Skeena Region

MANAGEMENT DIRECTION STATEMENT

September 2004

for Lepas Bay Ecological Reserve

BRITISH COLUMBIA

Ministry of Water, Land and Air Protection
Environmental Stewardship Division

Lepas Bay Approvals Page

Forward

On November 2, 1978, Order In Council #2751/78 established Lepas Bay Ecological Reserve (#93). Legislated status was provided on June 29, 2000, when the ecological reserve was listed in Schedule B to the *Protected Areas of British Columbia Act*.

This management direction statement for Lepas Bay Ecological Reserve (#93) provides management direction until the Environmental Stewardship Division revises the plan or prepares a more detailed management plan. Ongoing consultation between the Environmental Stewardship Division and First Nations may require changes to this management direction statement.

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

Approvals:

Regional Manager
Skeena Region
Environmental Stewardship Division

Date: Sept. 1, 2004

Assistant Deputy Minister
Environmental Stewardship Division

Date: Sept. 25, 2004

Table of Contents

Page

Forward and Approvals Page i

Introduction
Purpose of the Management Direction Statement 1
Context 1

Ecological Reserve Attributes
Conservation Values 1
Research and Education 4
Other Values of Importance 5
Significance in the Protected Areas System 5

Land Uses, Tenures and Interests
Access 5
Existing Tenures, Alienations and Encumbrances 5
Adjacent Patterns of Land Use 5
First Nations Interests 5
Other Agency Interests 6
Private and Public Stakeholder Interests 6

Ecological Reserve Role Statement
Conservation Role 6
Research and Education Role 6

Management Commitments and Issues
Management Direction from Previous Planning 6
Management Issues 7

Management Direction
Priority Management Objectives and Strategies 8
Consultation and Future Planning 10

Figures
Ecological Reserve Location Map 2
Ecological Reserve Map 3
Acceptable Activities / Uses Matrix 11

Lepas Bay Ecological Reserve

Management Direction Statement

Introduction

Purpose of the Management Direction Statement

Management direction statements (MDS) provide strategic management direction for protected areas that do not have an approved management plan. Management direction statements also describe protected area values, management issues and concerns; a management strategy focused on immediate priority objectives and strategies; and, direction statements from other planning processes. While the MDS identifies strategies, the completion of strategies is dependent on funding and funding procedures. All development associated with these strategies is subject to the Park and Protected Areas Branch's Impact Assessment Policy.

Context

Lepas Bay Ecological Reserve is located on an unnamed island in Lepas Bay, 3 kilometres southeast of Cape Knox, which is on the northwest corner of Graham Island of the Queen Charlotte Islands. The 3.6-hectare ecological reserve was established on November 2, 1978 to protect the habitat of nesting seabirds, mainly petrels. The island is one of only eight storm-petrel nesting sites in British Columbia and may be the largest mixed-species petrel site in the province.

