

Old Mill State Park Management Plan Amendment

Horse Trails and Staging Area



Minnesota Department of Natural Resources
Division of Parks and Trails

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DRAFT

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State of Minnesota Department of Natural Resources Division of Parks and Trails

This management plan amendment has been prepared as required by 2010 Minnesota Laws Chapter 86A.09, Subdivision 1.

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We would like to thank all who participated in this planning process.

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PURPOSE

The purpose of this management plan amendment is to amend the Old Mill State Park management plan (1980) to allow horseback riding within the park and develop a horse trail system, using segments of existing trails and park roads and connecting to a larger system of trails outside the park. A horse trailer parking and staging area would also be developed.

Management plans are required for state park units. *Minnesota Statutes*, section 86A.09, subd. 4 requires that the construction of facilities and other development conform to the management plan. This amendment will bring the management plan into accordance with current programming and development proposals for the park.

BACKGROUND

Old Mill State Park is located in northwestern Marshall County, midway between the small cities of Argyle and Newfolden and about 25 miles east of the Red River. The park is located about 30 miles northwest of Thief River Falls, and about 50 miles northeast of East Grand Forks. In a largely agricultural landscape, Old Mill State Park, located in the Middle River valley, typifies the landscape as seen by the first European settlers over a century ago. The riverine forest and patches of aspen parkland provide prime wildlife habitat for many species, including deer, moose, bear, timber wolves and otter.

As recently as 3,000 years ago, this entire northwest corner of the state was covered by a vast freshwater lake, glacial Lake Agassiz. Over the centuries as the lake level dropped, large beach ridges were formed as new shoreline was exposed and carved out by the action of the waves. One of those ridges is located about one mile east of the park. The Middle River valley was cut by the river flowing over the loose sediment left behind by the lake. Each time the lake level dropped, the river would cut a deeper channel. The steep-walled valley and narrow flood plain are typical of a young river valley.

The beach ridges of the old lake served as travel routes for Indians, traders, and settlers. For the early settlers, the beach ridge just east of the park was one of the Red River oxcart trails. For much of the 19th century, the Red River oxcarts hauled furs from the Selkirk settlements near Winnipeg to St. Paul, returning with supplies for the settlements. The oxcart trail, known as the Pembina or Woods Trail, and the river crossing are still visible near the park.

Park History

Old Mill State Park was established in 1937 when the State of Minnesota purchased 285 acres at a cost of \$11,000. The park was originally known as Middle River State Park. Its name was changed in 1951 to prevent confusion with similar names in Marshall County and to honor an old grist mill located in the park. The mill was built by John Larson in 1889 on the Larson family

farm, which had been homesteaded in 1882. The mill is listed as a historic site on the National Register of Historic Places.

This area along the Middle River was associated with recreation long before the park was established. As early as 1901 the site had been used as a picnic ground and a baseball field. Once the park was established, Works Progress Administration (WPA) funds were allocated for the construction of the present facilities.

The park includes a 25-acre historic district that is listed on the National Register of Historic Places, which includes eight WPA/Rustic Style buildings and structures, including the shelter building, swimming beach, diversion dam and suspension bridge. The Minnesota Historical Society describes the historical significance of the park as follows:

“Old Mill State Park was heavily used when it first opened, providing recreational facilities to a large number of people in the rather sparsely populated northwestern section of the state. In 1938, although the area was only partially developed, an organized picnic one Sunday brought more than 10,000 people to the park.

“The buildings and structures at Old Mill State Park are exceptionally significant architecturally as outstanding examples of rustic style split stone construction. The Suspension Bridge in particular is a notable rustic style architectural achievement. These historic resources are characterized by non-intrusive and environmentally sensitive designs based on National Park Service design philosophy and master planning, which carefully located the park buildings and structures along the Middle River.”¹



Suspension bridge



A group of picnickers circa 1920. Photo courtesy of Minnesota Conservation Volunteer.

¹ Minnesota Historical Society. Old Mill State Park. National Register Listing October 1989. <http://www.mnhs.org/places/nationalregister/stateparks/OldMill.html>

Park Facilities

Current park facilities include the swimming pond and beach, picnic area and shelter, a campground with 26 semi-modern campsites, a primitive group camp, fishing sites, and the Larson Mill historic site. Trails, shown in Figure 1, include 7 miles of summer hiking trails, 2.5 miles of winter snowshoe trails, 4 miles of cross-country ski trails, and 1.5 miles of snowmobile trails.

