

Skeena Region

**MANAGEMENT DIRECTION
STATEMENT**

November 2003

**for Torkelsen Lake Ecological Reserve
(ER #73)**



**BRITISH
COLUMBIA**

Ministry of Water, Land and
Air Protection
Environmental Stewardship
Division

Torkelsen Lake Ecological Reserve

Approvals Page

Forward

This management direction statement for Torkelsen Lake Ecological Reserve provides management direction until the Environmental Stewardship Division revises the plan or prepares a more detailed management plan. Ongoing consultation between Environmental Stewardship Division and First Nations may result in revisions as required. Aboriginal traditional activities and uses are honoured and respected within the ecological reserve.

Implementation of strategies identified in the management direction statement will be dependent on available funding and Environmental Stewardship Division priorities.

Approvals



Regional Manager
Skeena Region
Environmental Stewardship Division



Assistant Deputy Minister
Environmental Stewardship Division

Table of Contents

	Page
Introduction	
Purpose of the Management Direction Statement	1
Context	1
Ecological Reserve Attributes	
Conservation	2
Research and Education.....	2
Significance in the Protected Areas System	2
Land Uses, Tenures and Interests	
Access	2
Existing Tenures, Alienations and Encumbrances.....	2
Existing Land Use Activities and Facilities	2
Adjacent Patterns of Land Use.....	2
First Nations Interests	4
Other Agency Interests.....	4
Private and Public Stakeholder Interests.....	4
Torkelsen Lake Ecological Reserve Role Statement	4
Management Issues	
Management Issues.....	4
Management Direction	
Priority Management Objectives and Strategies	6
Consultation and Future Planning.....	6
Figures	
Figure 1. Regional Context Map.....	3
Figure 2. Tenures and Land Use Map.....	5
Appendices	
Appendix 1. Table of Acceptable Activities, Uses and Facilities.....	7

Torkelsen Lake Ecological Reserve Management Direction Statement

Introduction

Purpose of the Management Direction Statement

Management direction statements (MDS) provide strategic management direction for all protected areas that do not have an approved management plan. Management direction statements also describe protected area values, management issues and concerns; management strategy focused on immediate priority objectives and strategies; and, direction statements from other planning processes. While strategies may be identified in the MDS, the completion of all these strategies is subject to funding and funding procedures. In addition, all development associated with these strategies within the protected area is subject to the Parks and Protected Areas Branch Impact Assessment Policy.

Context

The objective of the ecological reserve program in British Columbia is the conservation of representative and special natural ecosystems, plants and animal species, features and phenomena. Ecological reserves contribute to the maintenance of biological diversity and the protection of genetic materials. They also offer opportunities for scientific research and educational activities. In many ecological reserves, the Environmental Stewardship Division does permit non-consumptive low-intensity uses such as nature appreciation, wildlife viewing, bird watching and photography.

The provincial government established Torkelsen Lake Ecological Reserve #73 by Order-in-Council 3766/75 under the *Ecological Reserve Act* in December 1975. The *Protected Areas of British Columbia Amendment Act, 2001* provided legislated status to the ecological reserve boundaries in 2001.

Torkelsen Lake Ecological Reserve covers 182 hectares and protects a bog-forest ecosystem 50 kilometres northeast of Smithers alongside the Nilkitkwa Forest Road, four kilometres west of the north arm of Babine Lake. The ecological reserve lies within the asserted traditional territory of Lake Babine Nation.

The ecological reserve, located at a divide between streams draining into Babine Lake and the Bulkley River, is on the floor of a broad northeast-southwest trending valley flanked by mountains rising to over 1200 metres. Except for a hill on its western side, most of the reserve is flat and boggy, containing a mosaic of open bog, sparsely treed woodland and dense forest. Two plants usually found further north, cloudberry and Lapland buttercup occur, perhaps as relicts from a time when a colder climate prevailed.

Ecological Reserve Attributes

Conservation

- Protects a small area of the Babine Upland Ecoregion. Currently only 4% of the Babine Upland Ecoregion is included in the protected areas system. Torkelsen Ecological Reserve is one of 19 protected areas in this ecoregion, contributing only less than 1% of the overall protected area representation of this ecoregion. Rubyrock Park (55%), Sutherland River Park and Protected Area (25%) and Babine River Corridor Park (14%) are the major contributors to the protected area representation of this ecoregion.
- Protects approximately 182 hectares of the SBSmc2 (moist, cold sub-boreal spruce subzone, Babine variant). This variant is well represented in the protected areas system (13%). The park contributes minimally (less than 1%) to the overall protected areas system representation of the SBSmc2. Tweedsmuir Provincial Park is the major contributor (76%) to the overall protected areas system representation of this variant.
- Protects northern bog-forest complex, including sedge fen, willow-sedge fen and well developed black spruce bog
- Includes cloudberry (*Rubus chamaemorus*) and Lapland buttercup (*Ranunculus lapponicus*), usually found in more northern regions, perhaps as relicts.
- Contains rich moss community.
- Beavers are active in the ecological reserve and moose are common in this area.
- Other ecological features are unsurveyed.

