EAST WABIGOON RIVER CONSERVATION RESERVE C2316

STATEMENT OF CONSERVATION INTEREST





JUNE, 2003

DRYDEN DISTRICT MINISTRY OF NATURAL RESOURCES

Approval Statement

We are pleased to approve this Statement of Conservation Interest for the East Wabigoon River Conservation Reserve (C2316).

This Statement of Conservation Interest will provide guidance for the management of the Conservation Reserve and form the basis for ongoing monitoring of activities. More detailed direction is not anticipated at this time. Should significant facility development be considered or complex issues arise requiring additional studies, more defined management direction, or special protection measures, a more detailed Conservation Reserve Management Plan will be prepared with full public consultation.

The East Wabigoon River Conservation Reserve will be managed under the jurisdiction of the Wabigoon Area Supervisor, Dryden District, Ministry of Natural Resources.

R.G. McColm Dryden District Manager

Ministry of Natural Resources

Charlie Lauer Regional Director Northwest Region

Ministry of Natural Resources

30/06/03

Date

Date

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1.0 Background Information

The purpose of this document is to identify and document the natural heritage values of the East Wabigoon River Conservation Reserve, the activities that occur there and, through a

set of management guidelines, lay out the activities that will and will not be permitted. For more information regarding this Statement of Conservation Interest (SCI) please refer to the "Conservation Reserve Policy and Procedure PL3.03.05".

Table 1.1: Background information for the East Wabigoon River Conservation Reserve.

Name	East Wabigoon River Conservation Reserve
Name	Č .
	(C2316)
Site Region / Site District	4S-4
OMNR Administrative	Northwest Region / Dryden District /
Region / District / Area	Wabigoon Area, Wabigoon Forest
Total Area (ha)	1, 299
Regulation Date	Anticipated for 2003
First Nations	Wabigoon Lake Ojibway Nation, Aboriginal People of
	Wabigoon, Eagle Lake First Nation
OBM	15530054900, 15540054900, 155300548000,
	15540054800
Lat. / Long.	49' 33 / 92' 26
Basemap	53549, 54549, 53548, 54548
General Location	The reserve is located approximately 35 km southeast
Description	from the City of Dryden (45 km by road). It
	encompasses the section of the Wabigoon River and
	surrounding wetland starting at the east end of the
	Wabigoon First Nation's Reserve, just off of Dinorwic
	Lake. It ends approximately 15 km upstream from
	there.
Access	A boat launch to get into the river exists
	approximately 4 km down on the west side of Snake
	Bay Rd., off of Hwy 17.

Table 1.2: Representation Targets – A summary of earth science, life science, cultural resource values and present or possible recreational opportunities.

	sent or possible recreational opportunities.
Life Science Representation	Upland Forest/Forested Dunes: <u>Mixed Forest</u> : balsam fir, white spruce, trembling aspen <u>Conifer Forest</u> : black spruce, tamarack, jack pine, cedar
	Wetland: Open-water Marshes: water milfoil Floating-leaved Marshes: yellow water lily, floating-leaved burreed, water smartweed, floating-leaved pondweed Emergent Marshes: wild rice, common cattail, arrowheads, cattails, bulrushes, water hemlock Meadow Marshes: lake, beaked and other robust sedges, sweet gale, calla lily, marsh cinquefoil, swamp candles Low shrub fens: Sphagnum moss, marsh horsetail, bog rosemary Conifer swamps: tamarack, black spruce, Labrador tea, dwarf raspbery, three-leaved false Solomon's seal Thicket swamp: speckled alder, high bush cranberry, red osier dogwood, long beech fern, meadow rue, lake sedge
	Animal Species: Pied-billed grebe, double-crested cormorant, wood duck, common goldeneye, northern harrier, broadwinged hawk, black-capped chickadee, red-breasted nuthatch, veery, white-throated sparrow, red squirrel, beaver, muskrat
Earth Science Representation	Bedrock: (Archean rocks) Portions of the greenstone belt, altered basalt ,volcanic rock, felsic, siliceous rock which is green in colour
	Surficial Geology: Downstream from road – glaciolacustrine material (bedded sands and gravel with coarse boulder component) of Pleistocene age
	Upstream - Recent organic, alluvial deposits
Cultural Value Representation	No known cultural values exist within the reserve.
Recreational Opportunities	Opportunity exists for boating, canoeing, fishing, hunting, gathering/collecting wild rice and other nature activities.

Table 1.3: Survey Information – Overview of inventories completed, their level of detail and any inventories that are needed.

Survey Level	Life Science	Earth Science	Cultural	Recreational
	I a .			
Reconnaissance	- Life Science	- Earth Science	- not required	- Recreation
	Checklist, 2002	Checklist, 2002		Checklist, 2002
Detailed	- not required	- not required	- not required	- not required

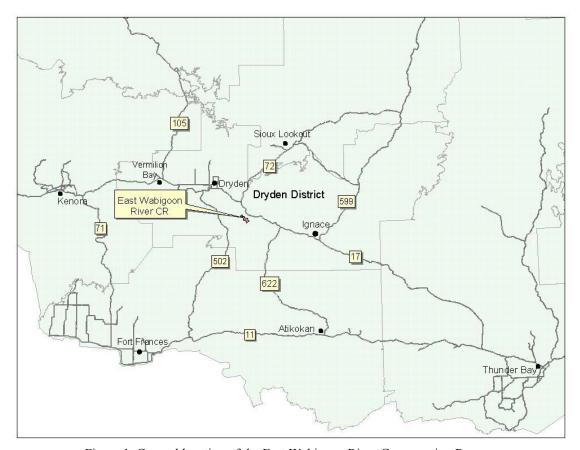


Figure 1: General location of the East Wabigoon River Conservation Reserve.

2.0 Values to be Protected

This section provides a description of the key natural heritage values on the site,

their condition relative to past resource and management activities, and their sensitivity to future land use and management activities.

Table 2.1: Values identified on the East Wabigoon River Conservation Reserve.

Table 2.1: values identified of	n the East Wadigoon River Conservation Reserve.
Life Science	 wetland considered provincially significant wild rice is ecologically and culturally significant bald eagle nest just outside of reserve giant blue hyssop found – generally a western prairie species old-growth black spruce
Earth Science	- altered mafic volcanic rock, shallow water glaciolacustrine deposits, the clay banks along the river and Recent alluvial deposits in the levees are considered locally significant
Cultural	- none determined
Aboriginal	- wild rice harvest
Tourism	- 1 commercial boat cache
Recreational Fishing	Permitted only on the east side of the bridge as a fish sanctuary exists on the west side.
Recreational Hunting	Permitted; WMU #9A
Trapping	DR04N02201, DR04T02301 – both are in use
Bear Management Area	DR-9A-017, DR-9A-018
Bait Harvesting	495922
Commercial Fishing	N/A

2.2 Values to be Protected

The intent of this SCI is to protect the following values by establishing management guidelines for existing and potential uses in this area given the level of past disturbance and the nature of the existing features.

2.2.1 Forest Values

Thirty-four hectares within the reserve contain 113-year-old intermediate black spruce, which meet the criteria for old growth. (Foster et al, 2002)

2.2.2 Biological Values

The reserve has a good diversity of open wetlands. The wetlands have a probable ranking of provincially significance but have not been officially evaluated. The wild rice is considered to have

ecological and cultural significance, being used as food for waterfowl as well as people. A fish sanctuary exists east of the bridge on Snake Bay Road from April 1 to May 31. Giant blue hyssop, a western prairie species belonging to the mint family was found along a disturbed south-facing bank on the Wabigoon River.

(Foster et al, 2002)

2.2.3 Landform Values

Due to erosion, the altered mafic volcanic rock underlying the reserve rarely appears at the surface. It can, however, be seen within this reserve in small outcrops. Shallow water glaciolacustrine deposits in the form of bedded sand and gravel with course boulders were found in the gravel pit within the reserve.



Figure 2: Example of thicket swamp found on reserve.

Deep water lacustrine deposits in the form of clay banks run along the Wabigoon River. Recent Age alluvial (organic) deposits can be found along the levees of the Wabigoon River. The aforementioned were considered to be of local significance. (Blackburn, 2002)

2.2.4 Recreational Values

The existing canoe route, river, edible aquatic foods, wetland vegetation, mixed coniferous/deciduous forest and wildlife are considered to be recreation features contained within this reserve. Present and potential recreational activities include boating, canoeing, fishing, hunting, trapping, collecting/gathering and nature activities. Feature significance was considered to be low and none of the features were considered sensitive to recreational use based on the activities listed. (See Appendix E)

2.2.5 Tourism Values

One commercial boat cache exists on the Wabigoon River, within the Conservation Reserve.

