plant species. Potential habitat for rare birds and plants exists among the conifer swamps. Recreation opportunities may be limited to low-impact uses due to the wetness of the area, but protection would conserve scenic views from the Mountain Bay State Trail.

NS North Branch of the Embarrass River

Size . . . . . Small
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★★★
Recreation Potential . . . . . ★★

This spring-fed stream offers some of the best trout fishing opportunities in central and northeastern Wisconsin. The North Branch begins in several small spring ponds and winds its way through a mix of coniferous and deciduous swamps, bottomland pastures, shrub wetlands picking up more cool water along the way.

CHARLES FONKAS

Screech Owl (*Otus asio*)

The watershed is moderately rolling with about half upland and half wetland. Approximately 50–60% of the upper Embarrass River watershed is wooded. Dairy farming and forestry are the most predominant land uses. There are few developments in the near-river corridor. Nearly all the stream frontage is privately owned and public access is limited and as a result, current recreational use is largely confined to fishing.

Although distant from this area, these waters eventually flow into Lake Winnebago, the source of water for the Oshkosh, Neenah, Menasha, and Appleton municipal water systems. As a result, water from this area may affect the raw water quality of those municipal systems, which provide drinking water for approximately 162,000 customers.

PV Plover River

Size . . . . . Medium
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★ ★ ★
Recreation Potential . . . . . ★ ★ ★

The Plover River originates from a series of cold water springs and spring ponds and flows southerly to the Wisconsin River. In the upper stretches, the Plover supports one of the most productive and popular trout fisheries in the area. Forested uplands in the headwaters area harbor some of the most botanically diverse woods in this ecological landscape. Further downstream, the river slows, widens and runs through several large, high quality forest blocks and wetlands, notably Jordan Swamp. Some state ownership exists, but is mostly confined to a narrow corridor along the river. Additional land protection would help ensure that water quality and quantity are maintained.

PR Prairie River

Size . . . . . Medium
Protection Initiated . . . . . Moderate
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★ ★ ★ ★
Recreation Potential . . . . . ★ ★ ★

This high quality, Class I trout stream flows into the Wisconsin River at Merrill. Several old dams have been removed in the past several years, which will serve to enhance water quality and extend the trout fishery further downstream. Expanding protection beyond the existing Prairie River State Fishery area could protect the stream from increasing development pressure, provide expanded fishing opportunity and provide areas for additional in-stream habitat improvements.

RD Red River

Size . . . . . Small
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★ ★ ★
Recreation Potential . . . . . ★ ★ ★

Originating in Langlade County, this river flows through and gathers high quality flow in the Menominee Indian Reservation. The river supports a diverse fishery, containing trout in its upper reaches and smallmouth bass, northern pike, and panfish in its lower reaches. The river is a very popular whitewater canoeing destination, particularly in its lower reaches.

Although distant from this area, these waters eventually flow into Lake Winnebago, the source of water for the Oshkosh, Neenah, Menasha, and Appleton municipal water systems. As a result, water from this area may affect the raw water quality of those municipal systems, which provide drinking water for approximately 162,000 customers.

RB Rib River

Size . . . . . Medium
Protection Initiated . . . . . Moderate
Protection Remaining . . . . . Moderate
Conservation Significance . . . . . ★ ★
Recreation Potential . . . . . ★ ★ ★

The Rib River offers some of the finest trout fishing in Taylor County. The river has a medium gradient with gravel, rock, and cobble substrate, offering excellent in-stream habitat. Natural vegetation, predominantly northern hardwood forest, covers most of the stream corridor. The shoreline corridor, with its wooded, wild, and steep banks, gives the angler a feeling of seclusion. Some agriculture occurs in the middle and lower reaches.

SC Sand Country Trout Streams

Size . . . . . Large
Protection Initiated . . . . . Substantial
Protection Remaining . . . . . Moderate
Conservation Significance . . . . . ★ ★ ★ ★
Recreation Potential . . . . . ★ ★ ★ ★

Running from Portage and Waupaca County to northern Marquette County is a series of high quality, cold water streams that originate in the recessional moraine left by the last advance of the glaciers. Often with sandy bottoms and soft water, these spring fed, low nutrient streams and rivers support healthy brook, brown, and rainbow trout populations. Aquatic insect life is rich and diverse. Along many of the creeks are high quality fens, sedge meadows and wet prairies. The number, quality, and close proximity of the streams to one another is unique in Wisconsin. The Mecan River alone, although only 17 miles long, has over fifty miles of trout stream in its watershed. Other important waters in the area include the White and Pine Rivers and Lawrence, Tagatz, and Willow Creeks and all their respective tributaries.