Ecological Reserve Attributes

Conservation Values

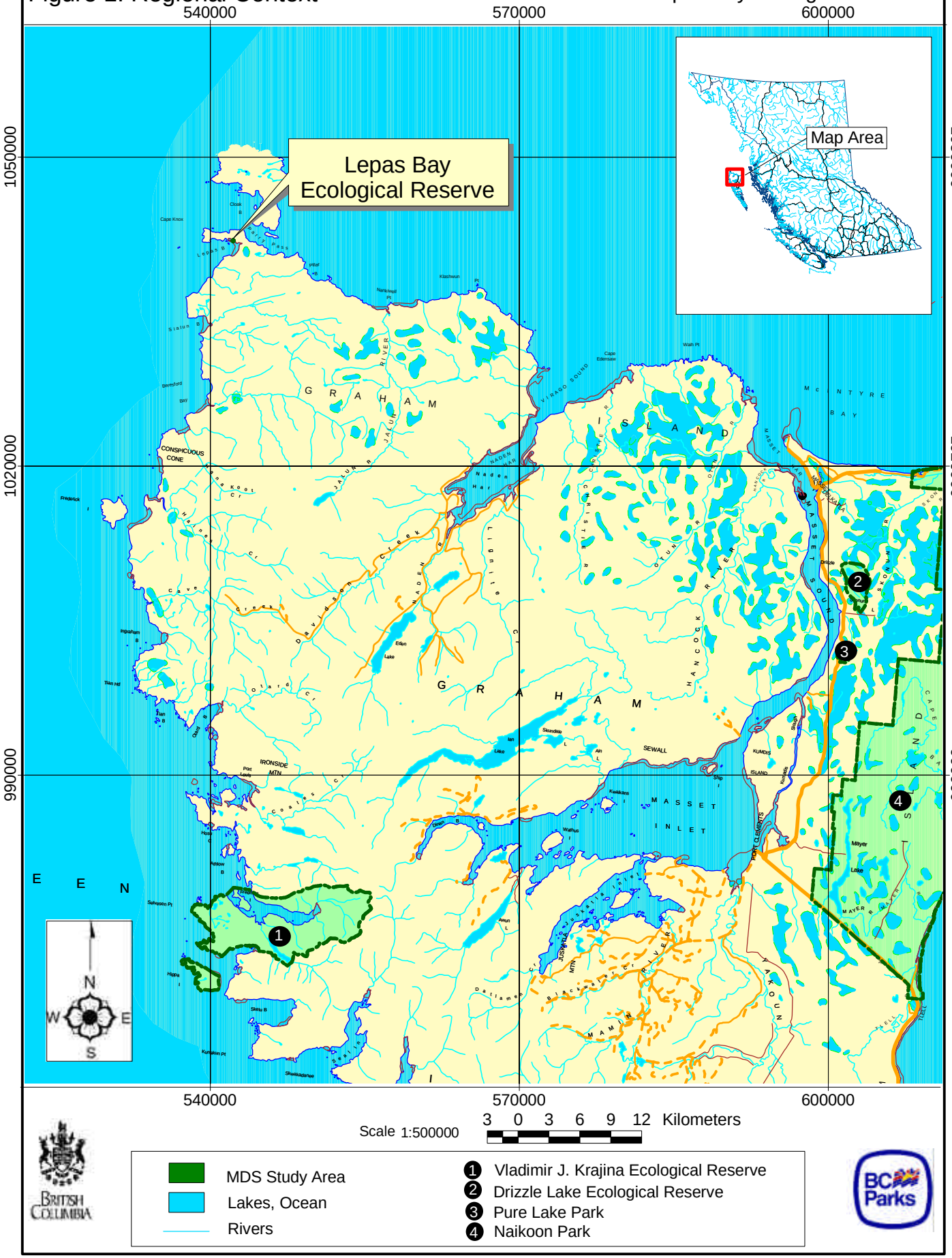
- Lepas Bay Ecological Reserve is situated in the Windward Queen Charlotte Mountains Ecosection and the Coastal Western Hemlock, Central Very Wet Hypermaritime (CWHvh2). Its contribution to ecosystem representation values is minimal given its small size.
- Lepas Bay Ecological Reserve is on a small oval-shaped island within a provincially blue-listed biogeoclimatic subzone variant (CWHvh2). The island provides nationally significant nesting and rearing habitat for possibly the largest mixed bird species breeding colony in British Columbia.

Fauna

- The ecological reserve is possibly the largest mixed species breeding colony in British Columbia and is one of only eight storm-petrel nesting sites in British Columbia.
  - nesting site for an estimated 3,400 pairs of fork-tailed storm-petrels.
  - nesting site for an estimated 4,300 pairs of Leach's storm-petrels.
  - nesting site for an estimated 60 pairs of Cassin's auklets.
  - nesting site for an estimated 50 pairs of pigeon guillemots.