Old Mill's small size (406 acres), remote location, and changes in recreational use patterns have resulted in declines in visitation levels. For example, many of the surrounding towns have built their own swimming pools, making the swimming pond at the park less of a draw. Picnicking has declined as a recreational activity, supplanted by more activity-oriented forms of recreation such as horseback, hiking, biking and snowmobiling.² Park visitation in 2010 was 18,207, an increase over recent years but still within the lowest quartile of state parks and state recreation areas.

Addition of horse trails has the potential to attract a new group of park users. Local horse trails surround the park, primarily following the shoulders of county and township roads. The park would provide a staging area for day use trail riders using this larger network, and would encourage those riders to take advantage of the park's other amenities.

DESCRIPTION

The following improvements are proposed in this amendment:

Horse Trails

As shown in Figure 2, about 1.6 miles of horse trail are proposed within the park, including about 0.6 miles of existing hiking trail, 0.5 miles of existing snowmobile trail, and 0.3 miles on the existing park road to the Larson Mill parking area. Trail connections to adjacent roads would be provided at the park's southern boundary, to 330th Street (County 4) and eastern boundary, to 240th Avenue NW (County 128). These connections will provide riders with access to over 40 miles of local horse routes and trails, primarily along county and township roads, including seasonal use of snowmobile trails (see Figure 3). Trail development will include signage and physical improvements to trails to minimize erosion and other impacts.

Staging Area

A horse trailer parking and staging area will be developed within the existing parking lot, to include a manure bunker, water valve or tank, and hitching rail. A kiosk or panel sign will be provided for rider information and orientation.

² Weaver, Will. "The Sunday Picnic." Article about Old Mill State Park, *Minnesota Conservation Volunteer*, July-August 2009. See also http://www.dnr.state.mn.us/volunteer/julaug09/old_mill_slideshow.html



Horses on the shoulder of a paved trail

The horse trailer parking and staging area will be located within the northeast quadrant of the parking area, a location that can withstand the additional activity without damage to sensitive resources. Water would be brought from the adjacent park shop via hose or buried line to a watering tank or valve near the staging area. The existing vault toilet(s) in the parking area will be adequate to serve the staging area.

NATURAL RESOURCES IMPACT

Horse Trails

Old Mill State Park provides a diverse set of prairie and forest environments, as shown in Figure 4. Natural plant communities include several types of upland prairie in the park's southeast quadrant, aspen parkland riparian forest throughout the river floodplain, and northern wet-mesic hardwood forest on the side slopes of the river valley. Areas of wet prairie are found on the west side of the Middle River and on the east side of the drainage ditch that crosses the southeast quadrant of the park.

The park's native plant communities were surveyed through the Minnesota County Biological Survey and are considered to be of moderate to high biodiversity significance (see Figure 5).

Several endangered, threatened, and special concern species have been reported in or near the park, including blunt sedge (*Carex obtusata*), an uncommon plant of dry sandy prairies and a species of special concern. The short-eared owl (*Asio flammeus*), also a species of special concern, has been found nesting within the park.

Old growth forests of the Northern Hardwoods type are found throughout the Middle River Valley, primarily on steep slopes. A rare natural plant community found in this area is a narrow band of undisturbed oak woodland on the north bank of the Middle River; a similar area is found in the northeast part of park.

The park is also considered to provide critical prairie habitat. According to the draft *Minnesota Prairie Landscape Conservation Plan*,³ Old Mill State Park is part of a potential Agassiz Beach Ridges prairie corridor, designed to allow key prairie species to move between larger "core" habitat areas.

The southern section of the proposed horse trail loops through the upland prairie area, following portions of existing hiking and snowmobile trails. This trail segment is sited in an upland area where the prairie sod is best suited to withstanding horse traffic, avoiding the wet prairie. Because the horse trail is located on existing trail corridors, disturbance of native plant

³ Minnesota Prairie Plan Working Group. "Minnesota Prairie Landscape Conservation Plan." Draft, March 2011.

communities would be limited. Trail conditions will be monitored to prevent erosion and maintain the health of these plant communities.

