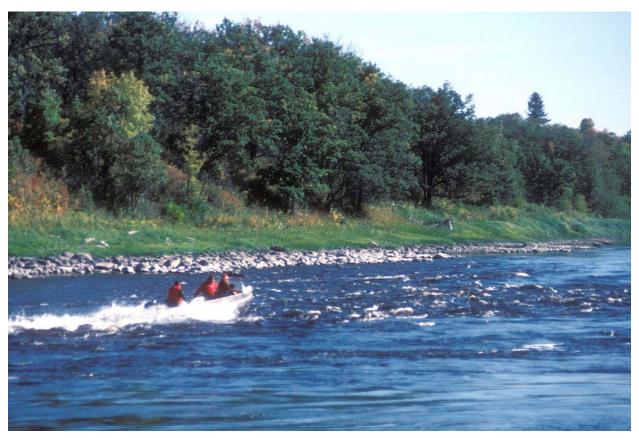
Franz Jevne State Park

Management Plan



A boat cruises past Franz Jevne State Park on the Rainy River.



Minnesota Department of Natural Resources Division of Parks and Trails

September 2016



For more information on this management plan, please contact the DNR Division of Parks and Trails at (651) 259-5600.

Copyright 2016 State of Minnesota, Department of Natural Resources

This information can be made available in alternative formats such as large print, braille or audio tape by emailing info.dnr@state.mn.us or by calling 651-259-5016.

The Minnesota DNR prohibits discrimination in its programs and services based on race, color, creed, religion, national origin, sex, public assistance status, age, sexual orientation or disability. Persons with disabilities may request reasonable modifications to access or participate in DNR programs and services by contacting the DNR ADA Title II Coordinator at info.dnr@state.mn.us or 651-259-5488. Discrimination inquiries should be sent to Minnesota DNR, 500 Lafayette Road, St. Paul, MN 55155-4049; or Office of Civil Rights, U.S. Department of the Interior, 1849 C. Street NW, Washington, D.C. 20240.

Minnesota Department of Natural Resources

500 Lafayette Road • St. Paul, MN • 55155

Department of Natural Resources Approval of Franz Jevne State Park Management Plan

Minnesota Statutes, section 86A.09, sub. 1 requires that a master plan be prepared for units of Minnesota's Outdoor Recreation System, including state parks and state recreation areas. The Laws of Minnesota for 1967, chapter 707, established Franz Jevne State Wayside Park, later amended to Franz Jevne State Park (Minnesota Statutes, section 85.012, subd. 20.)

The Minnesota Department of Natural Resources worked in partnership with Minnesota citizens and an interdisciplinary resource team to develop the management plan (master plan) for Franz Jevne State Park. The management plan was reviewed and approved by the Northwest Regional Management Team.

MNDNR Division of Parks and Trails

9/16/2016



Table of Contents

1.	Executive Summary	1
2.	Overview of Franz Jevne State Park	2
3.	Statutory Authorization	2
4.	Master Planning Process	3
5.	Vision Statements	4
6.	Regional Recreation and Tourism Opportunities	5
7.	Natural Resources	7
8.	Cultural Resources	19
9.	Interpretive Services	21
10.	Recreational Use and Visitor Services	21
11.	Park Operations	22
12.	State Park Boundary	23
13.	Plan Modification Process	26
14.	Bibliography	27
Та	ables and Figures	
Tab	ole 1: County Population Estimates 2010-12	5
Figu	ure 1: Regional Recreational Opportunities	8
Figu	ure 2: Ecological Subsections	9
Figu	ure 3: Topographic Map	13
Figu	ure 4: Land Cover Map	14
Tab	le 2: Endangered, Threatened, and Special Concern Species in Franz Jevne State Park	17
	ure 5: All Season Park Man	25

1. Executive Summary

This plan documents a public planning process and sets direction for future management and development at Franz Jevne State Park. *Minnesota Statutes*, section 86A.09 requires that construction of facilities and other development conform to the management plan. A citizen advisory committee provided input on plan recommendations and a draft plan was available for public review.

In 2015, the Division of Parks and Trails completed a Parks and Trails System Plan to advance new approaches to managing DNR's state parks, recreation areas, trails, forest recreation areas, and water recreation system. The System Plan recommends a differentiated system where each individual park will serve a niche within a system that offers a diverse range of recreational opportunities.

Franz Jevne State Park is designated as a Rustic State Park in the System Plan. Rustic parks will provide basic amenities and more self-directed services. These parks will focus on serving local users and those seeking a quiet, natural experience. Its niche includes providing excellent facilities for users seeking an experience along the Rainy River that is quiet, peaceful, and remote. This includes access to the Rainy River and its excellent fisheries, non-personal interpretation, and self-registration.

The following is a summary of key recommendations made in this plan. A complete list of recommendations can be found in the individual chapters of the plan. Implementation of recommendations in this plan will depend on funding, operational support, and implementation of the Division of Parks and Trails System Plan.

- Provide active management to maintain and improve native plant communities, maintain health of wildlife, and protect known cultural resources.
- Conduct resource assessments to avoid or mitigate impacts to natural and cultural resources.
- Update the Park Unit Interpretive Plan with a focus on nonpersonal interpretation and support of interpretation by partners.
- Enhance rustic camping by providing accessible facilities, and self-registration.
- Maintain existing infrastructure and make improvements to facilities using the Jevne Family Trust Gift Funds.

2. Overview of Franz Jevne State Park

At 120 acres, Franz Jevne is Minnesota's smallest state park, but it is full of outstanding natural and cultural resources. It is located on the Rainy River, at the Long Sault Rapids, and faces Kay-Nah-Chi-Wah-Nung National Historic Site of Canada.

The park's rock outcrop and rapids are part of a 2.1 billion-year-old intrusion of volcanic rock. As the Rainy River formed in a drained arm of Glacial Lake Agassiz about 9,700 years ago, it swerved north at this barrier but could not totally break free. The rocky obstruction created the turbulence of the rapids. The new cataract soon became a spawning ground for sturgeon.

This small area of land, designated a state park in 1967, mostly provides protection of the Rainy River shoreline. As the Rainy River was an important log drive stream, it is likely that the white pine were logged from the park during the early years of the 20th century.