Figure 1: Regional Context

Lepas Bay Ecological Reserve



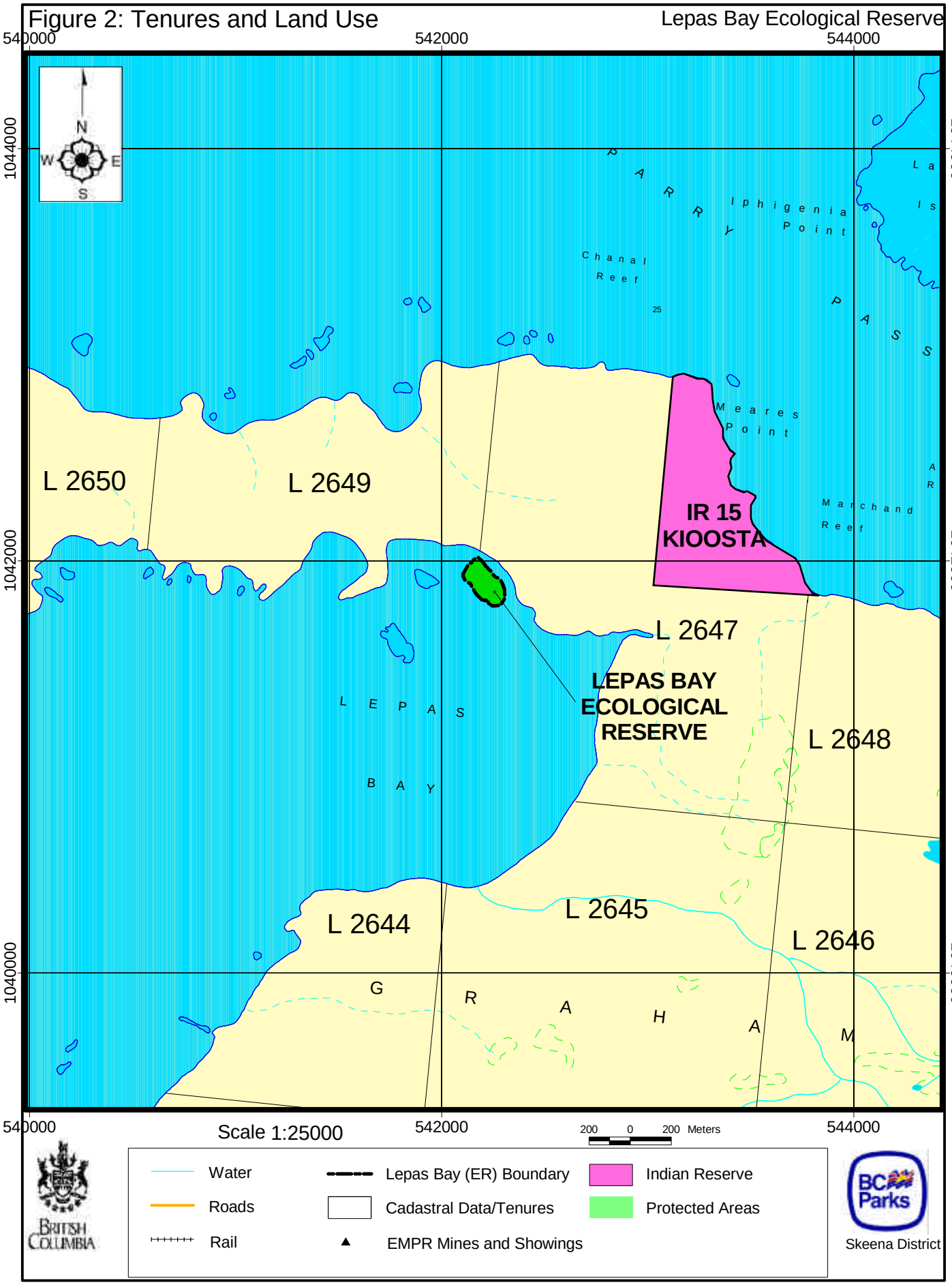


Figure 2: Tenures and Land Use
Lepas Bay Ecological Reserve
540000
542000
544000
1044000
1042000
1040000
N
W
E
S
L 2650
L 2649
L 2647
L 2648
L 2644
L 2645
L 2646
IR 15
KIOOSTA
LEPAS BAY
ECOLOGICAL
RESERVE
Iphigenia Point
Chanal Reef
Meares Point
Marchand Reef
LEPAS BAY
GRAHAM
Scale 1:25000
200 0 200 Meters
Water
Roads
Rail
Lepas Bay (ER) Boundary
Cadastral Data/Tenures
EMPR Mines and Showings
Indian Reserve
Protected Areas
BRITISH COLUMBIA
BC Parks
Skeena District

Flora

- The ecological reserve contains a diverse mix of habitats from southwest facing vertical cliffs, steep, rocky shorelines and grassy slopes.
  - The island vegetation is regionally important as it has not been extensively grazed by the introduced black-tail deer.
- Two (2) provincially red-listed and nine (9) blue-listed plant communities are found in the biogeoclimatic subzone variant found in the ecological reserve (Table 1). Although not documented, one or more of the plant communities may be located in the ecological reserve. Inventory data are required to confirm the presence or absence of the provincially significant plant communities.