Introduction of invasive species is a concern with any type of trail system change, and with new development such as a horse staging area. Trails will be monitored for invasives and treated as needed. Manure in the storage bunker will be handled appropriately to avoid spreading invasives, consistent with Operational Order 113 and the related state park guidelines, which call for designated areas for storage of horse feed, bedding and manure, and disposal of materials off-site.⁴ Signs will advise riders to remain on trails and to avoid leaving hay or other feed on site.

The north segment of horse trail follows the park road to the historic mill, avoiding previously undisturbed areas. The gravel road is wide enough and vehicle speeds are slow enough to accommodate horses along with motor vehicles. Depending on the level of use the horse trail receives, it may be appropriate to relocate it in the future to follow the hiking trail that parallels the road on the east side.

Horse trails are particularly vulnerable to compaction and “trenching,” where the trail deepens to a narrow slot. These conditions can lead to erosion and “braiding,” where users seek parallel routes and the disturbed area expands. The potential for compaction and erosion will be considered as part of the design of the proposed trails, and mitigation techniques will be used as needed. These may include hardening and grade changes that minimize runoff and erosion.⁵

Snowmobile trail segments that are proposed for horse trail use will need to be monitored to ensure that horse use does not lead to trenching or erosion that could damage the snowmobile trail.

The only completely new segments of trail are the connections to the parking lot/staging area and to County 39. These areas will be surveyed prior to development and designed to minimize erosion, compaction and other resource impacts.

Staging Area

The proposed staging area will be located on a section of the existing gravel parking lot, which offers ample space to accommodate this use. Since this area is already disturbed, impacts on adjacent natural resources will be limited.

⁴ Operational Order #113, Invasive Species, May 31, 2007.

http://files.dnr.state.mn.us/assistance/grants/habitat/heritage/oporder_113.pdf and Division of Parks and Trails Invasive Species Guidelines, April 2009.

⁵ See “Sustainable Natural Surfaced Trails” in *Trail Planning, Design and Development Guidelines*, MN DNR 2007.



Horse trail signboard and hitching rail



Manure bunker, Sand Dunes State Forest

CULTURAL RESOURCES IMPACT

The Old Mill State Park WPA Rustic Style Historic District surrounds and includes the shelter building, swimming beach, diversion dam and suspension bridge in the central part of the park (see Figure 2). The historic district has a landscape architecture theme for its significance. This means that new development should not interfere with the integrity of the WPA-designed landscape and must be visually compatible with the historic district.

The proposed horse trails would cross the southeast corner of the district, along existing hiking and snowmobile trails. The proposed new trail use would not directly affect any structures within the district. The staging area would occupy a portion of the existing parking lot, and would therefore have a limited visual impact on the district. However, any new development must meet the Secretary of the Interior's Standards for Historic Preservation.⁶

Several archaeological sites have been found within the park, and there is a strong likelihood that additional resources may exist. However, the use of existing trail corridors will minimize the likelihood of resource impacts. An archaeological survey will be conducted prior to siting new structures or trails.

RECREATION AND VISITOR USE IMPACT

Trail Users

A portion of the existing Agassiz self-guided interpretive trail, which is also a hiking club trail, would be affected by horse trail development. Horse trails are generally considered as multi-use hiking trails, but horse use, if heavy enough, may discourage other trail users. The interpretive trail has been in place for over twenty years and receives relatively low use. As part of the design of the horse trail, the function, design and use of the interpretive trail will be reassessed. There may be potential for shared use of the trail corridor, or the interpretive trail may be rerouted within the same general area.

Snowmobile trail segments that are proposed for horse trail use will be monitored to ensure that they remain viable for snowmobiles.

Other Park Users

Visitors to the swimming area, picnic areas, and historic sites in the park should experience few if any changes as a result of the addition of horse trails.

⁶ *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (Birnbaum and Peters 1996)

Park Facilities

It will be important to provide a watering tank or valve in the horse trail staging area so that riders are not tempted to bring horses down the slope to the swimming pool for water, which might cause degradation of the hillside and pool. A kiosk or signboard will be provided in the staging area to orient trail riders and inform them of park policies. Existing vault toilets are adequate to serve all users.

