A STUDY FOR PAIMUSK CREEK:

the stewardship of a heritage landscape

by

Louise M. Thevenot

A practicum submitted to the Faculty of Graduate Studies of the University of Manitoba in partial fulfillment of the requirements for the degree of Master of Landscape Architecture.

Department of Landscape Architecture
Faculty of Architecture
University of Manitoba
Winnipeg, Manitoba
Canada

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Acknowledgements

I would like to take this opportunity to thank the many people who have supported me financially and spiritually along my aspiring journey.

To Robert Newbury, "This river is like a deep brown god,..."
[T.S. Elliot]

To Graham Dodds, "I found the camels,..."

To Ted McLachlan, "No longer a missing link,..."

The people I met while involved with this project has given me the greatest pleasure. Special thanks go to Norway House residents who opened their doors and hearts to me during site visits.

All my love,
L.T.

Abstract

Paimusk Creek, in the Boreal Forest region of northern Manitoba, was studied to determine the significance of the creek as a heritage landscape. The heritage resources of the study area were determined for significance on a local, provincial and national level. The natural resources, cultural resources, human resources and land use, were identified and evaluated against criteria used for Heritage Resource Impact Assessments outlined by the Manitoba Historic Resources Branch.

Through site planning methods and recommended stewardship guidelines, the suitability for human and land use was further evaluated for the study area incorporating minimal impacts to identified heritage resources. A practical application used these recommended guidelines to design two stewardship option plans for Paimusk Creek.

Two Stewardship Plan options were discussed in terms of their impacts for short term and long term impacts to Paimusk Creek. Paimusk Creek meets the requirements for seven heritage landscape types with significance on local, provincial, and national levels.

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CHAPTER 1

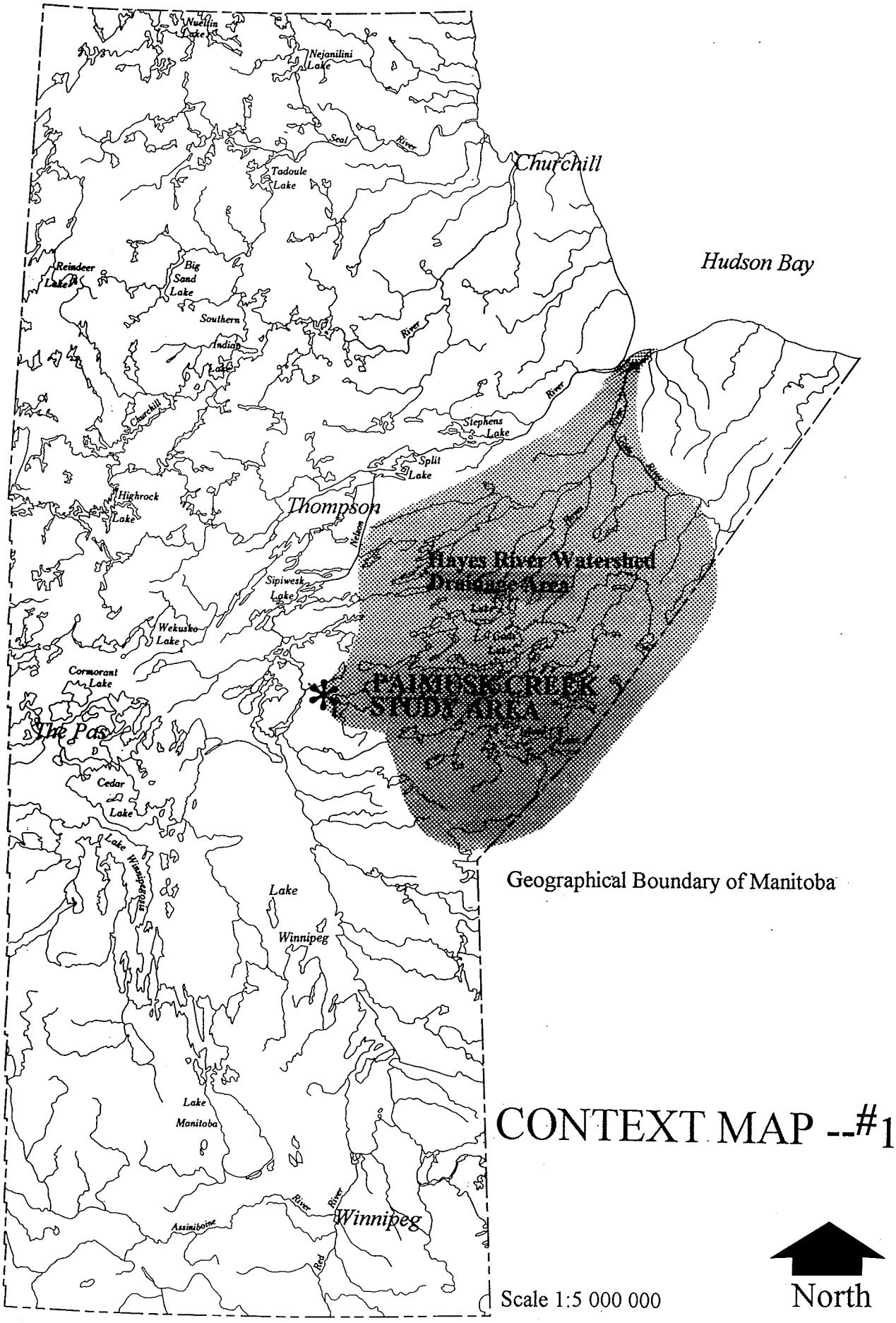
Introduction to the Study Topic

Introduction

Paimusk Creek, in northern Manitoba, is a place of significant heritage value. An interesting assembly of natural, human, and cultural resources and features concentrated at Paimusk Creek elevate its importance. The most prominent attributes of Paimusk Creek include a sacred rock painting site, flourishing fish production, unique geological and hydrological features, and deep cultural heritage values. These attributes and others contribute to the heritage of this landscape.

Paimusk Creek is a small tributary of Molson Lake. Paimusk Creek drainage division is situated in the southwest portion of the Hayes River Watershed Drainage Division **(see Context Map #1)**. The Hayes River has the third largest drainage division in Manitoba.

The Hayes River is the largest river in northern Manitoba that has been largely unaffected by human settlement and hydro-electric development. This anomaly in the landscape has retained its integrity over time, leaving a pristine example of unaltered landscape since the retreat of glaciers. Studies have concluded the Hayes River is valuable as a heritage landscape and fulfills the requirements for nomination in the Canadian Heritage River System [Dodds 1987].



CONTEXT MAP --#1

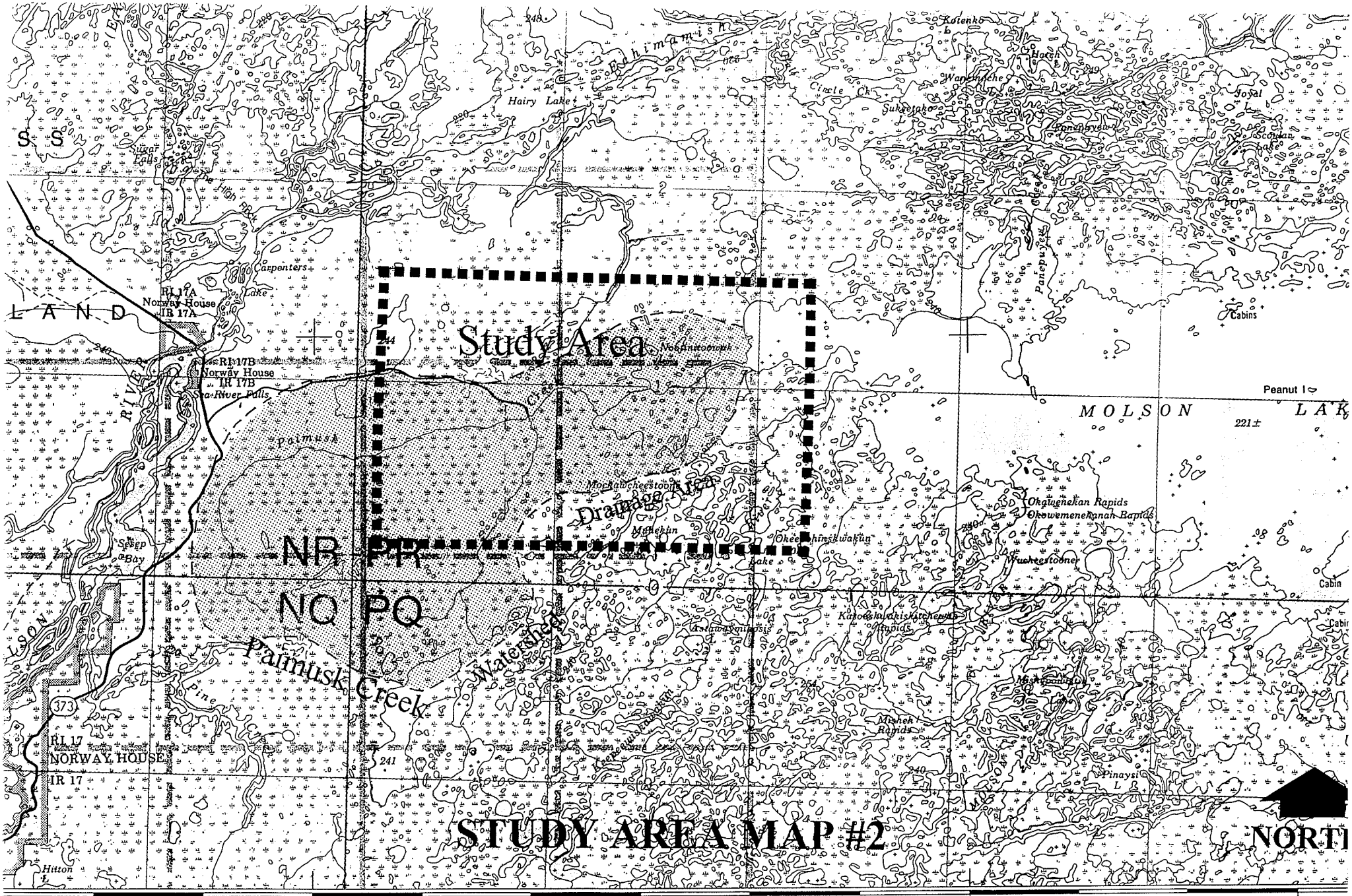
Prior to the building of the railway and road transportation systems, the Hayes River System was the main passage to the western interior of Canada. Since it was the least dangerous travel route when compared to the lower Nelson and Churchill Rivers. Lake Winnipeg, can be traveled to the junction of the Red and Assiniboine Rivers in the city of Winnipeg (The Forks), and to the mouth of the Saskatchewan River that extends throughout the Prairie Provinces. This historic travel route has immense historical significance to North American history beyond Canadian history, and local history.

Paimusk Creek exists today in much the same state as it did since glaciation. Landscapes that have remained natural or unaltered due to human activities are indigenous landscapes. Landscapes are considered heritage landscapes because of natural features, cultural events, or significant human history associated with a place in the landscape. An "indigenous heritage landscape" is an unaltered or native landscape that combines significant natural and cultural resources.

The Study Area

The Paimusk Creek study area is approximately 450 air km. north of Winnipeg and within 30 km east of Norway House Indian Reserve #17, #17A and #17 B. The watershed drainage area of Paimusk Creek is approximately 300 square km. The study area encompasses a 13 km length from the mouth of Molson Lake to several kilometers past the junction at the Y, which includes an area of approximately 250 square km. Latitude and longitude coordinates in the centre of the study area are 54 degrees 15' North latitude and 96 degrees 0' longitude **(see Study Area Map #2)**.

There are no permanent human settlements on the creek, however temporary camps for spawn taking, sport fishing, and hunting are frequent. The Provincial Crown has almost exclusive ownership of the study area. The Federal Crown owns several isolated parcels of land (<50 hectares). There are holds on parcels of land within the study area. Land hold claims include unsettled land exchange areas and Manitoba Hydro water power reservoir hold areas. There is a gravel access road that leads to the shoreline of Paimusk Creek. Winter road access extends to the mouth of Molson Lake and meanders on and off the creek bed as indicated on aerial photographs.


Study Area
NB PR
NQ PQ
Drainage Area
Watershed
Pamusk Creek
STUDY AREA MAP #2
NORTH
Scale 1:250,00
Norway House IR 17A
Norway House IR 17B
Sea River Falls
Carpenters Lake
Hairy Lake
Circle Ck
Sukretako L
Wapimache L
Kalenko L
Horseshoe L
Royal L
Scanlan Lake
Cabins
Peanut I
MOLSON LAKE
Okgungekan Rapids
Okowemenekanah Rapids
Muscowpetung
Kaboosakakiskitchewuk Rapids
Misheki Rapids
Pinaysi L
Hitton L
Pine Creek
Sipsip Bay
Cabin
R 2
R1W
30'
15'
97°00'
45'

This study was undertaken for two reasons. Firstly, potential threats to the integrity of the heritage values of Paimusk Creek due to changing land use are evident. Historically, a spiritual retreat and travel route were the primary uses of Paimusk Creek. Paimusk Creek has received much attention since the building of an access road in 1978. Increased ease for access to Paimusk Creek increases usage of the creek. Even prior to the road construction, activities by area residents and tourists had negative impacts on sites along the creek. The most visible impacts are written names and graffiti on rock surfaces, including a sacred rock painting site located in the study area.

Secondly, there is very little recorded information about Paimusk Creek either generally or specifically. Presently, there is limited cultural and heritage information for Paimusk Creek. More research in these areas is required to maintain valued resources of Paimusk Creek.

This study is organized as follows. First, this study identifies past and present land use activities to determine important values of the creek. Secondly, this study evaluates heritage resources of Paimusk Creek and recommends guidelines for future use of the creek. Thirdly, this study applies these guidelines through site planning methods to design a proposed stewardship plan. The focus of the stewardship plan sets guidelines for the use, enjoyment and protection of the creek.

The stewardship plan designates appropriate sites for recommended land use activities. The stewardship plan will provide a basis for ensuring that important values of Paimusk Creek are maintained and directs future use of the creek. Sustainable approaches use Paimusk Creek resources to their maximum potential with minimum impacts to heritage resources. The stewardship plan recommendations conserve and protect the values of Paimusk Creek as a heritage landscape.

Background to the Study Area

The rock paintings of Paimusk Creek and Painted Stone Portage were created by aboriginal people. Typically, aboriginal people carefully select unique landscapes as rock painting sites. These rock painting sites are sacred places where aboriginal rituals, teachings, and religious celebrations occurred. The rock painting sites were essential components of aboriginal belief systems and culture. Special landscape qualities along with the paintings themselves are evidence of past experiences associated with Paimusk Creek. Previous studies have concluded that these paintings are of special significance to aboriginal rock art [Steinbring 1991].

There are a number of rock painting sites located in the vicinity of the Paimusk Creek study area. The Painted Stone Portage of the Echimamish River has similar values as a spiritual retreat. The Echimamish parallels Paimusk Creek to the north, which links Paimusk to the Hayes River System. The Painted Stone, removed or destroyed in the late 18th and early 19th century, is the most significant difference between these two sacred sites. It was not economical to allow Natives time to stop at the Painted Stone Portage because this activity slowed down the transport and trading of goods, to and from Hudson Bay, during the 19th century. Ignorance and misunderstanding of the cultural meaning associated with the Painted Stone was problematic [Newbury 1981]. Although the destruction of the specific Painted Stone occurred, the *place* and heritage values associated with the *place* remain active today.

Since Paimusk Creek is part of the Hayes River watershed, activities and use of the Hayes River have direct and indirect impacts upon Paimusk Creek. The significance of these impacts are most evident in the protection of Paimusk Creek's resources and values. To protect the integrity of Paimusk Creek, the Hayes River becomes of crucial importance. Threats to the heritage resources and values, such as the past experience at Painted Stone on the Echimamish River, demands for protection of these resources. Protection of heritage resources requires immediate attention and evaluation.

Objectives of the Study

The study objectives are the following:

- To identify natural heritage values through literature review, interviews, field investigation, and site planning methods.
- To identify land use and human heritage values through literature review, field investigation, interviews, and site planning methods.
- To determine the significance of Paimusk Creek as a heritage landscape.
- To design a stewardship plan which will protect any identified heritage landscape values.

Methodology

The three phase process followed for the attainment of the study objectives is outlined below:

- **Identification**
- **Evaluation and Recommendation**
- **Preparation of Paimusk Creek Stewardship Plan.**

Phase 1.0 – Identification

1.1 -- Identification of Paimusk Creek Resources and Land Use

All the natural, cultural, and human resources including land use of Paimusk Creek are identified and summarized in this section. The methodology consisted of an information review of available data sources including government documents, library sources, newspaper articles, aerial photographs, maps, and interviews with experts.

1.2 -- Field Investigation

The purpose of the field investigation as a research method was to verify map and data sources for accuracy, and to acquire new data. Field investigation was of special importance to Paimusk Creek since there were limitations in available data.

The field investigation occurred in two site visits. The first site visit in May 1992 was to gain a familiarity with the selected study area and to see spawn collection operations during the spring thaw. Since spawn collection is an important human use of Paimusk Creek, the impacts of this activity were significant to view firsthand. Photographic documentation, descriptive notations, and points of interest were noted along the creek for further exploration prior to a longer site visit planned for July 18 -- July 24, 1992.

The route, traveled with a 4X4 truck, is a two-way, gravel base, all weather road. An aluminum boat with an outboard engine was used to travel from the boat landing to the mouth of Molson Lake on the first site visit. A canoe powered by two paddlers was used for the second site visit.

Personal communication through informal interviews with local residents were undertaken to identify the natural, cultural, and human resource *values* of the study area. Allowing public participation was crucial to the effectiveness and appropriateness of the recommended solution. Local people, whom value Paimusk Creek the most, provided information that was not previously documented. Assistance was given by the Norway House Band Office to ensure persons interviewed were elders and councilors familiar with Paimusk Creek.

Photographic documentation used 100 ASA and 200 ASA speed film in color slide format. Many photographs were taken of rock painting sites and landscape viewsheds for future, off-site analysis. Photographs will provide quick reference.

Map information sources and aerial photographs comprised preliminary site analysis. Field forms designed specifically for the study area are inclusive of the evaluation process. Explanations of each Field Form describing their purpose and weighting system is included in **APPENDIX A -- Field Forms**.

Phase 2.0 -- Evaluation and Recommendation

2.1 -- Landscape Reach Divisions

Due to the size and scale of the study area, "Landscape Reach Divisions" unified similar resources and landscape characteristics. Since many stops along the length of Paimusk Creek evidence similar attributes, evaluation of field investigation information linked *significant* riverscapes or changes in the landscape. This method has been successful in evaluating rivers for potential nomination in the Canadian Heritage River System [Dodds 1985].

2.1 -- Heritage Resources and Values

Identified heritage resources and values were weighted after the field investigations were completed. Heritage resources were categorized using Heritage Landscape Types from the Identification, Evaluation, and Interpretation of Heritage Landscapes [Patterson 1989]. The significance or heritage resource potential for Paimusk Creek was determined through the interpretation of these Heritage Landscape Types. Local, provincial, or national significance of heritage resources at Paimusk Creek depend on the Heritage Landscape Types recommended.

2.2 -- Degree of Protection

Once the *need* for a Heritage Landscape Designation within the study area was determined, the degree of protection needed addressed the maintenance of the integrity of the heritage resources. The degree of protection required varied within each Reach Division.

2.3 -- Suitability for Land Use Activity Type

This section evaluated the suitability for each type of land use activity to occur at Paimusk Creek. Recommendations for suitable land use activities focused on the maintenance and protection of heritage resources. Discussion included conflicts or destructive agents contributing to negative impacts within the study area.

If **no conflicts occurred**, then the proposed stewardship plan proceeded with appropriate land use recommendations.

If **conflicts occurred**, a recommendation for a Heritage Resource Impact Assessment was systematically warranted.

2.4 -- Recommendations

Site planning analysis determined the recommended land uses compatible with the maintenance of the heritage resources of Paimusk Creek.

Site planning analysis occurred in this section and included the following:
a) graphic summary of the resource and heritage values of Paimusk Creek;
b) recommended written general stewardship guidelines.

Phase 3.0 – Paimusk Creek Stewardship Plan

The preparation of the Paimusk Creek Stewardship Plan interpreted the stewardship guidelines through a site plan for the protection, land use, and cultural appreciation of the resources within the Paimusk Creek study area.

Two option plans discussed include the following:

3.1 – Paimusk Creek Stewardship Plan – option A

Option plan A is an optimum solution that relocates access to Molson Lake, away from Paimusk Creek.

3.2 – Paimusk Creek Stewardship Plan – option B

Option plan B is an alternate plan that is a temporary solution but does not eliminate all conflicts in their entirety.

CHAPTER 2

Overview of the Study Area

Identification of Paimusk Creek Resources and Land Use

Due to the regional scale of the study area, there is an abundance of general information relating to the Paimusk Creek study area. This section *summarizes* key resources and focuses on the most specific information available. Expanded details relating to resources are found in noted Appendices.

Field investigations are of special importance to areas such as Paimusk Creek since there is little published data in Northern Manitoba. Verification of data sources is critical to this report. Field investigation results are included within each section.

Paimusk Creek is divided into characteristic segments. For quick reference, The **Reach Divisions Map #3** for Paimusk Creek is used throughout the identification section. A more detailed explanation of these reach divisions occurs in Chapter 3.

Molson Lake

North

Paimusk Creek Road

Reach 7
The Y

Reach 6
The Calm

Reach 5
Grass Island

Reach 4
Big Island

Reach 3
The Gates

Cabin

Reach 2
Painted Rock

Reach 1
Fire

Rock Painting Site GbLh-1

Burial Grounds

known area for historic trails -- Muskataba

LEGEND

- evidence of human use
- Potential Rock Painting Site

REACH DIVISIONS Paimusk Creek Study Area ***Map #3*** Scale 1:56 000

2.1 -- NATURAL RESOURCES

Natural resources are identified under category headings which include climate, geologic processes, hydrology, soils, flora, fauna, and aesthetics. General information and interpretation from field investigations are inclusive within each section. Detailed or technical information is included in **Appendix B -- Site Planning** -- *Part i* .

2.11 – Climate

The Study area is within the Norway House and Cross Lake climatic region. This region has a humid continental or Boreal Arctic climate [Environment Canada 1975]. The permafrost transition zone is slightly north of the Paimusk Creek study area. To the south of Paimusk Creek, there are areas of localized permafrost.

Although climate does not restrict many activities, it is important to note that climatic factors were considered during site analysis. Seasonal precipitation was important when planning to camp on dry land. Certain reaches had few dry spaces to pitch a tent with pegs. Prevailing wind directions and wind speeds were important when planning suitable land use activities. Wind was also a significant factor during field investigations when canoeing on the creek. Further climatic data is in **Appendix B -- Site analysis** -- *Part i.*

2.12 – Drainage and Hydrology

Paimusk Creek flows eastward into Molson Lake. The Molson River flows north. It is the entrance from Molson Lake to the Hayes River. The watershed of Paimusk Creek is 300 square km (138 square miles [Badertscher, 1989])as indicated on the **Study Area Map #2**.

The creek is 13 km in length from the mouth of Molson Lake to Reach 7 The Y. The branches of The Y extend approximately 11 km beyond this junction. The creek eventually disperses into poorly drained bogs and fens that have no defined boundaries.

The width of Paimusk Creek at the widest point is 260 metres, and 20 metres at the narrowest point. The narrowest point of the creek occurs at The Gates in Reach 3. This hourglass effect funnels large volumes of water through a narrow opening. The deepest recorded depth during field investigations at Paimusk Creek was 5.3 metres at the narrow opening of The Gates.

Preglacial topography controls drainage. The Gates narrow opening is one such example. Concealed rock ridges that parallel the lakeshore obstruct drainage. Volcanic belts underlie the straight reaches of rivers and lakes. The irregularly shaped drainage patterns in the granites are expressions of joints and faults. The exception to this occurs in drift-covered regions, indicated by less rugged lakeshores of Molson Lake [Environment Canada 1975].

2.13 – Geology/Geomorphology

Glacial Geology

Paimusk Creek is within the Precambrian Shield physiographic region. The Precambrian Shield is further divided into the Superior Province and Churchill Province. The Superior Province and Churchill Province boundaries indicate major areas of advancing and retreating of glacial activity. Scouring activity along geologic plate margins in both province divisions occurred for thousands of years. These glacial processes influenced the morphology of the terrain and underlying geology at Paimusk Creek.

The study area is within the Superior Province. The Superior Province is further subdivided into Lithostructural belts and domains called the Granite-greenstone belts. The Granite-greenstone belts are important producers of copper, zinc, and gold within the Superior Province.

Glaciation covered the Superior Province approximately 8 000 years before present. Glacial Lake Agassiz covered the Paimusk Creek region. Geologic layering in the study area is typical of an old lake bottom. Geologic formations in the study area consisting of Metavolcanic and related intrusive rocks, metasedimentary rocks are generally the oldest geologic formations. There are several examples of Metavolcanic and intrusive rock within the study area. Other geologic formations include small pockets of white granite. White granite is less common throughout the region but can be found at Paimusk Creek.

The surficial material in the Paimusk Creek region is primarily organic material. Small quantities of lacustrine clays and silts, Precambrian bedrock, and glaciofluvial sands are found throughout the region.

Glacial Geomorphology

About 10 000 years b.p., the formation of a smooth **terminal moraine belt** occurred in the study region. Peat deposits covered this moraine. Poorly developed beaches indicated the moraine formation of beaches southeast of Montreal Point on Lake Winnipeg. The direction of water flowing in organic soils acted as a water divide at the crest of the terminal moraine.

Two **small eskers** and **esker-kame complexes** formed when glacial ice covered the Norway House/Cross Lake region. The direction of these interrupted esker chains was somewhat perpendicular to the terminal moraine. The esker chains extended beyond Paimusk Creek area in a northeasterly direction.

Approximately 8 000 years b.p., Glacial Lake Agassiz covered the Norway House and Cross Lake region once again. **Layers of clay and silt** deposited through wave action smoothed out the irregular topography of the esker formations and **plateau-like sand bodies** resulted.

When the glacial mass was melting and Lake Agassiz started to drain northward, the lake level subsided with only a few **beach ridges** forming in the Norway House and Cross Lake region. Peat soils buried **beach ridges** associated with **glacio-fluvial deposits** and terminal moraines.

At Paimusk Creek, peat soils covered depressions after final drainage of Lake Agassiz subsided. The average peat thickness ranges in depth from 1-3 metres, although thicker deposits occur.

Post glacial Geology and Geomorphology

There are three different physiographic zones within the study area and region -- **north**, **south**, and **central**.

Extensive peat deposits with bedrock outcrops are characteristic of the **north** and **south** zones. Clay covers portions along rivers and lakes. Both north and south zones have very irregular shorelines caused by the high proportion of erosion-resistant bedrock on or near the surface.

The **central** zone where the terminal moraine occurs has very little bedrock and mineral soil on the surface. Perennial frost found in formations such as wooded palsas and peat plateaus occur in organic deposits such as peat. Peat is the most dominant cover in the central zone.