3.0 Management Guidelines

3.1 Land Tenure

The East Wabigoon River Conservation Reserve consists of and is surrounded mostly by Crown land. Some patent land blocks exist just south of the reserve.

The reserve will remain Crown land and no additional dispositions (including Land Use Permits or Licenses of Occupation) will be issued for the site.

The disposition of adjacent Crown Land will be dealt with on a case-by-case basis.

Unauthorized occupations of lands within the conservation reserve will be handled in accordance with approved policy, and any required structural removal will be at the owner's expense.



Figure 3: View from the bridge facing east, of the Wabigoon River.

3.2 Existing and Proposed Development

According to the Natural Resource Values Information System (NRVIS), a number of old forest access roads can be found leading into the reserve. For the most part, these are overgrown and almost impassable due to lack of upkeep. The Snake Bay Road bisects the reserve in the west arm. A one-lane bridge passes over the river at this point. The majority of the reserve's upland area was harvested in the 1950s and 1960s. These were replanted with mostly jack pine and spruce. A clearing exists on the north shore of the river presumably from a former logging camp (Foster et al. 2002). The remains of a water control structure can be found at the narrows on Wabigoon River. Additionally, an inactive aggregate pit within the reserve can be seen from the river northeast of the bridge.

Facility infrastructure and development for recreational and/or educational purposes may be considered in the future if there is a demonstrated demand for such facilities. All provincial policies that guide development on Crown Land are applicable in Conservation Reserves.

A more detailed management plan would be required prior to any development occurring. Such a plan would have to ensure that there would be no negative impacts to any habitat or ecosystem pertinent to the values protected in this reserve.

3.3 Recreational Activities

Most recreational activities that have traditionally been enjoyed in this area can continue provided they pose no threat to the natural ecosystems and features protected by the Conservation Reserve. Those uses that are regulated include hunting, fishing and trapping. Most other permitted activities are non-regulated (i.e. canoeing, exploring). See Section 2.2.4 for the recreational uses for this Conservation Reserve as determined by the Recreation Resource Inventory.

Recreational boat caches will continue to be a permitted use. New applications will be reviewed subject to a test of compatibility with the conservation of the ecological features of the site. In addition, the Northwest Region Boat Cache Program Guidelines will also apply.

Mechanical travel within the reserve, including the use of snowmobiles and All Terrain Vehicles, is permitted only on existing roads and trails. Off trail mechanized travel is permitted for retrieval of game only.

3.4 Commercial Activities

No new activities, such as commercial logging, hydroelectric power development, new transmission lines (e.g. power or communications), pipelines, highways or roads, and the extraction of minerals, aggregate or peat will be permitted.

Resource user boat caches for the commercial harvest of natural resources (baitfish, commercial fur and wild rice) under a valid license, will continue to be a permitted use. New applications will be reviewed subject to the test of compatibility. In addition, the Northwest Region Boat Cache Guidelines will also be followed.

An examination of the possible impact of activities on adjacent lands should be evaluated in the Forest Management Plan.

3.5 Aboriginal Interests

East Wabigoon River Conservation Reserve (C2316) lies within Treaty 3 area. The Wabigoon Lake Ojibway Nation Reserve makes up the upper west boundary on the west arm of the reserve. Wild rice harvesting occurs within the reserve.

To date, no Aboriginal Groups have voiced any issues in regards to this conservation reserve. Nothing in this Statement of Conservation Interest

affects in any way existing or future Aboriginal or treaty rights.

3.6 Natural Resources Stewardship

Natural Resource Stewardship involves the consideration of the following specific natural resource management categories.

3.6.1 Vegetation Management

Management within the conservation reserve will allow for the continuation of natural ecosystem processes and functions with minimal human interference.

Forest fire suppression will be carried out in accordance with the approved Fire Management Strategy for the surrounding lands. "Light on the Land" suppression techniques which do not unduly disturb the landscape will be encouraged where feasible. Examples of "light on the land" techniques may include limiting the number of trees felled or the use of heavy equipment or foam

Opportunities for prescribed burning to achieve ecological or resource management objectives may be considered. These management objectives will be developed with public consultation prior to any prescribed burning, and reflected in the document that provides management direction for this conservation reserve. Plans for any prescribed burning will be developed in accordance with the MNR Prescribed Burn Planning Manual, and the Class Environmental Assessment for Provincial Parks and Conservation Reserves (approval pending).

The reserve is susceptible to edge and upstream effects due to its small size and riverine habitat. This sensitivity is increased by the reserves close proximity to current logging practices. It is recommended that this be taken into consideration during forest management planning in adjacent areas.

Forest insect and disease management will continue as on surrounding Crown lands.

3.6.2 Fish and Wildlife Management

The existing Wildlife Management Unit, sport fishing regulations and management activities will apply. Currently a fish sanctuary exists from April 1 to May 31 west of the bridge on Snake Bay Road.

3.6.3 Landforms

None of the landforms mentioned will be altered by landform modification activities such as filling and extraction. The extraction of aggregates, peat and similar materials are not permitted. Mineral exploration and extraction are not permitted in the CR.

3.7 Cultural Resources Stewardship

To fully manage and protect sites, field surveys are required. To date, there have been no surveys done to assess cultural or heritage values. However, common knowledge of the area suggests there to be no such values on this site, thus Cultural Inventories were deemed unnecessary.

3.8 Client Services

Given the focus on low key management, client information will be given on an inquiry basis only and will deal with the basic level of information with respect to access, natural heritage appreciation, recommended activities and boundaries.

3.9 Research

Non-destructive research by qualified individuals will be encouraged to provide a better understanding of the natural values protected by the Conservation Reserve and to advance protection, planning and management.



Figure 4: Wild rice marsh.

In order to assist with enhancing the management guidelines for the reserve, the collection of additional earth and life science information during research is also encouraged.

All research programs will require the approval of the Ministry of Natural Resources as will the removal of any natural or cultural specimen. The establishment of permanent plots, observation points or facilities must also be approved and be compatible with the Conservation Reserve protection objective. Any site disturbed by research activities must be rehabilitated as closely as possible to its previous state.

3.10 Marketing

Awareness of the Conservation Reserve is promoted through the Living Legacy web site. Intensive management activity to increase use is not required at this time.

4.0 Implementation

Implementation of this Statement of Conservation Interest will primarily involve monitoring activities to ensure adherence to the management guidelines and responding to inquiries about the site.

Implementation of this statement and management of the reserve are the responsibility of the Wabigoon Area Supervisor. Partnerships may be pursued to address management needs.

5.0 Review and Revisions

5.1 Review and Revisions

This Conservation Reserve Statement of Conservation Interest will be reviewed on an ongoing basis.

If changes in management direction are needed at any time, the significance of the changes will be evaluated and further consultation a possibility. Any major amendments will require full public consultation and the approval of the District Manager and Regional Director. Affected clients will be immediately informed of proposed changes to this Statement of Conservation Interest.

5.2 Public Consultation

5.2.1 Results of Past Consultations

Consultation on the East Wabigoon River Conservation Reserve was conducted as part of the consultation on the Ontario's Living Legacy Land Use Strategy, July 1999. Subsequent consultation also took place in June 2001 to refine the boundary of the Conservation Reserve.

District Manager letters, totaling 92, were sent to the Dryden Forest Management Co., Weyerhaeuser and Ontario's Forest Industries Association, Tourist Outfitters, Advisory Committees, Trappers, Land Owners, Members of the Public, NGOs and GOs. Newspaper ads were placed in the Ignace Driftwood June 20, 2001and Dryden Observer on June 19, 2001.

First Nation Consultation letters were also sent to ten Native communities/organizations including the

Wabigoon Lake Ojibway Nation, Eagle Lake First Nation and Aboriginal People of Wabigoon. Direct consultation with Treaty 3 First Nations was carried out on a regional basis and conclude November of 2002.

A concern regarding permitted uses was voiced from one of the stakeholders. As a result of the consultation process, no analysis of the issue was required. No responses have been received to date from any of the First Nations Groups.

5.2.2 Present and Future Consultation

More widespread consultation is not deemed necessary at this time.

5.2.3 Author

This Statement of Conservation Interest was prepared by Alicia H.L. Morin, OLL Intern, Information Management, Dryden District. Assistance was provided by Martin Pell (Dryden District Planner) and members of the Wabigoon Area Team.

