Western Coulee and Ridges

ecological landscape

Attributes and Characteristics
This ecological landscape is characterized by highly eroded, unglaciated topography. Steep-sided valleys are heavily forested and often managed for hardwood production. Agricultural activities, primarily dairy and beef farming, are typically confined to valley floors and ridge tops. Large, meandering rivers with broad floodplains are also characteristic of this landscape. They include the Mississippi, Wisconsin, Chippewa, Black, La Crosse, and Kickapoo. The floodplain forests associated with these riverine systems are among the largest in the Upper Midwest. Spring fed, coldwater streams that support robust brown and brook trout fisheries are common throughout the area. Soils are typically silt loams (loess) and sandy loams in the uplands and alluvial or terrace deposits in the valley floors.

Legacy Places
BX Bad Axe River
BA Badger Army Ammunition Plant
BN Badlands
BH Baraboo Hills
BO Baraboo River
BE Black Earth Creek
BR Black River
BU Buffalo River
CO Coulee Coldwater Riparian Resources
CE Coulee Experimental Forest
FM Fort McCoy
GR Grant and Rattlesnake Rivers
GC Greensand Cuesta
HR Hay River
KR Kickapoo River
UX La Crosse River
LE Little and Big Green Rivers
LC Lower Chippewa River and Prairies
LW Lower Wisconsin River
ML Mill Creek
PN Pine River
PL Platte River
RR Rush River
SL Shoveler Lakes-Black Earth Trench
SW Snow Bottom-Blue River Valley
SP Spring Green Prairie
TV Thompson Valley Savanna
TR Trempealeau River
TB Trimble River
UD Upper Red Cedar River

Along the Mississippi River corridor
BT Battle Bluff Prairie
CV Cassville to Bagley Bluffs
CY Cochrane City Bluffs
CZ Copper Creek to Lynxville Hollows
NP North Prairie du Chien Savanna
RU Rush Creek
TD Trempealeau River Delta
UM Upper Mississippi River National Wildlife and Fish Refuge
WY Wyalusing State Park
Key characteristics:
» Rugged landscape with little glacial influence
» Expansive tracts of oak forest
» Large, undeveloped river systems with extensive stands of floodplain forest
» Numerous coldwater streams and springs
» Hillside prairies
» Oak savanna
» Pine and hemlock relicts
» Mississippi River valley and bluffs
» Caves

Size:
» 9,640 square miles
» 6,168,000 acres
(17.2% of Wisconsin)

Natural communities:
(See Appendix B for descriptions)
» Algific talus slope
» Bedrock glade
» Cedar glade
» Dry and moist cliffs
» Dry-mesic prairie
» Emergent aquatic
» Floodplain forest
» Hemlock relict
» Oak barrens
» Oak opening
» Oak woodland
» Pine relict
» Sand prairie
» Shrub carr
» Southern dry forest
» Southern-dry mesic forest
» Southern mesic forest
» Submergent aquatic

Population:
» 513,000
(10.0% of Wisconsin’s population)

Notable species:
» Cerulean warbler
» Turkey
» Bald eagle
» Timber rattlesnake
» Blue racer
» Wood turtle
» Pickerel frog
» Brook and brown trout
» Channel catfish
» Gizzard shad
» Paddlefish
» Rare land snails
» Northern monkshood
» Shadowy goldenrod
» White and red oaks

Figure 91: Land cover of the Western Coulee and Ridges

Figure 92: Public conservation and other land ownership in the Western Coulee and Ridges

Figure 93: Land cover of public conservation lands in the Western Coulee and Ridges
Figure 94a: Legacy Places and public conservation lands of the Western Coulee and Ridges
Figure 95a: Legacy Places and land cover of the Western Coulee and Ridges Wisconsin Landscape Legacy Places by Ecological Landscape

Legacy Places and land cover
Western Coulee & Ridges

Land Cover
- Forest
- Open Water
- Open Wetland
- Renovated Wetland
- Urban
- Agriculture
- Grassland
- Shrubland
- Forest

Scale: 0 2.5 5 10 Miles

West. Coulee & Ridges
Figure 94b: Legacy Places and public conservation lands of the Western Coulee and Ridges

Legacy Places

- BX: Bad Axe River
- BA: Badger Army Ammunition Plant
- BN: Badlands
- BH: Baraboo Hills
- BO: Baraboo River
- BE: Black Earth Creek
- BR: Black River
- CO: Coulee Coldwater Riparian Resources
- CE: Coulee Experimental Forest
- FM: Fort McCoy
- GR: Grant and Rattlesnake Rivers
- GC: Greensand Cuesta
- KR: Kickapoo River
- LX: La Crosse River
- LE: Little and Big Green Rivers
- LW: Lower Wisconsin River
- ML: Mill Creek
- PN: Pine River
- PL: Platte River
- SE: Shoveler Lakes–Black Earth Trench
- SW: Snow Bottom–Blue River Valley
- SP: Spring Green Prairie