Franz Jevne State Park is located east of Baudette and Lake of the Woods in Koochiching County. State administered units within Koochiching County are typically managed by the DNR's Northeast Regional Office, based in Grand Rapids. Due to proximity to other park units, Franz Jevne State Park is currently managed cooperatively by DNR's Northwest Regional Parks and Trails staff with: Big Bog State Recreation Area, Manitou Rapids Public Wayside Area, Zippel Bay State Park, and Garden Island State Recreation Area.

Of the park's approximately 120 acres, there are 99.5 acres of mapped land cover at Franz Jevne State Park. Of these, seven acres are developed use areas. Six acres are identified as northern terrace forest or northern bedrock shrubland, both of which have statewide significance. Forested wetlands (54 acres) in the park are typed as northern terrace forest, northern floodplain forest, northern wet-mesic boreal hardwood-conifer forest and northern very wet ash swamp. There are 36 acres of northern wet-mesic hardwood forest in the park.

3. Statutory Authorization

The Outdoor Recreation Act of 1975 identifies state parks and recreation areas as units of Minnesota's outdoor recreation system and designates DNR as the managing agency for these units. The act describes the purposes of state parks, criteria for new parks, and how parks should be managed. According to the act, the purposes of state parks are:

"... to protect and perpetuate extensive areas of the state possessing those resources which illustrate and exemplify Minnesota's natural phenomena and to provide for the use, enjoyment, and understanding of such resources without impairment for the enjoyment and recreation of future generations."

The act also says that a new state park should not be established unless its proposed location substantially satisfied the following criteria:

- Exemplifies the natural characteristics of the major landscape regions of the state, as shown by accepted classifications, in an essentially unspoiled or restored condition or in a condition that will permit restoration in the foreseeable future; or contains essentially unspoiled natural resources of sufficient extent and importance to meaningfully contribute to the broad illustration of the state's natural phenomena; and
- 2. Contains natural resources, sufficiently diverse and interesting to attract people from throughout the state; and
- Is sufficiently large to permit protection of the plant and animal life and other natural resources which give the park its qualities and provide for a broad range of opportunities for human enjoyment of these qualities.

The act directs DNR to manage state parks:

"... to preserve and perpetuate, and interpret natural features that existed in the area of the park prior to settlement and other significant natural, scenic, scientific, or historical features that are present.... to maintain a balance among the plant and animal life of the park and to reestablish desirable plants and animals that were formerly indigenous to the park area but are now missing. Programs to interpret the natural features of the park shall be provided.... Park use shall be primarily for aesthetic, cultural, and educational purposes, and shall not be designed to accommodate all forms or unlimited volumes of recreational use..."

4. Master Planning Process

The Outdoor Recreation act of 1975, *Minnesota Statutes 86A.09*, requires management plans to be prepared for most units of the outdoor recreation system, including state parks. Management plans are developed through an open public process. Park staff and planners



A fawn stares towards a disturbance as it enters a clearing from the woods (Photo courtesy of John Tschudy).



Rainy River Shoreline (Photo courtesy of John Tschudy).

work with other Department of Natural Resources (DNR) staff, other agencies, local government officials, local legislators, and citizens during the planning process. Public input is a valued and influential part of the management plan.

The process begins with an assessment of natural and cultural resources, conducted by DNR's technical staff. Then, an open house is held to announce the start of the planning process and to recruit a citizen advisory committee. The committee advised DNR staff on development of the park plan.

The initial open house was held in Baudette February 19, 2013. Citizen advisory committee meetings were held May 2, 2013 at Zippel Bay State Park, June 7, 2013 at Baudette, June 13, 2013 at Birchdale, August 1, 2013 at Wheeler's Point and Williams. A final open house public meeting was held on Thursday, September 12, 2013 at Baudette. A 30-day public review period was held for review of the draft management plan.

5. Vision Statements

Franz Jevne State Park represents Minnesota's unique geological, natural and cultural resources. While this park is small, it will introduce visitors to these unique resources and will provide a memorable experience through the following:

- Protected and well-managed natural and cultural resources. DNR resource efforts will include protecting the existing high quality resources present at the site, controlling the introduction and spread of invasive species, and working to restore disturbed areas to native plant communities. Unique features include the more than two billion year old rock outcropping, native plant communities featuring white pine, and the Rainy River, its rapids and fisheries (especially lake sturgeon).
- A hub for outdoor activities that draw people to visit and to connect with other opportunities in the broader community.
 Franz Jevne State Park provides camping, hiking, boating, swimming, and fishing. It also connects visitors to indigenous people of the area and to Canadian monuments on the other side of the Rainy River. There is a tradition of local use of the park year-round.

Regional Recreation and Tourism Opportunities

Franz Jevne State Park is located along the Rainy River in Koochiching County. Region 1 Division of Parks and Trails, based in Bemidji, manages the park for the Minnesota DNR. The park was managed by the DNR's Division of Forestry for the first years of its existence as a state recreational unit.

The counties surrounding Franz Jevne State Park are relatively low in population, and are predicted to lose population over the next 20 years, the approximate timeline for this management plan. The density, or number of people per square mile, is among the lowest in the state. The population of the counties surrounding the park is generally older than the median age of Minnesotans and the income is 22 percent lower than the state average.

The following table shows population estimates for the seven counties closest to the park. The numbers and estimates are from the Minnesota State Demographic Center (2013).

Table 1: County Population Estimates 2010-12

County	2010 Estimate	2011 Estimate	2012 Estimate
Beltrami	44,442	45,212	45,325
Kittson	4,552	4,528	4,496
Koochiching	13,311	13,221	13,208
Lake of the Woods	4,045	4,011	3,976
Marshall	9,439	9,473	9,445
Pennington	13,930	14,018	14,075
Roseau	15,629	15,536	15,484

Visitor Use Patterns

Patterns of park and trail users in this area are described in Minnesota's Network of Parks and Trails: Northeast Region Profile (Davenport 2011). The Northeast Region is characterized by a dispersed population with below-average population growth and above-average numbers of people age 65 and older. Generally, the number of natural resource-based recreation areas and trails is higher in this region compared to the rest of the state, although demand for these amenities is lower compared to the statewide score.