6.0 References

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Appendix A:

East Wabigoon River Conservation Reserve (C2316) Values Map

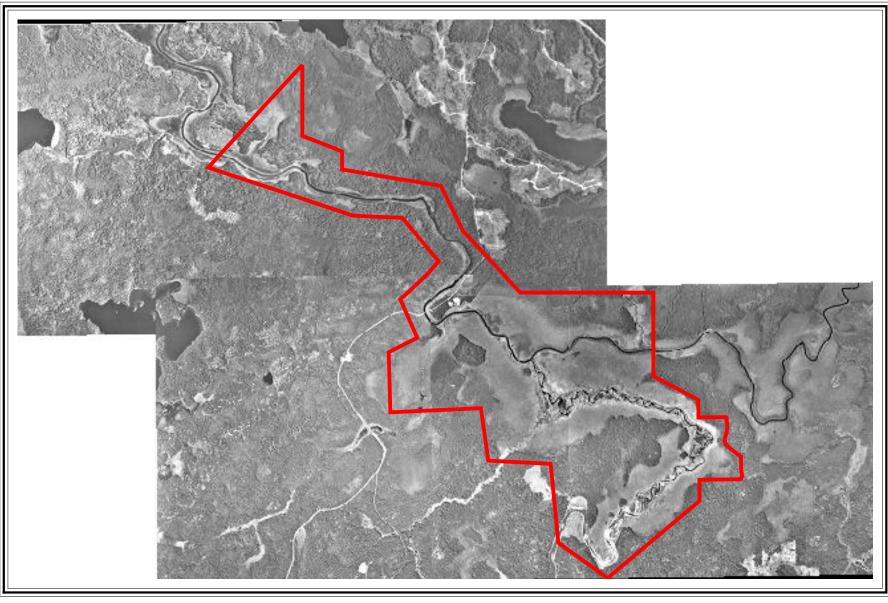
Ontario East Wabigoon River Conservation Reserve (C2316) Ontario's Living Legacy Snake Bay Ro Reserve Boudary Recreation Points Diporwic Lk. Boat Cache, Commercial Designated Camping Site Aggregate Pit Patent land Roads Tobacco Lk. Wildrice Fish Sanctuary Lakes Wetlands Rivers/Streams Site Reference Map 1:6000000 • approximate location of site Tabor L<mark>k.</mark> 6 Kilometers 1:50000

Appendix B:

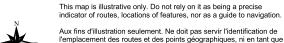
East Wabigoon River Conservation Reserve (C2316) Aerial Photo Image

East Wabigoon River Conservation Reserve - Aerial Photo Image





1:50000 ² 0 2 4 Kilometers



guide pour la navigation.

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Appendix C:

East Wabigoon River Conservation Reserve (C2316) Earth Science Checksheet

DETAILED INFORMATION FOR SITE C2316 EAST WABIGOON RIVER

PROTECTION HISTORY

The reserve was identified under the provincial Lands for Life - Ontario's Living Legacy Program as containing "wild rice stands, a fish sanctuary, and a marsh and swamp wetland complex. It is part of the Stormy Lake canoe route." (OMNR 1999).

No previous earth science significance was assigned.

SETTING

The reserve comprises 1 300 hectares, and is located in Dryden MNR District. Elevations range from 370 to 390 m a.s.l. Although named after the Wabigoon River, much of the eastern portion encompasses the Kawashegamuk River which enters from the south into confluence with the Wabigoon River.

EARTH SCIENCE FEATURES

Bedrock Geology

The entire East Wabigoon River Conservation Reserve was included in the southeast portion of mapping of the larger Dryden-Wabigoon area (Satterly 1943), and a very small portion at the southwest corner of the Dyment area (Satterly 1960). Outcrop density is low in the reserve (about 5%).

Archean Rocks

The reserve is situated in the centre of the Eagle-Wabigoon-Manitou lakes greenstone belt. The greenstone belt lies within the 900 km long, Archean age Wabigoon subprovince, at its western end (Blackburn et al 1991: Figures 9.2 and 9.8). Regional geological studies suggest that this central portion of the belt in which the reserve lies is structurally complex. Multiple folding on a large scale, shearing associated with a wide southeasterly-trending zone beneath Kawashegamuk Lake to the southeast of the reserve, and intrusion of numerous subvolcanic plutons close by, have all culminated in widespread alteration of the volcanic rocks on the reserve. Low outcrop density in the reserve limits good observations to the few exposures along the Wabigoon River. Volcanic rocks are dominantly basalts that have been sheared and altered to varying degrees. At a constriction on the Wabigoon River (station 1: photo 1) that in recent previous times was a small rapids, as indicated on geological Map 50e (Satterly 1943), basalts have been sheared and carbonatized. Weathering of the rock has

resulted in oxidation of fine-grained disseminated pyrite (photo 2). Nearby (station 3), river-bank erosion has exposed very schistose, highly altered volcanic rocks of probable basaltic origin (photo 3). Although about 2 km outside and to the southwest of the reserve (station 7), similarly heavily altered volcanic rocks observed during the present reconnaissance along an abandoned forest access road, are representative of rocks of felsic composition that have been mapped (Satterly 1943) within the reserve: the rocks, although siliceous, can be scratched with a knife, due to the intense carbonatization that has also imparted a pale green colour.

Proterozoic Rocks

Outcrop of a west-northwest trending diabase dike of Proterozoic age has been mapped (Satterly 1943) in two places, both to the north of the Wabigoon River, one inside the reserve at its northwest end, the other just outside the reserve near the former rapids. This single dike is similar to those of a swarm of northwest-trending dikes variously called the Kenora-Fort Frances (Osmani 1991) or Kenora-Kabetogama (Southwick and Halls 1987) swarm, that cross the Lake of the Woods region.

Surficial Geology

Quaternary deposits of the East Wabigoon River Conservation Reserve are of both Pleistocene age and Recent (Holocene) age. Downstream from the vicinity of where the Snake Bay forest access road crosses the Wabigoon River, glaciolacustrine materials of probable Pleistocene age predominate, while upstream of this point Recent organic deposits underlie the swamp wetland complex mentioned in the Land Use Strategy (OMNR 1999). Interpretations by previous workers (Roed 1980; Cowan and Sharpe 1991) differ in detail, but follow this general pattern. The glaciolacustrine deposits are both of shallow water, probable shoreline, and of deep water type. All glaciolacustrine sediments were likely deposited in glacial Lake Agassiz, which covered much of northwest Ontario in early postglacial time. Shallow water deposits observed in a borrow pit in the reserve (station 5) are predominantly bedded sands and gravels (photo 4), with a coarse boulder component (photo 5). Adjacent to this pit a cobble beach lies at a lower elevation, along the edge of the swamp wetland complex (photo 6). About 1 km south of the reserve along the Snake Bay road (station 6), another borrow pit is excavated in similar material: however, unsorted cobble to boulder till overlies the bedded deposits (photos 7 and 8). On Map 1774A (Cowan and Sharpe 1991) these deposits are interpreted to be of glacial outwash origin.

Deep water deposits are exposed in clay banks along the river edge (station 2: photo 9 and station 4: photo 10). This bank erosion appears to be related to the constriction in the river in this area where bedrock elevations are relatively

higher, resulting in outcrops over which rapids ran in the recent past as discussed above.

In the wetland complex, Recent alluvial deposits are represented along levees that margin the Wabigoon River, particularly upstream of its confluence with Kawashegamuk River (photo 11): the course of this portion of Wabigoon River is more stabilized than that of the Kawashegamuk River, where very sinuous meanders are evident in aerial photos (e.g. 97-4919-A; 57-10).

SIGNIFICANCE

Mafic volcanic rocks that underlie the reserve have mostly been sheared and altered, and represent a distinctive suite of Archean volcanic rocks. Because such rocks are easily eroded they very rarely appear at surface except in small outcrops, such as in this reserve. They do represent a local occurrence of this feature, and as such are considered to be of **local significance** only.

The one outcrop within the reserve of a Proterozoic diabase dike is possibly the only representative in the park system of this single dike that crosses this portion of northwestern Ontario. Although the condition of the outcrop was not investigated during the present survey, its uniqueness makes it of **regional significance.**

Shallow water glaciolacustrine deposits exposed in the gravel pit within the reserve are **locally significant** as representative of this material, while clay banks along the river are of **local significance** as representing deep water lacustrine material.

Recent alluvial deposits exhibited in the levees along Wabigoon River are of **local significance**.

SENSITIVITY

Bedrock is not subject to degradation by either human activity or natural processes. As demonstrated by the gravel pit within the reserve, sands and gravels are subject to degradation by human activity: however, the pit does serve to expose such deposits for observation. Fine grained sediments such as the glaciolacustrine silts and clays may be highly susceptible to enhanced erosion should the anchoring vegetation cover be disturbed. The levees that margin the course of the Wabigoon River upstream of its confluence with Kawashegamuk River may be susceptible to erosion by use of the waterway by motor powered boats.