Along the Mississippi River corridor

- BT: Battle Bluff Prairie
- CV: Cassville to Bagley Bluffs
- CZ: Copper Creek to Lynxville Hollows
- NP: North Prairie du Chien Sauvan
- UM: Upper Mississippi River National Wildlife and Fish Refuge
- WY: Wyalusing State Park

Public Conservation Lands

- State
- Federal
- County Forest

Miles
Figure 95b: Legacy Places and land cover of the Western Coulee and Ridges
Public Conservation Lands

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TOTAL | 252,315

Conservation Needs and Opportunities

This landscape provides opportunities to protect some of Wisconsin’s most significant natural features. The rugged hills that typify the area harbor the world’s largest concentration of hillside prairies, which often support numerous species of rare plants, insects and reptiles. In addition, many of these sites provide excellent opportunities to restore and expand remnant oak openings, a globally rare natural community.

This landscape also offers opportunities to pursue landscape scale management for several forest types, most notably southern dry forest dominated by white and black oak, southern dry-mesic forest with red oak as a principal component, and southern dry-mesic forest consisting primarily of sugar maple and basswood. Wisconsin's best remaining examples of pine and hemlock relics are found within this landscape, typically in association with three river systems—the Kickapoo, Pine and Blue. They are of conservation interest due to their relative rarity, unique assemblage of “northern” plant species, and the overall biological diversity they contribute to this region of the state. Extensive tracts of floodplain forest, thousands of acres in size, are found along large river systems, including the Chippewa, Black, Wisconsin, and Mississippi Rivers. The vegetation of these forests is characterized by an abundance of silver maple, cottonwood, green ash, hackberry and river birch. While their size alone is significant, they take on added conservation value due to the rich assemblage of reptiles and amphibians they support and the habitat value they provide for resident and migratory birds. Determining the impact of fluctuating water levels and timber harvest practices on forest regeneration are among the most pressing conservation needs.

The dendritic drainage patterns found in this part of the state give rise to numerous spring seeps that coalesce into cold headwater streams capable of supporting trout fisheries. In many instances, in-stream habitat conditions have been improved but identification and protection of the area’s remaining native brook trout streams remains a conservation goal. This landscape also offers conservation opportunities for a number of natural communities, that, while smaller in geographic extent and more widely scattered than those previously described, are no less biologically significant. Included among these are algal tussock slopes, dry sand prairies, cedar glades, dry cliffs and moist cliffs.

Recreation Uses and Opportunities

The Mississippi River and its associated backwaters are heavily used for a variety of recreational activities including hunting, trapping, fishing and boating. The Wisconsin, La Crosse, Black and Kickapoo Rivers are popular canoeing destinations. Coldwater streams found throughout the region support high quality trout fisheries and receive substantial use by anglers. Opportunities for the public to engage in upland recreation activities are limited, given the minimal amount of “dry” public land in this landscape. With its rugged and scenic topography, there is considerable demand for more hiking, off road biking, horseback riding, cross-country skiing, and camping opportunities here. However, due to the thin soils and steep grades, locating and maintaining trails that do not damage vegetation and do not result in erosion and runoff problems remains a challenge.
Western Coulee and Ridges ecological landscape

Legacy Places

BX Bad Axe River
Size: Medium Protection Initiated: Limited Protection Remaining: Substantial Conservation Significance: Recreation Potential:

Although the Bad Axe watershed is relatively small, it contains a number of valuable resources. The upper tributaries of the two main forks harbor good trout populations, with a significant amount of the hillsides wooded with oak and other hardwoods. Downstream from the confluence of the north and south forks, the water temperature gradually rises to the point where the lower reach of the river supports a warmwater fishery. The floodplain also widens in the lower reaches and harbors numerous owl ponds and associated wetland communities that provide high quality wildlife habitat for waterfowl, cranes, songbirds and a variety of reptiles, amphibians and mammals. Almost 20% of the wetlands found in Vernon County are located within the Bad Axe River system.

Some stream corridors are under state ownership, but these are scattered and provide only limited recreation opportunities. Expanding protection efforts could create corridors to link existing scattered public lands, allow for more extensive coldwater and warmwater habitat improvements and provide a wider diversity of upland recreation activities.

BA Badger Army Ammunition Plant
Size: Medium Protection Initiated: Substantial Protection Remaining: Limited Conservation Significance: Recreation Potential:

The Badger Army Ammunition Plant (BAAP) lies between the Baraboo Hills and the Wisconsin River. Although used to produce munitions for the Army for over thirty years, BAAP’s 7,300 acres contain a mix of native prairie, scattered oak woodlands, farm fields, and thousands of idle buildings. It currently hosts some of the largest populations of grassland birds in southern Wisconsin (103 bird species have been recorded here, of which 21 have critical status in Wisconsin). With the Baraboo Hills adjacent to the north, BAAP provides a rare continuum of grassland to oak forest. The Army is disposing of the property and negotiations are underway to determine future uses, which will likely include a mix of agriculture, recreation, and native habitat restoration.