Like all Minnesotans, residents of Northeast Minnesota are most likely to engage in walking or hiking, boating, swimming, and driving for

pleasure. Northeast residents are more likely than other state residents to gather mushrooms, berries, or other wild foods and drive all-terrain vehicles (ATVs) and snowmobiles. Compared to state residents, they are less likely to bike, golf, run, or jog. The Northeast is a destination for Minnesotans interested in experiencing nature. Two-thirds of the 5.8 million visits to the Northeast reported in 2008 were Minnesotans. Nearly half came from the Twin Cities metropolitan area and nearly 20 percent drove from the Duluth-Superior area. Compared to trail users statewide, visitors to the Northeast were more likely to report that the purpose of their visit was "to experience solitude" (Davenport 2011).

An accompanying report identified the following opportunities to enhance existing parks and trails units in the Northeast (Vogel 2011):

- Maintain existing resources to retain high-quality recreation opportunities.
- Evaluate and enhance supply of accessible fishing piers and access points and consider enhancing supply for aging angler population.
- Consider outdoor recreation resource enhancements for activities in which there is above-average participation, such as mushroom and berry gathering.
- Consider outdoor recreation resource enhancements that promote experiences such as solitude, silence and quiet, and being away from other people. Residents in this region tend to seek these experiences to a greater extent than the state as a whole.

These opportunities provide broad direction for all park and trail facilities in Northeast Minnesota. However, they do provide context for the role that Franz Jevne State Park plays in the outdoor recreation system.

The park has low visitation compared to other state parks. Annual visitation of the park is 2,205 and annual overnight use is 467 (5-year average). Total park use, including overnight use, has been stable over the last 10 years. However, overall participation rates are declining. Franz Jevne State Park provides access to two unique features of the region: the Rainy River rapids and an impressive outcrop of ancient bedrock. Moreover, it is an excellent place to experience nature, gather berries, and enjoy solitude, which are the experiences sought by both the Northeast's residents and its visitors.

7. Natural Resources

Franz Jevne State Park has unique and important natural and geologic resources. The park serves as an important access to shore fishing the Rainy River during specific times of the year. Specific areas of importance include:

- Known archaeological sites covering more than 10 percent of the park area, with approximately 3,000 years of habitation history.
- Fish resources of the Rainy River that include walleye and lake sturgeon.
- Sault Rapids mafic dike; a 2.1 billion year old geologic feature.
- Native plant communities of statewide significance.



The DNR and the U.S. Forest Service developed an Ecological Classification System (ECS) for ecological mapping and landscape classification in Minnesota. Ecological land classifications are used to identify, describe, and map progressively smaller areas of land with increasingly uniform ecological features. The system uses associations of biotic and environmental factors for classification, including climate, geology, topography, soils, hydrology, and vegetation. The largest unit is the Province, units of land defined using major climate zones, native vegetation, and biomes such as prairies, deciduous forests, or boreal forests. Provinces are divided into sections, then subsections.



Fishing boats pass by riffles on the Rainy River near Franz Jevne State Park (Photo by Marc Norberg).



A small channel flows around an island near the south shore of the Rainy River (Photo courtesy of John Tschudy).

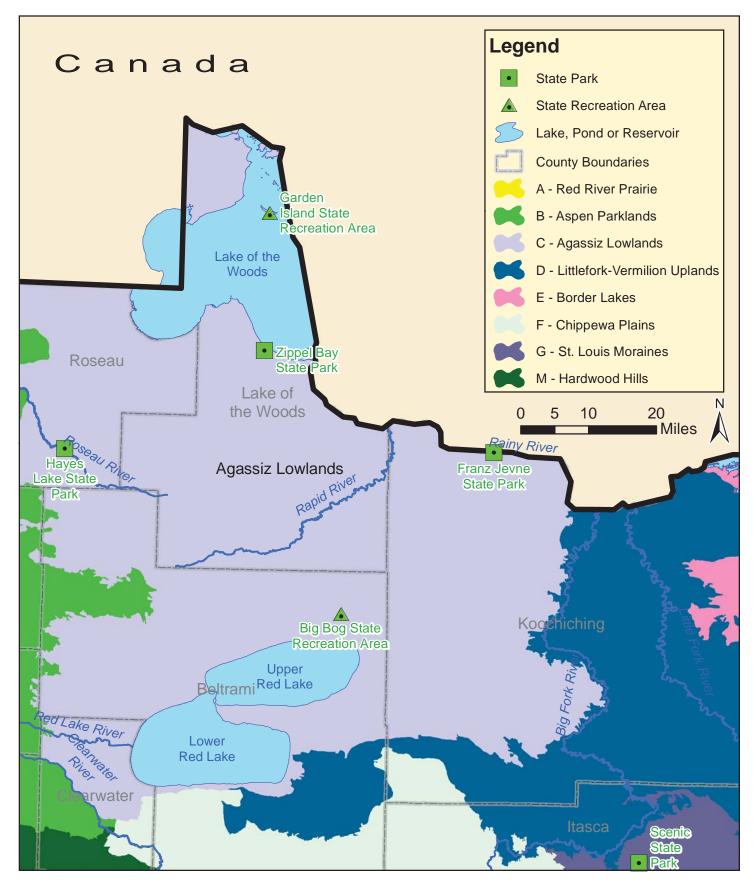


Franz Jevne State Park Figure 1: Regional Recreation Opportunities



Minnesota Department of Natural Resources Division of Parks and Trails September 2014





Franz Jevne State Park

Figure 2: Ecological Subsections



Minnesota Department of Natural Resources Division of Parks and Trails September 2014

Laurentian Mixed Forest Province

The Laurentian Mixed Forest (LMF) Province traverses northern Minnesota, Wisconsin, and Michigan, southern Ontario, and the less mountainous portions of New England. In Minnesota, the LMF Province covers a little more than 23 million acres (9.3 million hectares) of the northeastern part of the state. In Minnesota, the LMF Province is characterized by broad areas of conifer forest, mixed hardwood and conifer forests, and conifer bogs and swamps. The landscape ranges from rugged lake-dotted terrain with thin glacial deposits over bedrock, to hummocky or undulating plains with deep glacial drift, to large, flat, poorly drained peatlands. Precipitation ranges from about 21 inches (53 cm) annually along the western border of the Province to about 32 inches (81 cm) at its eastern edge in Minnesota. Normal annual average temperatures range from about 34°F (1°C) along the northern part of the LMF Province in Minnesota, to 40°F (4°C) at its southern extreme. Under influence of climate, the overall pattern of vegetation change across the LMF Province in Minnesota is warm and dry habitats in the southwest to cooler and moister ones in the northeast. Linked to climate are several other factors with southwest to northeast gradients that have important influence on vegetation and species ranges. Most notable are growing-degree days, evapotranspiration, and the depth and duration of snow cover.