The surrounding uplands are a mix of oak-pine forest, active and idle farmland, and low-density housing. Both open and forested wetlands are associated with most of the creeks and occur throughout the area. Establishing upland connections between these stream corridors would provide ecological values and enable some upland recreation opportunities. The Ice Age Trail is planned to pass through this general area.

Although state fishery areas occur along many of these streams and rivers, in several cases headwater springs, important buffer areas, and lower stretches remain unprotected. Ensuring that these waters meet their conservation and recreation potential would require additional protection efforts.

Although distant from this area, these waters eventually flow into Lake Winnebago, the source of water for the Oshkosh, Neenah, Menasha, and Appleton municipal water systems. As a result, water from this area may affect the raw water quality of those municipal systems, which provide drinking water for approximately 162,000 customers.

SX St. Croix River

See the Northwest Lowlands ecological landscape.

SR Straight River Channel

Size . . . . . Medium
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★ ★ ★ ★ ★
Recreation Potential . . . . . ★ ★ ★ ★

Appropriately named, the Straight River flows within a near perfectly straight valley in northern Polk County. This valley is believed to have been carved by water shot out of the bottom of the glacier under high pressure. The Straight River Channel is considered to be the finest example of this rare glacial phenomenon in Wisconsin. The river passes through Straight Lake and then ends in Big Round Lake. The Straight River Channel lies within a mix of farmland and forest that is intermingled with numerous pothole lakes. The larger lakes are mostly developed. The Straight River is a moderate sized river that supports a warmwater fishery.

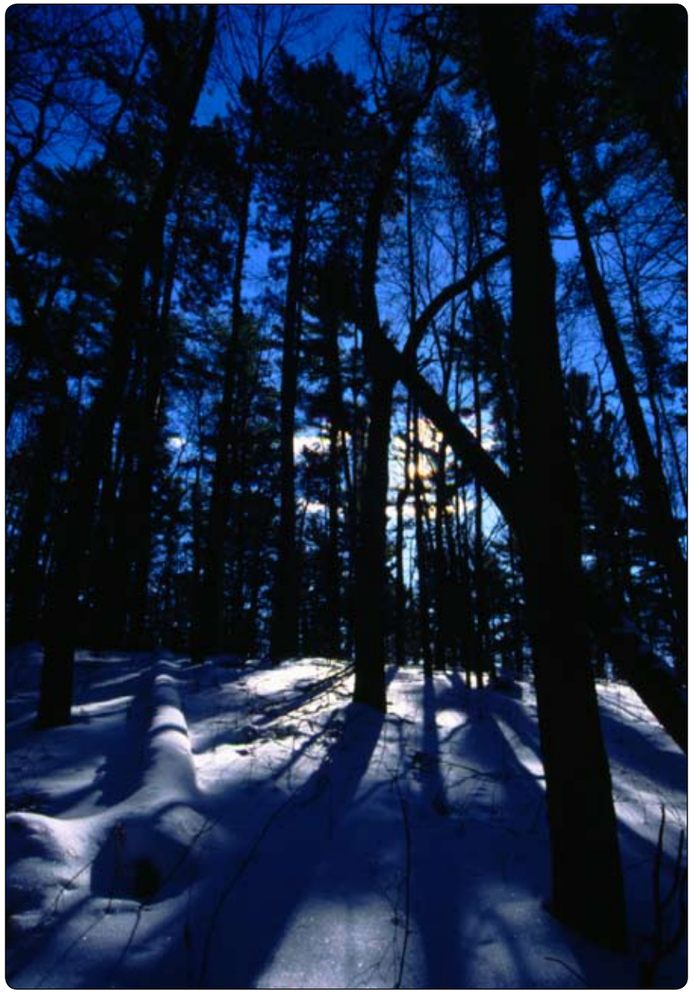
SCOTT NIELSON

Red-breasted Merganser (*Mergus serrator*)

Straight Lake, an adjacent unnamed lake, and approximately the first two miles of the Straight River are undeveloped and surrounded by a large block of forest. The lake and surrounding forest support a very diverse assemblage of species, including the highest density of the state-Threatened Cerulean warbler of any location known in northern Wisconsin, and represent one of the largest and highest quality forest-lake complexes in this ecological landscape. Some high quality wetlands, both forested and open, occur here as well. The uplands support some huge white pines and an intact forest understory. Bald eagles and trumpeter swans frequent the area. A large portion of this area is under one ownership with timber harvest occurring periodically. Maintaining the conservation, recreation, and educational values of the area is dependent upon maintaining the large block of wooded forest and wetlands.