Research and Education

- Several dragonfly species have been collected, sent to the Royal British Columbia Museum and identified, including *Enallagma cyathigerum*, *Aeshna interrupta*, *Aeshna palmata*.

Significance in the Protected Areas System

- Protects northern bog-forest complex for research and educational purposes.

Land Uses, Tenures and Interests

Access

Torkelsen Ecological Reserve lies directly west of the Nilkitkwa Forest Road between Smithers and Fort Babine. Traversing the ecological reserve is extremely difficult because of large areas of standing water often concealed by willow thickets.

Existing Tenures, Alienations and Encumbrances

- None.

Existing Land Use Activities and Facilities

- None.

Adjacent Patterns of Land Use

- Northwestern boundary is marked by a slow-moving creek with beaver dams on it.
- Logging operations cleared land to the south, west and north of the ecological reserve.



First Nations Interests

- The Lake Babine First Nation is interested in the ecological reserve because it lies within their asserted traditional territory.

Other Agency Interests

- Ministry of Sustainable Resource Management, British Columbia Conservation Data Centre (CDC) has an interest in any species at risk in the ecological reserve.

Private and Public Stakeholder Interests

- Naturalists and ecologists have an interest in the ecological reserve because it preserves an example of a northern bog and forest ecosystem.

Torkelsen Lake Ecological Reserve Role Statement

The primary role of Torkelsen Lake Ecological Reserve is to conserve a northern bog-forest ecosystem within the Sub-boreal Spruce Biogeoclimatic Zone and to protect rare plant species. The Torkelsen Lake Ecological Reserve provides secondary research and education roles by providing opportunities to study and learn about a northern bog and forest ecosystem in the Sub-boreal Spruce Biogeoclimatic Zone.

Management Issues

Management Issues

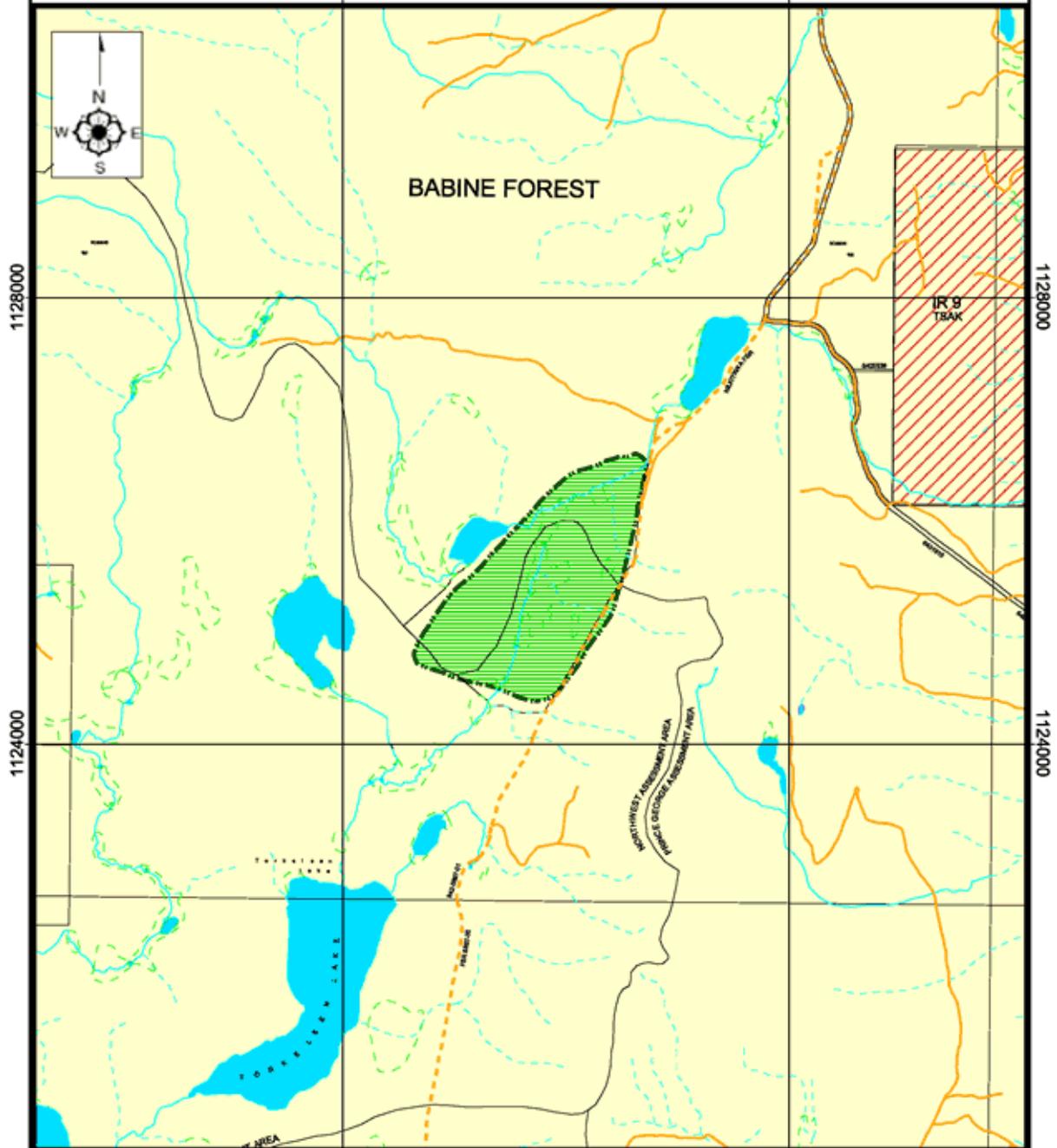
Environmental Stewardship Division identified the following management issues.