Northern Minnesota and Ontario Peatlands Section

The Northern Minnesota and Ontario Peatlands Section (MOP) is flat and poorly drained. About half of the section consists of clay deposits from ancient Glacial Lake Agassiz. The lake deposits are covered primarily by bogs, swamps, fens, and other peatland vegetation. At the eastern edge of the MOP Section, the peatlands are acidic, deep, and old (>4,000 years) and support extensive areas of acid peatland communities such as black spruce bogs and poor swamp forests. At the western edge of the MOP Section, the peatlands are richer in minerals, shallower, and younger (~1,000 years). Tamarack swamps, rich fens, and other rich peatland communities tend to be common in this part of the MOP Section. Some areas, especially along the eastern and southern borders of the MOP Section in the Littlefork Vermilion Uplands Subsection, have uplands formed of glacial till that was eroded and flattened by wave action from Glacial Lake Agassiz. Mesic and wet forests of aspen, paper birch, spruce, balsam fir, white cedar, and black ash are typical in these areas. Sandy shoreline deposits from recessional stages of Glacial Lake Agassiz formed uplands that are

present across the MOP Section. These low, sandy uplands are less extensive than either the peatlands or glacial till uplands. They are characterized by fire-dependent forests of jack pine or red pine.

Agassiz Lowlands Subsection

This subsection encompasses the portion of the Glacial Lake Agassiz plain where peatlands are dominant. The southern boundary is the southern edge of the lake plain where it abuts Des Moines Lobe ground moraines and end moraines. The western boundary is based on separation of lands dominated by conifer bog from those dominated by wet prairie, as delineated on Marshner's "Original Vegetation of Minnesota" map. The eastern boundary separates that portion of the lake plain that is primarily peatland from wet to dry mineral sediments.

This subsection is characterized by a flat, poorly drained lake plain. Local topographic relief is less than 50 feet on most of the plain. The peatlands are dominated by bog forest species, including black spruce and tamarack. Upland sites are commonly vegetated by aspen-birch and jack pine. Forestry and tourism (associated with large lakes within the subsection) are the major land uses.

Landform

Peatlands occupy the large glacial lake bed. The mineral substrate consists of calcareous silty till with a thin veneer of lake sediments. Sediments vary in texture across the extensive lake bed. Sandy beach ridges are exposed throughout the subsection.

The landscape of Franz Jevne State Park started forming 2.7 billion years ago during the Algoman mountain building event. The eroding forces of wind, water, and ice gradually smoothed the ancient landscape over millions of years. Approximately 2.1 billion years ago, along the Rainy River area, molten magma rose along large cracks to the surface, then cooled and formed mafic dikes. The rock of these dikes is more resistant to erosion than older bedrock formed during the Algoman event. A mafic dike (the Sault Rapids Dike) can be seen on the road into Franz Jevne State Park and again at low water in the river.

Over 65,000 years, glacial movements deposited till several hundred feet thick over the ancient bedrocks. The final glaciations of the Franz Jevne area ended about 9,700 years ago when Glacial Lake Agassiz drained to its current levels, now Lake of the Woods and the Red Lakes.

Bedrock Geology

Glacial drift is thinnest at the northern and eastern edges of the lake plain, where bedrock is locally exposed (Olsen and Mossler 1982). Drift is up to 300 feet thick at the western edge of the basin. The underlying bedrock is Precambrian (Late Archean) in age, and includes gneiss, amphibolite, undifferentiated granite, and metamorphosed mafic to intermediate volcanic and sedimentary rocks. There are also iron formation, metasediments, and metamorphosed felsic volcanic rocks.

Geology and Topography

The present landscape of Franz Jevne State Park and Koochiching County in general, is mostly young. The area was covered during the Wisconsin Glaciation from about 75,000 to 9,000 years ago. About 12,000 years ago, the last glacier retreated north into what is now Canada and its meltwater formed Glacial Lake Agassiz. The wave action of Glacial Lake Agassiz smoothed out the glacial till landscape beneath the lake while wind-driven waves built up ridges of sand and gravel along its shores. The oldest landscape features of the park are the bedrock outcrops that date back at least 2.5 billion years.

Soils

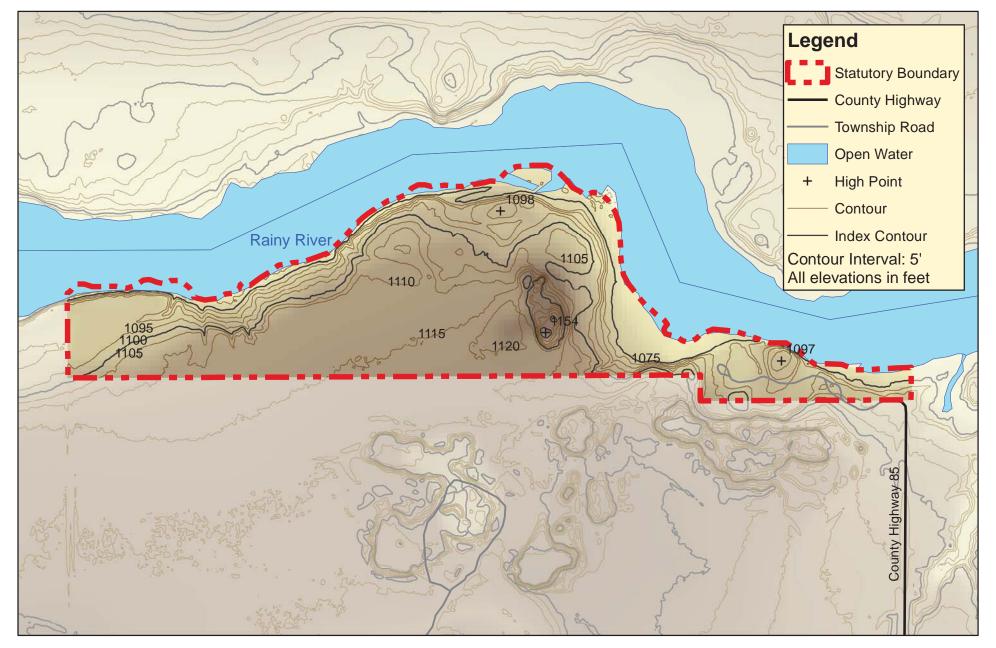
The soils of Franz Jevne State Park are consistent with those found in glacial lake bottoms – mostly poorly drained, deep till soils. Also found is the ancient bedrock outcrop and the mafic dike. About 75 percent of the soils are peats in this portion of the basin. Peat depths can exceed 15 feet.