The Ice Age Trail passes through the area and acts as a recreation link from McKenzie Creek State Wildlife Area, which lies about 2 miles to the northeast, to the large blocks of public forest in western Polk and Burnett counties. The Twin Cities lie approximately 50 miles to the southwest.

Forest Transition
ecological landscape



THOMAS MEYER

New Hope Pines State Natural Area in Portage County

TA Trade River Wetlands

Size . . . . . Small
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Moderate
Conservation Significance . . . . . ★ ★ ★
Recreation Potential . . . . . ★

This wetland complex is located in the Trade River watershed of the St. Croix Basin and straddles the Polk/Burnett County boundary. Historically, these wetlands were located at the convergence of several ecological communities: tallgrass prairie, oak savanna, barrens, and southern mesic hardwoods. The surrounding land is rolling and soils are silt loams. The Trade River is a somewhat degraded coldwater river.

YC Upper Chippewa River

See the North Central Forest ecological landscape.

UD Upper Red Cedar River

Size . . . . . Medium
Protection Initiated . . . . . Limited
Protection Remaining . . . . . Substantial
Conservation Significance . . . . . ★ ★ ★ ★
Recreation Potential . . . . . ★ ★ ★ ★

From its headwaters in northern Barron County downstream to Tainter Lake, the Red Cedar slowly winds through very picturesque and fertile farmland and white pine woods. Many of the headwater creeks are high quality and support good trout populations. Below the Chetek area, the river contains excellent in-stream habitat and a good warmwater fishery, high fish species diversity, and a good population of the state-Threatened greater redhorse. Some existing small state fishery areas provide some access, but protection needs remain. This area could provide multiple recreation opportunities for Eau Claire, Chippewa Falls, and Menomonie residents.

UP Upper Wolf River

See the North Central Forest ecological landscape.

Other Areas of Interest

Brokaw Hemlock Hardwood Forest (*Marathon County*)

This is the largest hemlock-hardwood forest in the Forest Transition ecological landscape and is indicative of the forests that occurred in this part of Wisconsin in pre-settlement times. The ground layer harbors a diverse plant community and many forest interior birds are present.

Cranberry Swamp (*Shawano County*)

This is a large landscape of numerous forested wetlands, small undeveloped lakes, and forested uplands. The area supports a diverse mix of upland and lowland species and could provide a variety of recreation activities. The Middle Branch of the Embarrass River runs to the west.

Crystal Brook (*Washburn County*)

Crystal Brook, a high quality stream containing impressive populations of native brook and brown trout, flows into Spooner Lake. Existing wetlands along the brook provide abundant waterfowl nesting and furbearing habitat. The State owns 64 acres that are used as a boat access site for Spooner Lake. Protecting this stream corridor would help maintain water quality in Spooner Lake.

Keller Whitcomb Woods (*Waupaca County*)

This is a relatively small but high quality mix of conifers and hardwoods that has many old-growth characteristics. Many rare birds are present.

New Hope Pines (*Portage County*)

In New Hope Township are a number of scattered old growth white pine stands within a landscape of small farms and resorts. Opportunities exist to connect larger patches of pine forests and expand small preserves.

North Pipe Lake Forest (*Polk County*)

This area near North Pipe Lake harbors a rich diversity of groundlayer plants growing under immense hardwoods. Numerous ephemeral ponds also occur here and provide habitat for a variety of salamanders and frogs.

Pine River Dells (*Lincoln County*)

A high quality hemlock forest occurs along this particularly scenic stretch of the river where cliffs are present.

Silver Creek Woods (*Barron County*)

This is a large block of hardwood forest with a large maple component. Many types of recreation could occur here.

UY Upper Yellow River

See the Northwest Sands ecological landscape.

YC Yellow (Chippewa) River

See the North Central Forest ecological landscape.

YW Yellow (Juneau) River

See the Central Sand Plains ecological landscape.