Theme	Issue
Protecting ecological values	<ul style="list-style-type: none">• Full extent of flora and fauna species is not known because an inventory of natural features is incomplete.• Ecological reserve values may be at risk because forest harvesting occurs next to the ecological reserve.• Lack of signs along the back boundary mean that ecological values might be disturbed
Protecting cultural heritage	<ul style="list-style-type: none">• Knowledge of cultural heritage values is unknown because an inventory of these values does not exist.
First Nations' values	<ul style="list-style-type: none">• Knowledge of First Nations values is unknown because an inventory of these values does not exist.

Management Direction

The vision for Torkelsen Lake Ecological Reserve includes protection of the bog-forest mosaic for research and education purposes. The following table describes management strategies to deal with identified issues. In addition, Appendix 1 contains a list of acceptable activities, uses and facilities for this ecological reserve.

Figure 2: Tenures and Land Use
 956000 Torkelson Lake Ecological Reserve
 960000



956000 Scale 1:50000 960000



- Roads
- Rail
- Torkelson Lk ER Boundary
- Cadastral Data/Tenures
- ▲ EMPR Mines and Showings
- ▨ Indian Reserve
- ▨ Protected Areas



Priority Management Objectives and Strategies

Objective	Strategy
To protect the ecological reserve's natural values	<ul style="list-style-type: none"> • Inventory fauna and flora; prepare Ecology Information Summary. • Investigate forest harvesting around the reserve and document potential impacts.
To encourage research and education in the reserve	<ul style="list-style-type: none"> • Support proposals for research and education in the reserve.
To protect the ecological reserve's cultural heritage values	<ul style="list-style-type: none"> • Investigate and collate existing information on cultural heritage values; prepare Cultural Features Information Summary.
To protect First Nation values	<ul style="list-style-type: none"> • Aboriginal traditional activities and uses may be exercised subject to safety and conservation concerns. • Meet with the Lake Babine First Nation to determine what interests and values they associate with the ecological reserve.
To provide the public with information about Torkelsen Lake Ecological Reserve	<ul style="list-style-type: none"> • Update the Ministry of Water, Land and Air Protection official web site with accurate and current information about Torkelsen Lake Ecological Reserve. • Ensure that boundary signs are in place to notify visitors of the ecological reserve's existence. <ul style="list-style-type: none"> ➤ Erect signs along ecological reserve's back boundary.

Consultation and Future Planning

Environmental Stewardship Division will consult with Lake Babine First Nation, local stakeholders and adjacent resource users as necessary. This ecological reserve has a low priority for the preparation of a full management plan. Environmental Stewardship Division will review and revise, if necessary, this management direction statement in five to seven years.

**Appendix 1. Torkelsen Lake Ecological Reserve
Table of Acceptable Activities, Uses and Facilities**

Activity/Use/Facility	Acceptability
Aboriginal traditional activities and uses	Y
Hunting	N
Fishing	N
Trapping	N
Grazing (domestic livestock)	N
Recreational gold panning/rock hounding	N
Utility corridors	N
Communication sites	N
Horse use	N
Pack animals	N
Guide outfitting (hunting)	N
Guide outfitting (fishing)	N
Guide outfitting (nature tours)	Y
Guide outfitting (river rafting)	N
Cat-assisted skiing	N
Ski hills	N
Commercial recreation (facility-based)	N
Commercial recreation (non-facility-based)	N
Backcountry huts	N
Water control structures	N
Fish stocking and enhancement	N
Road access	Y
Off-road access (snowmobiling)	N
Off-road access (motorised)	N
Off-road access (mechanical activities)	N
Motorised water access	N
Aircraft access	N
Fire management (suppression)	N
Fire management (prescribed fire management)	N
Fire management (prevention)	N
Forest insect/disease control	N1
Noxious weed control	N1
Exotic insect/disease control	N1
Scientific research (specimen collection)	Y
Scientific research (manipulative activities)	Y

Y = allowed subject to conditions identified in the management direction statement or management plan

M = may be permitted if compatible with protected area objectives

N = not allowed

N1 = allowed for expressed management purposes only

N2 = present and allowed to continue, but not normally allowed