Surficial deposits of the most recent glaciation (Wisconsin Period) occur in the Paimusk Creek region. There are two sand esker chains that lie in a northeast to southwest direction north of the Gunisao River (adjacent Molson Lake) and two gravely till deposits that run in the same direction, south of the Gunisao River.

The distribution of landforms and landform types evident resulted from movements in glacial and postglacial geomorphic history. During the latest stages of the Wisconsin period, the glacial mass went through series of retreats and advances. Lacustrine sediments overridden on deposits resulted since glacial Lake Agassiz covered the area.

The hummocky bog and frequent lichen covered rock outcrops are remnants of scouring resulting from glaciation. A deep narrow stream bed is characteristic of Paimusk Creek. Other geomorphologic processes affecting the water quality of Paimusk Creek are included in **Appendix B -- Site Planning** -- *Part i.*

2.14 – Soils

There are five soil orders in the study area:

1. Organic -- poorly drained
2. Gleysolic -- wet soils saturated for part of each year
3. Brunisolic -- associated with bedrock outcrops
4. Podzolic -- develop on acidic parent material and well to imperfectly drained
5. Luvisolic -- well to imperfectly drained.

These five soil orders are all examples of poorly drained soils or acidic soils **(Appendix B -- Site Planning --** ***Part i*****)**. Poorly developed soils and small changes in topographic contours dominate the study area. Saturated soils have few nutrients required to support diverse plant communities. Drainage of the study area determines the patterns of vegetation. Poor drainage also limits the diversity of flora and fauna species. Evidence supporting this statement is through the abundance of fens and bogs at Paimusk Creek. Discontinuous permafrost occurs in peatlands within the study area.

Soil Capability For Forestry

To effectively evaluate appropriate land use of the study area, identification of the capability for forestry activities to exist must interpret the soils capacity to produce a marketable forest. Black Spruce, Jack Pine, and Tamarack, are tree species indicators that are used when determining the expected volume yield for commercial forest production [Manitoba Provincial Forest Inventory 1991].

Black spruce forms the climax forest on most sites at Paimusk Creek. The soils range from poorly drained organic to well-drained clays and rapidly drained sands and gravel. Stands of dense black spruce trees occur on elevated, permanently frozen peat areas.

Forest fires introduce Jack Pine communities. Dry sites with exposed bedrock, glaciofluvial sands, and sandy lake beaches, are typical habitat. Jack Pines are a second regeneration forest species if there is an available seed source. Tamarack cover usually occurs on weakly minerotrophic sites that are wet or saturated.

At Paimusk Creek, the most common classification for Forestry includes Class 5, Class 6, and Class 7 **(Appendix B -- Site Planning --** ***Part i*****)**. These classes are severely limiting classifications for forestry production. Shallowness to bedrock, excessive soil moisture, frequent inundation, active erosion, low natural fertility, toxic levels of soluble salts, excessive stoniness, high levels of carbonates, and extremes of climate or exposure are some of the limiting factors.

2.15 – Flora

The vegetation for the Study Area is in the Northern Coniferous Forest Zone [Manitoba Historic Resources 1989]. Poor drainage within the region results in frequent fens and intermittent ponding.

Conditions such as poorly developed soils or poor drainage patterns are less than optimum for most plants to thrive. Terrestrial flora associated with oligotrophic soils is dominant. Oligotrophic soils are those which have few nutrients essential to plants.

Typical plant species associated with bogs and fens are listed as indicator species. An indicator species is one species that, when found, indicates that several other species are likely present. These other species can usually survive under similar conditions or habitat. Therefore, all plants associated with bogs and fens are not listed.

Typical Terrestrial Flora

The coniferous species are dominant throughout the region. The upper strata is comprised of Black spruce (*Picea mariana*), White spruce (*Picea glauca*), Tamarack (*Larix laricina*) and some Jack pine (*Picea banksiana*). Mixed wood areas consist of White birch (*Betula papyrifera*), Trembling aspen (*Populus tremuloides*), Balsam poplar (*Populus balsamifera*), and Balsam fir (*Abies balsamea*) which grow in areas with better-drained alluvial soils that border rivers and creeks.

Understory shrubs of willows (*Salix* sp.), Alder (*Alnus rugosa*), Dwarf birch (*Betula glandulosa*) and Redosier dogwoods (*Cornus stolonifera*) are evident on higher elevations where soils are more developed and better drained.

Groundcover species include Bearberry (*Arctostaphylos uva-ursi*), Bunchberry (*Cornus canadensis*), Canada blueberry (*Vaccinium myrtilloides*), Cotton grass (*Eriophorum* spp.), and strawberries (*Fragaria* spp.). Other species such as Leather leaf (*Chalmaedaphne calyculata*), Labrador tea (*Ledum groenlandicum*), Stemless raspberry (*Rubus acaulis*), rushes (*Juncus* spp.), Round-leaved sundew (*Drosera rotundifolia*) are indigenous to bog environments.

Grasses such as *Bromus* spp. and *Calamagrostis* spp. occur throughout the region. Sphagnum(*Sphagnum* spp.) mosses, lichens(*Cladonia* spp.) and reindeer lichens are found on rock outcrops throughout the region. Mosses and lichens survive on horizontal and vertical rock surfaces both on land or adjacent water.

The aquatic zone of vegetation in fens and meadows consists of sedges (*Carex* spp.). Depending upon the wetland type, the aquatic vegetation changes dramatically.

Wetland types

Paimusk Creek has many wetland types due to poor drainage patterns. There are five general wetland types typical of the study area: sedge fens, shallow marshes, beaver ponds, bog lakes, and freshwater lakes. These wetland types occur in micro-climates at Paimusk Creek **(Appendix B -- Site Planning --** ***Part i*****)**. Not all wetlands were evaluated through field investigations due to the topography and scale of the study area.

Field investigation

Field investigation confirmed information on typical vegetation species (see Table 10.0 **Appendix B -- Site Planning --** ***Part i*****)**. There were limited diversity of mixed wood species found in the upper strata. Greater diversity of mixed wood species usually indicates more developed or mature soils than are apparent at Paimusk Creek.

Understory shrubs were non-existent on many shorelines in the eastern reaches of Paimusk Creek. The most abundant vegetation species was in the ground cover strata. Identification of the major wetland species are typical. Sedges and grasses line the creek shoreline on the western reaches of the creek. Lush sphagnum mosses and lichens were abundant in almost all locations. Aquatic vegetation was more diverse than sources mentioned, boasting numerous flowering grasses.

2.16 – Fauna

The Soil Capability classification system provided important information for wildlife in the Paimusk Creek region. Mammals, birds, and fish characteristic of the Paimusk Creek region are listed in **Appendix B -- Site Planning** -- *Part i.* Although many of the listed species were not seen at Paimusk Creek during field investigation, it is known that a variety of fauna exists throughout the study area. The study area is widely hunted for wildlife and is a popular fishing spot all year round. Seasonal variances or present land use activities may contribute to the absence of visible fauna along the shorelines of Paimusk Creek.

The Manitoba Fisheries Branch collects eggs from walleye in the spring. Total walleye fish eggs collected at Paimusk Creek in 1992 was 58.4 million eggs. A total of 77.5 million eggs comprised all other female eggs collected for the *remainder* of Manitoba. The milt sperm from 30 male fish were collected. It is estimated that up to 200 million spawn could be collected at Paimusk Creek without impacting the fish resource [Swanson, pers. comm; 1993].

Paimusk Creek is one of the highest producing areas of walleye eggs in the province of Manitoba, and perhaps the entire Prairie region. Paimusk Creek supplies approximately 53% of the walleye spawn collected in Manitoba. The Department of Natural Resources credits Paimusk Creek with being "a consistently reliable source for walleye eggs"[Swanson, pers. comm; 1993].

2.17 – Aesthetics

Paimusk Creek is representative of a rugged landscape. Muskeg and bog lined creek edges are identifiers of human scale when compared to the towering height of the coniferous trees. Elevation changes due to bedrock outcrops are dramatic in typically hummocky terrain. Upon close viewing, the ground cover vegetation becomes extremely complex and includes a variety of colors.

The creek is navigable. Winds are strong and change direction throughout the day. Calm reaches protected from strong winds offer a wind break for canoeists.

The creek channel is exceptionally wide for the volume of water flowing through it. The characteristic meandering of the creek creates termination in viewpoints. Anticipated vistas and the quality of viewsheds from a variety of locations increase the scenic value of Paimusk Creek. Subtle and dramatic changes add to the mystery and excitement of experiencing Paimusk Creek.

2.20 -- Human Resources and Land Use

Human resources are defined as traditional and existing land use activities within the Paimusk Creek study area. In this study, any use of the landscape for survival of humans and animals, or any activity leading to some economic benefit defines land use. Land use includes activities above, on, or below ground level including water. Since much topography within the study area remains indigenous or in a "natural state", the majority of the land use within the study area relates to natural resources.

For the evaluation of human resources, there is a need to use a proven system to identify and classify these land uses. Therefore, land use is evaluated using LAND-BASED DEVELOPMENT CATEGORIES as outlined by Heritage Resource Impact Assessments guidelines [Manitoba Historic Resources Branch 1990]. Using a proven system that is familiar to government departments whom this information may be of value, will contribute towards the clarity and credibility of the evaluation processes. Since there are known heritage resources within the study area, there is a possibility that Paimusk Creek will require a Heritage Resource Impact Assessment.

These Land-Based Development Categories identify all land use and potential land use of Paimusk Creek. The category list includes human resources and land use relating to transportation, communication systems, recreation, agriculture, energy, mining, water development, urban and rural development, forestry, remotes areas, industry, and land ownership.

2.21 – TRANSPORTATION SYSTEMS

Access to Paimusk Creek is critical because of the remote location of the study area. Due to the nature of the topography within the study area, there are limiting factors when building transportation systems. Careful planning to ensure that appropriate sites are selected for roads can reduce long term maintenance costs of these roadways. Transportation types discussed include land, air, and water.

Land

Direct road access to Paimusk Creek by land is available via Provincial Trunk Highway #6, a two-lane asphalt highway, which joins a two-lane gravel road off P.T.H. #373, which leads directly to the shore of Paimusk Creek. In addition, a winter road provides access from Provincial Trunk Highway #373. Winter routes have changed through time as verified through aerial photography. Paimusk Creek, when frozen is a travel route also.

There is limited documentation of historic trails within the study area. Historic trails often lead to information and artifacts which verify historic data. Historic trails that are not known or mapped cannot be protected. The wealth of heritage resources that may accompany historic trails is also lost. Known trails are indicated on the **Reach Divisions Map #3**.

Air

Several commercial airline companies provide both passenger service and cargo service to an air strip at Norway House. The Natural Resource Officers patrol the study area by air also. There is an air strip located at the Molson Lake Lodge for guests and cargo. Paimusk Creek is accessible by float plane.

Water

Paimusk Creek is navigable throughout its entire length. Access by water can be gained from the Hayes River via the Echimamish and Molson River linkages.

2.22 – COMMUNICATION SYSTEMS

There are no formal communication systems at Paimusk Creek. The closest telephone services are within the boundaries of Norway House Indian Reserve.

2.23 – ENVIRONMENT AND RECREATION

Recreation opportunities at Paimusk Creek are predominantly water oriented [Environment Canada 1975]. The recreation potential is rated quite low **(Appendix D -- 3.0)**. The study area's remoteness and indigenous landscape characteristics are its greatest strengths.

Specialized recreation and selective sites offer excellent recreation potential. Bedrock outcrops are challenging for rock climbing and suitable for nature walks. Canoeing, boating, and angling can occur along Paimusk Creek. The upland areas of extensive bog and muskeg have a low recreational capability during the summer months with alternate uses during winter months. Isolated moraine and esker features offer interesting vegetation and improved capability for upland wildlife. There are limitations for intensive recreation.

2.24 – AGRICULTURE/HUNTING AND TRAPPING

Agriculture

There is limited capability agriculture. Organic soils dominate the Paimusk Creek region. Peat soils are not suitable for cereal crops and grazing pastures.

Agriculture relating to peat harvesting is *not feasible* at this time because of the high cost of draining peat, the sporadic nature of the deposits, and the incidence of permafrost in some of the peat. All soils in the area are subject to frost. Organic soils are the major soils at Paimusk Creek. Organic soils not evaluated in agriculture capability classes are given little value.

Hunting and Trapping

Commercial and domestic hunting and trapping occurs at Paimusk Creek. Registered traplines known as the Norway House Registered Trapline, cover the entire study area and beyond. Typical species hunted or trapped in the Norway House Registered Trapline Area are lynx, mink, fisher foxes, beaver, otter, and muskrat.

Low prices for skins and furs have resulted in greater harvesting of the wildlife population for the same economic benefit. The highest recorded value in 1989-1990 for any fur was $2 001.00-$2 500.00 range. The majority of all other furs have values under $500.00. However in 1984, the highest recorded value for any fur was over $5 500.00. Even when considering there are less active trappers, the average income per trapper has decreased substantially since 1984 **(Appendix B -- Site Planning -- *Part i*).**

2.25 – ENERGY PRODUCTION AND TRANSMISSION

There is no local power potential on Paimusk Creek but it may be altered as part of larger diversion and impoundment schemes [Manitoba Hydro 1991].

2.26 – MINERAL, PETROLEUM, SAND AND GRAVEL OPERATIONS

Mineral deposits in the study area indicate few usable mineral sources for mine operations or petroleum [Map sources -- Manitoba 1987]. Sand and gravel operations presently occur on approximately twelve sites adjacent to the Paimusk Creek road. The activity status of these sand and gravel sites is unknown. Due to the availability of bedrock sources, bedrock is blasted, transported, and used for constructing road base near Norway House.

Trace minerals occur within the Paimusk Creek region [Map sources-- Manitoba 1987]. Mineral staking occurs within or directly adjacent the study area [Hilderman 1991]. Historically, gold vein deposits excavated near the Echimamish River produce minimal reported findings. There are recommendations that suggest further gold mining is warranted [Hamilton 1987] **(Appendix E)**.

2.27 – WATER DEVELOPMENT PROJECTS

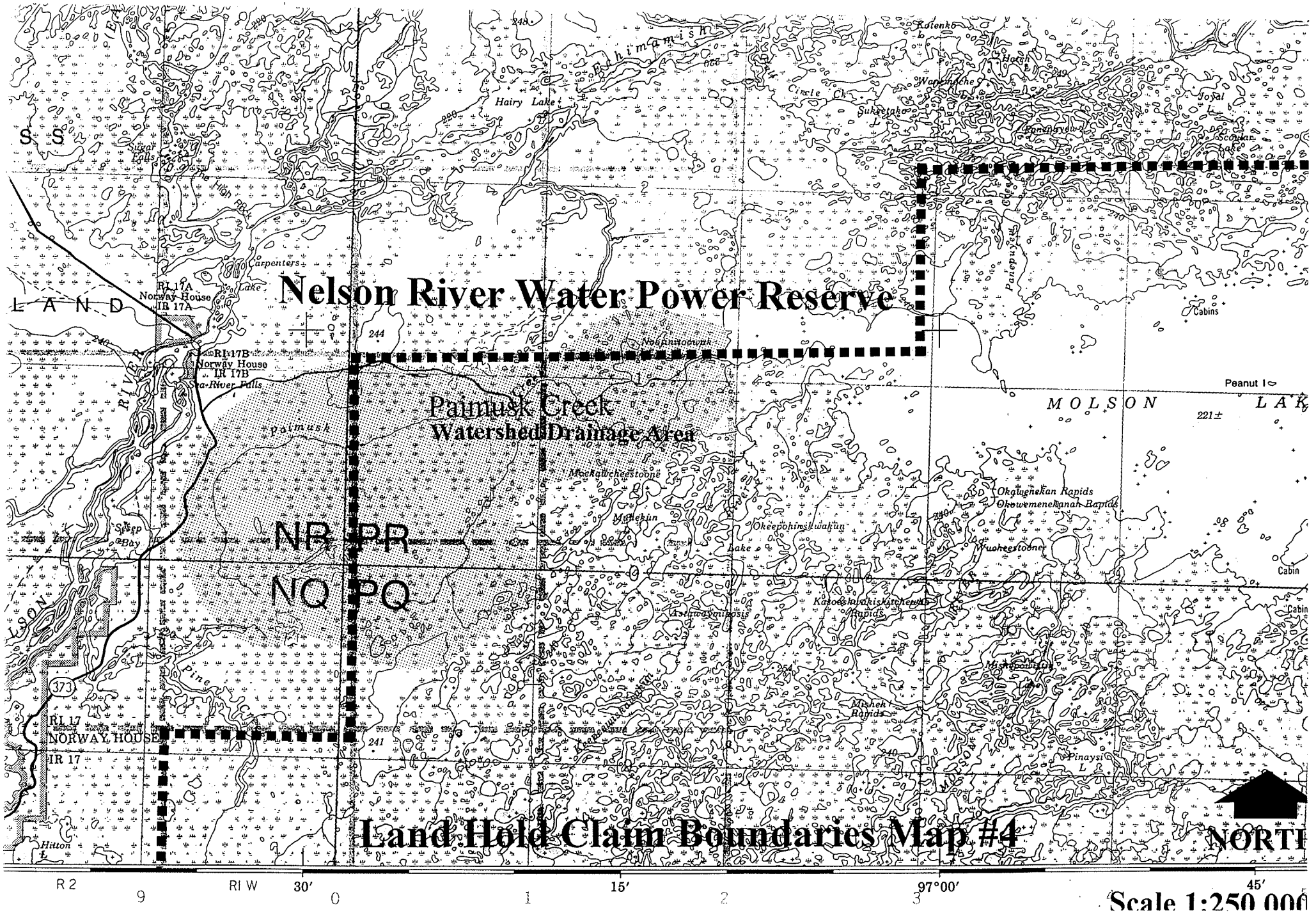
Presently, there are no water development projects at Paimusk Creek. In the 1970's however, Paimusk Creek was part of an abandoned plan for barge transportation linking Norway House to Oxford House. Raised water levels for Paimusk Creek would have supported safe barge transportation. A potential linking road would have crossed Paimusk Creek.

Parts of the Paimusk Creek study area involve land within the Nelson River power development Land Hold claim. Land within this hold boundary is reserved as a buffer zone or for future power development on the Nelson River.

Future, preliminary plans for Manitoba Hydro indicate the Molson Lake site would be used as a holding reservoir for water. Larger scaled plans indicate strategic dams located on the Hayes River would incorporate the proposed Molson Lake reservoir [Hayes River Working Group, 1973; Hydro Development Department Generation Planning Division; 1989]. The implementation of this system would mean the complete control of all inflow and outflow of the Hayes River. Since Paimusk Creek flows into Molson Lake, inclusive of the Hayes watershed division, this would directly affect Paimusk Creek (**see Land Hold Claim Boundaries Map #4**). The Paimusk Creek watershed would be completely controlled as well. If drainage of Paimusk Creek is altered, significant heritage resources would be subject to erosion, and habitat for wildlife would be flooded.

2.28 – FORESTRY

Half of the study area mapped as of December 1991 by Manitoba Department of Forestry, has no indication of any large stands suitable for forestry practices. Several marketable stands exist, but are not accessible due to their remote and sporadic location.


Nelson River Water Power Reserve
Paimusk Creek
Watershed Drainage Area
NB PR
NQ PQ
Land Hold Claim Boundaries Map #4
NORTH
Scale 1:250 000
Norway House IR 17A
Norway House IR 17B
Sea River Falls
Carpenters Lake
Hairy Lake
Sukeetako L.
Peanut I.
MOLSON LAKE
Okgunekan Rapids
Okowemenekanah Rapids
Okeepohinskwakug Lake
Kaskaskishki Kitchenoo Rapids
Misheki Rapids
Pinaysis L.
Sleep Bay
Pine Creek
RL 17
NORWAY HOUSE
IR 17
Hitton L.
Cabins
Cabin
R2
RI W
30'
15'
97°00'
45'

2.29 – URBAN AND RURAL DEVELOPMENT

There is no permanent settlement on Paimusk Creek, however, temporary camps are frequent.

There is a fly-in lodge that operates from May to September on Molson Lake. The Molson Lake Lodge is approximately 25 km from the boat landing at Paimusk Creek. Although the lodge caters primarily to non-Canadian residents and promotes a remote location, users of the lodge including employees use Paimusk Creek as a travel route.

The Norway House Indian Reserve #17, #17A, and #17B is the largest permanent settlement in close proximity to the study area. The Norway House reserve is 18,643 acres on Indian Reserve No. 17 plus four parcels of Reserve land on three islands in the Nelson River: Fort Island, Mission Island, and Towers Island. The population is approximately 5 000 people with 2 074 registered treaty Indians who live on-reserve.

The ethnic background of the majority of residents is aboriginal decent. The most abundant tribal representations are from Cree, Ojibwa, and Metis groups. Increasing population places increased demands upon Paimusk Creek to provide traditional fresh food sources for aboriginal people.

2.30 – INDUSTRIES

The most prominent industry at Paimusk Creek is fishing. Commercial fishing and domestic fishing provides livelihood for some residents of Norway House. Paimusk Creek supplements Norway House residents with healthy fish resources. Although the Nelson River is closer to the Norway House settlement, the fishing industry is not as productive as it was prior to hydro-electric development. Hydro development along the Nelson River affects the traditional use of Paimusk Creek's resources.

Molson Lake Lodge, on adjacent Molson Lake, is a viable tourist lodge. This lodge contributes toward the tourist use of Molson Lake and Paimusk Creek. Many tourists who use Paimusk Creek do not reside in Norway House. People from Manitoba and non-resident Canadians use Paimusk Creek primarily for fishing.

2.31 – REMOTE &/OR ARCHAEOLOGICALLLY UNEXPLORED REGIONS

Paimusk Creek's remote location and limited access contributes to maintaining many archaeologically unexplored regions. Access to Paimusk Creek by car or truck has been possible since 1978. Cultural resources are the least known at Paimusk Creek. Limited archaeological and anthropological documentation is supportive of this statement.

2.32 – LAND OWNERSHIP AND RIGHTS TO RESOURCES

Land ownership of the Paimusk Creek study area is primarily Provincial Crown Land. Several small acre parcels are Federal Crown Land owned. Land Hold Claims due to outstanding Treaty agreements and northern flood agreements overlap identical parcels of land. Manitoba Hydro also has Land Holds within the study area. These land exchange issues are legal matters that are unresolved.

The people of the Norway House Indian Reserve maintain that they have legal rights to resources at Paimusk Creek, Molson Lake, and other traditional hunting/fishing/trapping lands as explained in Treaty #5 (1875) with Adhesions (1907-1910) [Coates 1986]. These rights to resources evidence some conflicts since the Canadian Government does not agree to the same interpretation of the Treaty as the aboriginal people.

2.40 -- Cultural Resources

Cultural resources include resources associated with traditional and contemporary use of Paimusk Creek. Anthropological and archaeological discussion includes topics such as lifestyles, customs, and spirituality that contribute toward heritage values.

Prior to field investigations, documented cultural resources indicated a significant rock painting site at Paimusk Creek [Newbury 1989; Steinbring 1991]. Through interviews and literature review, cultural resource values were interpreted in this section to determine their level of significance. Field investigations verified the state of preservation of the rock painting site and identified new cultural resources.

2.41 – Anthropology

The anthropology review includes brief descriptions of the pre-history associated with the study area. Settlement patterns, transportation, hunting and trapping, and religion are discussed. Anthropological evidence provides insight into the land use and values of cultures associated with landscape regions. This information is especially useful where documentation and artifacts are not in abundance.

People of Pre-history

Native people were living on the land long before Europeans explorers arrived. The following quote, from a compiled history of Natives who traveled throughout the Northern regions, describes their belief system with insight into the cultural values of the people.

> "The Oldtimers (The Natives) were highly spiritual people who had a belief system which reflected their intimate and interdependent relationship with all the plant and animal beings with whom they shared the land. The people believed that physical, emotional and spiritual well-being was achieved by acknowledging these relationships through speech, prayer, and ritual. [Manitoba Culture, Heritage and Recreation 1989]"

The relationships to nature are evident throughout the Native culture in their education system, religious system, and daily life. Natural references instill inspiration, power, and answers to life's mysteries. Landscapes of special attributes endear special praise, worship, and value.

The most dominant tribes at Paimusk Creek are the Cree and Ojibwa. Very little written documentation exists among aboriginal cultures throughout the pre-history era due to an oral tradition which passes rituals from one generation to the following generation. Archaeological artifacts are used by anthropologists and historians to verify information about Native culture [Manitoba Culture, Heritage, and Recreation - Historic Resources 1989].

Settlement

Settlements were nomadic throughout Northern regions. Aboriginal tribes of the Southern Woodland or Prairie region varied from semi-permanent settlement to nomadic lifestyles. The availability of a proven food source and seasonal changes were the most influencing factors contributing to this type of lifestyle. Since there are no permanent settlements at Paimusk Creek, a summarized history for Norway House is included in **Appendix G -- Norway House History**.

Settlement patterns were organized in response to climatic factors. Typical to the Boreal Forest Region, traditional tee-pee structures were oriented with the door opening to the south. Groups of tee-pees were arranged in circular groupings with the central fire pit and hearth used as a shared area.

Transportation

Paimusk Creek was traditionally used as a transportation route. Transportation was predominantly by the birch bark canoe. Constructing sturdy birch bark canoes developed skills. The canoe was lightweight and highly portable. Portages were common. Since the canoe was portable, it had a natural suitability for a variety of landscape types and terrain.

Hunting and Trapping

Hunting and trapping for survival has always been an essential part of the aboriginal lifestyle. Hunter and gatherer societies used furs and skins for garments while meat from animals was used for subsistence. Gathering food for the family developed skills and senses which peoples lives depended upon.

When European explorers bartered for furs, hunting and trapping became part of a Western value system. A fur had a specific dollar value or beaver value [Beaumont 1989]. Aboriginal lifestyles and values changed due to this entirely new system.

Religion

Traditional religion in aboriginal culture elevated the power of spirits higher than human strength. Expression of these spirits was through symbolism. Symbols almost always related to natural elements or animals. For example, the wind, sun, and moon had specific qualities that evoked moods. As a member of the aboriginal society, careful study of these elements became an art to read or predict future events.

Power symbols were birds such as the thunderbird and eagle. Thunder and lightning were viewed as opposing strengths which battled for dominance. The turtle was representative of eternal life. Garments, shields, or the body displayed these symbols. The color, size, and placement of each symbol carried different levels of importance and meaning.

Shamans were the spiritual people in native culture whom had the legitimate usage of the thunderbird power [Steinbring 1981]. The shaman was considered the highest order of position in society. Only select individuals given this honor, undoubtedly earned their position many times over. The shaman provided spiritual healing as well as natural remedies for physical healing.