Table 1: Endangered (Red-list) and threatened (Blue-list) plant communities that may be located in the Lepas Bay Ecological Reserve

Scientific Name	Common Name	BEC	Provincial Rank	Provincial List
Picea sitchensis / Trisetum canescens	Sitka spruce / Trisetum	CWHvh2/09	S2	Red
Picea sitchensis / Maianthemum dilatatum Wet Hypermaritime 1	Sitka spruce / false lily-of-the-valley Wet Hypermaritime 1	CWHvh2/08	S2	Red
Alnus rubra / Maianthemum dilatatum	Red alder / false lily-of-the-valley	CWHvh2/10	S3	Blue
Picea sitchensis / Calamagrostis nutkaensis	Sitka spruce / reedgrass	CWHvh2/16	S3	Blue
Picea sitchensis / Carex obnupta	Sitka spruce / slough sedge	CWHvh2/18	S3	Blue
Picea sitchensis / Malus fusca	Sitka spruce / Pacific crabapple	CWHvh2/19	S3	Blue
Picea sitchensis / Polystichum munitum	Sitka spruce / sword fern	CWHvh2/17	S3	Blue
Thuja plicata - Picea sitchensis / Oplopanax horridus Very Wet Hypermaritime 2	Western redcedar - Sitka spruce / devil's club Very Wet Hypermaritime 2	CWHvh2/07	S3	Blue
Thuja plicata - Picea sitchensis / Polystichum munitum	Western redcedar - Sitka spruce / sword fern	CWHvh2/05	S2S3	Blue
Thuja plicata/Picea sitchensis - Lysichitum americanum	Western redcedar/Sitka spruce - skunk cabbage	CWHvh2/13	S3	Blue
Tsuga heterophylla - Picea sitchensis / Rhytidiadelphus loreus	Western hemlock - Sitka spruce / lanky moss	CWHvh2/04	S3	Blue

Research and Education

- Lepas Bay Ecological Reserve provides a unique opportunity to study and research one of the largest petrel nesting colonies in the province.
- The ecological reserve offers the opportunity to promote awareness, support and appreciation of storm-petrels and other ground nesting seabirds.

- Lepas Bay Ecological Reserve provides educational opportunities regarding petrels and seabird island ecosystems.

Other Values of Importance

- The ecological reserve is located within the Haida Duu-guusd Tribal Park proposal.
- The ecological reserve is in the asserted traditional territory of the Haida First Nation.
    - Other cultural heritage attributes have not been identified by or provided to the Environmental Stewardship Division.

Significance in the Protected Areas System

- Lepas Bay Ecological Reserve protects breeding colonies for fork-tailed and Leach's storm-petrels. Lepas Bay Ecological Reserve is one of only eight known petrel nesting sites in British Columbia and the ecological reserve may be the largest mixed-species nesting site in the province.
- The ecological reserve also protects island ecosystems virtually undisturbed by humans and free from grazing by introduced black-tailed deer.

Land Uses, Tenures and Interests

Access

- Access to the ecological reserve is by boat or aircraft under permit.
- Due to the sensitivity of the island, public entry on to island is currently restricted by regional policy. Prior permission is required to land on the island.

Existing Tenures, Alienations and Encumbrances

- No existing tenures are identified as part of the provincial tenuring system.

Adjacent Patterns of Land Use

- A small Haida Rediscovery Camp is located approximately 200 metres from the island.
- There are no foreshore leases issued within 1 km of the ecological reserve as per Crown land policy.

First Nations Interests

- Lepas Bay Ecological Reserve lies within the Haida Duu-Guusd Tribal Park proposal.
- The Haida have identified the Queen Charlotte Islands, which Lepas Bay Ecological Reserve lies within, as asserted traditional territory. The Haida have advised that:
    - Haida culture represents evidence of Haida activity over millennium and into the present modern age.
    - The Haida First Nation would like to see traditional uses continue in the ecological reserve.
    - The area is a source of food and commerce.
    - Archaeological values of the area are largely unrecorded and remain a priority for the Council of the Haida Nation .
- The Council of the Haida Nation has expressed an interest in co-management of all protected areas within their traditional territory and have advised that:
    - The Haida would like to see all research methods designed and approved by the Council of the Haida Nation.