RECOMMENDATIONS

Conservation Reserve status serves to prevent further exploitation of the gravel resources, which if allowed to continue, could also have impact on the wetland complex for which this reserve was set aside. Conservation Reserve status may help prevent degradation of the levees: however, continued use of the waterway by motor powered boats may have adverse affects on this natural feature.

The present survey has adequately identified both bedrock and surficial features. No further recommendations for inventory are made.

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OMNR 1999. Ontario's Living Legacy: Land Use Strategy; Ontario Ministry of Natural Resources, 136 p., accompanied by map, scale 1:1 200 000.

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Roed, M.A. 1980. Northern Ontario Engineering Geology Terrain Study, Data Base Map, Wabigoon Lake; Ontario Geological Survey, Map 5059, scale 1:100 000.

Satterly, J. 1943. Dryden-Wabigoon area; Ontario Geological Survey, Map 50e, scale 1:63 360.

Satterly, J. 1960. Dyment area; Ontario Geological Survey, Map 1960h, scale 1:31 680.

Southwick, D.L. and Halls, H. 1987. Compositional characteristics of the Kenora-Kabetogama dike swarm (Early Proterozoic), Minnesota and Ontario; Canadian Journal of Earth Sciences, v. 24, p. 2197-2205.

PHOTOGRAPHS

- 1. Constriction in the Wabigoon River at former rapids over mafic volcanic outcrops seen on either bank. (Stn. 1; UTM 0539169E 5492425N)
- Sheared and carbonatized mafic volcanics in outcrop seen in photo 1 (right side). Note rusty weathering due to oxidation of pyrite. (Stn. 1; UTM 0539169E 5492425N)
- 3. Schistose, highly altered mafic volcanics exposed in a river bank. (Stn. 3; UTM 0539056E 5492567N)
- 4. Well bedded sands and gravels in a pit on the east side of the Snake Bay road. (Stn. 5; UTM 0539402E 5491529N)
- 5. Coarse bouldery material overlain by well bedded sands. Same pit as in photo 4. (Stn. 5; UTM 0539402E 5491529N)
- 6. Cobble beach at the edge of the pit in photos 3 and 4. View is to the south over wetlands of the Wabigoon River, seen at the top of the photo. (Stn. 5; UTM 0539402E 5491529N)
- 7. Shallow dipping bedded gravel and bouldery material overlain horizontally by a 1 m layer of unsorted till ground moraine. (Stn. 6; UTM 0537950E 5490798N)
- 8. Unsorted bouldery till ground moraine in same pit as photo 7. (Stn. 6; UTM 0537950E 5490798N)
- 9. Clay bank on the Wabigoon River downstream of the bridge on the Snake Bay road. The level meadow may have been a pasture land. (Stn. 2; UTM 0538948E 5492911N)
- 10. Clay bank erosion on the Wabigoon River downstream of the bridge on the Snake Bay road. (Stn. 4; UTM 0539380E 5492293N)
- 11. Levees on the Wabigoon River, above its confluence with Kawashegamuk River, looking east.

C2316 East Wabigoon River





C2316 East Wabigoon River









C2316 East Wabigoon River



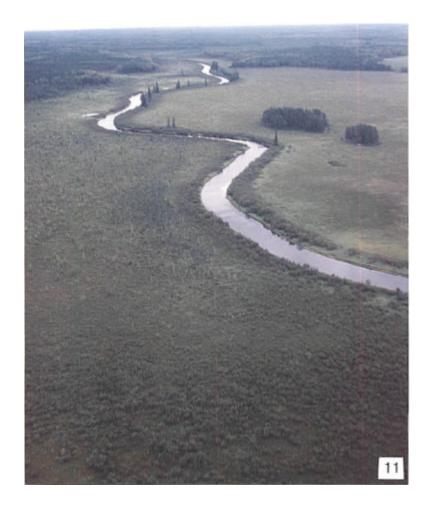


C2316 East Wabigoon River





C2316 East Wabigoon River



EARTH SCIENCE INVENTORY CHECKLIST

NAME Eas	t Wabigoon River	OLL ID C2316
MAP NAME [Dyment NTS Number 52F/09 UTM reference Z15 54	0000E 549
OBM Number	LATITUDE LONGITUDE ELEVATION - MAX 49° 34' N 92° 26' W 390m	ELEVATION - MIN
COUNTY District of Kenor	TOWNSHIP a Satterly, Melgund	Location Map
LOT NA	CONCESSION NA	Ниу 17
AREA (ha)	OWNERSHIP Crown Crown OWNERSHIP Crown	Mark!
7 111	ROLL FLIGHT LINE NUMBER 4918A-70; 97-57-4919A-07 to 10; 97-68- 105 to 108	. Y
MNR REGION Northwest	MNR DISTRICT PARK ZONE Dryden Northwest	
EARTH SCIENCE FEATURES	Archean age, Wabigoon Subprovince: entire site is underlain (< 5% outcrop) by highly all and/or sericitized, commonly schistose) mafic metavolcanic rocks of the Wabigoon Lake Proterozoic: West-northwest trending diabase dike represented in one outcrop. Quaternary: deposits are Recent organic material, overlying Pleistocene glaciolacustrine with pockets of glaciofluvial outwash sands and gravels that have been exploited in a greserve; a possible cobble beach deposit is located at the interface of glaciofluvial and ladjacent to the gravel pit.	greenstone belt. clays and muds, ravel pit within the
SIGNIFICANCE	Sheared and altered mafic volcanic rocks, although poorly exposed, are of local signification one outcrop of a Proterozoic diabase dike that is possibly the only such dike that crosses northwestern Ontario, makes it of regional significance. Shallow water glaciolacustrine deposits exposed in the gravel pit are of local significance clay exposed in banks exposed along the river are of local significance. People alluvial deposits in levees are of local significance.	es this part of
SENSITIVITY	Bedrock is not sensitive to natural or cultural impacts. Sands and gravels are subject to however, the pit does serve to expose materials for observation. Levees on the Wabigo susceptible to erosion by continued use of waterway by motor powered boats.	·
RECOMMENDATION	Further exploitation of the gravel pit could impact on the wetlands for which this r established: conservation reserve status will prevent this. Continued use of the waterway by motor powered boats could adversely affect the	
MAJOR REFERENCES	Blackburn et al 1991, "Wabigoon Subrovince" in OGS Special Volume 4; Cowan and Shai 1774A; Roed 1980, OGS Map 5059; Satterly 1943, OGS Map 50e; Satterly 1960, OGS Ma	
DATE COMPILED	COMPILER	
February 15, 200	O3 C.E. Blackburn, Blackburn Geological Services	



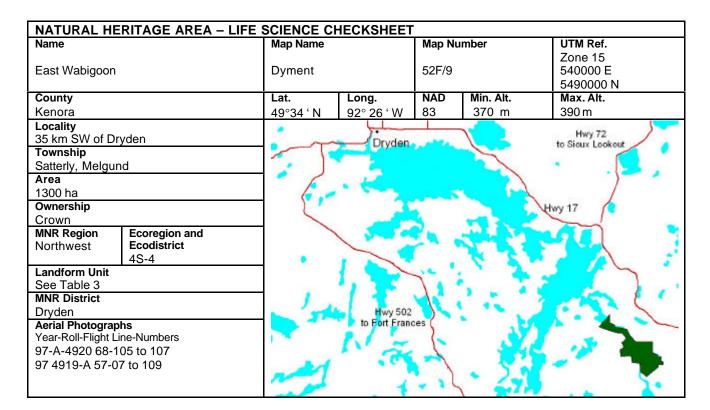
Ministry of Ministère des Natural Richesses Resources naturelles



Appendix D:

East Wabigoon River Conservation Reserve (C2316) Life Science Checksheet

C2316 EAST WABIGOON RIVER



Physical and Biological Features

C2316 is located along the lower reaches of the Wabigoon River east of Kagiwiosa Bay on the east shore of Dinorwic Lake. Kawashegamuk River and two smaller tributaries join the Wabigoon from the south. The reserve is characterized an alluvial plain with low relief, having only 20 m of elevational change. Marshes comprise 52% (671 ha) of the reserve, water accounts for another 10% (132 ha), and the remaining 40% is mainly upland forests (Photo 1).