Climate

The total annual precipitation ranges from 21 inches in the west to 25 inches in the east, with 40-50 percent occurring during the growing season. The growing season is short, from 98 to 111 days, with the shortest growing season near the eastern edge of the subsection.

Hydrology

This subsection is virtually level, which is reflected by the drainage network. Extensive ditching of the peatlands was done in the earlier part of this century in an effort to promote agricultural development of the region. These efforts were unsuccessful however. The Big Fork and Rainy Rivers are the largest rivers running through the subsection. The Rainy River forms part of the northern boundary of the subsection as well as the state. There are three large lakes that are remnants of Glacial Lake Agassiz. They are Lower Red Lake, Upper Red Lake, and Lake of the Woods.



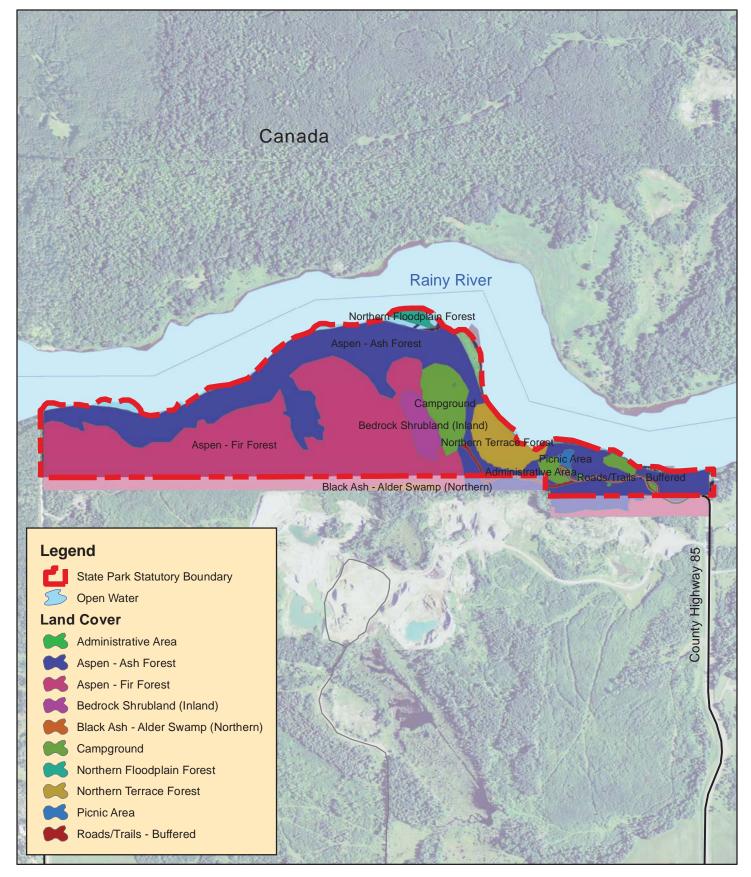
Franz Jevne State Park

Figure 3: Topography



Minnesota Department of Natural Resources Division of Parks and Trails September 2014





Franz Jevne State Park



Minnesota Department of Natural Resources Division of Parks and Trails September 2014

Figure 4: Land Cover



Presettlement Vegetation

Marschner (1974) mapped most of this subsection as peatland. Plant communities included in this classification were sedge fen, black spruce-sphagnum bog, and white cedar-black ash swamp. There were also low moraines and beach ridges dominated by jack pine forest or quaking aspen-paper birch forest. Recent ecologists have classified the peatland as a number of different plant communities, with the plant species present in each community responding to differences in water flow and water chemistry.

Land Use

Forestry and recreation are the major land uses. Black spruce, jack pine, and quaking aspen are the most common species utilized for paper making and sawlogs. Tourist activities and services are common near rivers and large lakes.

Natural Disturbance

Fire occurred infrequently in the peatlands. Insect infestations, such as spruce budworm probably lead to these fires. Water level fluctuation, caused both by short-term climatic changes and by beaver dams, probably contributed to tree mortality. Windthrow was common on the poorly drained mineral soils.

Franz Jevne State Park Resources

Vegetation

The majority of the land cover in Franz Jevne State Park consists of native plant communities – the remaining 7.5 acres contain developed recreational use areas. There are 54 acres of several types of forested wetlands and 36 acres of northern wet-mesic hardwood forest.

Six acres of the park are identified as either northern terrace forest or northern bedrock shrubland. These communities are of statewide significance and vulnerable to extirpation, according to the Minnesota conservation status rank (Lueth, Gronewold, Radford & Marjamaa 2013).

Water Resources

Franz Jevne State Park lies in the lower reaches of the Rainy River watershed overlooking a small stretch of the 3,000 mile Voyageur's Highway. The Voyageur's Highway was a long distance fur trade water route that was traversed by canoe. One portion went from Grand Portage west to Lake of the Woods along the boundary between

Canada and Minnesota. The upper Rainy River watershed drains a portion of the Canadian Shield and collects in Rainy Lake. Koochiching Falls (now dammed at this location and no longer a falls) at the outlet of Rainy Lake, serves as the headwaters of the Rainy River. The river then flows west 80 miles through the flat lake bottom of Glacial Lake Agassiz. The Rainy River empties into Lake of the Woods, which eventually drains into Hudson Bay. The lower Rainy River watershed covers 13,805 square miles and includes the Big Fork and Little Fork Rivers.

The Lake of the Woods-Rainy River system is one of the only places in Minnesota with a sturgeon population healthy enough to support a harvest fishery. Lake sturgeon are listed as a species of special concern in Minnesota. The species is prone to over-harvest due to their life history; they mature at 20 to 25 years and can live more than 50 years. DNR regulates angler harvest of sturgeon to ensure the long-term sustainability of the species and its continued recovery in the state.