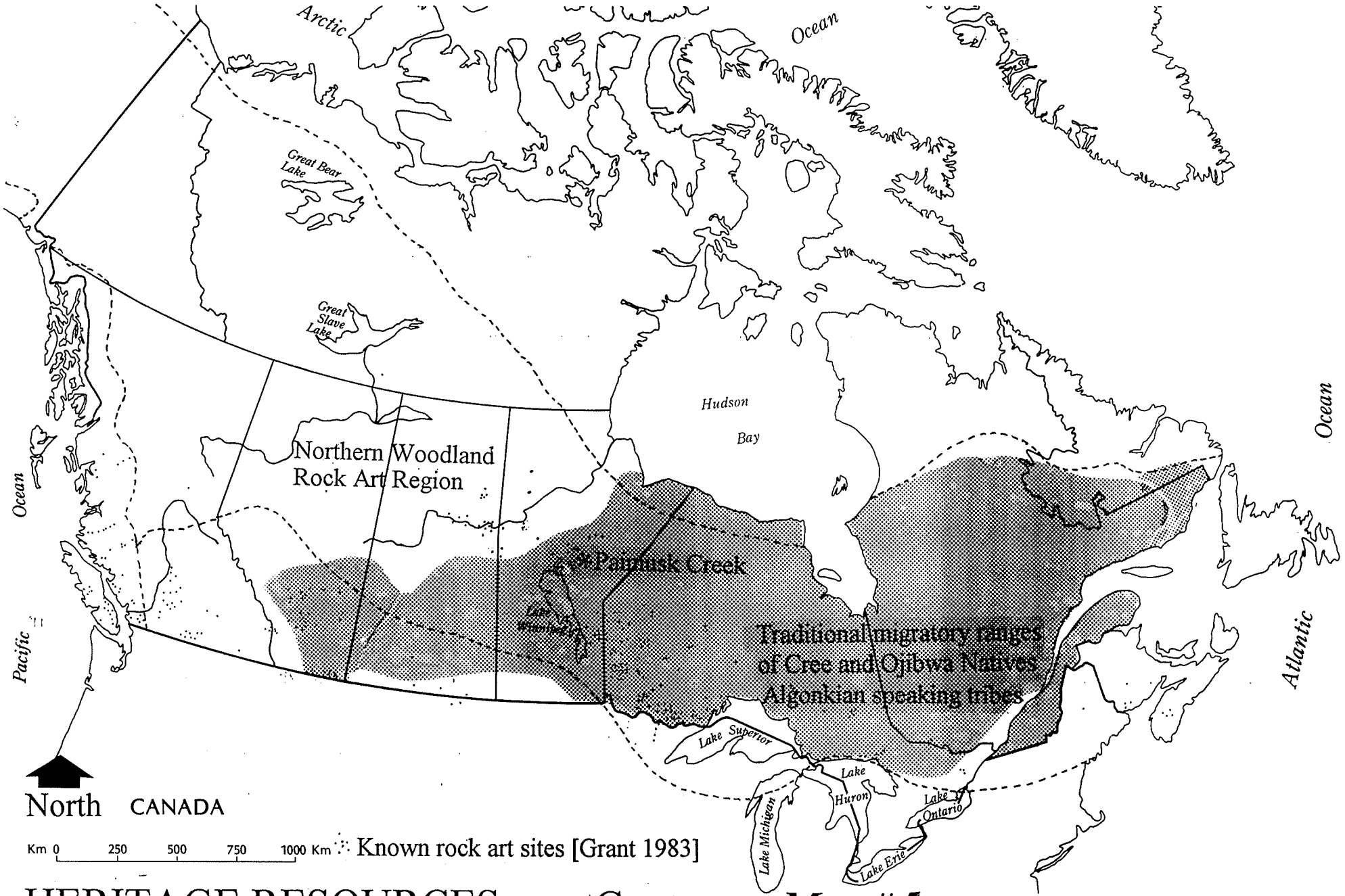
Rituals relating to individual achievements were important to native tradition. The passing through adolescence, naming ceremonies, status among hunters, and marriage were but a few examples of important events. Slight variances to rituals occurred depending upon the tribal orientation of the native community, but emphasis on the essence of the achievement remained a constant factor. Many of these rituals performed by shamans or elders within the community were sacred.

At Paimusk Creek, an aboriginal rock painting site is evidence of written or painted messages. Pre-language includes the usage of non verbal signs to communicate messages. The Ojibwa culture of the Algonquian Indians is credited with most rock painting sites in North America [Grant 1983] and "exhibit a fondness for recording important events on stone, bark and skin [Boyle 1971]". Interpretation of these messages depends upon the viewer and many other circumstances. Knowledge of the people and culture who are the makers of the rock art is necessary for any clear understanding of the work.

Paimusk Creek study area is within the Northern Woodland Rock Art Region [Grant 1983]. The Northern Woodland region is described as the largest geographical region in North America of ten Rock Art Regions discussed (see Heritage Resources Context Map #5). Western rock art is credited to Athabascan tribes and Eastern rock art is credited to Algonquian tribes (especially Ojibwa and Cree). Canadian shield imagery types and styles are recent images (300 years b.p.) which are still used today to gain power [Dewdney and Kidd; 1962, 1967].

Heizer and Clewlow 1973:5 suggest reasoning for "the simplicity of the Great Basin petroglyphs by saying that the designs themselves were probably secondary to the act of making them." [Grant 1983].

Lifestyles have changed dramatically with the increased population, development, and increased demand on natural resources. Native culture and religion has changed along with other societies. Traditional values and beliefs are still goals of many native communities. Conflicts between imposed systems and desired systems are growing.



HERITAGE RESOURCES -- Context *Map # 5*

Cartography by: Surveys and Mapping Branch, Manitoba.

2.42 – Archaeology

Recorded archaeological evidence consists of a "major rock painting site" at Paimusk Creek [Dewdney and Kidd; 1962, 1967]. This rock painting site has an identification number GbLh-1 [Walker, pers. comm; 1992]. According to the Manitoba Historic Resources Branch, there are no other recorded archaeology artifacts at or near Paimusk Creek [Badertscher, pers. comm; 1993]. Local people confirmed that other, smaller artifacts have been found on Paimusk Creek although, no significant finds have been reported.

Site visitation revealed three archeological artifacts --

1. Rock painting site GbLh-1
2. Potential rock painting site
3. Trapper's cabin.

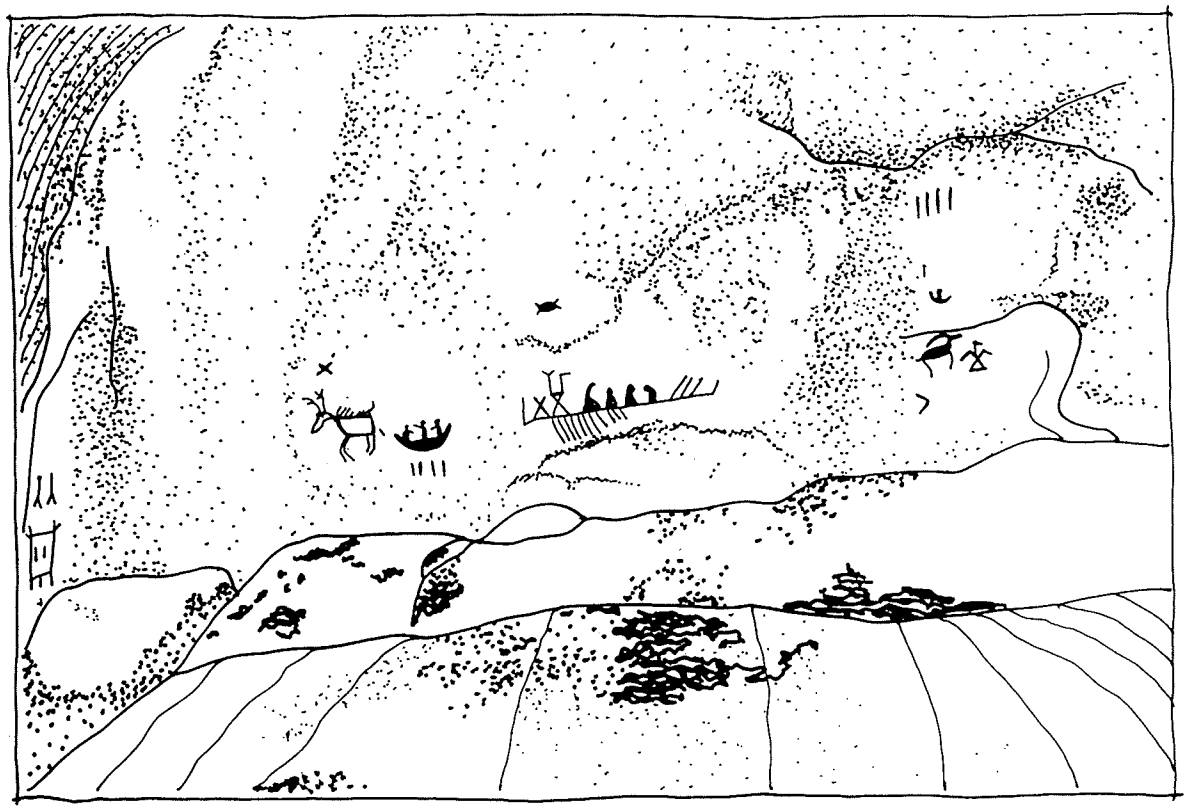
Artifacts

1. ROCK PAINTING SITE GbLh-1

The most visible cultural resource on Paimusk Creek is the rock painting site GbLh-1. The rock painting site is known locally as the "Masiniywapiskinikan", which means *Painted Rock* in the Cree language [Paupanekis, pers. comm; 1993]. Deeper cultural and spiritual meaning associated with the rock painting site is significant. The shamans, icons, rites and rituals associated with this site are sacred. Theoretical interpretation of possible meanings of the specific paintings is beyond the scope of this practicum study.

The rock paintings are red in color. The paint itself is made with red ochre and an unknown binder. The paintings are located on a white granite bedrock formation that faces Southeast. This bedrock outcrop is over 100 lineal meters and approximately 60 meters in height. White, chalky exposed surfaces and black surfaces are visible to the eye. Vertical folds in a pillowed rock formation provide various niches or "panel areas"[Steinbring 1990] of a smaller, more human scale.

Painted Rock -- distinct style -- Drawing #1

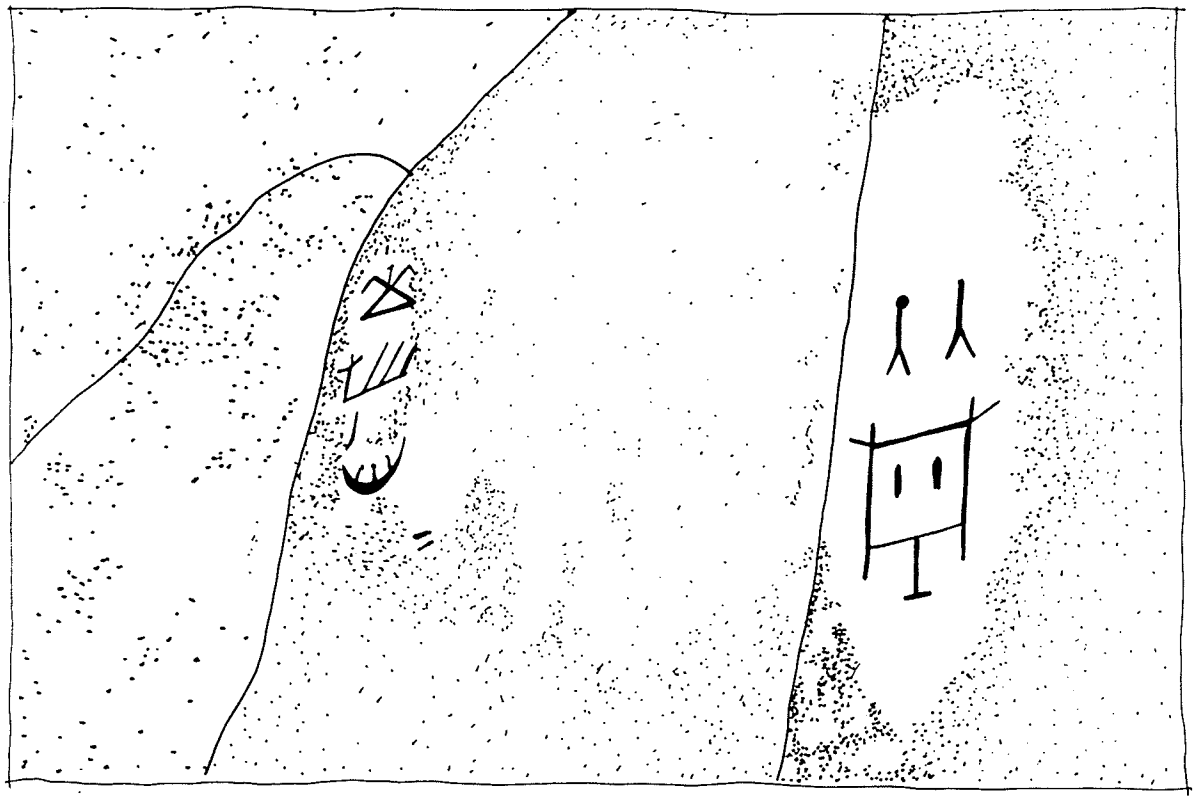


The bedrock face is near vertical above and below the water surface. Adjacent this rock outcrop and throughout Paimusk Creek shoreline, grasses and sedges are characteristic vegetation within the transition zone from water to land. Seasonal variances in water levels indicate water lilies may grow below the rock paintings during periods of low water.

There is an exposed bedrock island directly across from the rock painting site. A low profile shoreline on the south edge of the island allows easy docking for a motor boat or canoe. The island is a convenient stopping point and an excellent point to view the paintings and landform alike. The paintings are highly visible and well preserved.

A colorful display of lichen types covers the rock outcrop. Without climbing on the rock outcrop, it is impossible to know if black areas are simply lichens. Tamarack and aspen trees grow upright on the rock face.

Painted Rock -- symbolic paintings -- Drawing #2



"Many of the larger rock painting sites in the Precambrian shield lend themselves to hypothetical ordering in the timed use of space." [Steinbring 1990]. This attempt to order rock painting sites through people's use of space on land is an important link to the verification of authorship of the paintings. The ordering of timed use of space also aids in the estimated dating process.

According to Dewdney [1965] and Steinbring, the styles of the paintings represent a distinct uniqueness when compared to other rock painting sites within the Boreal Forest region. Typical imagery includes anthropomorphs, zoomorphs, geometric shapes, lines, animals, and deities. "There are approximately 130 rock paintings on 13 panels." [Steinbring 1990]. Expanded imagery descriptions are in **Appendix H**.

The landscape elements themselves enhance the spirituality and meaning of Painted Rock. Important examples of these landscape elements include the following:

1. The bedrock outcrop of the rock painting site is the tallest vertical element in the landscape for miles. The vertical rock face of the landform is a natural linear expression that is used as an advantage for a flat painting surface.

2. The southeast facing direction is consistent among rock painting tradition.

3. The mere scale of this rock outcrop in the vicinity of a calm, gently meandering stream is somewhat intimidating upon a first visit. The grandeur of openness of the landscape at this point in the creek is unique at Paimusk. The reflection of the site in the water below is mirror like. This effect almost doubles the actual size of the landform.

4. The geologic landform emanating a reclining human figure increases the hidden messages within the rock outcrop [Newbury 1989].

5. The icon of the thunderbird, a power symbol in the aboriginal culture increases the sacred value to aboriginal people.

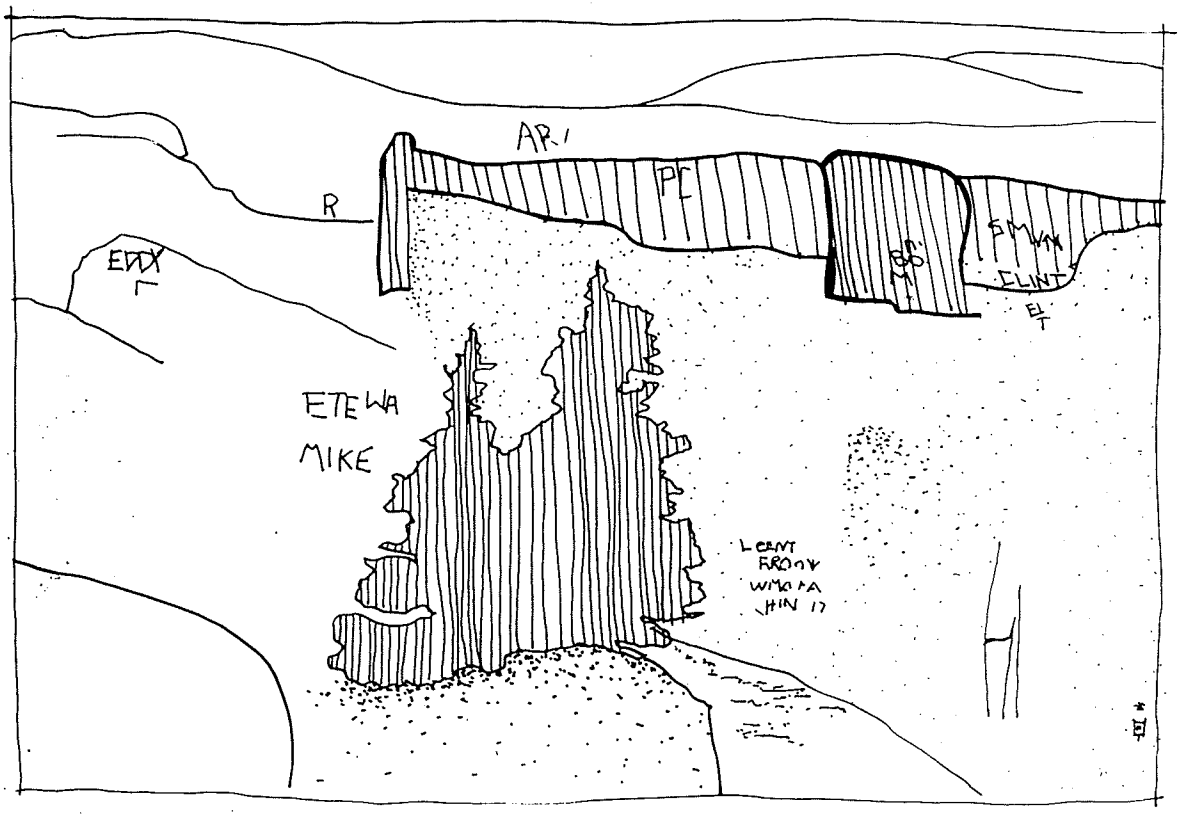
6. The echo acoustics are unique to the creek. The sound echoes only once as there are no other rock formations to capture the replying acoustical rebound.

7. The viewing island's strategic size and location is somewhat of an altar.

8. The painted imagery is also unique to rock art consistent with the Great Lakes or Woodland aboriginal regions [Dewdney and Steinbring 1990].

9. "The rock paintings on Paimusk Creek rank among the brightest examples."[Allen, pers. comm; 1992]

Painted Rock -- the thunderbird icon -- Drawing #3

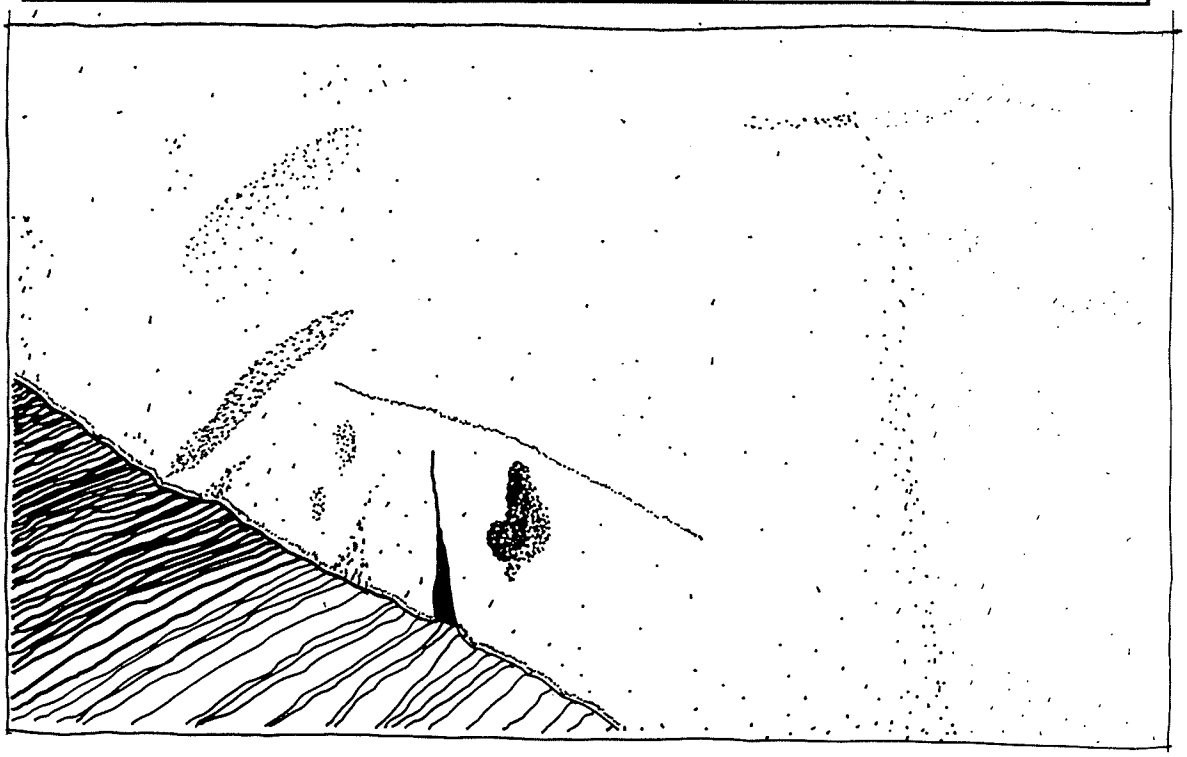


Many of these attributes have been characterized as "phenomenal attributes". These phenomenal attributes can be further characterized as an example of the "Cathedral effect". This descriptive term refers to a sacred site with exceptional spiritual qualities and significance. The location away from domestic activity at Molson Lake supports the sacredness of the site [Steinbring 1990].

2. POTENTIAL ROCK PAINTING SITE

Approximately 50 meters westward from Big Island, there is a red image on the south shore at water level. The image is approximately 20 cm. x 20 cm located on a white chalky colored stone. This image consists of one linear stroke over one rounded figure that appears to be pounded by an object. There is no perception of a specific form. The image is faint and vulnerable to erosion due to its location at water level.

Big Island -- painted image -- Drawing #4



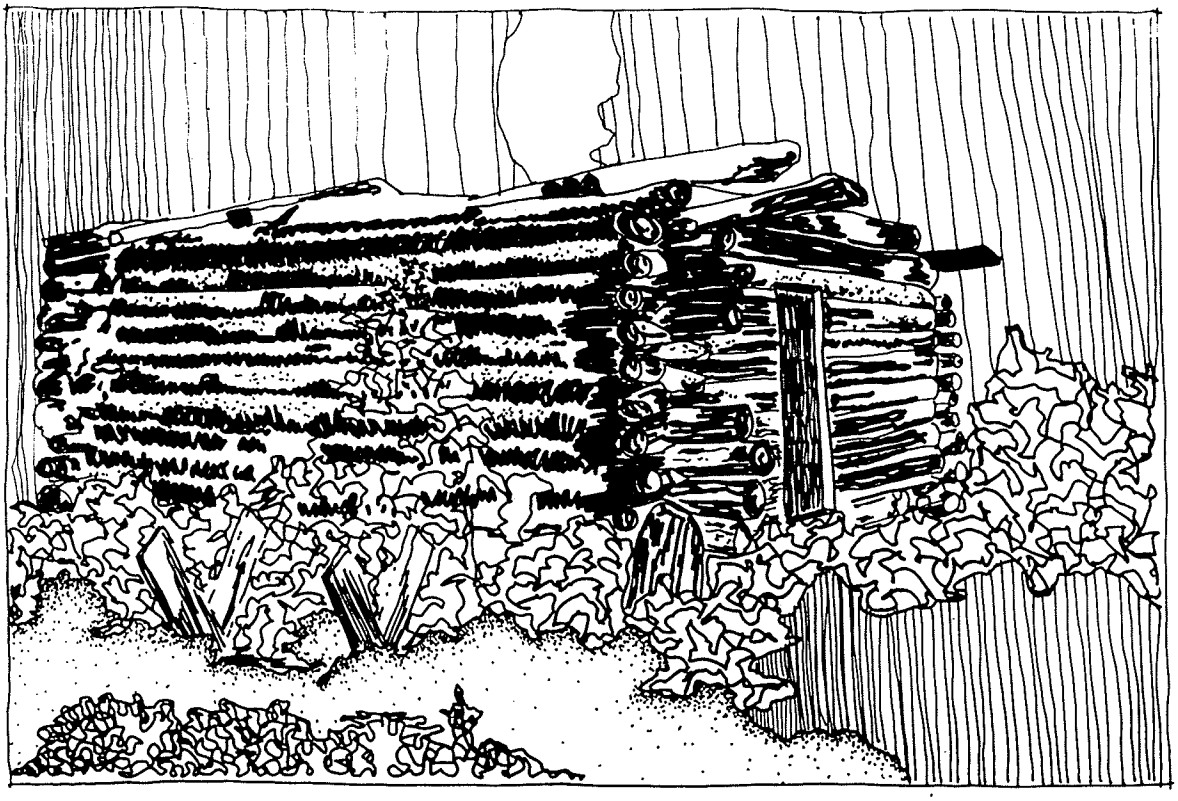
3. TRAPPER'S CABIN

A trapper's cabin is located on the mainland at a natural narrowing of Paimusk Creek. These natural gates are a distinct landmark. The cabin roof is visible from the creek both through summer and spring vegetation.

Cabin construction is wood timber logs approximately 15cm to 25cm in diameter. Corner joints and detailing are simple connections of timbers laid one on top of the other. The interior dimensions of the cabin are about 6'-0" x 6'-0". The roof is a typical log roof with rafter supports. The slope of the roof is approximately 15 degrees.

The south facing entry door and a hole in the centre of the roof are two sources of natural light. There is a metal cook stove and some garbage as evidence of a camp. The cook stove appears to be inactive. It is unknown if this cabin is used on a regular basis but chopped logs and portable toilet facilities are evidence of recent use.

The Gates -- Trapper's Cabin -- Drawing #5



The Gates -- Trapper's Cabin construction detail -- Drawing #6

2.50 – Cultural Resource Values

The local people feel that there is a general lack of service, both on Paimusk Creek and in Rossville. The unanimous consensus of local residents interviewed is that Paimusk Creek and Molson Lake are crucial as inclusion of their natural resource area. The cultural resources are very important to preserve as well. Both natural and cultural resources would have the same degree of significance because of the interrelationship to each other. Compromising the resident's resources would destroy their livelihood, their tradition, their memories, and their hope for aspiring and continuing as a culture.

The sacredness associated with Painted Rock is deep rooted within the highest powers of native culture. Literary evidence, local attitudes, and personal experience reinforce this statement without any cause or evidence indicating any lesser value be inherent to this rock painting site.

Many negative social issues have existed for numerous years because of conflicts with these Treaty agreements. Geographical reserve boundaries do not reflect actual usage of the land -- present or traditional use. Conflicts of land ownership with the establishment of the "Reserve system" result in conflicts of land use and management [Henderson 1980]. Land ownership in the Treaty agreements is vague. First Nation and Aboriginal Rights groups are addressing these issues today.