The reserve includes well-developed wetland toposequences, from open-water marshes to forested conifer swamps. The main channels of the Wabigoon and Kawashegamuk rivers are deep ($\sim 2m$) and poorly vegetated, but are fringed by open-water marshes with submergents such water milfoil where the current is reduced. These are interspersed with floating-leaved marshes (W4) with yellow water lily, floating-leaved burreed, water smartweed, and floating-leaved pondweed. Extensive emergent marshes with wild rice (W9) are found along the Wabigoon River in the western part of the reserve, and along the Long Lake River in the east. Emergent marshes dominated by common cattail (W11) are found on floating to semi-grounded mats along the edge of the rice, and the margins of meadow marshes (Photo 2). In sheltered areas of shallow water with less flow, mixed marshes with arrowheads, cattails, bulrushes, and water hemlock are found.

Broad meadow marshes and shore fens flank the emergent marshes. Meadow marshes are mainly dominated by lake, beaked, and other robust sedges (W11), with abundant sweet gale, calla lily, marsh cinquefoil, and swamp candles. These hummocky meadow marshes are grounded on over 1 m of humic

peat, on top of clay. They often have typical fen species such as bog willow, leatherleaf, and bog buckbean. North of the Wabigoon River, these grade into low shrub fens with *Sphagnum* moss, marsh horsetail, and bog rosemary. With a lower water table and increasing peat depth of fibric peat, these are replaced by intermediate conifer swamps with a tamarack and black spruce overstorey. Labrador tea, dwarf raspberry, and three-leaved false Solomon's seal are abundant in the understorey. Along the Long Lake River, broad shore fens dominated by wire sedge (W14) are found on floating *Sphagnum* mats along the edge of the wild rice and cattails. These gradually becoming grounded on clay or humic peat, and intersperse with meadow marshes. Thicket swamps of speckled alder, high bush cranberry, and red osier dogwood are found along the clay banks of the Wabigoon River above the junction with the Kawashegamuk River. The rich understorey is dominated by sensitive fern, long beech fern, meadow rue, and lake sedge. There often also a thin strip of thicket swamp at the ecotone between meadow marsh and conifer swamp as well. Rich cedar swamps (Ecosite 37), treed fens with tamarack, and poor to intermediate swamps dominated by black spruce comprise approximately 15% of the reserve.

Upland soils are mainly lacustrine clays with a thin veneer of ground moraine in a few locations. Mixed forests with balsam fir, white spruce, and trembling aspen (Ecosite 29) are found along the Wabigoon River below the bridge (Table 1). There is often a thick understorey of balsam fir, mountain maple and other shrubs. In the eastern portion of the reserve, younger (40-60 year old) forests are primarily coniferdominated with black spruce, tamarack, jack pine and cedar (e.g. Ecosites 25, 26) and abundant feathermosses. Mixedwoods with white birch, and trembling aspen (Ecosite 28), typically also have more diverse shrub and herbaceous layers. Many of these upland areas were formerly logged (Photo 3), and the planted spruce and pine are now approximately 40 years of age, 10-15 m tall and 10-20 cm DBH. Club mosses, starflower, and bunchberry are common on feathermosses and reindeer lichens.

Representation

Table 3 summarizes representation of landform vegetation types of the East Wabigoon River Conservation Reserve for Ecodistrict 4S-4 as recently refined by Ontario Parks (Steve Kingston pers. comm.). An older version of the landform vegetation representation matrix based on the original Ontario Living Legacy gap analysis is included for comparison (Table 4).

East Wabigoon has excellent representation of open wetlands on lacustrine sediments or shallow organic deposits overlying lacustrine sediments, greater than indicated in the original or revised OLL LV analysis. Much of the open fen, marsh, and meadow marsh complex is misclassified as treed fen in the updated GIS-derived LV-matrix (Table 3), or as burn in the original OLL LV-analysis (Table 4). Fire history maps and fieldwork confirm that there is no recent burn represented in the reserve. The FRI provides more accurate areas for these wetland types (Table 1).

Coniferous forests on organic deposits are also well represented in the reserve. Deciduous mixed and deciduous forests on organic deposits are dominated by alder and willows, but are less extensive than previously reported. Treed bogs reported for the reserve are actually treed fens or conifer swamp. Representation of sparse forest with broken canopy (<30%) cover is the result of budworm-killed balsam fir or past selective logging of conifers, but these areas will not likely provide long-term representation of this LV-type.

The conservation reserve provides provincially significant representation of open wetlands, conifer forests on organic deposits, and treed fens for Ecodistrict 5S-4

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Condition

Much of the reserve has been impacted by past and current human activities. A well-used forest access road, Snake Bay Road, bisects the reserve with a bridge over the Wabigoon River. There is a small boat launch on south shore of river (north side of road) with commercial and private boat caches. There is also a designated, but primitive, campsite near the bridge. There is a small gravel pit within the reserve as well. Non-native plant species such as bull thistle are found along the roadway, gravel pit, boat launch, and other disturbed areas.

Over half of the reserve uplands were logged during the 1950s and 1960s, scarified, and replanted primarily with jack pine and spruce. As a result, much of the forest is in well-defined rows that are visible on the ground and from aerial photographs. Other upland forests were apparently high-graded for conifer in the early 1900s. There are approximately 12 km of tertiary road from past logging in the reserve and a clearing on the north shore of river from a former logging camp (Photo 4). There are also the remains of a water control structure at the narrows on Wabigoon River, presumably for log drives. A harvest block on the Wabigoon Forest was recently logged along and potentially within the southern boundary of reserve (Photo 5).

The reserve's western boundary abuts the Wabigoon Lake Indian Reserve 27. Wild rice in the reserve is harvested by First Nation members; during field work an air boat was seen coming upriver and was used in reserve. The reserve straddles a baitfish block, three bear management areas (BMAs), and two trapline areas. There is a trapper cabin on south shore of the river in the reserve. The reserve is also likely used for waterfowl hunting although no direct evidence was observed.

Diversity

On the landform-vegetation type scale, the East Wabigoon River Conservation Reserve has relatively low forest diversity due to the due fairly uniform fine-textured soils and past logging. A total of 13 LV types (Table 4) and 27 Ecosites (Table 1) are represented. However, East Wabigoon does have a good diversity of open wetlands, particularly marshes.

Ecological Considerations

The conservation reserve provides a good example of the influence of flooding regimes and succession of wetland communities. There is a very well-developed levee along the banks of the Wabigoon River upstream of the junction with the Kawashegamuk River (Photo 6). Enough clay soil has been deposited during spring flooding to support large black spruce and a thin strip of alder thicket swamp. The ground drops away from the levee, and the saturated soils support meadow marshes. The wild rice stands, in particular, are sensitive to water level fluctuations, and are less dense and not as productive in high water years. Stumps of trees in the centre of some meadow marshes indicate the hydrology has changed over time due to flooding by beavers and possibly dams downriver. Beaver lodges and activity are common along the edges of the main channels and small dams have been built across the smaller tributaries.

Spruce budworm infestations occurred in the reserve during the late 1980s and early 1990s resulting in mortality of white spruce and balsam fir. Approximately 14 ha in the northwest corner of the reserve burned during the 1920s, but has since returned to conifer forest.

The small size and riverine nature of the reserve, as well as its proximity to logging, make it very susceptible to edge and upstream effects. Most of the watershed is outside the conservation reserve.

Special Features

Although the wetland has not been officially evaluated, it would probably rank as provincially significant. The extensive wild rice stands in the reserve are significant both ecologically and culturally as a food source for waterfowl and people.

The waters of the Conservation Reserve downstream of the Snake Bay Road bridge are designated as a fish sanctuary from April 1 to May 31. Abundant minnows and other small fish were observed in shallow water throughout the reserve.

There is a bald eagle nest just outside the reserve's southeastern boundary. Bald eagles are considered Endangered in Ontario.

Giant blue hyssop, a western species, was found on a disturbed, south-facing bank along the Wabigoon River. No other prairie species were found at this location. This species is uncommon and may be rare in the Ecodistrict 4S-4. A 10-m tall white elm was found at the clearing along the Wabigoon River.

The reserve has 34 ha of 114-134 year old intermediate black spruce swamp (Ecosite 36) that meet the criteria for old growth. It also has 6 ha of 124 year old jack pine dominated Ecosite and 45 ha of 104-114 year old aspen-dominated Ecosite 29 that meet old growth criteria.

Recommendations

Ontario Parks should continue to be actively involved in forest management planning in areas adjacent to the reserve.

Significance Level and Summary of Major Representative Values

East Wabigoon includes provincially significant open wetland communities including marshes, meadow marshes and shore fens. The conservation reserve also provides significant representation of conifer forests on organic deposits and treed fens for Ecodistrict 4S-4. These include regionally significant wild rice marshes and spawning habitat for walleye, pike, muskellunge, and other fish. Noble (1995) also considered the site provincially significant.