BN Badlands
Size: Small Protection Initiated: Limited Protection Remaining: Moderate Conservation Significance: Recreation Potential:

This large, roadless, hilly area harbors a mature stand of unfragmented hardwoods. It is one of the most extensive areas of contiguous oak forest in the region. The headwaters of Dell Creek and Hulbert Creek drain portions the area. The DNR recently completed a study assessing the feasibility of establishing an expansion of the Dell Creek State Wildlife Area into this area. The study concluded that potential DNR acquisition of land in the area was not supported locally and that other protection options were more appropriate.

BH Baraboo Hills
Size: Large Protection Initiated: Substantial Protection Remaining: Substantial Conservation Significance: Recreation Potential:

The Baraboo Hills support one of the largest contiguous upland hardwood forests in the Midwest and harbor an incredible diversity of species, including more than 1,800 plant and animal species. Of particular note are the many rare birds that nest here, including both northern and southern species. The Hills are all that remain of a very old quartzite mountain range that is now characterized by steep slopes and shallow, stony soils. Scenic vistas, waterfalls, interesting rock formations, deep forests and wildlife are all part of the attractions of the Baraboo Hills. The Ice Age National Scenic Trail also winds its way through this area. Recreational use of the area is heavy, especially at Devil’s Lake State Park.

A great deal of land in the Hills has already been protected by The Nature Conservancy, whose efforts have been concentrated on the Otter Creek watershed, and the DNR, which manages the state park and thirteen state natural areas scattered throughout the Hills. A few hundred acres along the Baraboo River have also been protected as federal waterfowl production areas. A unique opportunity exists to expand the amount of protected land from the Hills down to the Wisconsin River, via the former Badger Army Ammunition Plant. The Army is disposing of the property and negotiations are underway to determine future uses. Expanding and linking existing protected areas would greatly enhance both the recreational and ecological value of this exceptional landscape. Coordinating management among public and private organizations, and collaborating with private landowners, would be crucial to this effort.

BO Baraboo River
Size: Large Protection Initiated: Moderate Protection Remaining: Moderate Conservation Significance: Recreation Potential:

Scenic sandstone cliffs occur along the upper reaches of the Baraboo River and support hemlock and pine forests, forested seeps, and many rare plants and animals. These stands of hemlock and pine are found in deep, moist ravines or on cool, north- or east-facing slopes. Groundlayer vegetation contains species typically found much further north, such as clubmoss, wood fern, and mayflower. Some headwater creeks contain trout.

Until recently, the lower stretch of the river had been impacted by a series of dams that warmed and slowed the flow. The last of the dams was removed in 2001 and the aquatic diversity of the river system is already beginning to recover, setting the stage for the restoration of a good warmwater fishery including smallmouth bass.

Wisconsin Land Legacy Report
Legacy Places by Ecological Landscape
149
The Black Earth Creek valley encompasses a very scenic portion of the border between the unglaciated and the glaciated parts of the state. The area is a mix of rolling hills and deeply dissected ridges and valleys, consisting primarily of farmed ridgetops and bottomlands with wooded hillsides. Some large prairie, oak opening, and woodland restoration projects are already underway. Black Earth Creek is one of the most productive and heavily fished trout waters in the Midwest. Intensive agriculture and increasing urbanization of the watershed affect water quality and quantity and limit natural trout reproduction. Indian Mounds and petroglyphs can be found in several locations in the valley.

In addition to its ecological values, the valley could provide very significant recreation opportunities for fishing, off road biking, hiking, snowshoeing, cross-country skiing, and horseback riding, among other outdoor recreation activities. Although some public properties, notably fishing access easements, exist within the valley, with over 400,000 people in the nearby Madison metropolitan area, this place could be critical to meet growing demands for outdoor recreation.

The Black River originates in the northern forests of Vernon County to its confluence with the Wisconsin River, the Baraboo River is one of the longest free-flowing rivers east of the Mississippi River.

BE Black Earth Creek
Size: Large Protection Initiated: Moderate Protection Remaining: Substantial Conservation Significance: Recreation Potential: The Black Earth Creek valley encompasses a very scenic portion of the border between the unglaciated and the glaciated parts of the state. The area is a mix of rolling hills and deeply dissected ridges and valleys, consisting primarily of farmed ridgetops and bottomlands with wooded hillsides. Some large prairie, oak opening, and woodland restoration projects are already underway. Black Earth Creek is one of the most productive and heavily fished trout waters in the Midwest. Intensive agriculture and increasing urbanization of the watershed affect water quality and quantity and limit natural trout reproduction. Indian Mounds and petroglyphs can be found in several locations in the valley.

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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 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. Due to its relatively undeveloped and outstanding scenic qualities, the lower stretch of the Black River was once considered for national Wild and Scenic River status. It presently offers “wildness-like” canoeing opportunities.

Wildlife habitat value along the corridor is extremely high due, in part, to the adjacent, extensive, and relatively undeveloped uplands. The river corridor provides important nesting and migratory habitat for a variety of songbirds and waterfowl, and serves as an important north-south dispersal corridor for bear, wolves and fisher. The floodplain widens downstream from Black River Falls and supports large tracts of high quality southern floodplain forest, numerous eelworm lakes, and shallow marshes.