Contemporary Aboriginal cultures are striving for freedom and independence through what is termed, self-government. Social issues are a reflection of the problems within the society.

Questions to be answered of Native culture are those regarding values. Which traditional values are important to maintain unaltered, original; and which traditional values can have contemporary interpretations? The integrity of the native values has always been an important part of their culture.

CHAPTER 3

Evaluation and Recommendation

3.10 -- Character of Reach Divisions and Heritage Resource potential

Paimusk Creek is first divided into seven segments called reaches. Segments were selected on the basis of grouping similar characteristics such as ease of navigability, accessibility, flora, fauna, human resources, and geology/geomorphology. Sites identified during field investigations and site analysis were further evaluated, and deletions and additions were made to incorporate information which was not apparent during preliminary evaluations. Each reach is described below and evaluated for Heritage Resource potential. Refer to the **Reach Divisions Drawing #3** included on the following page and the **Characteristic Reaches of Paimusk Creek Drawing #18**.

Molson Lake

North

Paimusk Creek Road

Reach 7
The Y

Reach 6
The Calm

Reach 5
Grass Island

Reach 4
Big Island

Reach 3
The Gates

Cabin

Reach 2
Painted Rock

Reach 1
Fire

Rock Painting Site GbLh-1

Burial Grounds

known area for historic trails -- Muskataba

LEGEND

- evidence of human use
- Potential Rock Painting Site

REACH DIVISIONS Paimusk Creek Study Area ***Map #3*** Scale 1:56 000

Characteristic Reaches of Paimusk Creek -- Drawing #18

Paimusk Creek road condition

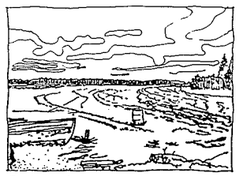
Paimusk Creek road washed out area

PAIMUSK CREEK ROAD

The only vehicle access route is a two-way gravel based road. Initially, the Paimusk Creek road built in 1978, by Urbanski Construction serviced adjacent gravel pits. This accounted for approximately the first five miles of road [Curtis, pers. comm; 1993]. The condition of the road is poor with numerous potholes and "washboard" areas. Deep ruts, slippery tracks, and water are typical. Poor drainage, blocked culverts, and beavers contribute to the washed out areas along the road in both spring and summer. The road is especially soft during spring thaw and autumn freeze.

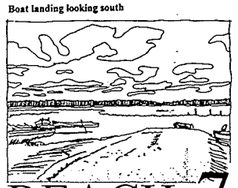
Access to Paimusk Creek has been a controversial issue for many people since the building of this road.

REACH 7



Boat landing looking west

Boat landing looking south



THE Y

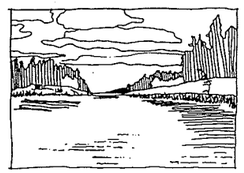
Reach 7 includes the Paimusk Creek boat landing. Due to typical bog topography, this reach includes all areas west of The Y. This route known locally as the "Muskatabe" in the Cree language. This route has heritage significance and should maintain the Muskatuba name.

The views both upstream and downstream are strikingly different in the spring and summer seasons. In the spring, golden grasses appear as prairie wheat fields. In the summer, the green grasses and sedges overpower the shorelines. The scale of the towering trees tends to dwarf the appearance of all other natural elements.

REACH 7

Boat landing looking east

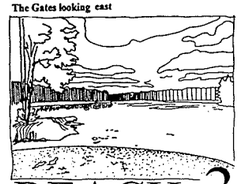
Boat landing looking north



The Gates looking west

Trapper's Cabin

The Gates looking east



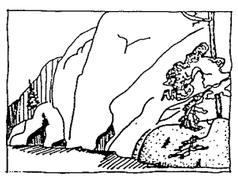
THE GATES

There is a dramatic narrowing of the creek which resemble gates. The Gates begin or end your contextual experience from Painted Rock and prepare you for future travel. This reach is perhaps the most ceremonious on Paimusk Creek. Even motor boats slow down when passing this point to avoid damaging their craft. The 5.3 m depth of the creek is the deepest point recorded during field investigations.

A trapper's log cabin is visible from the creek in both spring and summer. The cabin is the only built structure on Paimusk Creek and does not appear to be maintained. Trails, wood chopping areas, and temporary wooden trestles are evidence of frequent use in previous years.

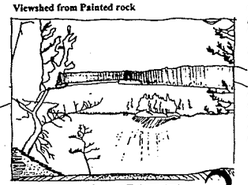
The shoreline changes slightly on the eastern portion at The Gates. Sedges, hard-stem bulrush and a shrub zone are evident. Many wildflowers such as wintergreen and tiger lilies carpet the mainland. Mixed coniferous species and aspen trees indicate the most complex ecosystem of the first three reaches. The number and diversity of insects are more complex due to four distinct strata layers of flora.

REACH 3



Vertical Rock Face

Viewshed from Painted rock



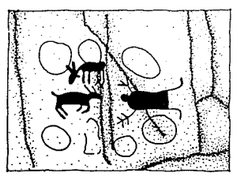
PAINTED ROCK

A southerly directional change in the creek channel builds anticipation leading up to the rock painting site. The physical bedrock landform provides wind protection. The creek current slows. Awareness of the distinct changes among landscape features are overpowering.

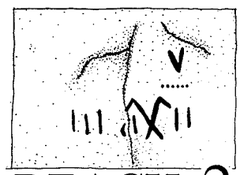
A massive vertical landform arises from the water as if it were placed there by giant hands. Directional, vertical planes on the landform are natural framing elements for the brilliant red paintings on the rock surface. The mere scale and number of lichenographs on this landform monopolize the glory ideally reserved for the rock paintings. An island across from Painted Rock is a convenient stopping point.

The experience at Painted Rock is dramatically different in a canoe as compared to a motor boat. Time is required to absorb and view elements of the macro-scale and the micro-scale. Slowed travel time helps to appreciate values associated with Painted Rock which recognize that this is not just a space, but a place.

REACH 2



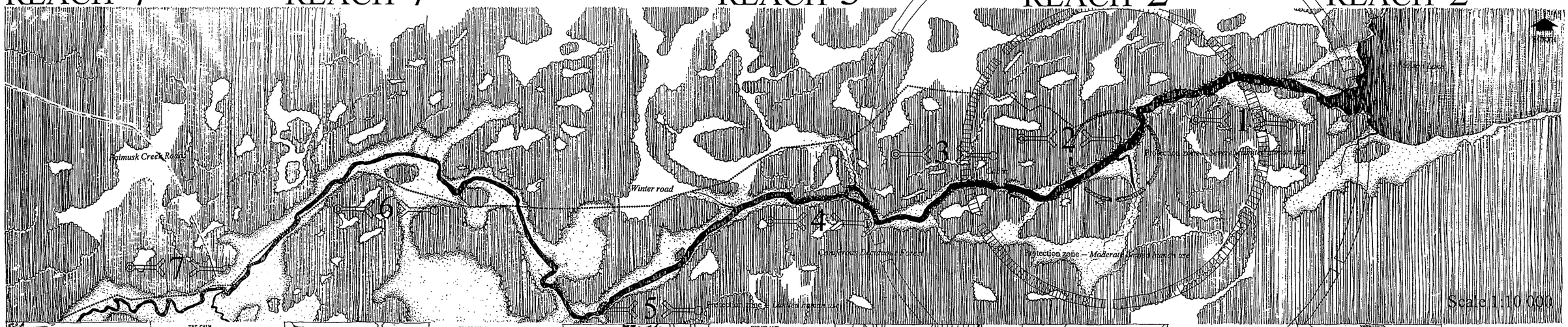
Rock Painting



THE PAINTINGS

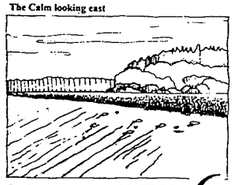
Imagery among the red ochre rock paintings range from linear strokes and groups of dots, to anthropomorphic and zoomorphic figures. The size of each image and directional placement are key to understanding images. Exact interpretations are not necessary as each viewer places different thoughts and meaning into the paintings. Paintings typically do not cross over cracks in the rock surface, however cracks among rock paintings are due to natural weathering processes.

REACH 2



The Calm looking west

The Calm looking east



THE CALM

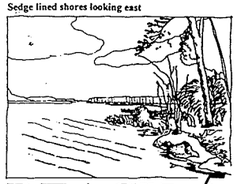
Reach 6 extends west through extremely calm waters. The calmness contrasts all other reaches which have significant wind. Wind protection through landscape topography accounts for this calmness. Paddling through The Calm is a treat prior to windy reaches.

Due to seasonal water levels and topography, there is only one suitable docking access point. The overgrown landing area is subject to erosion. The creek is characterized by wide sedge lined shores. Aquatic water lilies float at the water surface. Mature vegetation includes coniferous and deciduous species. There is a transitional willow and alder shrub zone seen only in this reach.

REACH 6

Sedge lined shores looking west

Sedge lined shores looking east



GRASS ISLAND

The resting point in Reach 5 is adjacent Grass Island and accessible for small groups only. The wind is unpredictable and steering a canoe is challenging. It is important to note that this is the last accessible landing point for some distance. Rest up.

Lichen vegetation in this area is extremely lush. Natural paths due to bedrock topography limits the necessity to cut trees. Routing pedial traffic through specific areas will allow the least amount of trampling for nature walks and hiking.

One exception to the pristine scenic views and vistas is a highly visible winter road cut-through.

REACH 5

Big Island looking east

Big Island looking north

BIG ISLAND

Big Island is a convenient stopping point and landmark. This is the largest accessible island at Paimusk Creek. The viewshed both up and downstream appear limitless. Evidence of numerous camps from past use on Big Island indicates the popularity of Big Island. This popularity has prompted the need for a portable toilet here Random open sewage practices of visitors was a problem.

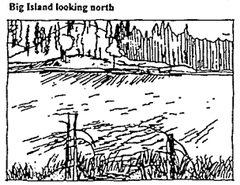
The island itself has coniferous and deciduous tree cover. Blocky boulders (1 m x 1 m) on the island appear ordered like Stonehenge, England. Humans may have influenced the ordering of these boulders. The north and east edges of Big Island are surrounded by grasses, sedges, and bog vegetation.

On the north mainland, natural paths of open terrain are rugged. Mosses over boulders do not allow for easy walking in all directions. The slope of the bedrock outcrop is approximately 35 degrees.

REACH 4

Naturally occurring paths looking west

Big Island looking north



Landform with excellent viewshed

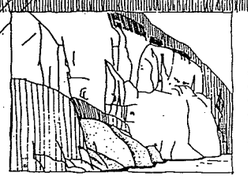
Camp location at Fire

FIRE

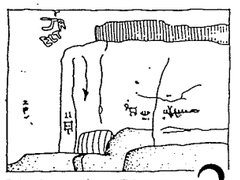
Reach 1 of Paimusk Creek extends west from the mouth of Molson Lake. Beginning canoeists must use caution as this reach has strong winds. Basic facilities for fish cleaning stations and evidence of campfires indicate a high desire to stop for shore lunches. This reach is least desirable for overnight camps because of the strongest water current and dense vegetation. The heaviest use by humans is on the north shore. The south shore has vertical rock faces with few opportunities to dock a boat or canoe.

Reach 1 ends at an area recovering from fire which has excellent viewsheds. Charcoal trees remain standing with several years of regenerating ground cover. This forest fire site presents an educational opportunity for all age groups. Exposed bedrock and immature vegetation visually allow a visitor to be introduced to the geologic history of Paimusk Creek.

REACH 1



The largest freize at Painted Rock



THE FREIZE OF PAINTED ROCK

Approximately 130 rock paintings cover the massive landform. Red ochre contrasts the white granite along with a brilliant display of lichens and mosses.

A symbolic reference such as the thunderbird is very powerful in Native cultures. The landform silhouette depicts a thunderbird with open wings. The strength and vitality of this image are sacred. The shaman is the authority on the powers of the thunderbird, being the only individual entitled to use these powers.

The largest and most recognizable frieze of the Paimusk Creek rock paintings is depicted in the sketch. This group of images is unique in western rock art.

REACH 2

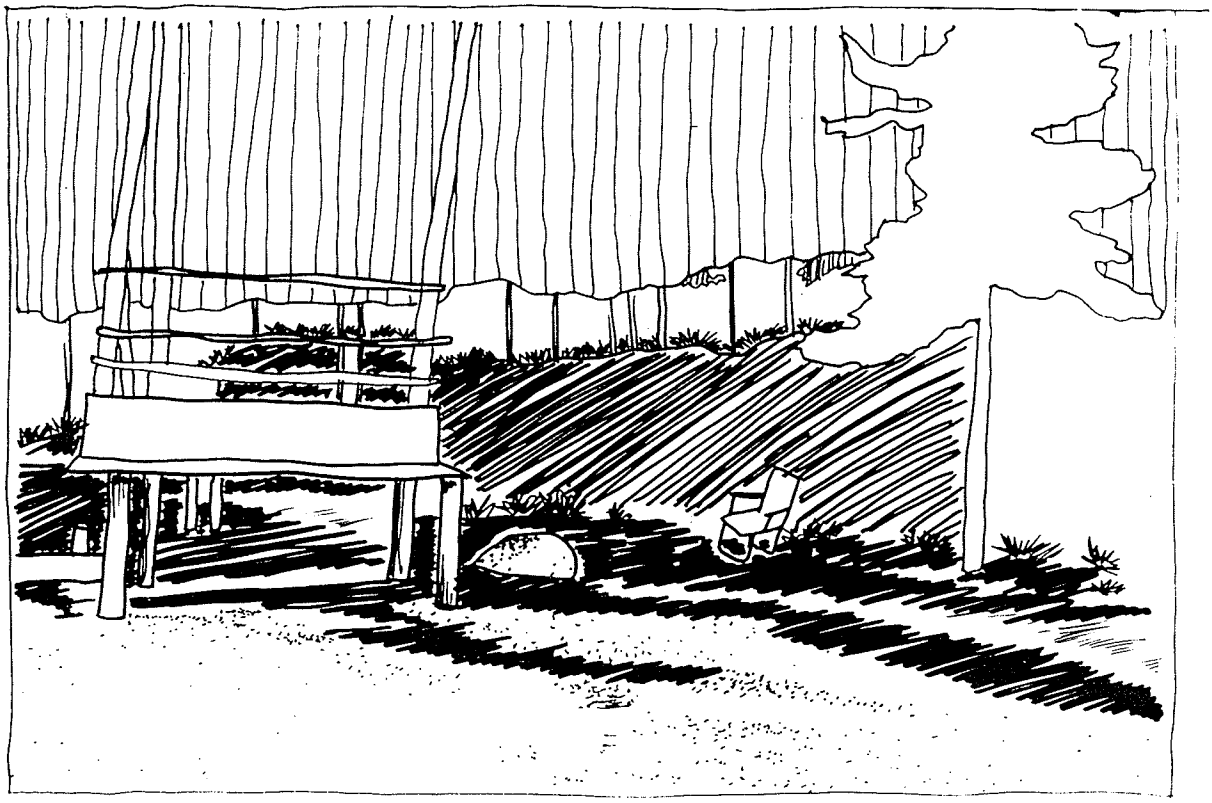
Reach Descriptions

REACH 1 -- FIRE

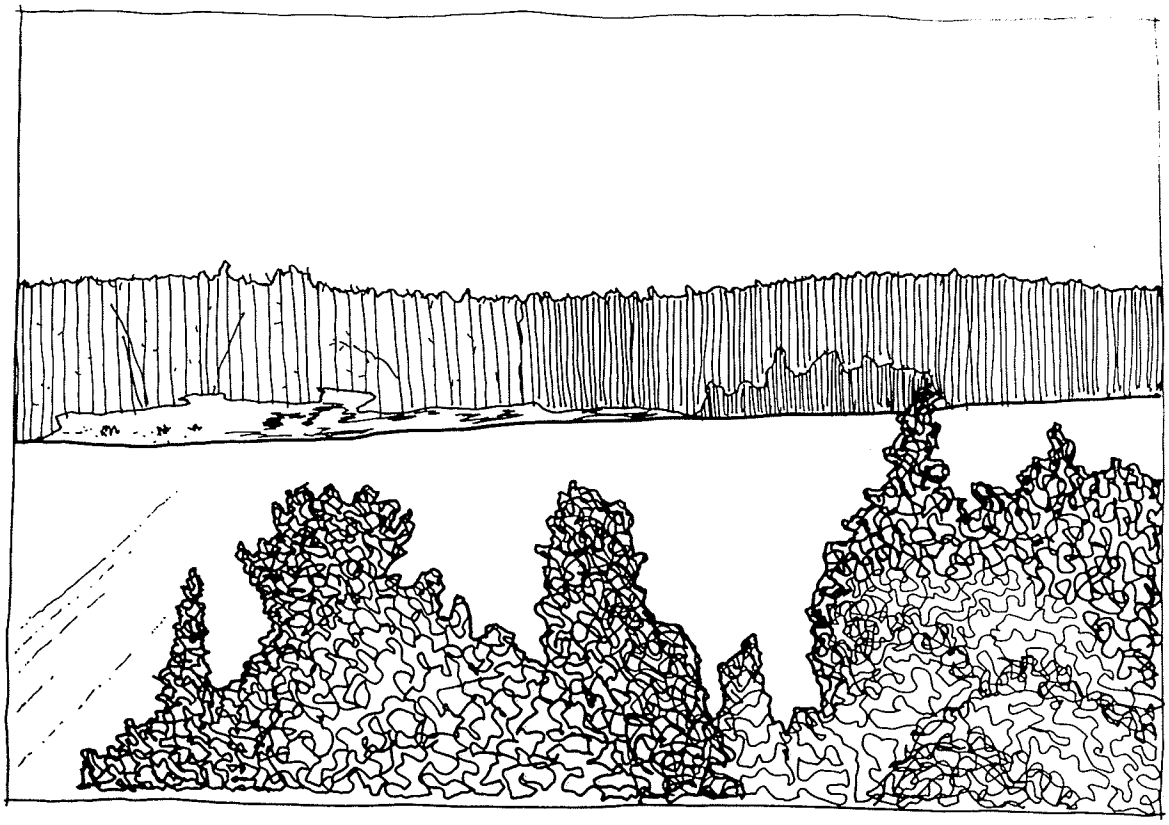
Reach 1 of Paimusk Creek extends west from the mouth of Molson Lake. Beginning canoeists must use caution as this reach has strong winds. Basic facilities for fish cleaning stations and evidence of campfires indicate a high desire to stop for shore lunches. This reach is least desirable for overnight camps because of the strongest water current and dense vegetation. The heaviest use by humans is on the north shore. The south shore has vertical rock faces with few opportunities to dock a boat or canoe.

Reach 1 ends at an area recovering from fire which has excellent viewsheds. Charcoal trees remain standing with several years of regenerating ground cover. This forest fire site presents an educational opportunity for all age groups. Exposed bedrock and immature vegetation visually allow a visitor to be introduced to the geologic history of Paimusk Creek. Two geologic examples include granite intrusions and evidence of molten bedrock.

Reach 1 -- Fire -- filleting stations -- Drawing #7



Reach 1 -- Fire -- viewshed -- Drawing #8



REACH 2 -- PAINTED ROCK

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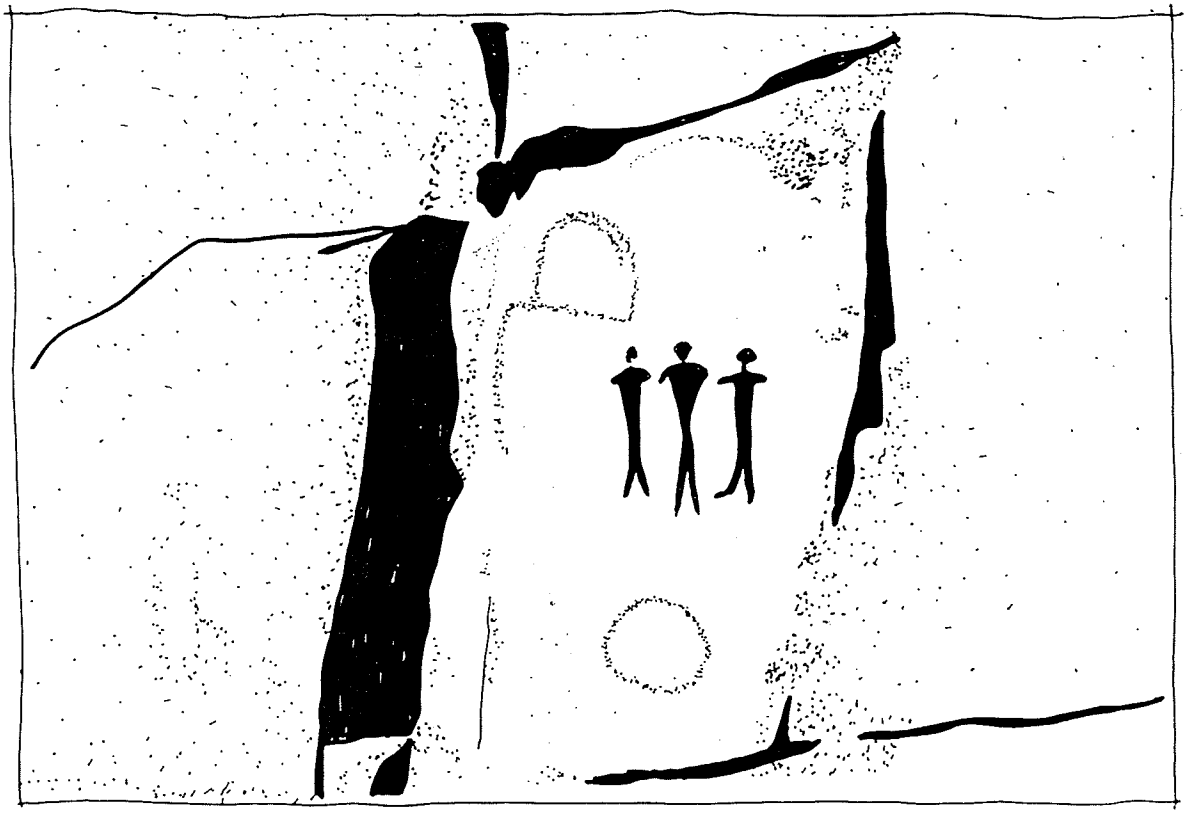
- *the paintings*

Imagery among the rock paintings range from linear strokes and groups of dots, to anthropomorphic and zoomorphic figures. The size of each image and directional placement are key to understanding images. Exact interpretations are not necessary as each viewer places different thoughts and meaning into the paintings. Paintings typically do not cross over cracks in the rock surface, however cracks among rock paintings are due to natural weathering processes.

Reach 2 -- Painted Rock -- red ochre paintings -- Drawing #9



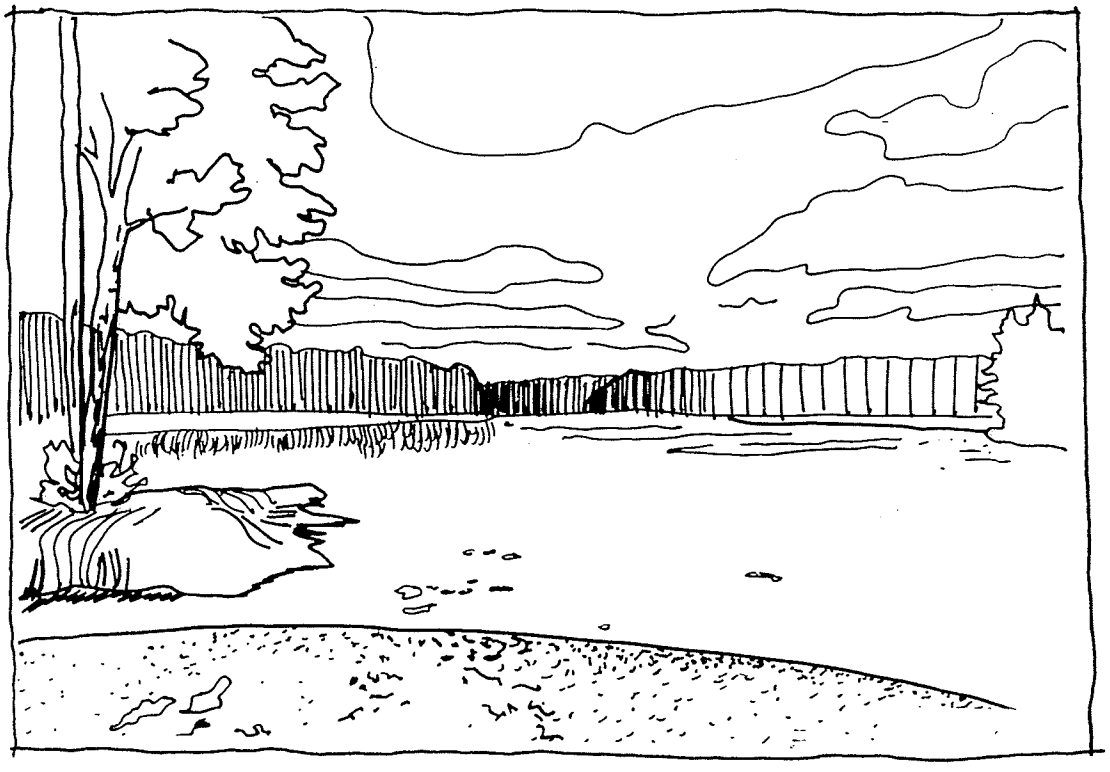
REACH 3 -- THE GATES

There is a dramatic narrowing of the creek which resemble gates. The Gates begin or end your contextual experience from Painted Rock and prepare you for future travel. This reach is perhaps the most ceremonious on Paimusk Creek. Even motor boats slow down when passing this point to avoid damaging their craft. The 5.3 m depth of the creek is the deepest point recorded during field investigations.

A trapper's log cabin is visible from the creek in both spring and summer. The cabin is the only built structure on Paimusk Creek and does not appear to be maintained. Trails, wood chopping areas, and temporary wooden trestles are evidence of frequent use in previous years.

The shoreline changes slightly on the eastern portion at The Gates. Sedges, hard-stem bulrush and a shrub zone are evident. Many wildflowers such as lily-of-the valley and tiger lilies carpet the mainland. Mixed coniferous species and aspen trees indicate the most complex ecosystem of the first three reaches. The number and diversity of insects are more complex due to four distinct strata layers of flora.

Reach 3 -- The Gates -- natural narrowing -- Drawing #10



REACH 4 -- BIG ISLAND

Big Island is a convenient stopping point and landmark. This is the largest accessible island at Paimusk Creek. The viewshed both up and downstream appear limitless. Evidence of numerous camps from past use on Big Island indicates the popularity of Big Island. This popularity has prompted the need for a portable toilet here Random open sewage practices of visitors was a problem.

The island itself has coniferous and deciduous tree cover. Blocky boulders (1 m x 1 m) on the island appear ordered like Stonehenge, England. Humans may have influenced the ordering of these boulders. The north and east edges of Big Island are surrounded by grasses, sedges, and bog vegetation.

On the north mainland, natural paths of open terrain are rugged. Mosses over boulders do not allow for easy walking in all directions. The slope of the bedrock outcrop is approximately 35 degrees. A potential rock painting image consists of faint markings on chalk like white granite. Docking on the south shore is not advisable.