Major Information Sources

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- Sims, R.A., W.D. Towill, K.A. Baldwin, P. Uhlig and G.M. Wickware. 1997. Field guide to the forested ecosystem classification for northwestern Ontario. Ont. Min. Natur. Resour., Northwest Sci. & Technol. Thunder Bay, Ont. Field Guide FG-03. 176 p.
- Uhlig, P., A. Harris, G. Craig, C. Bowling, B. Chambers, B. Naylor and G. Beemer. 2001. Old growth definitions for Ontario. Ont. Min. Nat. Res., Queen's Printer for Ontario, Toronto, ON. 27 p.

Date Compiled Compiler(s)

21/05/03 Robert Foster, Allan Harris Northern Bioscience

Northern Bioscience 5 February 2003

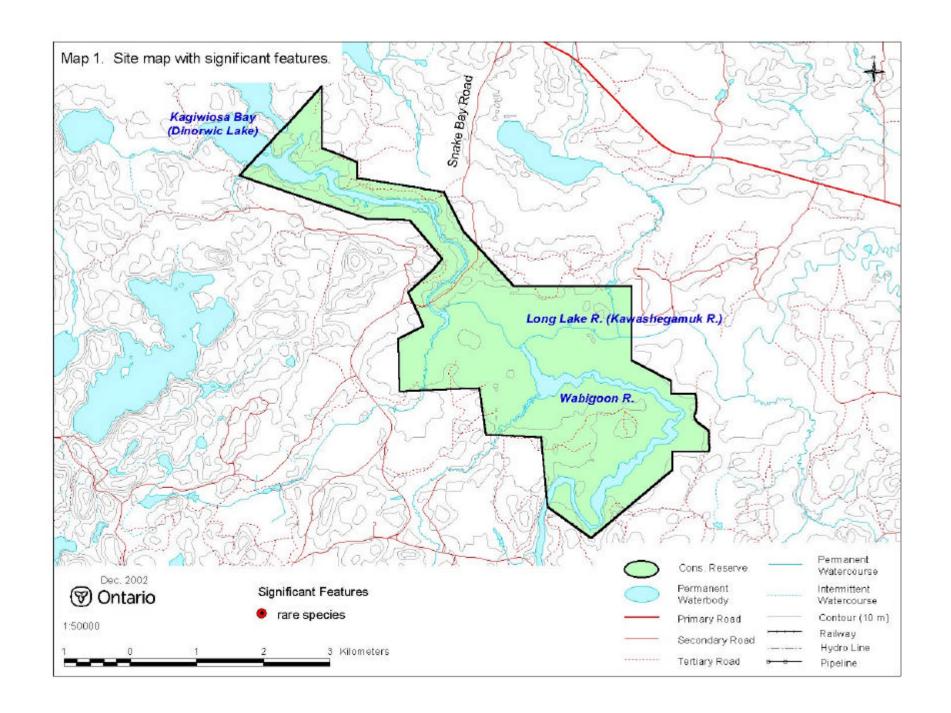




Photo 1. Wabigoon River, peatlands and jack pine forests in eastern part of reserve.



Photo 2. Open wetlands such as this shore fen with cattails dominate the reserve.



Photo 3. Mixed forest of aspen and jack pine were formerly logged.



Photo 4. Clearing on Wabigoon River from old logging camp.



Photo 5. Wild rice marsh, backed by cattail marsh and clear cut in southeast corner of reserve.



Photo 6. Levee and thicket swamp along Kawashegamuk River.

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Table 1. Terrestrial ecosites of East Wabigoon River (derived from Forest Resource Inventory data provided by OMNR).

	Description	Area (ha)	Proportion (%)*
	Very Shallow Soils	(/	(10)
ES12	Black Spruce - Jack Pine: Very Shallow Soil	4	<1
	Sandy- Coarse Loamy Soils	•	•
ES17	White Cedar: Fresh - Moist, Coarse - Fine Loamy Soil	<1	<1
ES18	Red Pine - White Pine: Fresh, Coarse Loamy Soil		
ES19	Hardwood - Fir - Spruce Mixedwood: Fresh, Sandy - Coarse Loamy Soil	19	2
ES20	Spruce - Pine / Feathermoss: Fresh, Sandy - Coarse Loamy Soil	<1	<1
ES21	Spruce - Fir Mixedwood: Fresh, Coarse Loamy Soil	10	1
ES22	Spruce-Pine / Ledum / Feathermoss: Moist, Sandy-Coarse Loamy Soil	1	<1
ES23	Hardwood Fir – Spruce Mixedwood: Moist, Sandy-Coarse Loamy Soil	1	<1
	Fine Loamy – Clayey Soils		
ES25	Pine – Spruce / Feathermoss: Fresh, Silty Soil	66	5
ES26	Spruce - Pine / Feathermoss: Fresh, Fine Loamy - Clayey Soil	126	10
ES27	Fir - Spruce Mixedwood: Fresh, Silty - Fine Loamy Soil	8	1
ES28	Hardwood-Fir-Spruce Mixedwood: Fresh, Silty Soil	19	1
ES29	Hardwood - Fir - Spruce Mixedwood: Fresh, Fine Loamy - Clayey Soil	194	15
ES31	Spruce-Pine / Feathermoss: Moist, Silty-Clayey Soil	1	<1
	Treed Wetlands		
ES35	Poor Swamp: Black Spruce: Organic Soil	53	4
ES36	Intermediate Swamp: Black Spruce (Tamarack): Organic Soil	41	3
ES37	Rich Swamp: Cedar (Other Conifer): Organic Soil	54	4
	Open Wetlands**		II.
ES40	Treed Fen MNR Code 310 - Treed Muskeg	56	4
	Other open wetlands (i.e., fens, shore fens, meadow marshes, marshes) MNR Codes 311 - Open Muskeg	507	39
ES44	Thicket Swamp MNR Code 312 – Brush and Alder	3	<1
_	Open Water MNR Code 152 – River – double line	89	7
	Unclassified or Other	39	3

^{*} proportion of reserve

Table 2. Rapid assessment plot summary from East Wabigoon

Plot No.	V / W Type	ES Type	Date
422	W35	ES44	2002/09/13
423	W12	ES46	2002/09/13
424	W31	ES37	2002/09/13
425	W14	ES45	2002/09/13
426	W9	ES47	2002/09/13
427	V16	ES27	2002/09/13

^{**} approximated from MNR Code; ecosites not directly interpreted for these polygons.

Table 3. Landform – vegetation (LV) type representation for Stormy Lake Conservation Reserve for Ecodistrict 4S-4 (derived from analysis by Ontario Parks; Steve Kingston pers. comm.).*

	Ecodistrict					East V	/abigoon	
LV_Description	Area (ha)	Representation Target		Protected Areas (ha)	Area (ha)	Contribution to	to Existing	in Field
		%	ha	` ,	()	Target (%)	Protection (%)	
Glaciolacustrine deposits-Dense Deciduous Forest	31,723	12	3,807	1,210	10	0	1	Х
Glaciolacustrine deposits-Mixed Forest – mainly Coniferous	31,445	12	3,773	1,431	160	4	11	Х
Glaciolacustrine deposits-Dense Coniferous Forest	19,316	12	2,318	1,865	58	2	3	Х
Glaciolacustrine deposits-Sparse Coniferous Forest	16,829	12	2,019	1,110	27	1	2	X
Glaciolacustrine deposits-Mixed Forest – mainly Deciduous	13,003	12	1,560	421	28	2	7	X
Glaciolacustrine deposits-Sparse Deciduous Forest	8,249	12	990	111	9	1	8	Х
Organic deposits-Mixed Forest – mainly Coniferous	3,250	12	390	278	143	37	51	X
Organic deposits-Dense Deciduous Forest	2,544	12	306	114	7	2	6	
Organic deposits-Dense Coniferous Forest	2,227	12	269	198	98	36	49	Х
Organic deposits-Sparse Coniferous Forest	1,996	12	243	228	44	18	19	X
Organic deposits-Mixed Forest – mainly Deciduous	1,101	15	161	158	45	28	29	Х
Glaciolacustrine deposits-Treed Fen	1,009	16	157	178	99	63	55	X
Organic deposits-Treed Fen	843	18	152	614	302	199	49	Х
Organic deposits-Sparse Deciduous Forest	754	20	151	37	14	. 9	37	Х
Organic deposits-Treed Bog	727	21	151	227	5	4	2	

The LV matrix was recently refined by Ontario Parks in several ways: 1) revised Ecodistrict boundaries; 2) increased resolution of Landcover28 data (25 m vs. 100 m); 3) terrain is no longer used as a modifier; 4) more accurate surficial geology data; and 5) updated approach to representation targets.