The river supports a diverse warmwater fishery and offers high quality sport fishing opportunities. Establishment of a protected corridor along the Black River would serve several purposes. First, it would link many 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.

BU Buffalo River
Size: Large Protection Initiated: Limited Protection Remaining: Substantial Conservation Significance: Recreation Potential: This corridor, running from Jackson County to the Mississippi River confluence, is a diverse mixture of high quality habitats ranging from broad wetlands to large forest blocks to oak savanna. The lower end of the Buffalo River provides valuable nesting and migratory habitat for many species of birds in the Mississippi River Valley and serves as an important staging area for migrating tundra swans. The flat, meandering floodplain lies in stark contrast to the adjacent steep bluffs. Narrow, sharp-crested ridges and broad valleys characterize the upper watershed. Many high quality prairies and oak openings occur on south and west facing slopes and the valley offers an excellent opportunity to restore a continuum from dry prairie to oak woodland ecosystems. Maintaining agriculture and forestry as a viable part of the area would help protect its conservation and recreation values.

Naples Lake, a seepage lake in northeastern Buffalo County just north of the river, experiences fluctuating water levels that provide excellent wildlife habitat. Naturally occurring lakes are very rare in this region of the state.

CO Coulee Coldwater Riparian Resources
Size: Large Protection Initiated: Substantial Protection Remaining: Moderate Conservation Significance: Recreation Potential: The Coles County area of southwestern Wisconsin is renowned for its abundance of springs and the resulting high quality trout streams. Set within a landscape of steep hillsides and narrow valleys, many of these streams were seriously degraded when early settlers cleared the forests. Without the tree cover to hold the soil, sediment flushed into the streams. Substantial protection and restoration efforts in Monroe, La Crosse, Vernon and Crawford Counties over many decades have resulted in many miles of high quality coldwater streams and their associated trout fisheries. Significant potential exists to build upon past successes by directing additional protection and restoration efforts to targeted coldwater streams, their headwater areas, riparian shorelands, and adjacent ecologically important upland buffers.

These trout waters draw anglers from throughout the Midwest. Some of the most popular streams include Timber Coles, Ruldands Coles, Coon Creek, upper reaches of the Bad Axe River, and the numerous creeks that feed the Kickapoo River.
The terrain surrounding the river is rugged with many ridges and valleys. Upland vegetation consists of bluff prairie, oak forest, oak savanna, and mesic forest. Veil rock and hemlock forests, rare natural communities, occur along cliffs. Springs and seeps are frequently associated with bedrock outcroppings. Together, this is one of the most diverse assemblages of natural communities in the state.

The valley’s forests support breeding populations of many forest-interior species, especially birds. Stretches of the upper river and its tributaries pass through sandstone cliffs, which provide habitat for numerous rare plants and animals, including globally rare species such as northern monkshood and several species of land snails. In addition, the Kickapoo River corridor provides an opportunity to ecologically connect the large block of public lands in the Central Sand Plains (Ft. McCoy, Black River State Forest, and many county forest lands) with the Wisconsin River. In addition to its ecological value, the valley is also extraordinarily scenic, harbors many very significant archaeological, cultural and historical sites, and provides a wide variety of recreation opportunities. Canoeing, birdwatching, hiking, biking, cross-country skiing, snowmobiling, camping, horseback riding, fishing, hunting, and sightseeing are popular and draw visitors from throughout Wisconsin and surrounding states. Wildcat Mountain State Park and the new Kickapoo River Reserve currently offer a wide variety of recreation activities and could serve as a foundation for future protection efforts. Opportunities exist to link public properties with the nearby Hillside, 400, Elroy-Sparta and Omaha Trails, thus potentially creating a unique network of short and long distance trails.
Western Coulee and Ridges ecological landscape

LX La Crosse River
Size: Medium
Protection Initiated: Moderate
Protection Remaining: Moderate
Conservation Significance: **
Recreation Potential: **

Running from Ft. McCoy west to the Mississippi River, the fertile floodplain of the La Crosse River contains several high quality wetland areas. The adjacent upland woods on the north and south slopes are predominantly wooded. The valley bottoms and ridgetops are often devoted to production agriculture. Within this corridor are the La Crosse River Bike Trail, a small county park, the La Crosse River Fishery Area and the Coulee Experimental Forest. The former Chicago Northwestern Railroad grade could link the La Crosse River and Elroy-Sparta State Trails to and through Fort McCoy and on to Wyeville.

LE Little and Big Green Rivers
Size: Medium
Protection Initiated: Moderate
Protection Remaining: Limited
Conservation Significance: **
Recreation Potential: **

These rivers, due to the abundant invertebrate populations they host, are some of the most productive trout fisheries in the Midwest. Both rivers are very popular with anglers throughout the region. Through DNR ownership and covenants, much of the streambank along the Big Green is protected; very little of the Little Green is formally protected. Additional efforts to minimize run-off problems in the rivers would be beneficial.