- Archaeological content should be controlled by the Council of the Haida Nation.
- Researchers selection should be controlled by Council of Haida Nation.
- All researchers should sign the Council of the Haida Nation's Archaeology paper that recognises the Council of the Haida Nation's ownership.

- The Haida would like to see "Haida Occupancy and Resource Use" noted as an existing tenure.

Other Agency Interests

- Canadian Wildlife Service – protection and management of seabirds.
- Land and Water BC is responsible for adjacent development on District Lots and on other lands close to the ecological reserve.

Private and Public Stakeholder Interests

- Scientific communities
- Friends of Ecological Reserves

Ecological Reserve Role Statement

The primary role of Lepas Bay Ecological Reserve is to protect a nationally significant petrel colony and protection of a provincially significant small island within the Coastal Western Hemlock subzone.

Conservation Role

To protect a significant breeding population of fork-tailed and Leach's storm-petrels. Lepas Bay Ecological Reserve is one of only eight known petrel nesting sites in British Columbia and the ecological reserve may be the largest mixed-species nesting site in the province. The protection of Lepas Island as a significant petrel colony island is the primary objective for the ecological reserve although the ecological reserve also contains provincially significant plant associations and regionally significant island plant communities.

Research and Education Role

As petrel colonies are extremely susceptible to damage through human trampling and the introduction of alien predators, visitation either for educational and/or scientific purposes is limited. However, as this island is one of the largest petrel nesting colonies, scientific research and monitoring must be conducted in order to determine if introduced species are present.

Management Commitments and Issues

Management Direction from Previous Planning

Observations and scientific research determined that Lepas Bay Ecological Reserve is a significant petrel breeding colony. As this breeding colony may be the largest in the province, the 3.6 hectare island was protected as an ecological reserve on November 2, 1978.

Previous planning includes an Ecological Reserve Management Statement, which was produced for Lepas Bay Ecological Reserve on March 6, 1990. A Management Plan for Lepas Island was also produced. In addition

an annual management plan is produced detailing current year activities. This management direction statement will provide more current direction.

Management Issues

Theme	Issue
Protecting ecological values	• The ecological reserve contains no intertidal or subtidal area which could buffer impacts to the breeding colony. • Flora and fauna inventories are incomplete • Access and visitor use ▪ Breeding colonies are susceptible to damage through recreational and scientific research and monitoring access. ▪ Unknown/unregulated use of area by fish charter companies. ▪ Unknown amount of use by visitors (marine access, floatplane and helicopter access). ▪ Proposed trail development within Haida Duu-Guusd Tribal Park may increase use. ▪ There is a lack of education materials to inform visitors of the importance and sensitivity of seabird nesting colonies. • Introduced species ▪ Introduced species (raccoons) can cause significant damage to ground nesting seabird colonies and deer can severely impact vegetation communities. • Use of adjacent areas ▪ Disturbance to bird nesting colonies by human activity or development on nearby lands. ▪ Commercial harvest of fish and shellfish in area surrounding ecological reserve.
Protecting cultural features	• Cultural features have not been identified by or provided to the Environmental Stewardship Division. • The Council of the Haida Nation would like control of archaeological and cultural materials.
First Nation Involvement	• Lepas Bay Ecological Reserve is included in the Haida Duu-Guusd Tribal Park proposal. • The Council of the Haida Nation would like to cooperatively manage all protected areas within their identified territory. • The Haida assert historic use of the area and would like all necessary research to be conducted with Council of the Haida Nation's direction and control of content.