Table 4. Original version of landform – vegetation (LV) type representation for East Wabigoon Conservation Reserve used in Ontario Living Legacy gap analysis.

Site District		Surface Expression	burn	conifer	conifer mixed	deciduous	deciduous mixed	open wetland	sparse forest	Grand Total
4S-4	Lacustrine Deposit		249	53 ^R	168	45	18 ^R	264 ^R	52 ^C	849

Table 5. Site type matrix for East Wabigoon with representative ecosites (Racey et al. 1996).

		Arid	Very Dry	Dry	Dry Mesic	Mesic	Wet Mesic	Wet	Very Wet	Saturated	Open Water
	Rock										
 -	Sand										
Colder	Loam										
ပ	Clay								36,37		
	Organic								35,36,37		
	Rock										
<u>=</u>	Sand										
Normal	Loam					27					
ž	Clay						31,32	31,32	36,37, 44	44,46	47,49,50
	Organic								35,36,37, 44	44,45, 46	47,49
	Rock										
er	Sand										
Warmer	Loam										
Š	Clay										
	Organic										

East Wabigoon Species Lists

The following species lists are based fieldwork conducted Sept 13, 2002 and data provided by OMNR.

Plant List

Taxonomic order and species names generally follow Morton and Venn (1990). Introduced species are marked "I". Provincially rare species (Oldham 1999) are marked "P". Regionally rare species are marked "R". Voucher specimens were collected for species marked "*".

FAMILY EQUISETACEAE

Equisetum fluviatile L. Equisetum pratense Ehrh.

FAMILY DRYOPTERIDACEAE

Dryopteris carthusiana (Villars) H.P.Fuchs

FAMILY OSMUNDACEAE

Osmunda claytoniana L.

FAMILY THELYPTERIDACEAE

Thelypteris palustris (Salisb.) Schott

FAMILY LYCOPODIACEAE

Lycopodium annotinum L. Lycopodium clavatum L.

FAMILY CUPRESSACEAE

Thuja occidentalis L.

FAMILY PINACEAE

Abies balsamea (L.) Miller Larix laricina (Duroi) K.Koch Picea glauca (Moench) Voss Picea mariana (Miller) BSP Pinus banksiana Lambert

FAMILY ALISMATACEAE

Sagittaria latifolia Willd. Sagittaria rigida Pursh

FAMILY ARACEAE

Acorus americanus L. Calla palustris L.

FAMILY CYPERACEAE

Carex aquatilis Wahlenb. Carex lacustris Willd.

Horsetail Family

Water Horsetail Shade Horsetail

True Fern Family

Spinulose Wood Fern

Flowering Fern

Interrupted Fern

Marsh Fern Family

Marsh Fern

Clubmoss Family

Bristly Clubmoss Common Clubmoss

Juniper Family

Eastern White Cedar

Pine Family

Balsam Fir Tamarack White Spruce Black Spruce Jack Pine

Water Plantain Family

Broad-leaf Arrowhead Stiff Arrowhead

Arum Family

Sweet Flag Water Calla

Sedge Family

Water Sedge Lake Sedge Carex lasiocarpa Ehrh.

Carex stricta Lam.

Carex utriculata Boott

Scirpus acutus Muhlenb. ex Bigelow

Scirpus cyperinus (L.) Kunth

Scirpus subterminalis Torrey

FAMILY IRIDACEAE

Iris versicolor L.

FAMILY LILIACEAE

Clintonia borealis (Aiton) Raf. Maianthemum canadense Desf. Maianthemum trifolium (L.) Sloboda

FAMILY POACEAE

Bromus ciliatus L.

Calamagrostis canadensis (Michaux) P.Beauv.

Muhlenbergia mexicana (L.) Trin.

Oryzopsis asperifolia Michaux

Phleum pratense L.

Poa palustris L.

Zizania palustris L.

FAMILY POTAMOGETONACEAE

Potamogeton natans L.

FAMILY SPARGANIACEAE

Sparganium emersum Rehmann Sparganium fluctuans (Morong) Robinson

FAMILY TYPHACEAE

Typha latifolia L.

FAMILY ACERACEAE

Acer spicatum Lam.

FAMILY APIACEAE

Cicuta bulbifera L.
Cicuta maculata L.
Sanicula marilandica L.
Sium suave Walter

FAMILY APOCYNACEAE

Apocynum androsaemifolium L.

FAMILY ARALIACEAE

Aralia nudicaulis L.

Wire Sedge
Tussock Sedge
Beaked Sedge
Hardstem Bulrush
Black-sheathed Bulrush
Floating Clubrush

Iris Family

Wild Iris

Lily Family

Blue Bead Lily

Wild Lily-of-the-valley

Three-leaved Solomon's Seal

Grass Family

Fringed Brome

Bluejoint Grass

Mexican Muhly

Rough-leaved Mountain Rice

Timothy

Fowl Blue Grass

Wild Rice

Pondweed Family

Floating-leaved Pondweed

Bur-reed Family

Common Bur-reed Floating Bur-reed

Cattail Family

Common Cattail

Maple Family

Mountain Maple

Parsley Family

Bulblet-bearing Water Hemlock Spotted Cowbane Black Snakeroot Water Parsnip

Dogbane Family

Spreading Dog Bane

Ginseng Family

Wild Sarsaparilla

FAMILY ASTERACEAE

Achillea millefolium L.

Anaphalis margaritacea (L.) Benth. & Hook. f.ex C.B. Clarke

Aster macrophyllus L.

- 1 Chrysanthemum leucanthemum L.
- Cirsium arvense (L.) Scop.
 Eupatorium maculatum L.
 Helianthus maxmilianii L.
 Solidago canadensis L.
 - Solidago nemoralis Aiton
- I Sonchus arvensis L.
- I Taraxacum officinale G. Weber

FAMILY BETULACEAE

Alnus incana (L.) Moench Betula papyrifera Marshall Corylus cornuta Marshall

FAMILY CAPRIFOLIACEAE

Diervilla Ionicera Miller Linnaea borealis L.

Lonicera oblongifolia (Goldie) Hook.

Lonicera villosa (Michaux) Roemer & Schultes

Symphoricarpos albus (L.) S. F. Blake

Viburnum trilobum Marshall

FAMILY CHENOPODIACEAE

Chenopodium album L.

FAMILY CORNACEAE

Cornus canadensis L.
Cornus stolonifera Michaux

FAMILY ERICACEAE

Andromeda polifolia L.

Chamaedaphne calyculata (L.) Moench

Gaultheria hispidula (L.) Muhlenb. ex Bigelow

Ledum groenlandicum Oeder

Vaccinium angustifolium Aiton

Vaccinium myrtilloides Michaux

Vaccinium oxycoccos L.

FAMILY FABACEAE

- 1 Trifolium hybridum L.
- 1 Trifolium pratense L.

Sunflower Family

Common Yarrow Pearly Everlasting

Large-leaved Aster

Ox-eye Daisy

Canada Thistle

Joe Pye Weed

Maxmilian's Sunflower

Canada Goldenrod

Wood Goldenrod

Perennial Sow Thistle

Common Dandelion

Birch Family

Speckled Alder White Birch Beaked Hazelnut

Honeysuckle Family

Bush Honeysuckle

Twinflower

Swamp Fly Honeysuckle

Mountain Fly Honeysuckle

Snowberry

High-bush Cranberry

Goosefoot Family

Lamb's Quarters

Dogwood Family

Bunchberry

Red Osier Dogwood

Heath Family

Bog Rosemary

Leatherleaf

Creeping Snowberry

Labrador Tea

Low Blueberry

Velvet-leaved Blueberry

Small Cranberry

Pea Family

Alsike Clover

Red Clover

FAMILY GROSSULARIACEAE

Ribes hudsonianum Richardson Ribes oxyacanthoides L.

FAMILY GUTTIFERAE

Triadenum fraseri (Spach) Gleason

FAMILY HALORAGACEAE

Myriophyllum verticillatum L.

FAMILY LAMIACEAE

Agastache foeniculum (Pursh) Kuntze

- Galeopsis tetrahit L. Lycopus uniflorus Michaux Scutellaria galericulata L.
- Stachys palustris L.

FAMILY MENYANTHACEAE

Menyanthes trifoliata L.

FAMILY MYRICACEAE

Myrica gale L.

FAMILY NYMPHAEACEAE

Nuphar variegata Durand in Clinton

FAMILY OLEACEAE

Fraxinus nigra Marshall

FAMILY ONAGRACEAE

Epilobium angustifolium L. Oenothera biennis L.