LC Lower Chippewa River and Prairies
Size: Large
Protection Initiated: Moderate
Protection Remaining: Moderate
Conservation Significance: **
Recreation Potential: **

The area along the Chippewa River, downstream from Eau Claire, and along the Red Cedar River, downstream from Menomonie, contains one of the largest floodplain forests in the upper Midwest. It also harbors the largest and highest quality floodplain savannas in the state. Along with the rugged hills to the southeast, this area supports more rare species (125) and more native prairies (25% of the state total acreage) than any area of comparable size in Wisconsin. Seventy-five percent of Wisconsin’s nesting bird species occur in the area, as do 50% of Wisconsin’s plant species. Exceptional occurrences of dry sand savanna occur on some of the river terraces. In recognition of these unique natural resources, the Lower Chippewa River State Natural Area was recently established. This expansive area includes portions of the Red Cedar and Chippewa River watersheds in Dunn, Pepin, Eau Claire and Buffalo counties.

LW Lower Wisconsin River
Size: Large
Protection Initiated: Substantial
Protection Remaining: Limited
Conservation Significance: **
Recreation Potential: **

The lower Wisconsin River, from Sauk Prairie to the Mississippi River, retains much of its natural, wild character and in many ways probably closely resembles the landscape seen hundreds of years ago. Very few roads, and only occasional houses and villages, can be seen from the river. Although upstream dams reduce scouring and the flushing of nutrients out into the floodplain, the lowland forests and marshes remain largely intact. The valley sides are dominated by mesic to dry forests of oak, maple, and red cedar. Bluff prairies are scattered along the south-facing slopes and harbor many rare species. Although not visible from the river, many large sand prairies occur throughout the floodplain. The Lower Wisconsin State Riverway was established in 1989 to protect and preserve the scenic beauty and natural character of the valley. The Riverway encompasses more than 79,000 acres of bluffs, bottomlands, islands and sandbars along the lower 92 miles of the Wisconsin River. With its scenic bluffs, islands, and sandbars, the river is an extremely popular canoeing destination. Public land within the Riverway supports a variety of recreation activities including, hunting, fishing, trapping, and hiking.

ML Mill Creek
Size: Small
Protection Initiated: Moderate
Protection Remaining: Limited
Conservation Significance: **
Recreation Potential: **

Mill Creek originates in Governor Dodge State Park and curves north to join the Wisconsin River at Tower Hill State Park. It flows through several wetlands as well as pastured and wooded lands. Many high quality and restorable dry prairies and savannas occur on and near the ridgetops and support several rare plants and insects. A short stretch of the corridor is designated trout water. A protected corridor along the creek could provide substantial ecological and recreation benefits.

PN Pine River
Size: Medium
Protection Initiated: Moderate
Protection Remaining: Moderate
Conservation Significance: **
Recreation Potential: **

As with most of the Western Coulee and Ridges ecological landscape, this area is a very scenic combination of small farm fields, woods, and pasture. The Pine River’s headwaters are small, cold creeks, often bordered by sandstone cliffs and outcrops. These creeks, draining much of Richland County, support excellent brook, brown, and rainbow trout populations that consistently provide good fishing. One of the river’s major tributaries, Willow Creek, is particularly...
productive and popular. Below Richland Center, the river is slower moving, warmer, and more fertile. It enters the Wisconsin River at the very large wetland complex near Gotham. The sandstone cliffs throughout the watershed harbor many relict pine and hemlock stands that may be vestiges from cooler, moister conditions present during the Ice Age. Along with those in the upper Baraboo River, Kickapoo, and some other Driftless Area streams, these pine and hemlock relics are globally rare and of considerable importance in maintaining ecological diversity.

**PL Platte River**
- **Size** : Medium
- **Protection Initiated** : Limited
- **Protection Remaining** : Moderate
- **Conservation Significance** : ★★★
- **Recreation Potential** : ★★★

The Platte River contains a high quality warm-water fishery, with smallmouth bass fishing being particularly popular. Many of its tributaries are high gradient, coldwater streams with good water quality. The mud darter, a special concern species, and the state-Threatened Oskar minnow are found in the Platte River watershed. An opportunity exists to create a connection, along the Roundtree Branch, between Platteville and the Platte River, to provide easily accessible fishing, hiking, biking, and canoeing opportunities for city residents.

**RR Rush River**
- **Size** : Medium
- **Protection Initiated** : Limited
- **Protection Remaining** : Moderate
- **Conservation Significance** : ★★★
- **Recreation Potential** : ★★★

Located in the heavily wooded valleys of Pierce County, the Rush River system supports a regionally significant trout fishery that draws anglers from throughout the area. The river’s delta, a combination of lowland hardwood forest and rich emergent wetland, spills out into the floodplain of the Mississippi River. The delta supports a myriad of wetland species and is heavily used by waterfowl and wading birds. Morgan Coulee State Natural Area, a complex of high quality oak woods and dry hillside prairies, is also located within the watershed. Land use in the area is typical of that found throughout the rugged hills of western Wisconsin, with agriculture confined to ridgtops and valley floors. The hillside are forested with basswood, sugar maple and red oak. Songbird diversity in the valley is very high. Residential development in the corridor is relatively light, but increasing due to its proximity to the Twin Cities. Stabilizing land use and maintaining a high percentage of forested cover in the watershed will be important in sustaining the high quality trout fishery. Those actions would also complement existing streambank protection efforts. Additional recreational opportunities could also be provided.