Management Direction

Priority Management Objectives and Strategies

Objective	Strategy
Protecting ecological values	• Implement a management approach that will conserve biodiversity and allow natural processes to predominate. ▪ Monitor the island for introduced species/predators (e.g. raccoons, deer) on an annual basis. – Multi-year monitoring program for raccoons ongoing and includes annual visits. To date, no raccoon presence has been indicated. – Develop and conduct control strategies for introduced species when necessary. ▪ Conduct an inventory to identify sensitive and critical habitats and red- and blue-listed wildlife and plant communities. – Develop special management plans for rare, threatened and endangered species as required ▪ Monitor the effects of scientific research; limit access if research is impacting the conservation values of the ecological reserve. ▪ Prepare a fire management plan ▪ Liaise with Land and Water BC, the Haida First Nation and Ministry of Forests to ensure future developments on adjacent lands do not impact the ecological reserve. ▪ Work with the Canadian Wildlife Service for management of seabirds. ▪ Establish a working relationship with the Haida First Nation and the Haida Rediscovery Program to develop strategies that will ensure the integrity of the ecological reserve. • Investigate the possibility to have a marine component/foreshore area added to the ecological reserve. This may include raising awareness through land use planning processes or other mechanisms as appropriate. • Develop a non–extractive research program for nationally significant bird colonies and provincially significant plant communities in the ecological reserve. ▪ Develop a research and monitoring program to assess the health of the seabird colonies. ▪ Issue research permits for all acceptable research.

Objective	Strategy
Protecting ecological values	• Access and visitor use ▪ Post signs identifying ecological reserve boundaries. ▪ Monitor human use in conjunction with other agencies (e.g. Ecological Reserve wardens, Conservation Officer Service, Ministry of Forests) to determine impacts on the ecosystem. ▪ Minimize visitor impacts on vegetation and nesting colonies. – In consultation with the Haida, local government and stakeholders, determine whether an area closure to all access, including scientific research, without the issuance of permit is required. – If necessary, conduct impact assessment to document human impacts ▪ Advise commercial operators that any commercial use of the ecological reserve requires a permit, must be consistent with the *Ecological Reserve Act* and regulations and would be subject to an impact assessment. ▪ Increase management presence (e.g. increased number of visits; recruit and retain an ecological reserve warden). ▪ Work with other agencies to conduct joint patrols in the area (e.g. DFO, Coast Guard, Conservation Officer Service, Canadian Park Service). • To provide off-island educational opportunities regarding petrels and seabird island ecosystems. ▪ Work with the Haida, local education institutions and through other measures to raise awareness, support and appreciation of storm-petrels and other ground nesting seabirds, particularly, on the Queen Charlotte Islands and in the north coast.
Protecting cultural features	• Investigate and collate existing information on cultural heritage values. • Prepare a Cultural Features Information Summary (based on Haida interests and desires). • Work with the Council of the Haida Nation to identify cultural heritage sites and traditional use areas.

Objective	Strategy
First Nations Involvement	• Through the treaty process or other mechanisms in place, investigate options for a more formal relationship with the Haida. Relationships should facilitate increased First Nation involvement in the stewardship and protection of the ecological reserve. • Work with the Council of the Haida Nation to develop cultural resource information for the public and define protective measures for their culture. • Honour aboriginal traditional uses and activities subject to conservation and safety concerns.

Consultation and Future Planning

Environmental Stewardship Division will work with the Haida First Nation to design and implement research programs that properly identify and locate heritage and cultural values while ensuring their protection. The division will also work with other agencies to ensure that the values within the ecological reserve are considered in adjacent future development and forestry harvesting activities. Internally, the Parks and Protected Areas Section will continue to work with the Fish and Wildlife Science and Allocation Section, the Ecosystems Section and the Conservation Officer Service to ensure effective protected area management within Lepas Bay Ecological Reserve.

Figure 3. Table of acceptable uses, activities and facilities in the Lepas Bay Ecological Reserve.

Activity/Use/Facility	Acceptability
Aboriginal Traditional Uses and Activities	**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/ Pack Animals	**N**
Guide Outfitting (hunting)	**N**
Guide Outfitting (fishing)	**N**
Guide Outfitting (nature tours)	**N**
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	**N**
Off-road Access (snowmobiling)	**N**
Off-road Access (motorised)	**N**
Off-road Access (mechanical activities)	**N**
Motorised Water Access	**N1**
Aircraft Access	**N1**
Fire Management (suppression)	**N1**
Fire Management (prescribed fire management)	**N**
Fire Management (prevention)	**N1**
Forest Insect/Disease Control	**M**
Noxious Weed Control	**Y**
Exotic Insect/Disease Control	**Y**
Scientific Research (specimen collection)	**M**
Scientific Research (manipulative activities)	**M**

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