FAMILY PLANTAGINACEAE

Plantago major L.

FAMILY POLYGONACEAE

Polygonum amphibium L. Rumex orbiculatus A. Gray

FAMILY PRIMULACEAE

Lysimachia thyrsiflora L. Trientalis borealis Raf.

FAMILY RANUNCULACEAE

Anemone canadensis L. Aquilegia canadensis L. Coptis trifolia (L.) Salisb.

Currant Family

Northern Wild Black Currant Bristly Wild Gooseberry

St. John's-wort

Marsh St. Johnswort

Water Milfoil Family

Bracted Water Milfoil

Mint Family

Blue Giant Hyssop Common Hemp Nettle Northern Bugleweed Common Skullcap Woundwort

Bogbean Family

Buckbean, Bogbean

Bayberry Family

Sweet Gale

Water-lily Family

Yellow Pond Lily

Olive Family

Black Ash

Evening-primrose

Fireweed

Common Evening Primrose

Plantain Family

Common Plantain

Buckwheat Family

Water Smartweed Great Water Dock

Primrose Family

Tufted Loosestrife Starflower

Buttercup Family

Canada Anemone Wild Columbine

Three-leaved Gold Thread

1 Ranunculus acris L.

Thalictrum dasycarpum Fischer & Ave-Lall.

Thalictrum dioicum L.

FAMILY ROSACEAE

Fragaria virginiana Miller

Geum aleppicum Jacq.

Potentilla palustris (L.) Scop.

Prunus virginiana L.

Rosa acicularis Lindley

Rubus idaeus L.

Rubus pubescens Raf.

Sorbus decora (Sarg.) C.Schneider

Spiraea alba Duroi

FAMILY RUBIACEAE

Galium labradoricum (Wieg.) Wieg.

FAMILY SALICACEAE

Populus balsamifera L.

Populus tremuloides Michaux

Salix candida Fluegge ex Willd.

Salix pedicellaris Pursh

Salix petiolaris Smith

FAMILY ULMACEAE

Ulmus americana L.

Common or Tall Buttercup

Tall Meadowrue

Early Meadowrue

Rose Family

Wild Strawberry

Common Avens

Marsh Cinquefoil

Chokecherry

Prickly Wild Rose

Common Raspberry

Dwarf Raspberry

Showy Mountain Ash

Narrow-leaved Meadow Sweet

Bedstraw Family

Smooth Bedstraw

Willow Family

Balsam Poplar

Trembling Aspen

Hoary Willow

Bog Willow

Slender Willow

Elm Family

White Elm

East Wabigoon Animal Species List

Taxonomic order and nomenclature follow AOU (1998) for birds and Banfield (1974) for mammals. Nesting evidence codes follow the Ontario Breeding Bird Atlas:

Possible Nesting

H - Species observed in breeding season in suitable habitat.

S – Singing male present or breeding calls heard observed in breeding season in suitable habitat.

BIRDS

Grebes

H Pied-billed Grebe

Cormorants

H Double-crested Cormorant

Ducks, Geese and Swans

H Wood Duck

H Common Goldeneye

Kites, Eagles and Hawks

H Northern Harrier

H Broad-winged Hawk

Chickadees

H Black-capped Chickadee

Nuthatches

S Red-breasted Nuthatch

Thrushes

H Veery

New World Sparrows

H White-throated Sparrow

MAMMALS

Squirrels

Red Squirrel

Beavers

Beaver

Rats, Mice, and Voles

Muskrat

FAMILY PODICIPEDIDAE

Podilymbus podiceps

FAMILY

Phalacrocorax auritus

FAMILY ANATIDAE

Aix sponsa

Bucephala clangula

FAMILY ACCIPITRIDAE

Circus cyaneus Buteo platypterus

FAMILY PARIDAE

Parus atricapillus

FAMILY SITTIDAE

Sitta canadensis

FAMILY TURDIDAE

Catharus fuscescens

FAMILY EMBERIZIDAE

Zonotrichia albicollis

FAMILY SCIURIDAE

Tamiasciurus hudsonicus

FAMILY CASTORIDAE

Castor canadensis

FAMILY MURIDAE

Ondatra zibethicus

Appendix E:

Recreation Inventory Checksheet

RECREATION INVENTORY CHECKLIST

NAME East Wabigoon River Conservation Reserve - C2316							
MAP NAME Dyment NTS Number 52 F	F/9 UTM reference 15540282549058						
OBM Number LATITUDE LONGITUDE AREA (ha) OWNERSHIP							
15530054900, 15540054800 49' 33	92' 26 1,299.00 Crown						
MNR REGION MNR DISTRICT PARK ZONE	COUNTY TOWNSHIP						
Northwest Dryden Northwest	N/A Satterly						
RECREATION FEATURES	RECREATION ACTIVITIES						
T06 - Existing Canoe Route	1. b01 - Boating						
2. M07 - River, Large	2. B02 - Canoeing						
3. W00 - Wildlife, General	3. d10 - Snowmobiling						
4. A04 - Edible Aquatic Foods	4. F00 - Fishing, General5. h05 - Waterfowl, Hunting						
5. E08 - Wetland Vegetation	5. h05 - Waterfowl, Hunting						
6. E05 - Mixed Coniferous/Deciduous	6. n00 - Nature Activities						
7.	7. G00 - Gathering/Collecting - General						
8.	8.						
RECREATION FACTORS FEATUR	RES Rating: Very High High Moderate Low N/A						
Most Scarce Feature: N/A							
Feature Scarcity:	N/A						
Most Unique Feature: 1							
Activity Attraction Capability:	Low						
Scenic Attractiveness:	Moderate						
Geographic Significance:	N/A						
Feature Significance:	Low						
Most Sensitive Feature To Recreation Use: N/A							
Feature Sensitivity To Recreation Use:	N/A						
Most Sensitive Feature To Resource Development: N/A							
Feature Sensitivity To Resource Development N/A							
Cultural/Historic and Archaelogical Features: N/A							
Comments							
DATE COMPILED COMPILER							
ay, August 04, 2002 Alicia Morin, Ashleigh Prior							
Source: Recreation Resource Inventory Stadndards and Proceedures DRAFT REPORT, Gov. of British Columbia, Ministry of Forests Range, Recreation and Forests Practices Branch, March 1995. ONTARIO							



Ministry of Natural Resources Naturelles

Appendix F:

Permitted Uses Table

Summary of Generic Permitted Uses in Conservation Reserves within the Planning Area

Use	Existing Conservation Reserves	New Conservation Reserves in the Planning Area
Commercial timber harvest, commercial hydro development	Not permitted.	Not permitted.
Mineral exploration and mining	Not permitted.	There will be no new exploration permitted.
Bait fishing, commercial fishing, commercial fur harvesting, wild rice harvesting	Existing use permitted to continue, unless there are significant demonstrated conflicts. New operations can be considered, subject to the "test of compatibility".	Existing use permitted to continue unless there are significant demonstrated conflicts. New operations can be considered, subject to the "test of compatibility".
Sport hunting	Permitted.	Permitted.
Sport fishing	Permitted, except in specific fish sanctuaries.	Permitted, except in specific fish sanctuaries.
Seasonal recreation camps ("hunt camps")	Existing camps permitted to continue, and may be eligible for enhanced tenure, but not purchase of land (see 6.1.8).	Existing authorized camps permitted to continue, and may be eligible for enhanced tenure but not purchase of land (see 6.1.8).
Commercial Bear Hunting	Existing use permitted to continue. New operations not permitted.	Existing use permitted to continue. New operations not permitted.
Tourism facilities (for resource-based tourism) and recreational trails	Existing authorized facilities and trails can continue, unless there are significant demonstrated conflicts. No new tourism facilities permitted. New trails can be considered as part of planning for an individual reserve.	Existing authorized facilities and trails (motorized and non-motorized) can continue, unless there are significant demonstrated conflicts. Tourism facilities can apply to upgrade tenure from LUP to lease. New tourism and trail facilities can be considered as part of planning for an individual reserve.
Land Disposition	Sale of lands is not permitted. Renewals of existing leases or land use permits are permitted; requests for transfer of tenure will be considered in the context of the Statement of Conservation Interest or Resource Management Plan. New leases or land use permits permitted for approved activities.	Sale of lands is not permitted. Renewals of existing leases or land use permits are permitted; requests for transfer of tenure will be considered in the context of the Statement of Conservation Interest or Resource Management Plan. New leases or land use permits permitted for approved activities.
Roads	Existing roads can continue to be used, but new roads for resource extraction will not be permitted.	Existing roads can continue to be used, but new roads for resource extraction will not be permitted, with the exception of necessary access for mineral exploration and development.