Reach 4 -- Big Island -- viewshed -- Drawing #11

REACH 5 -- GRASS ISLAND

The resting point in Reach 5 is adjacent Grass Island and accessible for small groups only. The wind is unpredictable and steering a canoe is challenging. It is important to note that this is the last accessible landing point for some distance. Rest up.

Lichen vegetation in this area is extremely lush. Natural paths due to bedrock topography limits the necessity to cut trees. Routing pedial traffic through specific areas will allow the least amount of trampling for nature walks and hiking.

Reach 5 -- Grass Island -- lush vegetation -- Drawing #12

REACH 6 -- CALM

Reach 6 extends west through extremely calm waters. The calmness contrasts all other reaches which have significant wind. Wind protection through landscape topography accounts for this calmness. Paddling through the Calm is a treat prior to windy reaches.

Due to seasonal water levels and topography, there is only one suitable docking access point. The overgrown landing area is subject to erosion. The creek is characterized by wide sedge lined shores. Aquatic water lilies float at the water surface. Mature vegetation includes coniferous and deciduous species. There is a transitional willow and alder shrub zone seen only in this reach.

One exception to the pristine scenic views and vistas is a winter road cut-through. The cut is highly visible from the creek and the break in vegetation is a negative attribute.

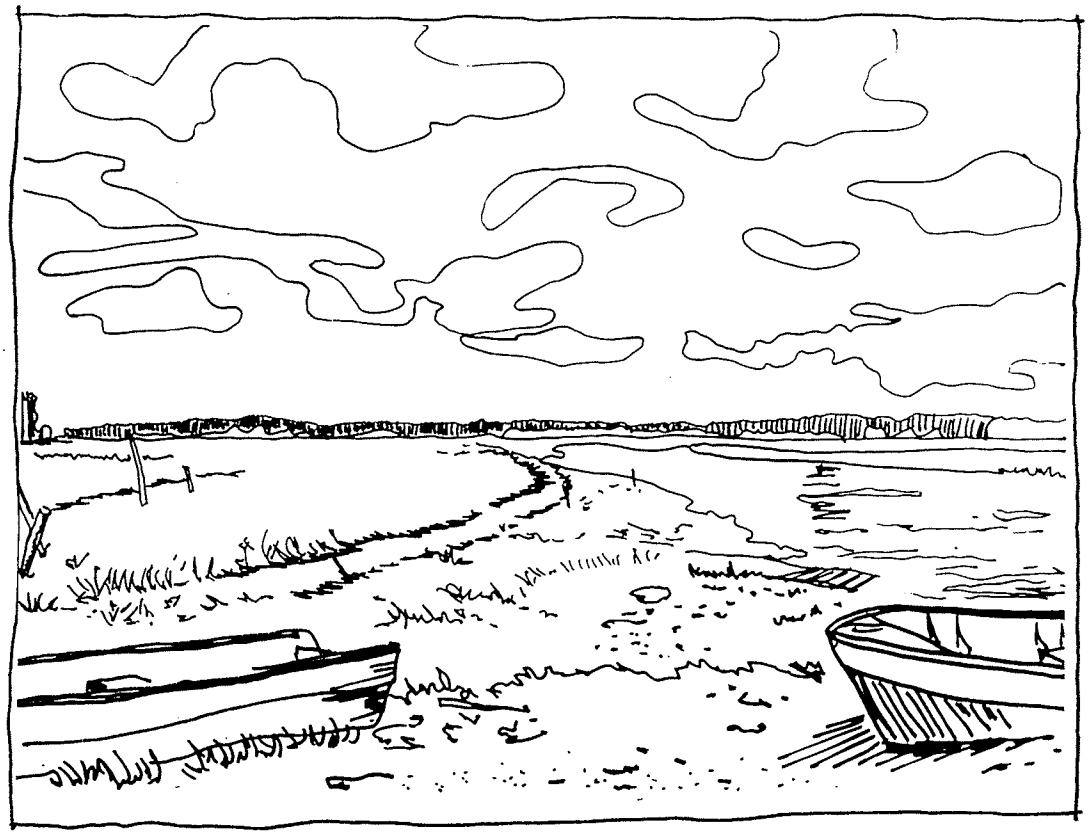
REACH 7 -- THE Y

Reach 7 includes the Paimusk Creek boat landing. Due to typical bog topography, this reach includes all areas west of The Y. This route known locally as the "Muskataba" in the Cree language. This route has heritage significance and should maintain the Muskataba name.

The views both upstream and downstream are strikingly different in the spring and summer seasons. In the spring, golden grasses appear as prairie wheat fields. In the summer, the green grasses and sedges overpower the shorelines. The scale of the towering trees tends to dwarf the appearance of all other natural elements.

Due to a slower current, there is opportunity to immerse your canoe in the sedge lined shorelines and get a close look. These areas are important for waterfowl nesting and include a diversity of water loving flowers.

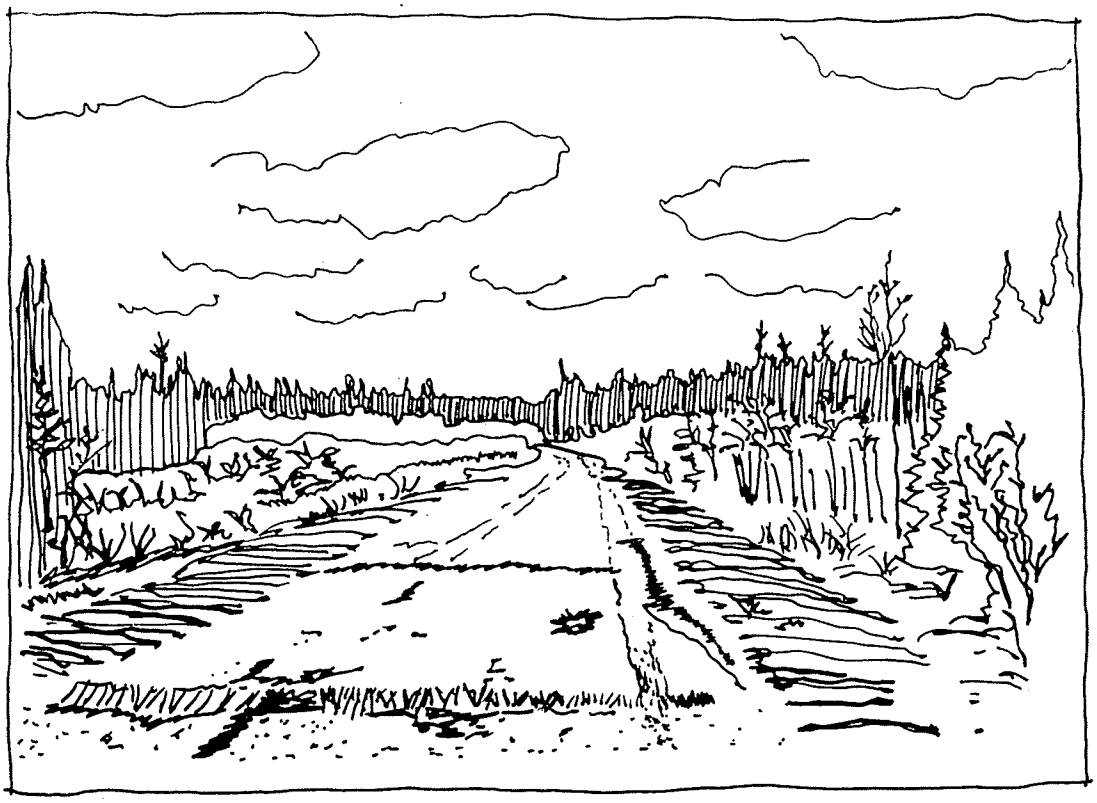
Reach 7 -- The Y -- the boat landing -- Drawing #13



THE PAIMUSK CREEK ROAD

The only vehicle access route is a two-way gravel based road. Initially, the Paimusk Creek road built in 1978 by Urbanski Construction serviced adjacent gravel pits. This accounted for approximately the first five miles of road [Curtis, pers. comm; 1993]. The condition of the road is poor with numerous potholes and "washboard" areas. Deep ruts, slippery tracks, and water are typical. Poor drainage, blocked culverts, and beavers contribute to the washed out areas along the road in both spring and summer. The road is especially soft during spring thaw and autumn freeze.

Paimusk Creek road -- washed out area -- Drawing #14



Access to Paimusk Creek has been a controversial issue for many people since the building of this road. The road was part of a larger master plan. Planning changes left this road in a seemingly arbitrary location.

Heritage Resource Potential

The Heritage Resource Potential of each reach is evaluated based on a five point weighting system. 1 -- poor, 2 -- fair, 3 -- good, 4 -- very good, 5 -- exceptional.

Category headings for the identification of Landscape Reaches include the following:

- **Natural heritage resource potential**
- **Cultural heritage resource potential**
- **Human and Physical heritage resource potential.**

Criterion used to weight natural, human, and cultural resources for their Heritage Potential is included in **Appendix A -- Field forms**. The summary chart in Table 1.0 indicates the strengths and weaknesses of each reach.

Table 1.0 Heritage Resource Potential

HERITAGE RESOURCE POTENTIAL			
	NATURAL	**HUMAN**	**CULTURAL**
REACH 1 -- Fire	Very good	Fair	Poor
REACH 2 -- Painted Rock	Exceptional	Good	Exceptional
REACH 3 -- The Gates	Exceptional	Good	Very good
REACH 4 -- Big Island	Good	Good	Good
REACH 5 -- Grass Island	Exceptional	Poor	Fair to Good
REACH 6 -- Calm	Very good	Good	Poor to Fair
REACH 7 -- The Y	Very good	Good	Exceptional

3.11 -- Heritage Resources and Values

Having established that there are exceptional examples of heritage resources at Paimusk Creek, there is a need to define the Heritage Landscape Types that best represent the heritage resources of the study area. Brief discussion regarding the suitability for each Heritage Landscape type is included in **APPENDIX J**.

Heritage resource values are also evaluated for their significance on a local, provincial, or national level. "Landscapes differ not only in their physical attributes, but in the ways that they are valued by people with different cultural backgrounds [Smardon 1983]."

Heritage Landscape Types

All reaches of Paimusk Creek meet criteria for each of the following Heritage Landscape Types:

- Major natural landscape
- Historic route
- Landscape related to famous Manitoba citizens
- Other significant heritage value -- *as an Indigenous Heritage Landscape*.

REACHES 1, 4, 5, 6, and 7 within the Paimusk Creek study area are important to these Heritage Landscape Types because of their accumulated heritage resources and contextual importance to other heritage resources.

The heritage resources of REACH 2 and REACH 3 meet criteria for several other cumulative Heritage Landscape designations:

- Unique places and spaces, and
- Heritage precinct.

REACH 2 has the most Heritage Resources within the study area. These special qualities warrant further Heritage Landscape designations including:

- Important native site,
- Sacred places.

Cultural resources previously mentioned such as the rock painting site, trapper's cabin, and traditions of the aboriginal culture are heritage resources which are inseparable from their place in the landscape. Site context and landscape attributes are equal parts of heritage landscapes that warrant equality in terms of heritage value.

Heritage Resource Values

The identified heritage resource values of Paimusk Creek are evaluated based on a three point weighting system:

1 -- Low significance, 2 -- **Moderate** significance, 3 -- **High** significance.

Significance -- Local

Values of Paimusk Creek are most important to local residents of Norway House. Heritage values of Paimusk Creek are important locally and to people who are aware of these exceptional heritage resources.

- **High** significance.

Significance -- Provincial

Throughout this study of Paimusk Creek, heritage resources have evidenced an importance beyond a local scale. Acknowledgments of Provincial significance for the rock painting site by archaeological experts exists [Dewdney and Kidd; 1962, 1965; Steinbring 1991; Petch, pers. comm; 1992; Dr. Jack Steinbring, pers. comm; 1992]. Paimusk Creek rock painting site is among the largest and best preserved in the province of Manitoba [Allen, pers. comm; 1992; Dr. Jack Steinbring, pers. comm; 1992].

- **High** significance.

As a flourishing fish spawn resource, Paimusk Creek is presently providing over half the spawn needed for the entire province. Dramatic geological features along with the natural state of the flora and fauna extend beyond the scope of Provincial boundaries.

- **High** significance.

Significance -- National

National recognition of Paimusk Creek requires comparison to other sites across Canada. Paimusk Creek requires evaluation for representatives among the Woodland Rock Art Region and traditional native migratory areas. Provincial geographical boundaries should not be a factor in determining national representation since aboriginal migratory regions does not resemble existing provincial political boundaries. This site is worthy of recognition and protection even if there are multiple valued sites in Manitoba.

- **High** significance

Designation of Heritage Resources based upon Heritage Landscape Types magnifies the significance of Paimusk Creek on local, provincial, and national levels. Reach 2 has seven Heritage Landscape Type designations alone. Paimusk Creek requires further heritage resource evaluation -- immediately.

3.12 -- Recommended Degree of Protection

Heritage Landscape designations and the significance of heritage values for Paimusk Creek form the basis for the degree of protection recommended for the study area. Through interpretation and evaluation, the degree of protection recommended for each Reach is included in Table 2.0.

Defined categories and weighting for the degree of protection of heritage resources included the following:

1 • *reconstruction* -- reestablish, the state of being reconstructed.
2 • *rehabilitation* -- to restore to a former capacity or state.
3 • *restoration* -- bringing back to a former or original position or condition.
4 • *conservation* -- a careful preservation and protection of something especially planned management of a natural resource to prevent exploitation, destruction, or neglect.
5 • *preservation* -- an area restricted for the protection and preservation of natural resources (as animals or trees), especially one used primarily for regulated hunting or fishing [Webster 1981].

Table 2.0 -- Recommended Degree of Protection

RECOMMENDED DEGREE OF PROTECTION		
Reach #	**Reach Name**	**Recommended Protection Status**
REACH 1	Fire	conservation
REACH 2	Painted Rock	preservation
REACH 3	The Gates	preservation
REACH 4	Big Island	conservation
REACH 5	Grass Island	conservation
REACH 6	Calm	conservation
REACH 7	The Y	restoration, rehabilitation, conservation.

Heritage landscapes are actively being designated [Countryside Commission 1970; Dodds 1985; Dodds 1987] with increasing public awareness [Forbatha 1977]. The importance of a Heritage Landscape depends upon the value given to each landscape.

> "They have established that perception of nature is culturally defined, and that the symbolic value ascribed to archetypical landscapes evolves with culture [Graber 1976]."

The importance of a Heritage Landscape having more than one type of designation amplifies its importance and value proportionately. "The effect of a conservation plan is to preclude sudden or fundamental changes in land use or vegetative cover." [Countryside Commission 1986].

3.20 -- Recommendations

The suitability of human resources and land use at Paimusk Creek are discussed for each land use activity type. Recommended Stewardship Guidelines are incorporated within each activity type. Site analysis reevaluates the potential for all land use activities incorporating the recommended degree of protection of heritage resources. The recommended Stewardship Guidelines will be applied in a Stewardship Plan in Chapter 4.

3.21 -- Suitability Weighting for Human Resources and Land Use Activity Types

Land use activity types must comply with the recommended degree of protection for the study area reaches. Responsible planning with sustainable approaches focus on minimum impacts to Paimusk Creek as a heritage landscape. Land-Based Development Categories previously discussed are used to identify all types of human resources and land use.

The suitability analysis for Land Use activity types is based on a five point weighted system: 1-- poor, 2 -- fair, 3 -- good, 4 -- very good, 5 -- excellent. Results of the evaluation for each reach are in Table 3.0.

Table 3.0 -- Suitability for Land Use Types

LAND BASED DEVELOPMENT CATEGORIES							
REACH	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Transportation systems -- water	Excel	Excel	Excel	Excel	Excel	Excel	Good
Communication systems	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Environment and Recreation	Excel	Excel	Excel	Excel	Excel	Excel	Excel
Agriculture/Hunting and Trapping	Good	Good	Good	Good	VeryG	Good	Good
Energy Production and Transmission	Fair	Poor	Poor	Poor	Poor	Poor	Poor
Mineral, Petroleum, Sand and Gravel Operations	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Forestry	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Water development projects	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Urban and Rural Development	Poor	Poor	Poor	Poor	Poor	Poor	Fair
Industries	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Remote and/or Archaeologically unexplored regions	Excel	Excel	Excel	Excel	Excel	Excel	Excel
Land Ownership/Rights to Resources	Poor	Poor	Poor	Poor	Poor	Poor	Poor

3.22 -- Suitability Descriptions for Human Resources and Land Use and General Stewardship Guidelines

General stewardship guidelines are determined through evaluation of site planning analysis criterion and analysis drawing. Guidelines for Land Based Development categories relate specifically to the category that it is listed under but may apply to other activities. These guidelines may become useful for more than one category that is overlapping in use or restriction.

TRANSPORTATION SYSTEMS

Land

The existing road at Paimusk Creek is a known controversial route for many reasons. A chronology of key events with further details included in **Appendix C.** In 1982, the Manitoba Government Department of Highways and Transportation stated, "No time, effort, or money will be spent repairing or maintaining the Paimusk Creek road [Manitoba Department of Natural Resources 1992]." In the fall of 1991 however, some upgrading did occur by the Manitoba Government. The department responsible for funding is still a mystery.

The road access prompted the initiation of several High Quality Management fishing restrictions for Paimusk Creek and Molson Lake. These restrictions prove to be of significant help to the maintenance of the Molson Lake Lodge industry. Paimusk Creek fish stock is healthy but there are still no firm estimates as to impacts on future fishing at Paimusk Creek and Molson Lake. A restriction on all walleye fishing during the month of May is contributory toward maintaining a healthy fish stock. The walleye fish have the opportunity to maintain a natural life cycle at a critical time in their reproductive life cycle [Swanson, pers. comm; 1993].

The public access road however is still a dilemma. Easy public access increases the number of users of Paimusk Creek. Increased users places higher demand on fish stocks by local residents, Manitoba sport fishers and out-of-province fishermen. Even with fish limits and licensing restrictions for non-Canadian residents, tourists and others use Paimusk Creek to access Molson Lake. According to local residents, deliberate efforts to block culverts, wash out the road to restrict access of Paimusk Creek. Controversy exists locally about who benefits from the road and who does not benefit.

Whether the road stays or goes, there must be action toward responsible stewardship of the Paimusk Creek resources. Poor planning when siting the road in this location results in frequent inundation of portions of the road. Using the highest contour elevations taken off topographic maps is the most logical, and economically feasible method to site a road in a poorly drained area.

Winter access to Paimusk Creek is via the winter road. According to aerial photography this irregular winter road crosses through vegetation, across the creek, on the creek, and exits at Molson Lake. Trucks and skidoos traverse this route. Cut-throughs coming off Paimusk Creek are very visible scars. A vertical void in dense forest is highly visible, deterring from the integrity of an indigenous landscape.

Guidelines

Road -- Winter and summer

1. An all weather access road to Molson Lake will be the only vehicle access point. Summer and winter travel can occur on this single access route. Siting this access maintains minimal impact to wildlife -- ungulate migratory paths. Local hunters must be consulted before proceeding with the recommended location of the road.

2. Since there is no formal name given to the Paimusk Creek road (aka. Molson Lake road), a formal name or number should be assigned to this ten mile length of road. A regulation sign should be installed at the junction of P.T.H. #373. Encourage local input. An informal name for this road may have special meaning to many local people.

3. Local access is open. Public access is limited and monitored. Foreign access is limited and monitored.

4. Beaver may be viewed as hazards inhibiting road access. Advise consultation with local users before destroying a beaver structure.

5. No hydro-electric transmission line, water reservoir, or hydro-generating station or dam is recommended within the study area including land or water alterations that will affect any natural resources, cultural resources, or heritage values of the study area. Any visible structural tower or hydro line adjacent or crossing Paimusk Creek at any point would destroy the pristine natural heritage of the place.

Air

Transportation by air is common. Commercial flights are available for contract flights from Winnipeg or other Northern Manitoba communities with airstrip facilities. Molson Lake Lodge has an airstrip used to bring in lodge users and supplies. Flights are expensive for one person, but are more reasonable for small groups. As a common, local expense, flights are not affordable for the average person.

Water

Transportation by water is primarily with mid-size motor boats. Canoeing is certainly possible for an intermediate canoeist. There are no rapids or falls on Paimusk Creek. The summer winds are strong and can be fatiguing for a beginning canoeist.

The negative aspect of the riverscape at Paimusk Creek is the accumulation of garbage on the shorelines, remnants of overnight stays, and freedom for littering. An effort by local Natural Resource Officers removed many garbage bags full of litter. However, staffing is inadequate to remove all litter on Paimusk Creek due to the amount of time, effort, and distances involved.

Guidelines

Water -- Winter travel

1. All motorized vehicles except skidoos are not allowed on Paimusk Creek.

2. Responsible skidoos travel only within the main pathway of the creek. Stay off the sedges and grasses of the Paimusk Creek shoreline.

3. Dog sled route traditional use can occur with designated stopping areas for feeding and resting of dogs. Concentrations of dog manure to be collected and disposed of in a manner that does not compromise water quality of Paimusk Creek and does not promote the spread of disease.

4. No other types of recreational vehicles such as three-wheelers, four-wheelers, or motor bikes allowed off the designated access road.

5. Overnight boat or canoe docking allowed in designated areas only.

6. Motor boat users must be cautious through Reach 2 of Paimusk Creek.

7. Monitoring petroleum products pollution resulting from motors. Electric powered motors may be recommended as an alternate use.

Rail

There are no railway services at Paimusk Creek and Norway House Indian Reserve. Connecting lakes and rivers are more economical means of travel over land. Feasibility for railway travel is not recommended. Topography and soil conditions are limiting factors.

COMMUNICATION SYSTEMS

Communication systems of Paimusk Creek exist through nature only. No telephone, radio, satellite dish, or postal service are available at Paimusk Creek. Being devoid of any formal communication system is becoming an anomaly for even the remotest locations of the globe.

Guideline

1. This is a remote area. Arrangements prior to departures can alleviate risks for emergency. A mandatory permit system will provide a documented record of Paimusk Creek users. Incorporating existing open areas to signal patrolling planes are recommended for emergency safety measures.

ENVIRONMENT AND RECREATION

Recreation options at Paimusk Creek are diverse. Gross-motor activities such as canoeing, hiking, and rock climbing will not alter the landscape setting. Natural paths and exposed bedrock outcrops are indigenous at Paimusk Creek. Bird watching, photography, plant identification, drawing, and painting are suitable individual activities. Group activities such as camps and general play can also occur. Paimusk Creek is suitable for introspective activities such as thinking, imagination, and stress release.

Environment and recreation at Paimusk Creek are one in the same. Paimusk Creek is an indigenous landscape. Experiencing the creek through recreation is achieved without exception. To experience the creek, challenging survival techniques place emphasis on instinct rather than process. This experience develops skills not attainable in a formal education system. Education about environment occurs best within a natural setting. This activity has no age barrier. Limitations in topography are restricting barriers due to their ruggedness.

Guidelines

1. No tree cutting.

2. Stay on designated resting or landing areas.

3. Open fires in designated fire pits only.

4. Register upon arrival and report duration of stay.

5. All litter must be returned to your pack and disposed of in designated litter receptacles only.

6. Respect any discovered artifacts or remains. Leave active hunting or trapping areas immediately.

AGRICULTURE/HUNTING AND TRAPPING

Agriculture

Specialty crops such as peat production, indigenous berries, and wild rice are the most suitable for Paimusk Creek. Further investigation would be necessary to evaluate potential yields for these specialized crops. Results for wild rice harvesting projects at Norway House are unknown.

Hunting and Trapping

Hunting and trapping is active at Paimusk Creek by residents of Norway House Indian Reserve. Paimusk Creek is a source of food for Native people. Any food not acquired through hunting or trapping is purchased from a grocery supply store. Southern markets supply these stores. The cost of the food source is expensive due to the northern location of the reserve. By removing, influencing, or changing the resource area will affect the wildlife food source at Paimusk Creek.

For example, forest fires are naturally occurring hazards. If fire destroys the resource area at Paimusk Creek, surviving animals alter migratory patterns and nesting habitat. The resource area boundaries however do not change. The land can no longer produce the same capacity of food and people must find alternate sources. This has serious negative economic, ecological, and psychological impacts to people who depend upon this resource for livelihood and survival.

Guidelines

1. Local hunting and trapping rights to be maintained and undisturbed.

2. Specialized agriculture in designated areas only.

ENERGY PRODUCTION AND TRANSMISSION

Water

The suitability for hydro-electric energy production within the Paimusk Creek study area is very poor due to the low velocity and low water volume discharge of the creek. Although there is no siltation at Paimusk Creek, the abundance of organic matter could create undesirable situations for water development projects.

Wind

Strong winds at Paimusk Creek could be harnessed to generate wind power. There is very little available research on this topic. This is one clean source of power. Minimal physical structures with visible impacts are recommended due to the delicate nature of ecosystems involving permafrost ecology.

Guidelines

1. No built structure may be visible on or near Paimusk Creek from any direction.

2. No pollutants or by-products due to waste or disposal practices may be dumped into Paimusk Creek. All contaminated water soluble or non-water soluble products must be treated or disposed of at off-site designated and regulated approved areas.

Solar

Solar energy is another option for Paimusk Creek to produce local energy. The geographic location may be beneficial most during summer months when days are longer than nights. Winter months have fewer hours of sunlight.

Nuclear

Without the consultation of an expert in nuclear energy siting, geological maps do show fault lines within or in close proximity to the study area. A geologist ensured me that these fault lines have not been active for thousands of years and cause no direct threat as earthquake hazards. There are concerns that this is not a safe place to store nuclear waste produced by nuclear energy plants.

Fault lines are potential hazards when siting nuclear waste storage areas. Any leakage in solid bedrock can directly pollute groundwater aquifers with nuclear waste. This potential hazard is detrimental to all living things.

MINERAL, PETROLEUM, SAND AND GRAVEL OPERATIONS

Mineral

Mineral exploration in the Paimusk Creek study area is limited. There are over 130 active mining claims within Norway House Resource area [Hilderman 1991]. One site within Molson Lake Hold Area 3 indicates activities associated with mining exploration are likely to include aerial surveys, ground surveys, and exploratory drilling [refer to Hilderman 1991].

Gold extraction is not significant enough to warrant further exploration at this time. Research indicates that gold can be extracted from the burnt crowns of Black Poplar trees (*Populus tremuloides*). According to the research, geologic gold veins leach gold metal that is absorbed systemically through trees. The tree crowns are collected and burnt. This mining practice should be explored further [Radforth 1977]. Areas burnt by forest fires may become important resources.

Guideline

1. No mineral exploration or removal can occur without a Heritage Resource Impact Assessment.

Petroleum

There is no indication that petroleum exists in the Paimusk Creek study area.

Guideline

1. No petroleum exploration or removal can occur without a Heritage Resource Impact Assessment.

Sand and Gravel Operations

According to the Norway House Land Exchange Status Report prepared by Hilderman Witty Crosby Hanna and Associates, December 1991 the Province of Manitoba owns several aggregate pits located along the Paimusk Creek road. Current field investigations for this study revealed approximately twelve pits with their activity status being unknown.