Aquatic invasive species threaten many resources around the country. Lake of the Woods and Rainy Lake (connected by the Rainy River) have been designated as infested with spiny water fleas. Minnesota rules and regulations prohibit anglers from transporting lake water anywhere in the state. Consequently, anglers must make sure they pull their drain plugs from the hull, live wells, and bait containers. Anglers are also encouraged to clean their fishing gear before fishing a different water body. With increasing threats of aquatic invasive species on water resources, everyone plays a role in preventing and slowing the spread of invasive species.

Fisheries

Lake sturgeon have likely come to the rapids to spawn since the end of the last ice age. These giants can reach eight feet in length, weigh more than 200 pounds, and live more than 80 years. With their ridged back of bony plates, they are living fossils, evolutionary relics of the Mesozoic Era that once swam in ancient waters while dinosaurs walked on land. Over thousands of years, their presence here and at other cataracts on the Rainy River was a predictable, life-saving resource for American Indians at the end of the long northern winters. The fish were so thick during the spawning runs that they could be harvested with barbed moose-bone harpoons or even by hand.

Sturgeon in the Rainy River were nearly wiped out about 100 years ago. In the 1890s, commercial fishermen plundered the sturgeon fishery, which was valued as a source of caviar, meat, oil, and isinglass (collagen from the swim bladder was used for glue and to clarify wine and beer).

Efforts to help the sturgeon population recover began decades ago, but recovery is still under way for these long-lived, slow-growing fish.

While the Rainy River provides sturgeon with prime spawning grounds, it holds even greater importance as a nursery. Even after the decline of commercial sturgeon fishing pressures in the early 20th century, the population didn't recover, likely due to water pollution from upstream paper mills and municipal wastewater plants. Once water quality improvements began in the early 1970s young sturgeon began to thrive again. Those circa-1970 sturgeon are 70 inches long today.

In 1993 the Rainy River First Nations established a fish hatchery at Manitou Rapids to augment recovery of lake sturgeon on the Rainy River and elsewhere. This hatchery is the source of sturgeon fry that DNR has released in the Red River. While the lake sturgeon population suffered greatly from over-harvesting, DNR staff managed a successful recovery program and today population numbers increase annually.

Whitefish, once locally abundant, are now mostly found in the deeper northern bays of Lake of the Woods and will not return to the park area unless lake temperatures are reduced, which is unlikely given current climate change predictions.

The Rainy River also provides habitat for other game fish. Anglers can catch walleye, northern, and small mouth bass, in addition to sturgeon, on this portion of the river. Walleye, more than any other species, drives the local tourism-based economy.

Wildlife

Eighty-eight Species in Greatest Conservation Need (SGCN) are known or predicted to occur within the Agassiz Lowlands (DNR 2006). These SGCN include 28 species that are federal or state endangered, threatened, or of special concern. Seven mammal SGCN are known or predicted to occur in the Agassiz Lowlands, which is equivalent to one-third of all mammal SGCN species in the state.

Table 2: Endangered, Threatened, and Special Concern Species in Franz Jevne State Park

•					
Scientific Name	Common Name	Status			
Acipenser fulvescens	lake sturgeon	MN_SC			
Lasmigona compressa	creek heelsplitter	MN_SC			
Ligumia recta	black sandshell	MN_SC			

MN_E = Minnesota Endangered, MN_T = Minnesota Threatened, MN_SC = Minnesota Special Concern, FED_T = Federally Threatened



DNR staff tag lake sturgeon on the Rainy River.



Creek heelsplitter (Lasmigona compressa)

Natural Resources Recommendations

These recommendations provide a broad direction for resource management at the park. The unit resource plan provides more quantitative, time-constrained objectives over the short-term (Lueth, Gronewold, Radford & Marjamaa 2013).

- Preserve and protect the natural resources of Franz Jevne State Park.
- 2. Provide active management of vegetation resources in order to maintain and improve the quality of the native plant communities found at Franz Jevne State Park.
 - a. 80 acres of mesic hardwoods will be managed to reduce aging balsam and replant longer lived pine species and white spruce.
 - b. Unless Franz Jevne experiences a significant blow down event, using wide-scale harvest as a management tool is not appropriate at Franz Jevne due to its small size and significant potential for damage to archeological elements.
 - c. Pine re-introduction will be accomplished using small gaps created by resource crews.
- Manage for the advance of Emerald Ash Borer (EAB) in accordance with Parks and Trails Ash Management Guidelines (PAT 3/23/2014).
 - a. Three of the park's native plant communities have scattered ash and are susceptible to EAB kill (Northern Wet-Mesic Boreal Hardwood-Conifer Forest, Northern Wet Ash Swamp, and Northern Very Wet Ash Swamp). As per the Parks and Trails EAB guiding document, management of EAB will reflect current best practices and will provide for succession of ash to other native tree species found within the native plant community. As ash are merely a component of Franz Jevne, the succession of ash to other native species will not detract from the overall quality of the park's native plant communities.
 - b. Logging to salvage EAB killed trees will not likely be necessary or feasible at Franz Jevne due to the scattered nature of ash and potential damage to archeological features.
- 4. Monitor native plant communities to ensure infestations of terrestrial invasive plants are detected early and treated.

- 5. Maintain health of local wildlife and their ecosystem so that neither is adversely affected by unnatural influences.
 - a. Conduct surveys for selected invertebrates, amphibians, reptiles, and mammals in the park.
 - b. Annually assess need for deer reduction. If needed, plan and administer a hunt.
 - c. Assess need for beaver reduction as problems arise, such as flooding of trails or roads or falling of use-area shade trees.
- 6. Conduct resource assessments on all development projects to avoid or mitigate impacts to natural and cultural resources.

8. Cultural Resources

Historical Setting

The history along the Rainy River has interested archaeologists since the 1880s and there has been extensive archaeological work done at several prominent sites along the Rainy River. In particular, the Kay-Nah-Chi-Wah-Nung National Historic Center, located on the Canadian side of the Rainy River opposite Franz Jevne State Park, contains the largest prehistoric mound structure in Canada. This site spans 3,000 years from the Archaic period into the historic Ojibwe use of the site. The mounds at this site are visible from Franz Jevne State Park. As the location of the Kay-Nah-Chi-Wah-Nung site and Franz Jevne State Park are situated at a set of rapids in the Rainy River, there is high archaeological potential here for portaging routes, habitation sites, and sturgeon fishing camps from a thousand years past (Lueth, Gronewold, Radford & Marjamaa 2013).