MANAGEMENT PLAN REVISIONS

The 1980 Management Plan did not include horse riding as one of the recreational activities the park was intended to serve. This amendment supplements the “Physical Development and Recreation Management” section of that plan to include horseback riding as a designated use and to identify horse trails and a staging area for riders within the park.

This amendment also supplements the management plan with regard to the park’s trail system as a whole. Many changes in trail location and use have occurred in the decades since the management plan was adopted and the summer and winter trail systems have evolved and changed from those envisioned in the plan. The proposed trails map (Figure 2) would therefore replace the “Summer Trails” map in the plan.

PUBLIC REVIEW – TBA following open house, contact with Friends group

Map Symbol Key



Picnic Area



Swimming Beach



Shelter



Historic Dam



Campground



Group Campground



Historic Site (Larson Mill)



Parking Area



Contact Station

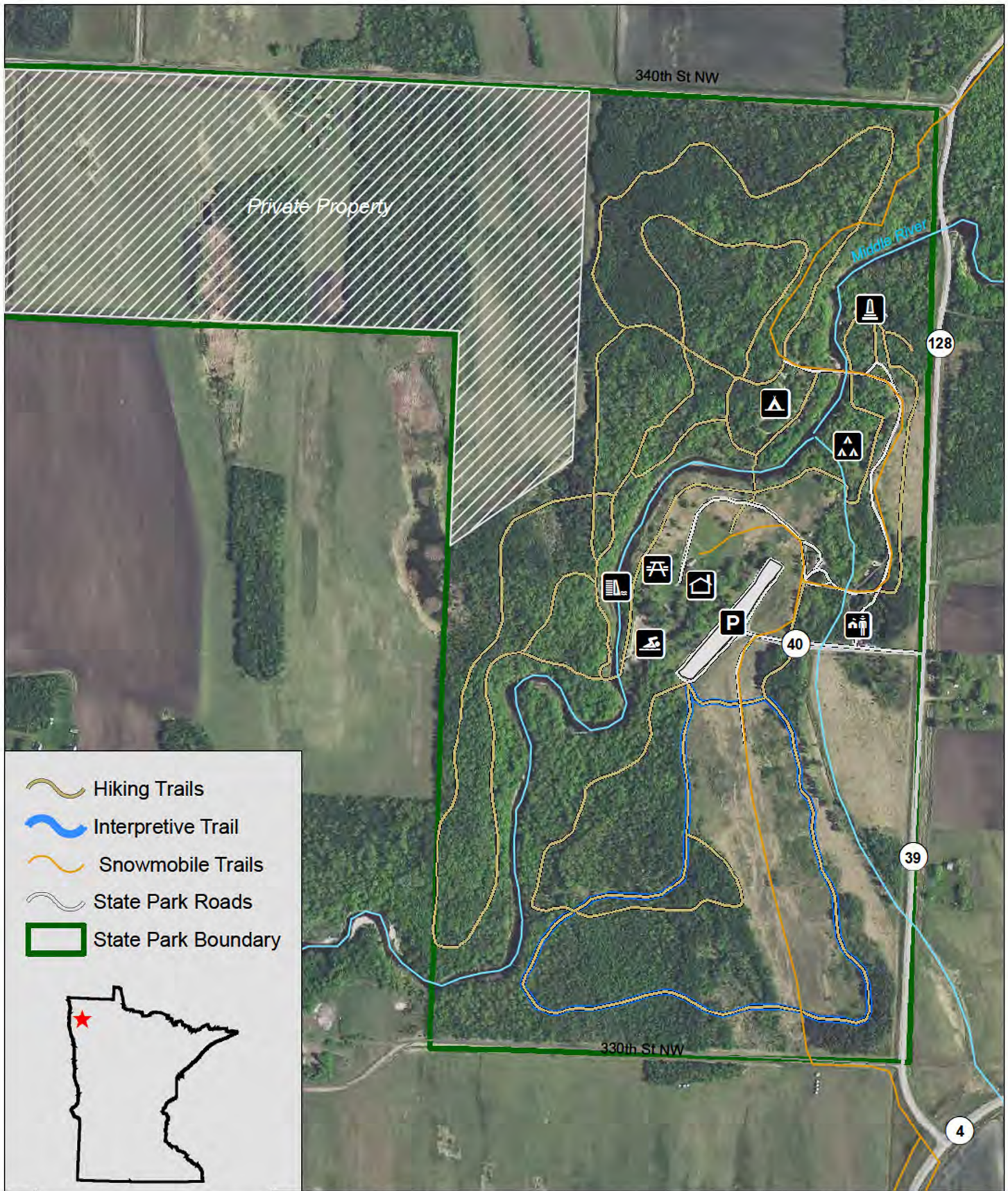


Figure 1
 Old Mill State Park
 Management Plan Amendment
 Existing Trails and Facilities

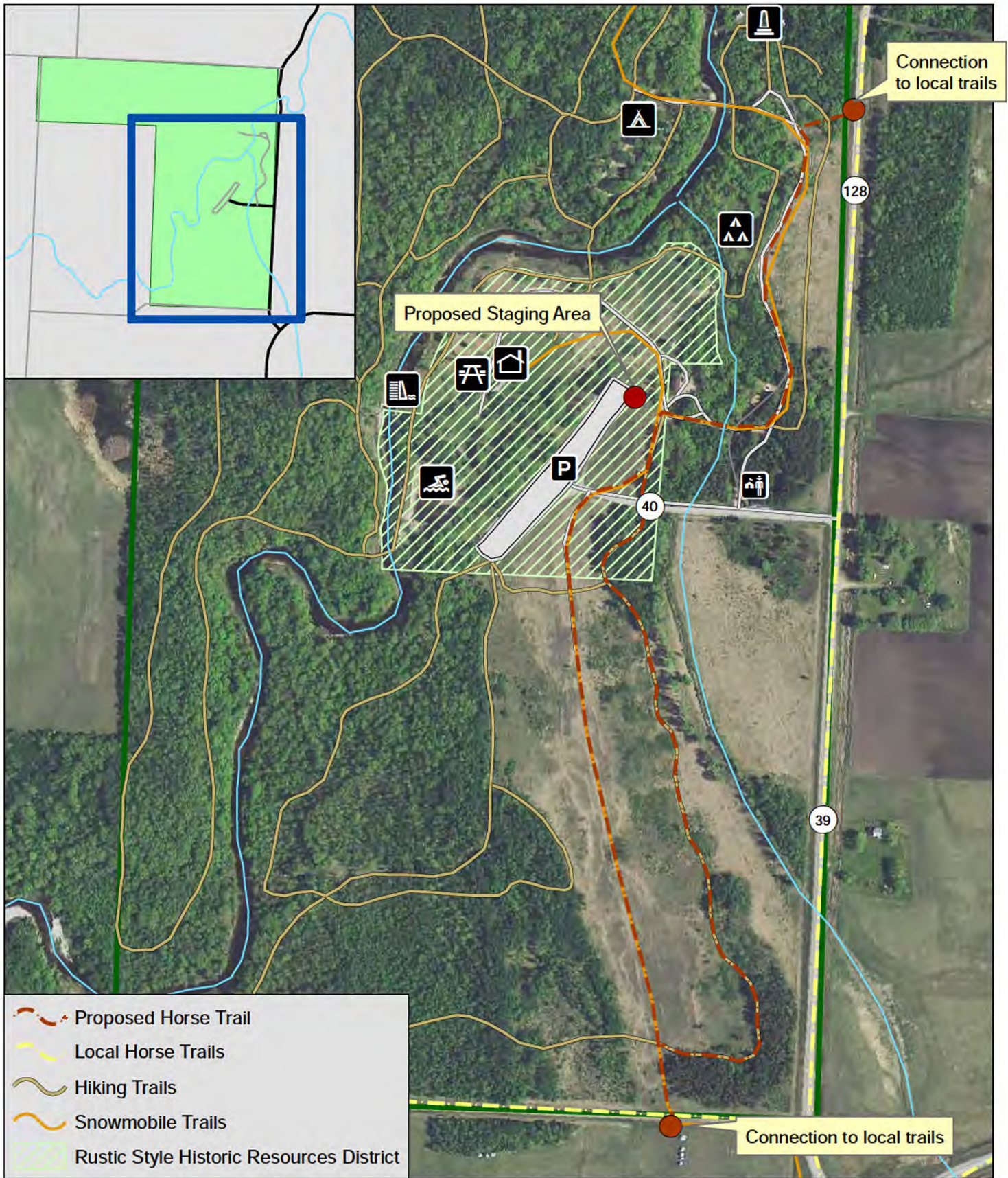


Figure 2
 Old Mill State Park
 Management Plan Amendment
 Proposed Horse Trail and Staging Area