The sand and gravel operations are used primarily for local building purposes. Bedrock is blasted and used as road base. The Norway House Land Exchange Status Report evaluates specific parcels of land throughout the Norway House resource area. Information specific to these lands hold areas indicates that "no permits are issued to any third party for removal of aggregate within Hold Areas."[Hilderman 1991].

Although sand and gravel operations are locally based, particular attention is required when selecting these extraction sites. The aggregate pits along Paimusk Creek road appear at scattered points. The pits are away from the main population areas but do not appear to prioritize sites through their location. Some pits appear abandoned and exposed. Quarry and Aggregrate Extraction require management as well. The Paimusk Creek aggregate pits require steps toward reclamation when their activity status becomes inactive or exploited.

Guidelines

1. Sand and gravel operations limited to areas along Paimusk Creek road. Rehabilitation and reclamation of any used or exploited aggregate pits must be completed within two years of their abandoned use.

2. No additional sand and gravel operations may occur without a Heritage Resource Impact Assessment by the Manitoba government.

FORESTRY

Productive forestry stands are scattered throughout the study region. In a simple diagram highlighting the Forested land into two categories of "Productive" and "Non-Productive" for forestry purposes, it is very visible that the forestry is not economical at Paimusk Creek. In past experience, it has not proven economical to harvest these types of scattered stands because of the difficulty of access, rugged topography, and inability to regenerate new harvestable growth quickly.

Forest fires are common in northern Manitoba. Significant areas of potential merchantable timber are sometimes subject to fire damage. Current information is necessary to identify these areas.

Guideline

1. Deforestation activities require limitations including a minimum protected 150 meter buffer zone from Paimusk Creek shoreline. If removal of trees deters aesthetically or ecologically to an area, this buffer zone may be extended to include the protected region.

WATER DEVELOPMENT PROJECTS

Water development projects at Paimusk Creek will cause severe damage to the indigenous landscape. Beaver houses and small dams inland occur as unplanned, natural water diversions. These water level changes flood out areas including the Paimusk Creek road. The perception of beaver dams as a problem at Paimusk Creek causes few inconveniences.

There are potential plans for Molson Lake to become a water holding power reserve [Hydro Development Department Generation Planning Division 1989]. This type of project would have direct negative impact on Paimusk Creek for several reasons. Large scale diversion projects or water development projects changing the water levels of Paimusk Creek could severely damage the waterfowl nesting habitat. Increased changes in water levels at Paimusk Creek would subject the aboriginal rock paintings to increased erosion. Decreased water levels would change the perception of this sacred heritage resource.

The balance in humidity both on land and airborne contribute to the state of preservation of the rock paintings. Lichens and mosses are also dependent upon ideal climatic conditions to thrive. Due to the slow growth rate of lichens (1" per 100 years), minimal changes in micro-climate influence the health of these vegetation species.

Traditionally in Manitoba little value is placed on Heritage values regarding water development projects. Communities are relocated and landscapes destroyed at the expense of hydro-electric power. Rock painting sites and other sacred sites such as burial grounds are also destroyed as part of these mega-projects.

Guidelines

1. No hydro-electric transmission line, water reservoir, or hydro-generating station or dam is recommended within the study area including land or water alterations that will affect any natural resources, cultural resources, or heritage values of the study area. Any visible structural tower or hydro line adjacent or crossing Paimusk Creek at any point would destroy the pristine natural heritage of the place.

2. All water level fluctuation other than naturally occurring highs and lows due to precipitation should be restricted. Many rock paintings are on the rock face near water level. According to local sources, 1992 had high water levels and some rock paintings were inundated.

URBAN AND RURAL DEVELOPMENT

There are no urban or rural development centers within the Paimusk Creek study area. This increases the value of Paimusk Creek as an indigenous landscape. Basics such as shelter, food, water, and heat become difficult to supply at Paimusk Creek. Topography restricts: sewage system development, sanitary landfill operations, and the delivery of supplies needed for survival without impacting the landscape. Paimusk Creek would also no longer be an indigenous landscape should such development occur.

Guideline

1. Any urban or permanent rural development should be restricted along or near Paimusk Creek.

2. No commercial retail operations, food stands, or cottages allowed within the Paimusk Creek study area.

INDUSTRIES

The fishing industry is suitable to Paimusk Creek but does have impacts upon the fish resource. Commercial and domestic fishing requires a balance. Spawn collection practices at Paimusk Creek are enhanced by the available access. Potential exploitation of Paimusk Creek fish resource requires protection.

Tourism at Molson Lake Lodge impacts Paimusk Creek. Norway House residents employed at Molson Lake Lodge travel Paimusk Creek daily. Periodically tourists from United States use the Paimusk Creek road instead of staying at the lodge. The access road is free advertising to any Manitoba sport fishing enthusiast as well. Monitoring of this access is imperative.

Although Molson Lake Lodge depends on a remote location to promote the type of business that the lodge pursues, Molson Lake is large enough in size to accommodate other uses. These recommended uses are limited and specific. Local input, local management, and enforced regulations are mandatory for the longevity of success for this recommendation.

Guidelines

1. Paimusk Creek as a fish resource must be protected.

2. Conservation considerations to maintain Molson Lake Lodge as a tourism resource and source of employment is encouraged.

3. Expansion of limited, restricted, and specific tourism and recreation are encouraged but should be sited off Paimusk Creek Local guides and monitoring are mandatory.

REMOTE &/OR ARCHAEOLOGICALLLY UNEXPLORED REGIONS

Paimusk Creek study area is remote and archaeologically unexplored. Further study of the rock paintings by qualified professionals should be initiated. No destructive scraping techniques should be allowed for research or any other use. Removal of lichens would also be considered destructive. Localized archaeological and anthropological excavations could occur off the main creek bed.

Anthropological studies are certainly useful in education future generations. Cultural lifestyles need more research in northern environments in Manitoba.

Guideline

1. Paimusk Creek is remote and archaeologically unexplored. This study area is worthy of archaeological exploration that respects minimal impact methods of study.

LAND OWNERSHIP & RIGHTS TO RESOURCES

The integrity of Paimusk Creek depends upon the governing management. Land ownership of the Paimusk Creek study area is primarily Provincial Crown Land. Small parcels of Federal Crown Land occur in the area. Norway House Treaty Indians have the rights to resources. Plans initiated by government departments must respect these rights to resources. Resources are renewable items that, inherently, have no dollar value. Trading resources for money is not an equitable solution.

The Norway House Land Exchange Status Report. is based on information from the Provincial Crown Lands records only. "There are few land use changes since 1986 which have directly affected the proposed land exchange sites. Most sites are within the Repap Forest Management Agreement area but this should have no effect on the exchange sites as provided in Article 3.2 of the Northern Flood Agreement.[Hilderman 1991]".

The Land Exchange Report acknowledges potential Canadian Heritage River status for the Hayes River. The implementation of such status directly affects Paimusk Creek and Molson Lake. Land use changes affected by these land exchange areas may also seriously impact Paimusk Creek study area. Management is largely influenced by ownership. Respect and integrity of the Paimusk Creek site are critical for any management group. Cultural resources are ***irreplaceable***. All people must respect the ***values*** of Paimusk Creek. There is no monetary value high enough to replace Paimusk Creek.

The Norway House community, Norway House Chief and Band Council, Provincial Government representation, and Federal Government representation from the Department of Northern and Indian Affairs are all in a position to be responsible stewards of the Paimusk Creek study area. In the past, this type of management has not proven successful or accountable for native interests.

Guidelines

1. Co-management by the Norway House Band and Manitoba Government giving each party equal representation requires mutual agreement prior to implementing change in land use or implementation of regulations.

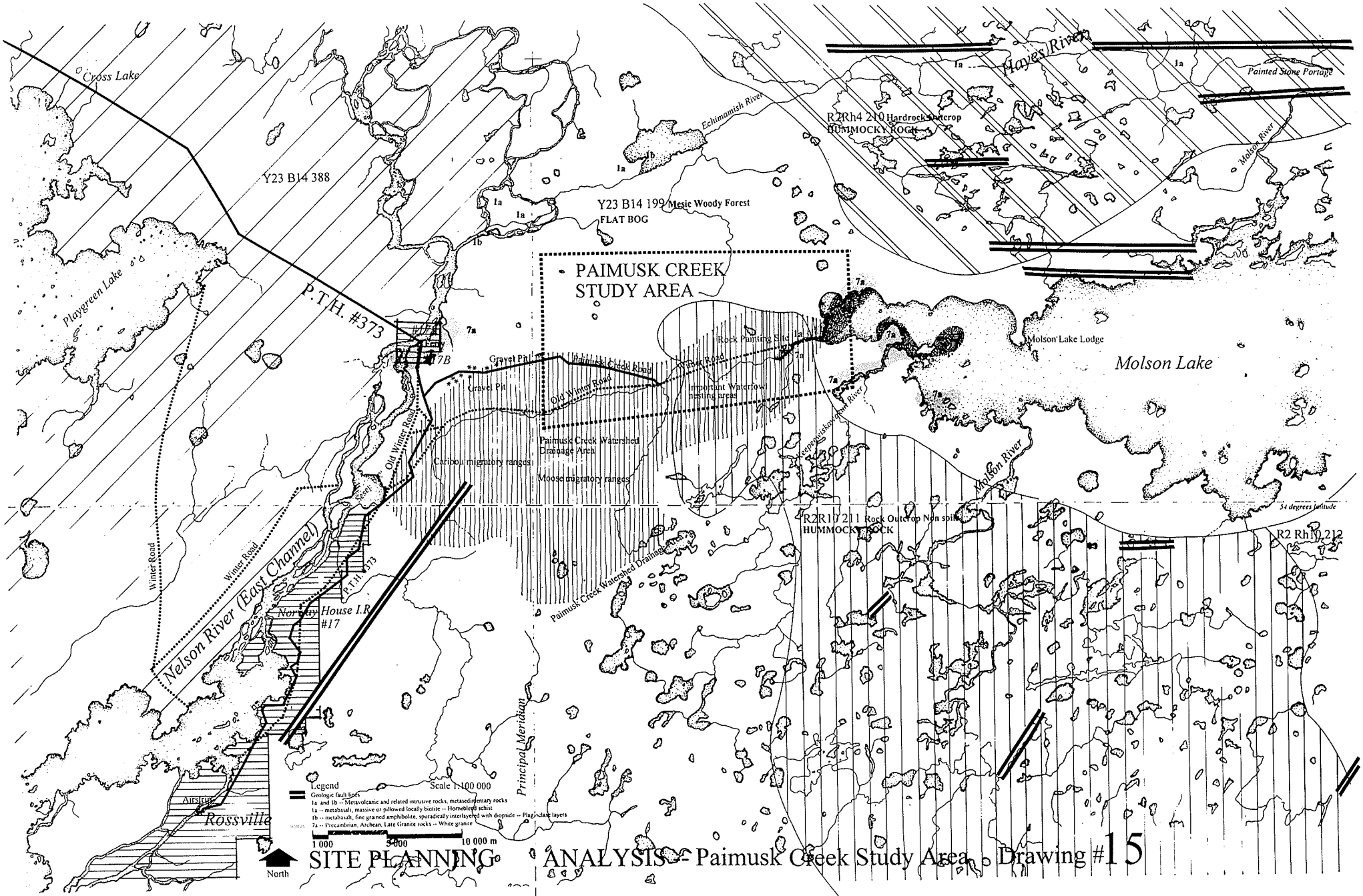
2. Regulations must be enforced or any public access or conflicting land uses will be denied. Protection of the indigenous heritage landscape resources is the emphasis. These resources are the most valuable.

3. Local access is a legal right of the aboriginal people of Norway House and must remain open. However, the protective recommendations are also in the best interest of the native users to promote a positive stewardship of the landscape. Increasing the longevity of the resources is a sustainable approach to resource management.

4. Density of use of Paimusk Creek is also critical. This indigenous landscape requires monitored access to ensure the privilege of use is not abused.

3.23 -- Site analysis of Resource and Heritage Values

"Site planning is the art and science of arranging the uses of portions of land. [Rubenstein 1969]." Further site analysis for natural, cultural, human, and heritage resources is included in ***APPENDIX B --Site Planning Analysis*** *-- Part ii.* Site planning analysis incorporates physical factors, cultural factors and human factors involving landscape use. Human use and integrity of the landscape can co-exist. Sustainable approaches to site planning promote accountability and responsibility for land uses. A site planning analysis plan of the Paimusk Creek study area is included on the attached drawing **Paimusk Creek Study Area - Site Planning Analysis Drawing #15**.



SITE PLANNING ANALYSIS – Paimusk Creek Study Area – Drawing #15

CHAPTER 4

Paimusk Creek Stewardship Plan

On the basis of the findings of this study, general stewardship guidelines and recommended land uses plan for the protection, use, and cultural appreciation of Heritage resources and values within the study area. Local values are a priority. These stewardship plans could be used as *recommendations* or resource material for the Norway House community and the Manitoba Government regardless of the prevailing land ownership conflicts. No active implementation of any plan should occur without local consultation.

Appropriate siting for land use activities can reduce visible and physical impacts upon the landscape. For example, ecosystems relating to permafrost environments are susceptible to erosion due to heat. Human activities such as trampling, breaking, or cutting of vegetation can seriously increase erosion due to heat and alter the natural processes affective these environments.

Two Stewardship Plan options designed to preserve significant Heritage values within the study area, promote sustainable management of all resources identified. Planning includes summer and winter activities.

4.1 – Paimusk Creek Stewardship Plan – option A

Option Plan A is an optimum solution that relocates **access** to Paimusk Creek **(see Drawing #16 Stewardship -- Plan A)**. Present access to Paimusk Creek is in conflict with the maintenance of the human and cultural resources. Walleye fishing during May to June is attractive at Paimusk Creek. Other times, most users of Paimusk Creek are destined for Molson Lake. Increased traffic passing the rock paintings increases the potential for vandalism of the rock paintings. Access for Molson Lake would limit users of Paimusk Creek to those who want to go to the creek for a specific purpose.

Access is encouraged or discouraged through design [Countryside Commission 1970]. Recommended stewardship options taken out of context may contribute to conflicting use of Paimusk Creek. Combined graphic and written suggestions form a cohesive stewardship plan.

Descriptions by Reach

Summer

REACH 1 -- Fire

Numerous Day camps and one filleting station exist in Reach 1. Limited, additional filleting facilities are required. These filleting stations must be indigenous or vernacular in character to blend into the landscape. Natural building materials such as wood from deadfall is suitable for trestle style filleting stations. A smooth cutting surface and litter receptacle for debris is recommended.

A permit must be acquired to use Paimusk Creek. Visitors may be accompanied by guides. Day camps are in designated areas only and are on a rotational basis so vegetation can maintain itself. Only one camp area should be equipped with bathroom facilities and campfire pit at one time.

REACH 2 -- Painted Rock

The aboriginal rock painting site is sacred. No built structure or permanent camps allowed in Reach 2. Controlled access limiting traffic that may be in conflict with the protection and preservation of the rock paintings is required.

Guides instructed about designated areas monitor activities within their group. No overnight camps in this reach.

REACH 3 -- The Gates

The Gates are natural boundaries that enclose the contextual landscape for Painted Rock. Protection of this context is critical to Painted Rock. Without the integrity of the contextual landscape, the site loses considerable meaning.

Day camps occur here but no overnight stays.

REACH 4 -- Big Island

Big Island can physically accommodate larger groups of people. The island is highly visible and a recognizable landmark.

Maximum overnight stays for two to three days allowed.

REACH 5 -- Grass Island

Grass Island is not the most obvious stopping place. However, examples of mosses and lichens are exceptional. There is a natural suitability for hiking at Grass Island that is too motivating to pass up. No clearing of vegetation is required due to natural paths resulting from glaciation.

Activities include nature walks and hiking only.

REACH 6 -- Calm

Existing winter road cuts are visible scars that require restoration efforts. There is only one suitable docking access at Calm. It is appropriate for larger groups and for longer visits.

Maximum overnight stays for five days.

REACH 7 -- The Y

Restoration of the shoreline at the boat landing and rehabilitation of the relocated access road is necessary to deter access. Heavy vegetation planting is required to block access to the former road during winter months. Fences are negative images and should be avoided. Fences imply land ownership values imported from Europe which are conflicting with the traditional cultural values in the study area. Fences also destroy indigenous heritage qualities.

Activities include hiking and nature walks only.

Winter

Winter travel is restricted to traditional dog sled users and skidoos only. They must remain on the main creek pathway **(see Drawing #16 Stewardship Plan Option A:)**.

Molson Lake

North

Educational Camp

Proposed summer and winter road

Paimusk Creek Road

Reach 1 *Fire*

Reach 3

Reach 4
Big Island

The Gates

Painted Rock

Reach 2

Reach 7
The Y

The Calm
Reach 6

Grass Island
Reach 5

Paimusk Creek Watershed Drainage Area

LEGEND

- Day camps
- Overnight camps
- Excellent viewshed
- Protection zone -- *Severely limited human use*
- Protection zone -- *Moderate limited human use*
- Protection zone -- *Limited human use*

Scale 1:56 000

Drawing #16 -- STEWARDSHIP PLAN -- Option A

4.2 – Paimusk Creek Stewardship Plan – option B

Option Plan B is recommended as a temporary solution only **(see Drawing #17 Stewardship Plan -- Option B)**. Plan B maintains the existing location of the access road. This solution incurs a lower initial capital cost, but has increased costs over a long term period when compared to Plan A. Increased costs would include higher risk for damage to cultural resources (all risks cannot be eliminated). Relocating the access road may be required in the future, therefore expenditures for upgrading the existing road would become redundant.

Budget concerns for the relocation of an existing road are significant however short-term planning will benefit the most from this solution. This solution does not eliminate all conflicts at Paimusk Creek and still requires monitoring by people.

Descriptions by Reach

REACH 1 -- Fire
Provide same facilities as Option Plan A. Stewards to monitor access must be stationed here.

REACH 2 -- Painted Rock
Restrict all facilities as in Option Plan A. Nature walks at one location only. No fires allowed on gallery island across Painted Rock.

REACH 3 -- The Gates
Only day camps allowed without overnight access. Stewards to monitor access must be stationed here.

REACH 4 -- Big Island
Only day camps allowed without overnight access.

REACH 5 -- Grass Island
Activities include hiking and nature walks only.

REACH 6 -- Calm
Larger facility to accommodate larger groups for several overnight days.

REACH 7 -- The Y
Improve boat dock facilities with boardwalk and canoe racking area. No commercial venues allowed.

There is a monitored access point prior to arrival at Paimusk Creek. A permit system provides a permanent record of all users of Paimusk Creek. Inform all visitors about restrictions on Paimusk Creek and responsible conduct. Develop camping facilities at exploited gravel pit locations.

Winter
Winter access requires monitoring at the main access point to limit vehicle travel on the creek. Dog sled and skidoo travel are acceptable.

Molson Lake

North

Educational Camp

Paimusk Creek Road

responsible travel on existing Winter Road

Reach 1
Fire

Reach 3
The Gates

Reach 4
Big Island

Painted Rock
Reach 2

Reach 7
The Y
Boat Landing

The Calm
Reach 6

Grass Island
Reach 5

Paimusk Creek Watershed Drainage Area

LEGEND

- Day camps
- Overnight camps
- Excellent viewshed
- Protection zone -- *Severely limited human use*
- Protection zone -- *Moderate limited human use*
- Protection zone -- *Limited human use*

Scale 1:56 000

Drawing # 17 -- STEWARDSHIP PLAN -- Option B

4.3 – Written Stewardship Recommendations

The following written stewardship recommendations are applicable to both Stewardship Plans discussed.

4.31 – Environment and Recreation

Recreation opportunities in the form of **Guided Camps** are most suitable to Paimusk Creek study area for several reasons.

1. Suitable recreation activities are diverse [Department of Landscape Architecture 1975]. The selection of low impact, year round activities are important factors to maintain the integrity of Paimusk Creek. Programs for environmental recreation such as camps can include cultural awareness for all age groups.

2. Traditional survival skills lost due to changing lifestyles must be taught by individuals privileged to have such experiences. "The experience is learned rather than inherited [Graber 1976]." Knowledgeable guides familiar with survival skills and the study area landscape remove fear or anxiety from this type of experience. Guides who teach and enforce the stewardship responsibilities are essential.

3. Removing yourself completely from your environment to be transplanted into an unfamiliar wilderness environment can be challenging and fascinating. "Wilderness may make an 'important contribution to the mental health of those who use it.'" [Elbers 1991].

4.32 – Tourism

There are fewer and fewer naturally occurring landscapes that provide a remote, natural experience. Even fewer places exist with the wealth of heritage resources found at Paimusk Creek. Maintaining an indigenous landscape is far more valuable than building a cottage development with commercial activities.

Designation Types

1. Paimusk Creek was not evaluated as part of The Hayes River Background Study. The inclusion of Paimusk Creek as part of the Hayes River watershed should not be overlooked. Recommendation for a Canadian Heritage River System nomination should be considered.

2. Heritage Landscape designation warrants "specialized" park status. Considerations and limitations for access remain applicable.

3. Due to present conflicts within the Paimusk Creek study area, an immediate Heritage Resource Impact Assessment is recommended.

4.33 – Education and Awareness

1. Litter and pollution are concerns when maintaining the integrity of a pristine water body. Local residents comprise the largest contributing factor to the litter problem. Education in the schools and on a community level for adults is essential -- *immediately*. Natural Resource Officers should be involved in this education process. Responsible actions result from responsible leadership. Education and awareness are key to this success.

2. The potential for vandalism of Painted Rock can be reduced through education and awareness. Appreciation of values is developed through experience. "Any rock art site that is near a road or trail is certain to attract the attention of the vandal [Grant 1983]." The destruction, loss, or tampering with Heritage Resources of Paimusk Creek will result in the loss of Heritage to many Canadians.

3. Awareness of aboriginal rock painting or rock art is needed due to the importance and fragility of these irreplaceable cultural resources. Promoting the significance of archaeological discoveries through media exposure can augment awareness quickly. A videotape available through NCI Communications in Thompson, Manitoba hosts a local elder speaking of the legends of the Paimusk Creek. The videotape was aired once locally in 1989. The videotape is called -- "Legends with Charles Queskekapow". This is a great beginning. Pictures are relatively harmless in terms of site impacts. This videotape should be promoted more aggressively in all schools in Manitoba and communities throughout Canada.

4. Education for future generations is essential to appreciate and enjoy landscapes that resulted through millions of years of time. Indigenous landscapes are resources unto their own. Aesthetic viewing appreciation is one of the most unobtrusive uses that can occur.

4.34 -- Water quality

1. A type of pollution surveillance should be in place. Generally, "high use of pollutants in an area affects it's own area most, and distributes from there."[Acid Rain Foundation Inc. 1985]. Rock art conservation is subject to natural weathering. The weathering due to climatic changes has increased due to man's effect on the environments, such as increased toxic pollutants in the air [Rosenfeld 1988].

2. Permits for water development projects should not be approved for areas surrounding or adjacent Paimusk Creek. Both the physical and sociocultural characteristics of residents are variables that must be considered in water resource allocation [Brown 1973]. The ultimate goal involving public and private planning is to better serve society effectively. Without early planning, the implications can be disastrous **(Appendix J -- Summary and Implications of Water Resource Allocation)**. The values of the people interviewed are negative toward water development projects within their Registered Trapline area.

3. Permanent settlement is not recommended. All known attempts to drill wells to use ground water supplies have been unsuccessful.

4.35 – Sewage treatment and disposal

1. Depending upon the concentrations of human users of Paimusk Creek the open, random sewage practices pose threats to water quality. Evidence suggests that the present number of users on Paimusk Creek warrants bathroom facilities. Designate sites should be allocated for outdoor bathroom facilities.

4.36 – Wildlife – Fish

1. High quality management of fish stocks for sport and commercial fishing must continue to be top priority. The fish resource is precious. Norway House residents depend on Molson Lake and Paimusk Creek for a dependable, fresh fish supply. The Molson Lake Lodge depends upon high quality fish or trophy fishes to promote the wilderness experience. The Department of Fisheries depends on Paimusk Creek's spawn resources for Manitoba sport fishing.

2. If recommended road access changes increase traffic causing negative effects on Paimusk Creek, further fishing restrictions must be applied and enforced.

4.37 – Land Ownership

1. Aboriginal people living a nomadic lifestyle throughout pre-history had little impact on the landscape. In recent history, settlement both rural and urban have changed the landscape forever. These Aboriginal people are significant to the development, preservation, and maintenance of Paimusk Creek. They have been *resident stewards* of the landscape for many years and deserve public recognition.

2. The protection of Paimusk Creek is a remarkable primary concern. All Heritage Landscape Stewardship Plans should include reporting procedures and inspection monitoring at time intervals agreed among all managing partnerships [Countryside Commission 1986].

CHAPTER 5

Concluding Remarks

This study emphasizes the long term values for the resources of the Paimusk Creek study area. Paimusk Creek, a heritage landscape, is priceless to our nation of First People, Manitobans, and Canadians. Stringent protective measures must be planned and enforced to maintain the integrity of Paimusk Creek.

Stewardship Plan Option A is the most beneficial stewardship plan for all people. Relocating access for Paimusk Creek along the highest contour elevations of the Paimusk Creek watershed division is the most economical solution. This plan has the least impacts for Paimusk Creek and applies the most logical methods to arrive at a solution.

Protecting heritage resources are the most critical for Paimusk Creek. Painted Rock and the fish resource are the two most significant resources of Paimusk Creek. Every effort to protect and maintain these resources will prolong the viability of Paimusk Creek as a heritage landscape and productive resource area.

The geologic and geomorphologic features of Paimusk Creek are exceptional heritage resources as well. The restricting width of Paimusk Creek at Reach 3, The Gates, sharply contrasts the adjacent open landscape of Reach 2 -- Painted Rock. White granite intrusions and the massive scale of the landform at Painted Rock are high contrast elements contributing to the aesthetic values of Paimusk Creek.

The recreation potential for educational camps, guided camps, and wilderness experiences are superb. Individual or group activities promoting responsible stewardship is enticing. A mandatory permit system however must be in place to record and/or limit numbers of users of Paimusk Creek.

The significance of Paimusk Creek is important locally, provincially, and nationally. Paimusk Creek is an outstanding example of eight heritage landscape designation types. Recognition for Paimusk Creek is remarkable. Although all heritage landscapes are significant, Paimusk Creek includes a sacred heritage landscape designation. A sacred, major rock painting site at Paimusk Creek has the highest spiritual and sacred significance possible.

Among the mystery, anticipation, and solitude beckoning from this special place in the landscape, Paimusk Creek exemplifies deeper issues which are valuable to all Canadians. Issues such as land ownership and the value of resources affect all people.

> "Landscape is not merely an aesthetic background to life, rather it is the setting that both expresses and conditions cultural attitudes and activities, and significant modifications to landscape are not possible without major changes in social attitudes [Patterson 1989]."

Policies can change social attitudes if the people who enforce policies change as well. Education and awareness initiate change but it takes people to apply these changes throughout their lives for a positive cycle to continue. Landscapes affect social attitudes and social attitudes affect landscapes.