For more than 4,000 years, and probably much longer, fish sustained the large congregations of people who came to Long Sault Rapids to trade each spring. The first mound builders at the Place of the Long Rapids are known as the Laurel Culture. They inhabited the region from about 300 BC to 1100 AD. The mounds are cemeteries, but also sacred landmarks at the rapids and river confluences, and in some cases symbolic effigies representing ancient beliefs.

The tradition of mound building came to the Rainy River from the American Indian Hopewell Culture in present-day Ohio through a network of trade. The trade network spread religious ideas throughout an area from the Gulf of Mexico to the Great Lakes, and west across the Great Plains to the Rocky Mountains.



The Long Sault site, located across the Rainy River from Franz Jevne State Park, contains the largest prehistoric mound structure in Canada (Photo courtesy of John Tschudy).

Mound building traditions lasted into the early fur trade, by which time Ojibwe bands had migrated to the Rainy River and intermarried with members of the Cree and other tribes. Relic hunters in the late 1800s complained that Rainy River Ojibwe were fiercely protective of the mounds and would not allow digging at this site.

Cultural Resources

The goal of cultural resources management in state parks is to protect the existing cultural resources of the park.

The long-term goals for cultural resources at Franz Jevne State Park are to protect all known cultural resources from adverse impacts as a result of development or vandalism. In those cases where impacts cannot be avoided, DNR will conduct mitigation so as to preserve the artifacts and information. No archaeological survey has been done in the western half of the park and this area certainly possesses high archaeological potential, especially near the Rainy River. Any development or ground-disturbing activities proposed for Franz Jevne State Park should be assessed by an archaeologist.

Birchdale area residents are supportive of cultural resource programming that explores the region's history and pre-history. Teachers at the nearby Indus School use the park for environmental education. Birchdale residents are also interested in how the mounds of the area connect; the Grand Mound site located on the other side of the Rainy River is 23 miles to the east, but may have cultural connections to Franz Jevne State Park.

Cultural Resources Recommendations

- It is likely that archaeological sites will be found in other locations within the state park boundary. Archaeological assessments will be conducted as part of resource assessments for the development of new facilities, trails, or other structures to prevent or mitigate disturbance to cultural resources.
- 2. As funding is available, encourage exploration of the park for cultural resource sites.
- 3. Work collaboratively with partners to interpret the park's unique cultural resources.

9. Interpretive Services

Current Interpretive Services

Interpretive services at Franz Jevne State Park consist of non-personal (self-guided) interpretation. This is consistent with its funding and staffing levels. Information boards allow visitors to learn about the natural and cultural history of the park and surrounding area.

Franz Jevne State Park has a modest budget and does not have staff dedicated to interpretive programming. However, park staff and volunteers have helped to provide limited programming that engages visitors and school children, and builds loyalty to the park.

Should funding ever allow for an interpretive naturalist at Big Bog State Recreation Area, part of that staff person's duties would be to provide a limited amount of programming at co-managed parks such as Franz Jevne State Park.

Interpretive Services Recommendations

- 1. Update the Park Unit Interpretive Plan (PUIP) for Franz Jevne State Park. Within the PUIP, develop themes that identify relevant natural and cultural resource stories.
- Create a new kiosk with a map of the park and develop interpretive panels related to the themes determined in the PUIP.
- 3. Regularly assess and update non-personal interpretation in the park, focusing on park themes, as funding allows.
- Support and assist efforts of partners to offer personal interpretive services at the park focusing on park themes, as time and funding allows.

10. Recreational Use and Visitor Services

Existing Recreational Facilities

Franz Jevne State Park is an important resource for the local community. It serves as an important access to shore fishing the Rainy River during specific times of the year and is popular with walleye and sturgeon anglers.

The park has 18 campsites (two with access to electricity and two walk-in campsites) located on the Rainy River. One site is designated and maintained as an ADA accessible site. There is a picnic area and a hiking trail. There is a boat ramp on County Road 85 at the park entrance.



Drive-in camp site at Franz Jevne State Park.

Recommendations for Recreational Use and Visitor Facilities

- Improve existing ADA accessible campsite and facilities.
- Provide small entrance kiosk that provides self-registration, orientation and non-personal interpretation of park resources.
- 3. Consider upgrading campsites to accommodate recreational camping vehicles and boats.
- 4. Consider upgrade of picnic shelter. This may include concrete slab and screened walls.

11. Park Operations

The manager of Big Bog State Recreation Area currently oversees the management for several state recreation units in the Northwest, including Zippel Bay State Park, Franz Jevne State Park, Garden Island State Recreation Area, Blueberry Hill Forest Campground, Faunce Forest Campground, Manitou Rapids wayside rest, and various public water accesses. Franz Jevne State Park is maintained by Zippel Bay State Park staff. The park does not have staff on-site. Use of the park, and payment of permits, is on the honor system. Park visitors use the park's roads for skiing and snowshoeing during the winter, but the roads are not maintained. Residents of the Birchdale community would like to see roads maintained year-round. Decisions related to operational activities and funding will need to be consistent with the Parks and Trails System Plan and division management structure.

Partnerships

Franz Jevne State Park was donated to the State of Minnesota by the Jevne family as a lasting memorial to their father, Franz Jevne. Franz Jevne, a Wisconsin native, moved to International Falls to work as an attorney when he was 29. The Jevne family included funds for park operation in his bequest. Due to the isolated location of the park and the proximity to local DNR forestry offices, the park was managed by the Division of Forestry until 1999. Franz Jevne State Park has since been managed by the Division of Parks and Trails.

If the recommendations in this park plan were to be implemented, annual operational costs may need to be increased. There is local support for these recommendations and interest from the Birchdale community in developing partnerships to help achieve them.

Residents of the Birchdale community are interested in seeing electrical site improvements at Franz Jevne to bring in additional tourism to the

local area. Residents also identified a need for improvements to the public access site at the park entrance. The access is owned by Koochiching County and maintained largely by Con-Con funds.