**SL Shoveler Lakes - Black Earth Trench**
- **Size** : Medium
- **Protection Initiated** : Limited
- **Protection Remaining** : Moderate
- **Conservation Significance** : ★★★
- **Recreation Potential** : ★★★

See the Southeast Glacial Plains ecological landscape.

**SW Snow Bottom - Blue River Valley**
- **Size** : Medium
- **Protection Initiated** : Limited
- **Protection Remaining** : Moderate
- **Conservation Significance** : ★★★
- **Recreation Potential** : ★★★

Occupying an ancient, south-facing terrace of the Wisconsin River and adjoining bluffs, this area hosts a remarkably diverse set of plants and animals, ranging from prickly pear cactus to pocket gophers. At last count, fourteen species of reptiles had been recorded here. The invertebrates, however, are the most unusual of the Spring Green fauna. For several spiders and insects, the Spring Green prairie is their only known site in the state. Of special interest are the black widow spider, several types of wolf spiders, five species of cicada, eight species of tiger beetle, and predatory wasps. The Nature Conservancy has led protection and restoration efforts here for thirty years and worked extensively with University of Wisconsin scientists on a variety of research projects.
Western Coulee and Ridges

ecological landscape

TV Thompson Valley Savanna
Size: Small
Protection Initiated: Limited
Protection Remaining: Substantial
Conservation Significance: Recreation Potential: 

Due to its size, the structure and composition of the tree species present, and the presence of savanna species in the understory, this area represents one of the best opportunities in the state to restore a large oak savanna. This largely rural area presently consists of a mosaic of farms and large wooded tracts. The area could provide numerous opportunities for outdoor recreation activities, including hunting, hiking, wildlife watching, and cross-country skiing.

TR Trempealeau River
Size: Medium
Protection Initiated: Limited
Protection Remaining: Substantial
Conservation Significance: Recreation Potential: 

The Trempealeau River arises from coldwater trout streams located in deeply incised valleys. As it flows southwest, the river gradually becomes larger and warmer and in its lower reach supports a good quality warmwater fishery. Abundant nutrients and frequent flooding in the lower stretch nourish extensive high quality wetlands that provide significant habitat for reptiles, amphibians, waterfowl, wading birds, and mammals.

Agriculture in the area is generally confined to ridge tops and wide valley floors. Steep-sided valleys are heavily forested. Although portions of the feeder streams are in public ownership, key reaches remain unprotected. A protection corridor that links existing state-owned properties, thereby increasing the ability to manage the entire corridor as a biological system, could provide high quality hunting, fishing, and quiet boating opportunities.

TB Trimble River
Size: Medium
Protection Initiated: Limited
Protection Remaining: Substantial
Conservation Significance: Recreation Potential: 

The Trimble River originates in the rolling, open landscape of northern Pierce County. As the river flows south, it enters the heavily forested, unglaciated area of western Wisconsin. Rich deciduous woodlands supporting numerous species, including a high diversity of songbirds, are found throughout the lower watershed. The Trimble River supports one of the best trout fisheries in western Wisconsin and due to its proximity to Minnesota’s Twin Cities, the river corridor is heavily used by trout anglers. Land use in the watershed is changing rapidly and threatens the water quality of the Trimble, access for anglers, and, due to fragmentation, the integrity of the woodlands.

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. Many of the headwater creeks have high water quality and support good trout populations. Below the Chetek area, the river contains excellent habitat, a good warmwater fishery, high fish species diversity, and a population of the state-Threatened greater redhorse. A few small state fishery areas exist (and provide some public access), but significant protection needs remain. This area could provide multiple recreation opportunities for Eau Claire, Chippewa Falls, and Menomonie residents.
By any measure, the Mississippi River valley is one of the state’s most valuable natural resources. From the flooded bottomlands to the bluff tops, the valley is an ecological and recreational treasure. The river, in some parts wide impoundments and in others a maze of sloughs and backwaters, supports an enormous variety of aquatic life. The lowlands are a mosaic of marshes, shrub thickets, and floodplain forests. The surrounding uplands grade from mesic forests up to prairies on the ridge tops.

As the primary migratory pathway in the central part of the country, millions of birds pass through the valley each spring and fall. With most of the valley floor included in the Upper Mississippi River National Wildlife and Fish Refuge, the valley draws boaters, anglers, hunters, bird watchers, and sightseers from around the country. The several parks along the valley are very popular camping, hiking, and wildlife watching destinations. Some important lowlands are outside of the Refuge and are worthy of protection. Of particular conservation interest are the lower reaches and mouths of rivers and streams that flow into the Mississippi, notably places like Coon and Waumandee Creeks and the Rush and Black Rivers.