Paimusk Creek is one example of a first class heritage landscape. The precious values of Paimusk Creek are attributed to its indigenous state of preservation. Respecting these heritage values is the most responsible stewardship that any one person can give to Paimusk Creek. In return, Paimusk Creek's value will augment with time.

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APPENDIX A -- Field Forms

Forms used during field investigations recorded and evaluated natural, human, and cultural resources. Flora, aesthetics, soil conditions, and evidence of human use are recorded throughout the length of Paimusk Creek. Weighting scales and category headings used to evaluate the data are discussed for each form. Sample field forms are attached within this Appendix.

A. Landscape Reach -- Heritage Resource Potential

This form rated the natural, human, and cultural resources for their Heritage Resource Potential on a weighted scale:

1 -- poor, 2 -- fair, 3 -- good, 4 -- very good, 5 -- exceptional.

Category headings for the identification of Landscape Reaches include the following:

- **Natural heritage resource potential**
- **Cultural heritage resource potential**
- **Human and Physical heritage resource potential.**

B. Flora Field Sheet

This form included descriptions recording general habitat, vegetation, and soil conditions. Identification of individual plant species occurred where possible. This sheet also included the methodology for selecting each recorded site. This information was useful when recommending future land use potential.

The recording method for plant species was the DAFOR (Dominant, Abundant, Frequent, Occasional, Rare) method. Each transect began at the shoreline to a distance determined on site. On-foot traverses at interval stops within the Paimusk Creek study area were dependent upon accessibility to the shoreline due to the abundant bog or fen vegetation.

Written descriptions included sensory information (smell, mood, quality of light) along with sketches of shoreline profiles. Soil samples were not taken.

C. Landscape Reach -- Identification No.

This form used to record evidence of human resources or land use included impacts, artifacts, and site size. Areas photographed and documented included contextual features. Notable relationships to other features were significant. No planned excavations occurred due to the limitations in archeological excavations of the author.

D. Land-Based Development Categories

The suitability or potential for each Land-based Development Category evaluated against the following weighting scale:

1 -- poor, 2 -- fair, 3 -- good, 4 -- very good, 5 -- exceptional.

All field investigation occurred prior to evaluation of the Land-based Development Categories.

LANDSCAPE REACH · IDENTIFICATION No #.

Human Resources

Date :

Location:

Description of human resource/or use :

Impacts visible →

Artifacts visible →

Size of site & context →

Relationships to other features →
ie: trail to water's edge

sketch:
photograph:

FLORA FIELD SHEET #.

Date :

Location:

Habitat :

Site Description:

Species List	distance interval	DAFOR	Cardinal Direction

Methodology:

Soil Conditions:

LANDSCAPE REACH • EVALUATION #.

No.	Type	Characteristics	Length

EVALUATE FOR: UNIQUENESS
REPRESENTATIVENESS

LAND-BASED DEVELOPMENT CATEGORIES #.

Identification	Land-Based Dev. Type	Evaluation Potential 1 2 3 4 5
	1 Energy	
	2 Transportation systems	
	3 Mineral, Petroleum, Sand, Gravel	
	4 Water development	
	5 Forestry	
	6 Environment & Recreation	
	7 Agric./Hunting & Trapping	
	8 Urban & Rural Dev't	
	9 Industries	
	10 Remote & /or Archaeologically unknown	
	11 Land ownership & right to res.	

APPENDIX B – Site Analysis

Site analysis occurred in two parts. *Part i* includes preliminary site analysis information which was used to determine Landscape Reaches and the suitability for land use activities. This information is not included in the body of text due to the specific nature and degree of detail involved, however is relevant to the site planning process. Categories include climate, geology/geomorphology, soils, flora, fauna, hunting and trapping, and urban and rural development.

Site analysis -- Part ii includes futher analysis of heritage resources once recommended guidelines are established. This analysis is used to determine the Stewardship Plan options.

Site Analysis – Part i

Climate

Norway House operates a climate recording station. The following climatic data in Table 4.0 through Table 9.0 includes mean daily temperatures, precipitation, and wind speed. The data listed are from the Norway House Forestry recording station [Environment Canada 1980].

Table 4.0 -- Mean Daily Temperatures

MEAN DAILY TEMPERATURES												
MONTH	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
	-24.3	-19.6	-12.0	-2.4	7.0	14.1	18.3	17.5	10.0	3.3	-8.7	-18.8

The extreme minimum yearly recorded temperature for Norway House Forestry is -46.7 degrees Celsius in January. The extreme maximum yearly recorded temperature is 33.0 degrees Celsius in July.

Table 5.0 -- Precipitation

PRECIPITATION												
MONTH	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Rainfall	0.0	0.0	0.7	21.5	19.6	46.0	79.4	53.3	47.1	32.1	4.0	0.0
Snowfall	20.1	13.3	32.0	20.6	5.7	0.2	0.0	0.0	0.5	9.7	33.2	27.9

The **least** combined precipitation occurs in February. The **highest** combined precipitation occurs in July. May and October do not show significant precipitation but both months have periods of combined rainfall and snowfall.

Table 6.0 -- Precipitation Days

PRECIPITATION DAYS												
MONTH	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Days with Rain	0	0	1	1	6	9	10	11	10	6	0	0
Days with Snow	9	5	8	4	4	0	0	0	0	3	10	10

The total days with rain are 54 per year. The total days with snow are 53 per year.

The average annual frost-free period is ninety-one days. The mean dates for the last spring frost are June 9 and the first fall frost is September 9.

Table 7.0 -- Mean Wind Speed and Prevailing Direction

MEAN WIND SPEED (KM/H) AND PREVAILING DIRECTION												
MONTH	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
	NW	NW	N	S	NE	SW	NW	NW	NW	NW	NW	NW

The mean wind speed is the most dominant in May and October.

Table 8.0 -- Percentage Frequency for Prevailing Winds

PERCENTAGE FREQUENCY												
	J	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
North		**X**	X		X				X			
Northeast					**X**				X			
East				**X**								
Southeast											**X**	
South				**X**				X		X		
Southwest						X	**X**					
West	**X**											
Northwest	X	X					X	**X**			X	X

The **highest** recorded percentage frequency with a bold "**X**" indicates each prevailing wind direction. High winds noted are comparable in speed.

The Annual Wind Rose shows the **Highest** speed and frequency by direction for Norway House Forestry to be from the northwest direction and south direction. Northwest winds are the most frequent and south winds are the fastest. The **Lowest** speed winds and frequency by direction are from the east, southeast, and west direction.

Molson Lake water area is 34 square km (153 square miles). The average depth of Molson Lake is 11 metres (38' - 0") and maximum recorded depth of 43 metres (140' - 0") [Macdonald, pers. comm; 1992].

Geology/Geomorphology

Geomorphological processes in the area excluding the formation of peat, relate to processes affecting Lake Winnipeg. West winds cause active erosion along the eastern shoreline of Lake Winnipeg, adjacent Norway House Reserve. High steep clay banks near Warren Landing have extensive and active slumping of clay banks. Fine particles of eroded clay suspended in the water produce a muddy, brownish-gray appearance. Sediment material transported with lake currents drift northward and deposit in the Nelson River System. A small pronounced spit bar has developed near Spider Island having sand dunes reaching heights of about 40 feet. These processes are relevant to Paimusk Creek's water quality. *

*The information for the geological/geomorphological history base is from 1975. These sources are prior to development of several hydro-electric projects along the Nelson River System. The entire drainage system has altered in some degree since 1975. These hydro-electric projects have effects on all land, erosion processes, and human activity throughout the region.

Geological analysis

"Outcrop is largely restricted to shorelines with extensive swampy areas inland. The rocks are mainly layered and foliated gneisses of quartz diorite composition with some recent pink and white granite. Minor volcanic rock bands are present along the Nelson and Echimamish rivers and the Molson Lake area. The schistosity generally trends westerly to southwesterly and dips steeply south. Deformation and fault zones are present. [McLeod 1976]"

Soils

1. **Organic** soils are poorly drained. Organic soils occupy about fifty percent of the study area and are denoted by muskeg or bogs. These soils are basically Messisols and Fibrisols, indicative of very poorly drained fen peat. Messisol soils can rise above the water table. Palsa mounds (or peat plateaus) are one example of a Messisol soil. Palsa mounds are raised, peat landforms, containing a frozen core that are scattered throughout the study area.

2. **Gleysols** are wet soils saturated by water for part of each year. Gleysolic soils develop on parent material and include Messisol soils.

3. **Brunisolic** order soils are most often associated with bedrock outcrops. These soils have less than one foot of extremely stony surface material. Other Brunisolic soils develop on calcareous medium textured till and sand deposits. This soil order also develops on acidic Precambrian sandy loam till.

4. **Podzolic** order soils develop on acidic parent material derived from coarse-grained rocks commonly under the influence of a coniferous forest. Podzolic soils are well to imperfectly drained.

5. **Luvisols** order soils are well to imperfectly drained leached soils usually found in fine-textured lacustrine deposits.

Soil conditions noted at interval stops indicate a range from burnt soils recovering from forest fire damage to saturated soils (see Table 9.0).

Table 9.0 -- Soil Conditions

SOIL CONDITIONS					
	Burnt	**Dry**	**Moist**	**Wet**	**Saturated**
REACH 1	X				
REACH 2		X			X
REACH 3 -- *Poor drainage*			X		
REACH 4			X		
REACH 5				X	
REACH 6		X			
REACH 7			X		

Flora

Table 10.0 -- Field Inventory Summary

FIELD INVENTORY SUMMARY						
Species list - REACH	**1**	**2**	**3**	**4**	**5**	**6**
	Fire	**P.rock**	**Gates**	**BigIsland**	**G.island**	**Calm**
Aquatic Plants						
Carex sp. - Wide blade sedge		A				
Lilium sp. - Water lilies			O	O	A	A
Mentha sp. - Mint			O			
Scirpus sp. - Hard stem bullrush			A			
Herbaceous Plants						
Rock outcrop/fire - deadfall	D			D		
Bare ground/leaf litter/pine needle litter		D				D
Achillea Millefolium - Yarrow	O					
Agrostis sp.- grass species			A			R
Campanula - Bluebells	F					
Carex sp. - Sedge		O	O			R
Chalmaedaphne calyculata - Leather leaf				O	A	A
Cladonia sp.- Lichens		D		A	A	
Cornus canadensis - Bunchberry				D	D	F
Equisetum - Common horsetail					O	R
Galium sp L.- Bedstraw					O	R
*Lathyrus sp.*L. - Vetchling			R	O	D	
Ledum groenlandicum - Labrador tea		A		A	A	
Linea borealis -- Pink wintergreen	A		O			
Lilium sp. - Wild tiger lillies			O			
Lychopodium					D	
Pelargodium - Wild geranium	R	R				

Species list - REACH	1 Fire	2 P.rock	3 Gates	4 BigIsland	5 G.island	6 Calm
(con't)						
Rhubus - Wild raspberry					O	
Rhus radicans - Poison ivy						O
Smilacina - False Solomon's Seal			R			O
Sphagnum sp. - Sphagnum moss	D	A	O	D	D	F
Vicia cracca L. - Pea flower				O	O	
Deciduous shrubs						
Alnus - Alder		O	O		F	O
Ribes - Alpine Currant			O			
Rosa - Prairie rose		D			O	A
Deciduous trees						
Betula papyrifera - Paper Birch		O	R		R	R
Larix - Tamarack		F	R	R	A	
Populus tremuloides - Trembling Aspen						R
Salix sp. - Willow			O			R
Coniferous Shrubs						
Juniperus sabina - Savin Juniper						R
Coniferous Trees						
Picea glauca- White Spruce			R			
Picea mariana - Black Spruce		D		D	D	D
Pinus banksiana - Jack Pine			O			F
Pinus sylvestrus - Scotch Pine		F	A	A		A

Wetland Types

Sedge fens are flat areas dominated by Sedges, Dwarf birch and Willow. They may be peat-filled depressions that hold water only during wet seasons. In this case, the fringe edge would include Sedges, Willows, Arrow grass(*Triglochin maritima*), Dwarf birch, Marsh horsetail(*Equisetum palustre*), scattered Black spruce and Tamarack on ridges between depressions.

Marshes are generally found bordering streams or larger lakes. The marshes are alkaline and brachish. Hardstem bulrush(*Scirpus acutus*), Horsetail, Common reed(*Phragmitis communis*) and Sedges are characteristic vegetation. In open water areas Northern water-milfoil(*Myriophyllum exalbescens*), Clasping-leaf or Richardson pondweed(*Potamogeton richardsonii*), Common bladderwort(*Utricularia vulgaris*), and Stonewort(*Chara* spp.) are common species.

Beaver ponds occur frequently along shallow creek basins. Common plants are Spatterdock(*Nuphar variegatum* and Floating-leaf pondweed(*Potamogeton natans*).

Bog lakes are shallow with a characteristic surrounding floating sedge material of Spatterdock, Floating-leaf pondweed and Aquatic moss(*Drepanocladus* sp.) These aquatic plants can survive in the brown stained water which lacks nutrients.

Freshwater lakes are generally clear with low concentrations of dissolved salts. They contain scattered Hardstem bulrush, Floating-leaf pondweed, Water-milfoil, and Narrow-leaved bur reed(*Sparganium angustifolium*).

Fauna

Mammals

Predators inclusive of the study area are the short-tailed weasel (*Mustela cicognani*), lynx (*Lynx canadensis*), and wolf (*Canis*). The redback vole (*Evotomys gapperi*), snowshoe hare (*Lepus americanus*), red squirrel (*Sciurus hudsonicus*), moose (*Alces alces*) and woodland caribou (*Rangifer tarandus*) are among wildlife species of the region.

Ungulates that occur in the Paimusk Creek region include Woodland caribou and moose. The woodland caribou is a dominant species in the study area (96% in map region). Typical habitat consists of peat lands interspersed with rock outcrops. Woodland caribou traverse in areas of ridges, lakes, and streams inclusive. Woodland caribou feed on mosses such as reindeer moss. Suitable moose habitat occurs on clay soils along the shores of lakes and rivers.

Birds

Common bird species in the study area include: bald eagle, common raven, gray jay, ruffed, spruce, and sharp-tailed grouse.

There are few high-quality marshes or wetlands with suitable waterfowl breeding potential within the study area and region. The highest class rating which includes a corridor within the Paimusk Creek study area is Class 4. "Lands in this class have moderate limitations to the production of waterfowl.[Environment Canada 1975]"

Most abundant species of breeding waterfowl in the Norway House and Cross Lake region include:

Lesser Scaup	*Aythya affinis*
Mallard	*Anas platyrhynchos*
Common Goldeneye	*Bucephala clangula*
American Widgeon	*Mareca americana*
Common Merganser	*Mergus merganser*
Ring-necked Duck	*Aythya collaris*
Bufflehead	*Bucephla albeola*
Canada Goose	*Branta canadensis*
Gulls	*Larus spp.*
Sandhill Cranes	*Grus canadensis*
Cormorants	*Phalacrocorax* spp.

Many of these species are not at Paimusk Creek, however the study area may supply passing birds with food, water and shelter. Several types of eagles seen on field investigations were most dominant on Molson Lake, not Paimusk Creek.

Fish

Main fish species common to Paimusk Creek are walleye, sauger, northern pike, whitefish, and perch. Exotic species exist to a lesser extent but without accurate date, there is no formal list for this information.

Agriculture/Hunting and Trapping

Table 11.0 -- Fur Harvest Information

Fur Harvest Information System Record of crop and value of all furs					
YEAR of record	Avg. income/ active trapper $	Value/100 square km $	# of trappers (active)	# of furs	Total value $
1989-90	439.12	151.66	75	1489	32934.00
1988-89	809.72	406.43	109	3668	88259.40
1987-88	904.10	582.86	140	7373	126574.00
1986-87	1522.01	932.15	133	5961	202426.75
1985-86	1029.30	601.96	127	4460	130721.35
1984-85	900.10	654.41	156	8325	142112.50

Settlement

As seen in Table 12.0, over 3,000 people from Norway House Indian Reserve are under the age of 39 years. The importance of elders as educators is significant since there are relatively few people over the age of 69.

Table 12.0 -- Population

POPULATION					
Age & Group years	**Sex**	**Total**	**On Reserve**	**Off Reserve**	**TOTAL**
00-09	M	547	431	116	1058
	F	511	420	91	
10-19	M	421	325	96	830
	F	409	307	102	
20-29	M	409	314	95	831
	F	422	310	112	
30-39	M	255	183	72	559
	F	304	199	105	
40-49	M	183	140	59	364
	F	181	117	63	
50-59	M	110	83	27	227
	F	117	71	46	
60-69	M	55	45	10	111
	F	56	42	14	
70-79	M	33	31	2	77
	F	44	37	7	
80-85+	M	11	8	3	27
	F	16	11	4	
TOTAL	M	2024	1560	463	4084
	F	2060	1514	545	

[Indian Register Population by Age, Sex and Type of Residence by Registry Group, Region 5 -- Manitoba, December 31; 1991.]

APPENDIX B – Site Analysis – Part ii

Site analysis of Resource and Heritage Values

The evaluation of resources and heritage values throughout the Paimusk Creek study evidenced positive findings and negative findings. These findings are the base for site planning concepts. Interpretation of this information generates the forms inclusive of the design process. The following list is a summary of these findings:

Natural Resources

1. Climatic considerations are most important when siting specific activities. Seasonal generalizations can guide activity planning. Wind direction and sun orientation most important at Paimusk Creek include -- Winter -- dominant cold winds NW; Spring winds strongest and SE; Summer winds warm SW; Autumn winds very strong W.
2. There are unique white granite geological findings in Reach 2. Their massive scale and vertical face are significant geomorphologically. Linear erosion patterns typical of a larger area in Manitoba are also unique.
3. Hydrologic features at the rock painting site change from wide open areas to a constricted channel opening at The Gates. This is a unique natural feature that opens or closes the experience of viewing the rock painting site.
4. Drainage is poor and limits Land Use. Notable areas of high ground are based on field investigations and aerial photography.
5. Soil quality is dependent upon the peat content, pH levels, salinity, and permafrost variances. Further research is required. Lagoon development would consider other factors such as drainage, muskeg removal (or not), access, presence of bedrock, etc.
6. Indigenous flora is exclusive to the study area. Exceptional areas of lush mosses and lichens are in Reach 5.
7. Forestry capability is poor. Forestry removal is hazardous to the ecosystems of Paimusk Creek.

8. Limited Wildlife - Waterfowl capability is moderate in Reach 3 and 4. Best waterfowl nesting areas are Reach 5, 6, and 7. Maintaining waterfowl in this study area is critical to other Northern regions.
9. Wildlife -- Ungulates migratory ranges are respected through minimal disruption of their habitat South of Paimusk Creek.
10. Wildlife -- Fishing is an excellent resource that requires monitoring.
11. Aesthetically, this pristine landscape is an anomaly with special qualities within the Boreal Forest transition zone.

Human Resources

1. Transportation systems -- land -- have moderate potential. A need for affordable local access is warranted. The existing location for access is poorly sited.
2. Transportation systems -- air -- existing routes are adequate to accommodate existing needs.
3. Transportation systems -- water route -- is an excellent example of a historic route. Navigability is safe for intermediate level outdoor recreationists. Protection of the waterway is required.
4. Communication systems -- depending upon the use of Paimusk Creek may become a *desire*, but there is no *need* for formal tele-communication systems on the creek. Installation of communication systems that damage other physical elements is considered destructive for this study area.
5. Environment and Recreation has the most diverse options.
6. Agriculture/Hunting and Trapping -- needs to respect existing registered trapline areas. Opportunities for specialized agriculture practices require siting compatible to heritage values and Paimusk Creek integrity.
7. Energy Production and Transmission -- water -- poor potential for hydro-electric power and high potential for damage. This activity is not recommended.
8. Energy Production and Transmission -- wind -- potential in Reach 1 but not recommended with further research. Remote location may not be feasible when compared to the output of wind energy.
9. Energy Production and Transmission -- solar -- has potential but further research is required.

10. Energy Production and Transmission -- nuclear -- is not recommended because this is a hazardous location.
11. Mineral, Petroleum, Sand and Gravel Operations -- further research is required for mineral potential. There are high risks for damage. Sited locations must be compatible with other resources. Reclamation of existing sand and gravel operations is mandatory.
12. Forestry -- potential in Reach 1 has merchantable stands. All other areas have poor yield and high potential for damage during removal of stand. This land use is exceptionally aesthetically damaging to an indigenous heritage landscape.
13. Water Development Projects -- poor potential for energy and high potential for damage (see Appendix K).
14. Urban and Rural Development -- isolated location is poor. The potential to supply essential services are severely limited along with high potential for damage to the landscape.
15. Industries -- fishing industry is excellent and requires stringent monitoring. Tourism potential is excellent but requires stringent monitoring. Tourism also has potential for negative impacts upon Paimusk Creek due to increased access. Only very specific programs could be compatible with Paimusk Creek's maintenance integrity.
16. Remote &/or Archaeologically unexplored regions -- has potential. Any excavations require monitoring. Area sizes should be limited and this use must also comply with other protective restrictions.
17. Land Ownership and Rights to Resources -- are in conflict. Protection from all potential land managers is required.

Cultural Resources

1. Rock painting site GbLh-1 -- is an excellent historic site that requires protection. Potential designation of a historic site is warranted.
2. Traditional spiritual site -- is an excellent natural resource, cultural resource, including heritage values which requires protection.
3. Traditional travel route -- is an excellent heritage resource which requires protection.

Heritage Resources

1. Heritage Landscape Type -- Important native site --*Reach 2*
2. Heritage Landscape Type -- Unique places and spaces -- *Reach 2, 3*
3. Heritage Landscape Type -- Heritage precinct -- may extend further than Paimusk Creek -- *Reach 2, 3*
4. Heritage Landscape Type -- Major natural landscape -- *Reach 1 through 7*
5. Heritage Landscape Type -- Historic route -- *Reach 1 through 7*
6. Heritage Landscape Type -- Landscape related to famous Manitoba citizens -- *Reach 1 through 7*
7. Heritage Landscape Type -- Other significant heritage value -- as an indigenous landscape -- *Reach 1 through 7*
7. Heritage Landscape Type -- Sacred places -- *Reach 2*

Heritage Values

1. Local heritage value is most important to the Norway House residents.
2. Regional heritage value is important because of the cultural resources and heritage values.
3. Provincial heritage value is important because of the geologic features. The white granite outcrop and linear river beds are inclusive of a larger region than just the study area. The scale change within the water route from wide to narrow funnels a large quantity of water through a small channel without a waterfall elevation change.
4. National heritage value is important due to the unique stylistic representation and phenomenal attributes associated with the "Masiniywapiskinikin" site. The numbers of paintings on this one rock outcrop along with the context of the site make this site a major site within the context of the Woodland Region for Aboriginal Rock Art.

Refer to **Paimusk Creek Study - Site Analysis Drawing #15**

APPENDIX C -- Summary of Paimusk Creek Road Conflict 1977-1990
[documentation current to August, 1992]

1977 - An access road to Paimusk Creek is built in the fall season by the Department of Tourism. The road is originally built to access the Paimusk Creek Gravel Pit. Why the road goes directly to the shoreline of the creek is still a mystery. There is some speculation even at this point in time that public pressure may be applied to maintain the road in the future.

1978 - Lyle Fett and Don Larsen own the Molson Lake Lodge. Molson Lake is accessible by waterway from Paimusk Creek. The nature of the fly-in lodge depends on maintaining a remote location. In order to continue to provide the atmosphere and services of a fly-in lodge, the access by vehicle to the creek threatens the viability of the lodge. The road to Paimusk Creek increases access and reduces the cost of getting to Molson Lake.

The Molson Lake Lodge employs approximately twenty-five local residents from Norway House. Economic benefits from expenditures for supplies and food is a valuable to the Norway House Reserve. Annual expenditures for the Molson Lake Lodge for supplies exceed one million dollars. This business is continuing to grow with much success.

A request to ban commercial fishing of sport species and increased control of the commercial whitefish harvest is desired. The increased anglers fishing on Paimusk Creek and Molson Lake has serious impacts on the Molson Lake Lodge and the maintenance of healthy fish stock.

The Norway House Band Council passes a resolution to freeze commercial fishing on Molson Lake. This resolution is not supported by the Norway House fishermen. At this point, the Fisheries Department evaluates the situation and recommends that sport and commercial fishing can co-exist with seasonal allocations. The seasonal allocation for winter commercial fishing, restricted quotas and regulated fishing net mesh size will minimize conflicts.

1979 - The Molson Lake Lodge implements catch and release policies. The main purpose of the Fly-out lodge is to attract American tourists angling for trophy fish. The lodge supports the local community and employs local residents. There is a request to close the road except for winter travel. This request is not implemented.

1981 - Dwayne Strate, a Natural Resource Officer of Norway House thinks that Paimusk Creek may get a Park Status. His thoughts for the best way to protect the area will be to remove the road entirely. This is not likely and would receive much opposition by local residents. He recognizes the need to protect the area. He characterizes the creek as a garbage dump that would be easier to protect if it were under the Provincial Parklands Act. Especially because of the native rock paintings. Efforts to involve the lodge owner to share the profits of developing the road would even out the losses created by the increased access.

His records indicate up to seventeen vehicles with American license plates on one visit to Paimusk Creek. When the road is dry any vehicle type can manoevre the road. Wet conditions however create some difficulty. Large van-like vehicles(recreational vehicles) are no exception.

During enforcement patrols Don Cook estimates over 13,230 pounds of pickerel per 45 days and 35,136 pounds of pike per 45 days are conservative. Up to thirty-six people are at the landing. Groups are camped down stream on various islands or parts of the shoreline. Many people can catch their limit within two hours. The average stay is about one week.

1982 - The Molson Lake Lodge records declining guests over 50% of annual business.

1980 - 720 guests

1982 - 300 guests

The Manitoba Government agrees to not maintain the Paimusk Creek road. By leaving the road unmaintained, it will eventually disintegrate under natural weathering processes.

The local Natural Resource Officer takes it upon himself to upgrade and improve the boat landing. This is intended to aid his patrolling duties of the Paimusk Creek and Molson Lake area. Unaware of causing increased tension to the lodge-owner.

Mr. Fett requests the access to Paimusk Creek be removed. This request is denied. The Norway House band proposes to close to road except to local residents. This request is denied. Access cannot be restricted to some Manitobans due to the "universal access to all waters" policy. Restricting access to the road would need to be enforces for all people. The popularity and increased use of the road will get some opposition.

Department of Fisheries applies special management restrictions to Paimusk Creek and Molson Lake. All angling is closed to non-resident anglers unless you are licenced with an outfitter.

1983 - Molson Lake Lodge is extremely important to the viability of Norway House. Guides, cooks, carpenters, and cleaning staff are required at the lodge. Expenditures for food, supplies, and services boost the economy of Norway House.

Commercial fishing license applications are denied. In the Northern flood Agreement Article 15, Norway House residents have first priority for commercial licensing. Commercial fishing of the creek will not be economical for Norway House.

1984 - The Natural Resources Officer recors over thirty resident vehicles of all types at the Paimusk Creek landing during the first three weekends in June.

1985 - Mr. Fett requests a High Quality Management regulation be enforced. Inhabitation and over fishing of prime locations by non-local residents is a major concern. Limits on fish stock are reduced to 4 walleye, 4 pike, and one lake trout creel.