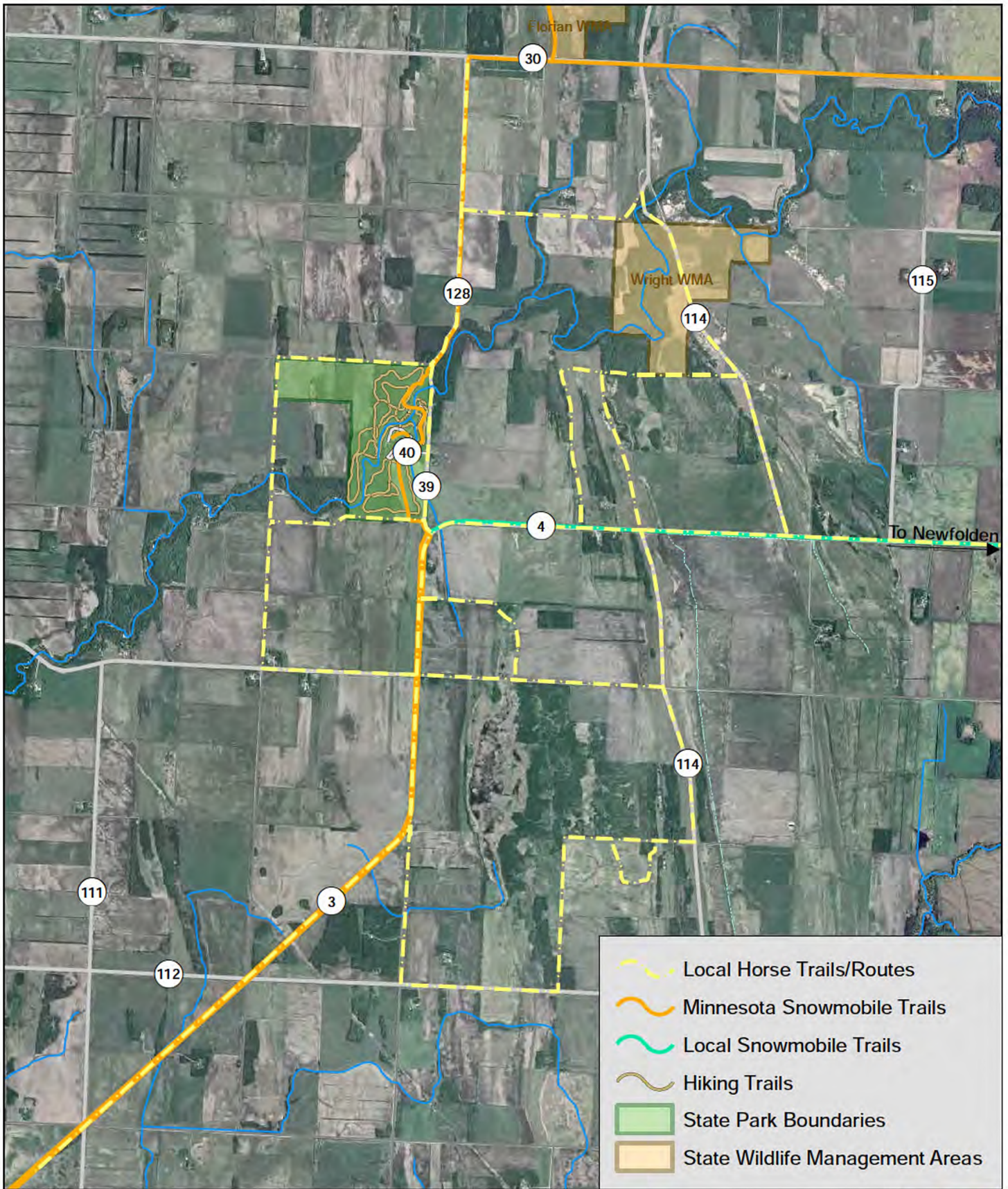


Figure 3
 Old Mill State Park
 Management Plan Amendment
 Local Area Horse Trails and Routes