Rising dramatically from the floodplain, the rugged 400 to 500 foot bluffs provide spectacular scenic views and harbor numerous rare species. Since the Wisconsin side of the Mississippi River valley has predominantly southern or western exposures, prior to Euro-American settlement the extensive network of bluffs was covered by dry hillside prairie (often referred to as “peat prairie”) and oak savanna. Since that time, fire suppression has resulted in the transformation of many prairies and savannas into forest. As a consequence, plants and animals dependent on these open habitats have declined markedly. Although degraded, these bluffs still harbor the greatest concentration of dry hillside prairies remaining in North America.

An increasing level of development along the bluffs is impacting scenic views and degrading sensitive habitats. There is growing recognition that a protection strategy (that extends beyond the valley floor) is needed to protect the scenic, ecological, cultural, and economic values that this unique corridor provides. Several private, locally-led conservation organizations, including the Mississippi Valley Conservancy and the West Wisconsin Land Trust, are very active in the area. Although some of the most notable bluff prairies and savannas are included in the following descriptions, countless others are scattered along the Mississippi River valley.
Ice fishing on a Mississippi River slough

Western Coulee and Ridges
ecological landscape

**BT** Battle Bluff Prairie
Size: Small
Protection Initiated: Medium
Protection Remaining: Limited
Conservation Significance: Moderate
Recreation Potential: Limited

Battle Bluff Prairie is a south-facing dry prairie on a steep slope. The diverse prairie flora is interspersed with limestone boulders, sandstone outcrops, and a few stunted trees. More than 80 species of native prairie plants have been identified at the state natural area here. The wind-eroded sandstone outcrops and limestone boulders contain a number of unusual plants such as cliff brake and Canada yew. The bluff rises some 480 feet, providing clear views to the south across the Mississippi River.

**CV** Cassville to Bagley Bluffs
Size: Medium
Protection Initiated: Limited
Protection Remaining: Moderate
Conservation Significance: Limited
Recreation Potential: Limited

This area includes the bluffs from southeast of Cassville north to Wyalusing State Park near Bagley. This area was historically dry hill prairie and oak savanna. Today, the hilltops are used for agriculture, but many remnant prairie and oak savanna species have survived on less accessible sites. With the lack of fire, many of these dry prairies are becoming overgrown with red cedar, further reducing their size and increasing their isolation. Remaining open areas harbor many rare plants, animals, and natural communities. Several talus slopes are found here, as well as major bald eagle winter roosts and several archaeological sites. These bluffs provide spectacular views of the Mississippi River valley below.

**CY** Cochrane City Bluffs
Size: Small
Protection Initiated: Limited
Protection Remaining: Substantial
Conservation Significance: Limited
Recreation Potential: Limited

The Cochrane City Bluffs harbor good quality prairie and oak savanna complexes. A number of rare prairie species are present and the diversity of plant species here is high. However, in the absence of fire, they are rapidly being encroached on by woody vegetation.

**CZ** Copper Creek to Lynxville Hollows
Size: Medium
Protection Initiated: Limited
Protection Remaining: Substantial
Conservation Significance: Limited
Recreation Potential: Limited

This area encompasses a series of small hollows that extend up from the Mississippi River valley only a short distance, but harbor a wide range of high quality forest to dry prairie habitats. In the bottom of these narrow hollows are blocks of mesic forest comprised of oak, maple, basswood, hickory, and black walnut. Moving up into the more open oak woodlands dominate and near the tops of the ridges, they grade into oak savanna. Along the ridge tops some dry prairie remnants occur. Several rare, threatened, and endangered species exist in this area. The bluffs provide spectacular views of the Mississippi River valley below.

**NP** North Prairie du Chien Savanna
Size: Small
Protection Initiated: Moderate
Protection Remaining: Substantial
Conservation Significance: Limited
Recreation Potential: Limited

Running from the bluffs overlooking the Mississippi River back several miles, this area contains many high quality remnants of oak savanna and oak woodland within a working agricultural landscape. Some rare, threatened, and endangered species are present. Given the quality of the existing remnants and the potential to restore some additional lands, this area
Some of the mussels found in the Mississippi River