1988 - Special slot limits for pike includes the closing of all angling for two weeks in May. This is enforced to protect the fish stock during spawning. This restriction is effective in reducing the traffic at Paimusk.

1988 - Support from people who frequently use Paimusk Creek road access request some maintenance of the road. With little effort and expense the road could be returned to a high quality standard. The former landing is destroyed and a dliberate plugging of culverts have increased the erodability of the road. It is very common to have over ten vehicles throughout the spring and summer seasons which warrants the road repairs.

1988 - Mr. Fett requests the omission of the word "outfitter" from the High Quality Management Lake. The fish stock is stable. No other outfitter licences arre issued to Paimusk Creek or Molson Lake in order to protect the Molson Lake Lodge.

1990 - There are still requests to limit access through the use of the Paimusk Creek landing. Despite the road, Mr. Fett's lodge business is increasing steadily with many repeat users (up to 800).

APPENDIX D -- Capability classifications for Forestry, Waterfowl, Recreation, Agriculture Capability Classes [Environment Canada 1973]

D 1.0

Forestry classification

Class 5 - "Lands having severe limitations to the growth of commercial forests."

"Soils are shallow to bedrock, stoney, excessively or poorly drained of coarse or fine texture, may have poor moisture holding capacity and be low in natural fertility. Productivity will usually be from 31 to 50 cubic feet per acre per year."

Class 6 - "Lands having severe limitations to the growth of commercial forests."

"Productivity will usually be from 11 to 30 cubic feet per acre per year."

Class 7 - "lands having severe limitations which preclude the growth of commercial forests."

"Actively eroding or extremely dry soils may also be placed in this class. A large percentage of the land is very poorly drained organic soils. Productivity will usually be less than 10 cubic feet per acre per year."

D. 2.0

Waterfowl capability

Class 4 - "Capability on these lands is moderate. Limitations are due to climate or to characteristics of the land that affect the quality and quantity of habitat. These lands have a high proportion of both temporary and semipermanent shallow marshes poorly interspersed with deep, open waters and poorly developed marsh edges or both."

D. 3.0

Recreation Capability

Class 5 - "Lands in this class have moderately low capability for outdoor recreation."

"L - interesting landform features other than rock formations

O - Land affording opportunity for viewing of upland wildlife

E - Land with vegetation possessing recreational value"

The majority of the Norway House/Cross Lake region is under Class 7.

Class 7 Lands in this class have very "low capability for outdoor recreation (specialized activities or open space)."

sub class M - "frequent small water bodies or continuous streams occuring in upland areas."

D. 4.0

Agriculture

Soil Class 6 - "Soils in this class are capable only of producing perennial forage crops, and improvement practices are not feasible."

"The soils provide some sustained grazing for farm animals, but the limitations are so severe that improvement by use of farm machinery, or the soils may not respond to improvement, or the grazing season may be very short."

Soil Class 7 - "Soils in this class have no capability for arable culture or permanent pasture."

"This class also includes rockland, other non-soil areas, and bodies of water too small to show on the maps."

Soil Class 0 - "Organic soils not placed in capability classes."

APPENDIX E -- Land Use - Mineral, Petroleum, Sand and Gravel Operations

A report, Mineral Potential Inventory Northeast Manitoba part 6, has some recommendations affecting areas adjacent or within the study area that must be addressed. A summary of key points is listed below:

"The fault that transect I.R.#17 at latitude 54degrees 00' and longitude 97degrees 45' west appears to have caused deformation. Favorable prospecting is indicated in this region, especially near the young granite."

"No known gold or base metal deposits within 15km of #17 Reserve. However, substantial nickel deposits occur in Wabowden area about 100 km from Norway House. Other small gold, silver, copper and molybdenum showings occur within 100km of Norway House."

"No claims staked and no mineral exploration projects in region. Potential for discovery of gold or base metals is poor."

The engineer in this report recommends "regional prospecting near Echimamish river for gold is warranted."

APPENDIX F -- Provincial Forest Inventory criteria [Department of Natural Resources 1991]

According to the Provincial Forest Inventory, units of land are organized into management units. The status of land regarding ownership and productivity are broken down into specific categories. Aggregate type, cover type, and site types including landforms, moisture, and indicator plants are used to determine a specific cutting class.

The cutting class is based on size, vigour, state of development and maturity of a stand for harvesting purposes. Rotation ages are assigned to the specific indicator species as part of sustainable approaches to forestry management.

Species composition of a stand is based on the comparison of the tree count(basal area) for each species to the total tree count(basal area of the stand), and expressed rounded to the nearest ten percent. The majority of stand information is derived from photo-interpretation.

APPENDIX G -- Norway House History

Norway House Pre-History

Two sources of written history for the Norway House Indian Reserve which include the Paimusk Creek study area are Norway House A Brief History -Place untouched by human hands and The Canadian Prairies: A History 1984 by Gerald Griesen.

Wigwams and tipis along rivers lakes exemplified a nomadic lifestyle which survived for thousands of years. The Cree tribes lived north and east, while further north and west lived enemies, the Chipewyan. The Assiniboine tribes lived to the south and sometimes the Cree would join them to hunt buffalo. In winter, the Cree moved north and killed moose for food. Sometimes they joined the Assiniboine to Missouri and traded meat and fat for corn and beans. The Ojibway lived to the southeast along the shores of the great lakes. Trading changed the river and lake forever.

Blood, Blackfoot, Mandan and possibly Sarci and others made the journey down to "the bay, they undoubtedly passed by the place that was to become Norway House many years later [Beaumont 1989]". French and English, after much conflict, finally signed treaties with the English. Trading continued with a "Made Beaver"[Beaumont 1989] which was a unit of value like a dollar is today. A gun was purchased with perhaps one hundred Made Beaver.

History

1740 - Sturgeon Cree lived around Lake of the Woods and lived by fishing sturgeon on the lake for many years. With the expansion of the fur trade, they moved west. A trading depot is set up inland 1796, Henry Hallett established a house at Jack River to oppose a North West Company post built there the year before. Located at the upper end of the Hayes River System and twenty miles below the outlet of Lake Winnipeg, this house is strategically placed to dominate the trade in that vicinity. Oxford House was built and completed the chain. This was when the written history of Norway House began, Jack River House [Beaumont 1989]". Gaps and stories are inclusive until the mention of Molson Lake.

1815 - James Sutherland mentioned two outposts, one at Jack Lake and the other at Winipegoosish(Molson Lake). Fish was the main source of food and could be found abundant during April and May spawning season. Ducks and geese provided a change of diet in the spring and fall but the local hunters used up valuable ammunition and diverted them from trapping. Eggs were found on islands that dotted the lake. Winter roads were built to shorten distances.

Norway House 1

1814 - Norwegians were hired to clear 50-60 acres of land to plant potatoes. Then they were to move to the site of the second depot at White or Robinson falls to clear more land and plant it to rye. Many problems occurred and Norway House was named about 1815. Many people eventually moved to the Red River Settlement.

1819-1820 - Captain John Franklin made two visits to Norway House.This visit in November Papahnahkise arrived to inform the factor that his father-in-law, the Porcupine was near death. Whooping cough and dysentery and measles were rampant. As many as half the Plains Assiniboine and perhaps as many Plains Cree were reported to have died from the combined effects of the disease.

1821 - Agriculture was important. Kitchen garden with vegetables like radish, cucumber, turnip, carrot, onion, cress, parsley, and turnip-radish(horseradish no doubt). The south Garden had barley, wheat, potatoes. Cucumbers and melons planted in the hot bed and cabbage and lettuce grown in boxes. Pines and raspberries were planted in the south garden. Gooseberries and black currents attempted on a trial basis. Experimentation.

1823 - Dams built on "Eats-a-ma-miss" River to enable boats loaded with sixty or seventy pieces to pass with ease."Each a way Mah miss" is another spelling of this river.

1824 - Governor Simpson divided staff equally between Norway House and Berens River.
Norway House continued to serve as a depot for the Athabasca and Mackenzie River Outfits and Red River but its trade role became insignificant with the transfer of Berens River to the Winnipeg district.

1826 - Severe storms undermined the shoreline and John MacLeod wrote that portions of the garden had been completely washed away. Simpson ordered the post be moved to higher ground.

Norway House 2
1831 - Donald Ross replaced MacLeod as chief trader and remained for twenty years. Fisheries on the lake within one to four miles and sufficient timber for house and boat buildings.

1830- 1840 - Norway house increasingly important as the depot expanded. Most of the original buildings had been replaced. Unless schools were established at the posts, they would leave the Territories in increasing numbers. No longer able to control the forces around them, they had suffered much from poverty, disease, and starvation. The old ways had not met their needs, they were ready for change and a better life as promised in the new religions at Red River. People inquiring about this new Great spirit.

1840's - James Evans developed Cree syllabics so people could read the scriptures in their own language. Developed a mission and gave the Cree a written language. 1955 his ashes were returned to Norway House where they lie near the Church that bears his name.

1850's - Methodist and Anglican missions were there. Roman Catholic requests to found mission were earlier denied by Governor Simpson. Henry Steinhauer, orphaned Ojibway boy raised by famous missionary William Case. His two sons became well known Methodist ministers in Western Canada and a descendant became the first native Lieutenant Governor of Alberta.

1855 - Appointed to resume work begun in Alberta by Robert Rundle. Many accomplishments and later died the same weekend as his friend.

1860's - Decline had set in.

1870's - The era was over. Company decided to bring in supplies for the inland trade by Winnipeg instead of York Factory and shifted from York boats to steam navigation. This decision put 130-140 men out of work at Norway House. Commercial fishing started on Lake Winnipeg but was already under control of others.

1885 - The Hudson's Bay Company was turned over to Canada. It was not enough to be born in Norway House, they had to be living there in 1885 in order to receive scrip. They were never in the right place at the right time.

1908 - 227 names added to Treaty pay lists and remainder absorbed into mixed blood population and given the chance to apply for scrip. Moving to southern acreages to farm was not valuable to these people from isolated northern posts. They sold their scrip for much less than it was worth and buyers took the certificates south and sold them again at huge profits to settlers going into Saskatchewan and Alberta. Injustices created have yet to be redressed.

The creation of two separate peoples by decree, treaty or non-treaty, is a sad consequence that weakened their voice.

History

Norway House is established in 1826 being located on the fur trade route to York Factory on Hudson Bay. A mission is erected in Rossville in 1842. Norway House is the center for the Council of Northern Development of Rupertsland. Here, the Swampy Cree and Saulteaux Indians ceded their rights to 100,000 square miles of land in 1875.

1975 - Livelihood is based on commercial fishing, trapping, and government services such as schools, hospitals, and construction. Local residents sell handicrafts. Freight is brought in by boat and barge in summer and by tractor train in winter. Freight and transportation by air is provided throughout the year.

Norway House Indian Reserve No.17 is located approximately 281 air miles or 450 air kilometres north of Winnipeg at 54 degrees latitude and 97degrees 50' longitude. The Reserve is linear and covers 7,554 hectares(18,659 acres) with approximately 32 km(20 miles) of river frontage. An air strip is 5,000 feet(1,525 m) and serviced by Perimeter Airlines.

An all weather road is accessible from P.T.H.#391. During freeze-up and break-up neither the winter road nor the ferry are in operation(usually 2-3 weeks). Dock facilities are available in the adjacent off-Reserve community equipped to handle boats, barges and float planes.

APPENDIX H -- Native Imagery

A beaver is a rain maker. Owl feathers convey night vision. Zig-zag lightning streaks on a shield represent destructive power. The mythical thunderbird is associated with the ferocious powers of thunder and lightning. the smaller birds are swift fliers or companions of this thunderbird. The eagle and owl feathers impart courage, speed and night sight. red paint on the cover symbolizes life force, while the black background represents victory. Seven circles may coincide with Pleiades constellation with the spring and fall growing seasons. [McCoy 1984]

APPENDIX I -- Interview Notes

1. Norway House Band Members

Charles Queskekapow - elder from Norway House
William Simpson - elder from Norway House
Sandy Carmody - senior Councillor of Norway House Band Office
Hubert Folster - Councillor and representative for Northern Flood Agreement negotiations

Land Use - Historically to present

Traditional uses of Paimusk Creek include hunting, trapping, and fishing. The creek has been used as a travel route all year round being travelled by motorized vehicles in winter including trucks and ski-doos, as well as motorized boat or canoes in summer months. Historically, Paimusk Creek was also used as a dog sled route.

Although trapping and hunting occurs year round, at present there are no **permanent** residents of Paimusk Creek or Molson Lake; however, trapping cabins or temporary camps are used.

Natural Resources

Molson Lake is the resource area for Norway House residents. Without a dependable resource area, the residents would be forced to purchase all food supplies from Southern markets or alternative sources. There is a high quality mature fish stock in Molson Lake and Paimusk Creek when compared to the younger fish stocks on the Nelson River. The freshness of taste and healthy walleye, white fish, and trout are maintained at Molson Lake. Unpolluted waters are most likely on the Hayes River System due to low density settlements when compared to other Northern River Systems such as the Nelson River.

Forest fires are unpredictable. Some cabins are lost to fire and must be rebuilt or relocated until the forest regenerates sufficient new growth to support plant and animal life once again.

Cultural Resources

Masiniywapiskinikan means "rock painting". There are brilliant red ochre rock paintings on Paimusk Creek. The stories and legends of the rock paintings have been passed down through generations. The specific interpretation of the paintings will not be addressed due to the sacred nature of some legends and the inability to speak with an original artist of the paintings. The stories themselves may be interpreted several ways but as told to me by an elder, the paintings teach you lessons about life and nature for both the future and the present. Anyone interested in learning more about these paintings would be wise to experience the creek first hand and talk to local elders.

The Muskataba refers to the "Y" at Paimusk Creek. Muskataba means 'walk boat in'. When there is not enough water in the upper reach of the creek, it would be necessary to walk through the muskeg while dragging your boat. This is similar to the dragging of a toboggan which is the meaning of the latter portion of the word.

2. Interview - Dennis and Kay Allen

Dennis Allen was a Natural Resource Officer (NRO) of the Norway House Station for approximately thirty-five years. His familiarity with the landscape in the Northern Manitoba and Northern Ontario region and interest in rock painting sites provided a mini-library resource of archeological data.

Almost invariably, the orientation of rock painting sites are exposed to the South or Southeast. Mr. Allen could recall only several examples of a North or West facing rock painting site. The state of preservation of many rock paintings is faint to obscure. The paintings on Paimusk Creek however rank among the brightest examples.

APPENDIX J -- Suitability for Heritage Landscape designation

Major natural landscape

"Major natural landscapes are the first order of landscape in which humanity evolved. Substantial portions of the surface of our province should be preserved as a priceless part of our heritage. [Patterson 1989]"

Paimusk Creek has scenic and raw landscapes that are in excellent preservation of a first order landscape. Indigenous qualities are heritage resources.

- **local, provincial, national significance**

Historic route

"Historic routes are a reminder of the tremendous feats of movement and trasportation which led to settlement in British Columbia. [Patterson 1989]"

Historic routes have a similar role in Manitoba history. The linkage of Paimusk Creek to the Hayes River is of exceptional importance to Canadians. An out-of-the-way spiritual retreat with a reliable fish source plays a major role in Native culture.

- **local, provincial, national significance**

Landscape related to famous Manitoba citizens

"Landscapes related to famous British Columbia citizens are important because they allow us to experience the landscape as a moving and influential factor in the lives of those citizens. [Patterson 1989]"

Although fragmented documentation exists for the Paimusk Creek region, there are undoubtedly significant known and unknown Manitoba citizens, and their decendants whom deserve special recognition. The Norway House history names several important Native people who are leaders among the community, both locally and nationally [Beaumont 1898]. Many European explorers travelling the Hayes River potentially stopped at Paimusk Creek as well.

- **local, provincial, national significance**

Other significant heritage value -- as an Indigenous Heritage Landscape.

The indigenous aspects of a landscape are gaining awareness. Joan Elbers Changing Wilderness Values, 1930 - 1990: An Annotated Bibliography is an excellent reference source [Elbers 1991]. The Wilderness Act signed by Lyndon B. Johnson in 1964 mandates land to be set aside, not as a game or hunting preserve or for spectacular scenery, but to be left alone. In the words of the Act, "the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." [Elbers 1991].

- **local, provincial, national significance**

Unique places and spaces
"There are many, one-of-a-kind places to be found throughout the province that stand out in our memories as offering or representing a unique component of our society. [Patterson 1989]"

Paimusk Creek is truly valuable as a Unique place and space. The dramatic landforms, striking rock paintings, and serene calmness set the stage for experiences beyond the physical landscape.

"In these hunter-gatherer societies wilderness -- the unmanipulated and unmanaged natural environment -- is identical with good land supportive of human life. All the envrionment partakes of the sacred although special places concentrate spiritual power." [Snyder 1984].

- **local, provincial, national significance**

Heritage precinct

"Heritage precincts are areas where a large number of heritage features, by virtue of their proximity to one another, create a more complete sense of history than would be otherwise possible with an individual heritage project. [Patterson 1989]"

The Painted Stone portage and the Painted Rock of Paimusk Creek have similar values. These two sacred places along the Hayes River could create a Heritage Precinct due to their proximity and orientation in the Upper Hayes River Basin. These two sites concentrate spiritual power. Many of the same travelers who used Painted Stone also used Paimusk Creek. The association of the same people places similar value upon Paimusk Creek. Heritage linkages are worthy considerations.

- **local, provincial, national significance**

Important native site

"Important native sites are the first villages and places inhabited by peoples of this land and constitute the first and most important of our human related heritage landscapes. [Patterson 1989]"

As an important native site, Paimusk Creek ranks among the most important sites in Manitoba and possibly Canada wide. The sacred nature of the rock painting site is priceless. Paimusk Creek evokes a strong spirit of place.

- **local, provincial, national significance**

Sacred places

"Sacred places are those which occupy a special meaning in the emotional spiritual lives of our citizens and, as such, warrant preservation. [Patterson 1989]"

Rituals, ceremony, and tradition are synonymous with Paimusk Creek. The aging timelessness of Paimusk Creek instills hope and humbles the soul. "Although the meaning and function of rock art in North America can only be surmised,... continuing use of sites as offering places all point to an interpretation of rock painting as religious tradition [Molyneaux; Archeaology paper #2]."

Sacred landscape information such as the forms of rock formations may contribute to the selection of a particular site [Molyneaux; Archeaology paper #2]. The choice of location for convenient rock surface and unusual qualities of the site are usually evident.

> "Sacred power is apprehensible by the human mind through the medium of concrete objects, events, persons and places [Graber 1976]."
>
> "There is an underlying unity to the varied and apparently conflicting arguments in favor of wilderness preservation because wilderness has become a contemporary form of sacred space, valued as a symbol of geopiety and as a focus for religious feeling [Graber 1976]."
>
> "Nature itself is not worshiped, but the Power that reveals itself in nature [Graber 1976]."
>
> "Localities are like instants in time: specific, independent, unique [Graber 1976]."
>
> "The Roman *Genii loci* were examples of geopiety, with human worship directed toward the spirit or character of a place [Graber 1976]."

The rock paintings of the Paimusk Creek site are in excellent condition when compared to other documented pictograph sites in Manitoba, reinforcing the importance of Paimusk Creek as an indigenous heritage landscape. Site features characterized by Dr. Jack Steinbring, refer to the Paimusk Creek site as an example of a Cathedral effect. This descriptive term refers to a sacred site with exceptional spiritual qualities and significance.

- **local, provincial, national significance**

APPENDIX K -- Summary and Implications of Water Resource Allocation

- Very few people get to vote on water resource policies.
- Those in authority do not permit appropriate development of opposition until too late for opposition to be effective.
- Legal channels and media are inadequate; people only realize when effects occur; then it is physically or economically impossible to reverse.
- People believe only a very specific category of people benefit.
- Decision-making changes -- First an engineering problem; secondly an economic cost-benefit problem; thirdly a political expediency timing for funding problem.
- Understanding the public good -- fruitful, then it becomes a leadership and cost benefit problem.
- Original issue is lost and economics are seen differently depending on who gains.
- Local administration unit are directors but not government officials.
- Name of administration unit often misleading.

[Brown 1973]

APPENDIX L -- Heritage Permit

he Heritage Resources Act (Subsection 14(2) and Sections 52 and 53)

Manitoba
Culture, Heritage
and Citizenship

Heritage Permit No A33-92

FORM 11

URSUANT to Section/~~Subsection~~ 53 of *The Heritage Resources Act:*

Name: Louise Thevenot
Address:

(hereinafter referred to as "the Permittee"),

s hereby granted permission to:

urvey the Paimusk Creek area to identify past and present land uses and Heritage esources, in order to determine the significance of Paimusk Creek as a Heritage andscape and to designing a Stewardship Plan accounting for human, cultural and atural resources as an integral part of the local community's values of land use

uring the period:

ay 15 to August 31, 1992

his permit is issued subject to the following conditions:

1) That the information provided in the application for this permit dated the 7th day of May 19 92, is true in substance and in fact;

2) That the Permittee shall comply with all the provisions of *The Heritage Resources Act* and any regulations or orders thereunder; PLEASE NOTE ATTACHMENT RE CUSTODY AND OWNERSHIP OF HERITAGE OBJECTS.

3) That the Permittee shall provide to the Minister a written report or reports with respect to the Permittee's activities pursuant to this permit, the form and content of which shall be satisfactory to the Minister and which shall be provided on the following dates:
Interim Report March 31, 1993
Final Report/Thesis March 31, 1994

4) That this permit is not transferable;

5) This permit may be revoked by the Minister where, in the opinion of the Minister, there has been a breach of any of the terms or conditions herein or of any provision of *The Heritage Resources Act* or any regulations thereunder;

6) Special Conditions:

a) The permittee must keep the Historic Resources Branch informed of new sites and major finds;

b) No excavations will be undertaken;

c) The permittee must obtain permission from any land owner, lessee or regulatory authority, as applicable, concerning access to any property to be searched;

d) That neither the Government of Manitoba nor the party issuing this permit be liable for any damages resulting from any activities carried out pursuant to this permit, and the Permittee specifically agrees, in consideration for receiving this permit, to indemnify and hold harmless the Minister and the Government, against any and all actions, liens, demands, loss, liability, cost, damage and expense including, without limitation, reasonable legal fees, which the Government, Minister or any employee or official of the Government may suffer or incur by reason of any of the activities pursuant to or related to this permit.

ated at the City of Winnipeg, in Manitoba , this 19th day of June 1992.

Minister of Culture, Heritage and Citizenship

G-13519 (English)

Manitoba
Culture, Heritage
and Recreation

PROVISIONS REGARDING CUSTODY AND OWNERSHIP OF HERITAGE OBJECTS UNDER THE HERITAGE RESOURCES ACT (SECTION 44)

1. *The Heritage Resources Act* separates the issues of ownership and custody of heritage objects. Under the *Act*, archaeological, palaeontological, and natural heritage objects found after May 12, 1986 belong to the Province. Crown ownership ensures that the province has the appropriate authority and ability to preserve and protect such objects for the benifit of all Manitobans.

2. But the *Act* also explicitly provides for the retension of newly-found archaeological, palaeontological, or natural history objects by private individuals.

3. Where an object is found on Crown or municipal land, custody is retained by the finder, except in specified areas (such as parks and special preserves).

4. **Where an object is found on private land, custody is retained by the landowner. This means that if someone other than the landowner -- for example an amateur or professional archaeologist -- is the finder of an object on private land, he/she may acquire custody of the object, but only with the approval of the landowner.**

5. The finder or owner of a heritage object can give custody of the object to the Crown, if he or she so wishes.

6. Custody of heritage objects can be transferred to any other persons at any time and, upon the death of the custodian, will pass to his/her heirs, executors, or administrators, who will then hold them in trust for the Crown.

Further information is provided in the publication, *A Precious Resource for All Manitobans: Heritage Objects*, available from the Historic Resources Branch, Manitoba Culture, Heritage and Recreation, 3rd. floor, 177 Lombard Avenue, Winnipeg, Manitoba, R3B 0W5.

Personal Communication List

Allen, Dennis	Norway House Resource Officer -- retired
Allen, Kay	Norway House resident
Ahenakew, Prof.	University of Manitoba -- Department of Native Studies
Badertscher, Patricia	Manitoba Department of Culture, Heritage, Recreation and Historic Resources -- Archeaologist
Carmody, Sandy	Norway House Band Office -- Senior Councillor
Connell, Glenn	Assembly of Manitoba Chiefs, assistant to Phil Fontaine
Corkery, M.Timothy	Manitoba Department of Energy and Mines
Curtis, Trevor	Manitoba Department of Highways
Deneer, Paul	Norway House Resource Officer
DIAND	Department of Indian and Northern Development
Dixon, Bonnie	Norway House Public Library
Egin, Morton	Department of Natural Resources -- Environment Planning and Management - Trapline information
Feir, Brian	Environment Canada
Fett, Lyle	owner of Molson Lake Lodge
Gaboury, Mark	Manitoba Department of Natural Resources, Fisheries Branch
Gallo, Jim	DIAND
Grier, Sylvia	CBC -- Thompson, Manitoba
Hernandez, Helios	Manitoba Department of Natural Resources, Parks Branch
Hickson, Sharon	Federal Heritage Parks -- Federal Government of Canada
Hunt, Captain Ian	National Defense -- Federal Government of Canada
Jones, Bob	Manitoba Department of Natural Resources, Wildlife -- Waterfowl
Johnson, Karen	Botanist, Museum of Man and Nature
Leary, Kathleen	Norway House Public Library
Lloyd, Graham	DIAND -- Land Titles
Macdonald, Don	Manitoba Department of Natural Resources, Fisheries Branch -- Thompson, Fisheries biologist
McCullough, Greg	Freshwater Institute -- Geomorphologist
McGillis, Mr.	Land Resource Research Centre, University of Manitoba -- Agriculture Building
McLeod, Sheldon	Canadian Council of Ministers of the Environment -- Director, Strategic Planning
Mitchell, Anita	Manitoba Hydro -- Public Affairs
Osiowy, Bernie	Manitoba Hydro
Paupanekis, Ken	Frontier School Division -- Education Department
Petch, Virginia	Archaeologist
Queskekapow, Charles	Norway House elder
Rosenberg, Dave	Federal -- Freshwater Institute

Ross, Allan	Chief for Norway House
Schroeder, Roger	Manitoba Department of Natural Resources, Parks Branch
Simpson, William	Norway House resident
Smith, Trevor	Manitoba Department of Natural Resources, Fisheries Branch -- Grand Rapids
Steinbring, Dr. Jack	University of Winnipeg -- Department of Anthropology
Swanson, Gary	Manitoba Department of Natural Resources, Fisheries Branch
Thomas, Jim	Hilderman Witty Crosby Hanna Landscape Architects
Wagner, Murray	TARR -- Treaties and Aboriginal Rights Research
Walker, Dave	Water Resources
Walker, Peter	Manitoba Department of Culture, Heritage, Recreation and Historic Resources
Ward, Mike	Norway House Resource Officer
Watkins, Bill	Manitoba Department of Natural Resources
Wilson, Rick -	Manitoba Department of Natural Resources, Parks Branch - Canadian Heritage Rivers System - Project Manager Manitoba

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