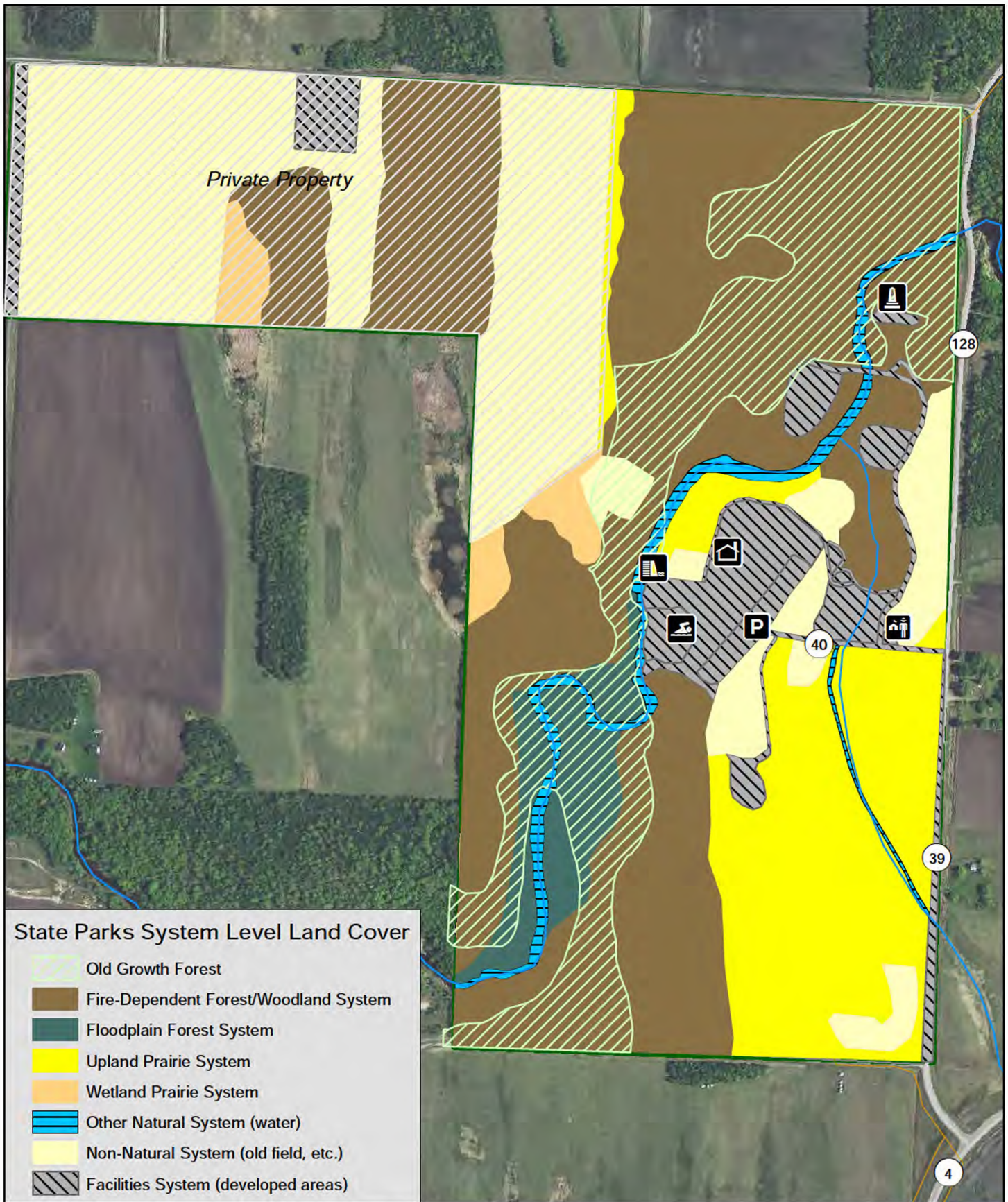


Figure 4
 Old Mill State Park
 Management Plan Amendment
 Land Cover