**Elatia** (Acanthodonta margarita)**

**Hippili’s Eye** (Lampsilis hippopus)**

**Fat Pocketbook** (Potamilus capitellus)**

**Pitaya** (Truncilla truncata)**

**Quadrula pustulosa**

**Lampsilis siliquoidea**

**Fat Pocketbook** (Potamilus capitellus)**

**Epioblasma triquetra**

**Truncilla donaciformis**

**Pyganodon grandis**

**Giant Flatter** (Fusconaia grandis)**

**Fat Pocketbook** (Potamilus capitellus)**

**Cyclonaias tuberculata**

**Substantial**

**Lampsilis higginsii**

**Substantial**

**Cyclonaias tuberculata**

**Substantial**

**Unidentified**

**Eozone** (Truncilla truncata)**

**Giant Flatter** (Fusconaia grandis)**

**Fat Pocketbook** (Potamilus capitellus)**

**Cassidulina metanevra**

**Rush Creek**

Rush Creek State Natural Area is one of the state’s most spectacular views of the Mississippi River valley. From the subtle palette of colors on the dry hillside prairies, to the oak-hickory forests, to the deep greens of the floodplain forest in the valley floor, visitors can get a glimpse of what the valley must have looked like centuries ago. The prairie complex at this location is the largest and most extensive series of grass prairies left in the state. In addition, the large blocks of forested land provide habitat for forest interior species as well as common game species such as wild turkey and deer. Many rare species are found throughout the Rush Creek area. The existing State Natural Area is extensively used for hunting (deer, turkey, and squirrel), fishing, and non-intensive recreational activities such as bird watching and hiking. Expanding protection efforts here would not only allow for a wider variety of recreation activities, but also enable large-scale restoration of the oak savanna and oak opening natural communities.

**TD**

Trempealeau River Delta

The undeveloped uplands situated between the Trempealeau National Wildlife Refuge and Porre State Park and adjacent to the Trempealeau River provide an excellent opportunity to establish a conservation corridor linking both properties with the Great River State Recreation Trail. Habitat conservation benefits, including protection of sand dunes, pothole ponds, remnant prairie and wooded uplands on the sandy river terrace, would be substantial. This corridor could also provide opportunities for expanded recreational use, as all three properties are heavily used for a variety of recreational purposes.

**UM**

Upper Mississippi River National Wildlife and Fish Refuge

Extending 284 miles from Wabasha, Minnesota, to Rock Island, Illinois, this 194,000-acre refuge encompasses most of the floodplain associated with the Mississippi River. Numerous side channels, backwater sloughs, marshes, and extensive tracts of floodplain forest dominated by silver maple, cottonwood and green ash, contribute to the outstanding fish and wildlife habitat provided by the refuge. These habitats, in turn, support important populations of freshwater mussels, game and non-game fish, reptiles, amphibians, songbirds, hawks, and bald eagles. The refuge also plays host to significant waterfowl migrations, including some of the continent’s largest concentrations of migrating tundra swans and canvasback ducks. Boating, fishing and waterfowl hunting are popular recreation pursuits. Commercial transport of bulk commodities by barge and commercial fishing are also important activities that occur within the refuge.

**WY**

Wyvaling State Park

Sitting at the confluence of the Wisconsin and Mississippi Rivers, Wyvaling is one of the state’s oldest and most popular state parks. Visitors come to camp, hike, bike, cross-country ski, fish and enjoy nature education programs. The area is a haven for bird watchers. The park’s 2,000 acres contain the longest series of prehistoric mounds found in Wisconsin. The dolomite and sandstone cliffs, steep ravines and bottomlands support rich deciduous woodlands.
Western Coulee and Ridges

Other Areas of Interest

Eagle Basswood Forest
(Richland County)
This area includes a small block of mature southern mesic forest, representative of this ecological landscape, and many springs.

English Run Woods
(Crawford County)
This area harbors a small, but high quality, block of southern mesic forest with patches of old growth.

Honey Creek Savanna
(Sauk County)
This area is one of best opportunities in the state to restore a deep-soil oak savanna. Huge bur oaks, some up to five feet in diameter, dot the pastures along the creek.

Joe Gray Coulee Forest
(Pepin County)
This forest is influenced by the soluble limestone rock on which it lies. Solution caves and cold air vents permeate the area, providing microhabitats for many rare species. The ground layer is very diverse, harboring both plants indicative of northern and southern Wisconsin. Springs, streams, and gorges add to the diversity of the landforms. Although relatively small, the area supports an impressive diversity of species.

Kelley Creek Sedge Meadow and Savanna
(Eau Claire County)
This area contains a mosaic of southern sedge meadow, wet prairie, and oak savanna natural communities with excellent restoration potential.

Pleasant and Coon Ridges
(Iowa County)
These areas host narrow ridges, steep hillsides, and narrow valleys. Farm fields, old savanna, oak woodland, prairie remnants, rock outcrops, and significant springs are present.

Sandy Creek
(Grant County)
The consistent flow of Sandy Creek is provided by numerous springs emanating from the hillsides. Underlying shale, about 100-feet under the crest of the hills, prevents water from seeping down and directs flow sideways. This flow emerges in a series of several springs, which provides constant water for the creek and a valuable resource for mammals and birds. Wintertime populations of migratory birds reach high levels in the valley and annually harbor numerous sparrow species and golden eagles.

Trimble Peak
(Trempealeau County)
This steep hill contains a large block of oak forest with patches of southern sedge meadow.

Taylor Oak-Pine Forest
(Jackson County)
This area contains one of the largest intact blocks of forest in the Driftless Area, with a significant portion of white pine in the canopy.

Waters Valley Bluff Prairie
(Buffalo County)
This good quality dry hillside prairie and the associated dry-mesic forest harbor a diverse assemblage of species.