Enforcement

Park staff (with security ranger certification) from Zippel Bay State Park and Big Bog State Recreation Area patrol the park during heavy use periods. Assistance with enforcement issues is received from DNR Division of Enforcement Conservation Officers and the Koochiching County Sheriff's Office.

Park Operations Recommendations

- 1. Ensure that resource management hours are available to implement the resource management activities.
- 2. Ensure that operations hours are available to implement visitor services and maintenance activities.
- 3. Monitor use and development to ensure proper staffing.
- 4. Periodically evaluate management structure to determine correct management staffing.
- Implement recommendations included in Statewide and Park Interpretive Plans. Primary focus will be on non-personal interpretation but may include support for special events and occasional programing by interpretive staff and/or park management staff.
- Maintain existing infrastructure and make improvements to facilities using Jevne Family Trust Gift Funds donated to the park for that purpose.

12. State Park Boundary

The Minnesota State Legislature establishes state park boundaries. The state park statutory boundary defined in Minnesota Statutes provides staff, citizens, and policy makers with a common understanding of which lands are appropriate for inclusion in the park. Lands are included within a statutory boundary when a landowner has agreed to inclusion. The DNR is then authorized to negotiate with willing sellers for acquisition of lands contained within that statutory boundary. The landowner retains full ownership and rights to the land until he or she decides to sell to the park or another individual. Boundary modifications are considered during all state park management planning processes. Although a state park management plan can recommend boundary changes, only the Minnesota State Legislature can change state park boundaries.

Franz Jevne State Park Management Plan

There are approximately 120 acres within the state park's statutory boundary. All lands within the park boundary are owned by the State of Minnesota and managed by the Division of Parks and Trails.

Frontale Campsite w/electricity Camping Registration Drive-in Campsites Walk-in Campsites Campground Picnic Area Boat Ramp Parking Hiking FACILITIES TRAILS 000 Ø River MORTH 100 200 300 400 500 Þ Rainy Z Ø O © 5/2016 by State of Minnesota, Department of Natural Resources

Figure 5: All Season Park Map

13. Plan Modification Process

State park management plans document a partnership-based planning process, and the recommended actions resulting from that process. These comprehensive plans recognize that all aspects of park management are interrelated and that management recommendations should also be interrelated.

Over time, however, conditions change that can affect some of the plan recommendations or occasionally an entire plan. Plans need to acknowledge changing conditions and be flexible enough to allow for modifications as needed.

Plan Amendment

The DNR Division of Parks and Trails has adopted processes for plan amendments (major changes) and plan revisions (minor changes), which are coordinated through the division's planning section. A plan amendment will be completed to address changes that would vary from the approved management plan.

The Plan Amendment Process consists of five steps:

- The existing plan is reviewed at the park and regional levels to determine which stakeholders are potentially impacted by a resource condition or proposed change.
- 2. If the proposed change involves other DNR divisions, the issue should be resolved by staff of involved divisions and approved by the division directors.
- If the proposed change involves other state agencies, the issue should be resolved by staff and approved by the appropriate division directors from all involved agencies.
- 4. If the proposed change is potentially controversial among elected boards, user groups or the public, a citizen advisory committee should be established to address the proposed change. A locally advertised open house will be held to encourage public input on the matter, after which point the DNR Division of Parks and Trails Director will determine whether the proposed change should be reviewed by the department.
- All plan amendments will be coordinated, documented and distributed by the DNR Division of Parks and Trails planning section.

Plan Revision

If a plan change is recommended that does not meet the amendment criteria above, and generally follows the intent of the plan, the DNR Division of Parks and Trails has the discretion to modify the plan without a major planning process.

Plan Revisions Related to Physical Constraints and Resource Protection

Detailed engineering and design work may not allow the development to be completed exactly as it is outlined in the plan. A relatively minor modification, such as moving a proposed building site to accommodate various physical concerns, is not uncommon. Plans should outline a general direction and document the general "area" for development rather than specific locations. For the most part, plans are conceptual, not detail-oriented. Prior to development, proposed development sites are examined for the presence of protected Natural Heritage Program elements and historical/archaeological artifacts. If any are found, the planned project may have to be revised to accommodate the protection of these resources.

Program Revisions

The resource management section and interpretive services sections of the plan should be updated periodically as needed. The DNR Division of Parks and Trails' resource management and interpretive staff will determine when an update is needed.

14. Bibliography

- Davenport, et al. (2011) Minnesota's Network of Parks & Trails: An Inventory of Recreation Experience
 Opportunities in Minnesota: Northeast Region Profile. Minneapolis, MN: University of Minnesota
 Center for Changing Landscapes.
 - http://ccl.design.umn.edu/documents/Northeast Profile 2011.pdf
- Kelly, Tim. (2013). Results of 2012 Minnesota State Park Visitor Survey. Saint Paul, MN: Minnesota Department of Natural Resources.
 - http://files.dnr.state.mn.us/aboutdnr/reports/parks/2012 park visitor report.pdf
- Lueth, C., Gronewold, C., Radford, D., Marjamaa, J. (2013) *Franz Jevne State Park Unit Plan for Natural & Cultural Resource Management: 2013-2019.* Bemidji, MN: Minnesota Department of Natural Resources, Division of Parks and Trails.
- Minnesota Department of Natural Resources. (2006). *Tomorrow's Habitat for the Wild and Rare: An Action Plan for Minnesota Wildlife*. Saint Paul, MN: Comprehensive Wildlife Conservation Strategy. Division of Ecological Services, Minnesota Department of Natural Resources.

http://files.dnr.state.mn.us/assistance/nrplanning/bigpicture/cwcs/profiles/agassiz_lowlands.p df

- Minnesota Department of Natural Resources. (2013) *Destination Minnesota: A New Direction for Minnesota State Parks and Trails.* Saint Paul, MN.
 - http://files.dnr.state.mn.us/aboutdnr/reports/legislative/2013 destination minnesota.pdf
- Minnesota State Demographic Center. (2013) *Minnesota Population Estimates*. http://mn.gov/admin/demography/data-by-topic/population-data/our-projections/index.jsp
- Vogel, M., Ek, A., Davenport, M., Schneider, I., Zerger, B., Schreurs, B.,... Picone., L. (2011) *Minnesota's Network of Parks & Trails: Framework.* Minneapolis, MN: University of Minnesota Center for Changing Landscapes. http://ccl.design.umn.edu/mnpat.html