NITINAT LAKE ECOLOGICAL RESERVE

PURPOSE STATEMENT

September 2003

Approved by:

Dick Heath

Regional Manager

Environmental Stewardship Division

Date:

Date: <u>Sept. 6/03</u>

Nancy Wilkin

Assistant Deputy Minister

Environmental Stewardship Division

NITINAT LAKE ECOLOGICAL RESERVE Purpose Statement

Ecological reserves are areas selected to preserve representative and special natural ecosystems, plant and animal species, features and phenomena. The key goal of ecological reserves is to contribute to the maintenance of biological diversity and the protection of genetic materials. All consumptive resource uses and the use of motorized vehicles are prohibited. Research and educational activities may be carried out but only under permit.

Primary Role

The **primary** role of Nitinat Lake Ecological Reserve is to preserve Douglas-fir trees near their westernmost limit of distribution on southern Vancouver Island. The ecological reserve is located in the heart of the Nitinat triangle that extends out to the West Coast Trail unit of the Pacific Rim National Park Reserve. It extends for about 2.5 kilometres along the Nitinat Lake shoreline and 300 metres inland, and comprises a mix of steep slopes, rocky outcrops, bluffs and talus.

This largely inaccessible 79-hectare ecological reserve protects sensitive lakeshore habitat and steep rocky cliffs with nesting habitat for ducks and songbirds. The co-occurrence of Douglas-fir and Sitka spruce on very steep slopes makes this habitat unique. The Douglas-fir and Sitka spruce tress are scattered among broken rocks and bluffs, where competition for other trees is reduced. Western hemlock is the dominant tree over most of the area on representative sites, and plant communities displayed in the ecological reserve are typical of hemlock and fir communities. Nitinat Lake Ecological Reserve protects a very small representative portion of the Windward Island Mountains.

Management Issues

| Known Management Issue | Response |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Impact of adjacent forest harvesting on the integrity of the ecological reserve through blow-down or upslope erosion | Work with the forest companies to ensure that adjacent forest development minimizes the impacts on ecological reserve values. Monitor any new logging activities adjacent to the ecological reserve boundaries, particularly on the eastern boundary. Work with the volunteer warden to monitor activities around the ecological reserve. |
| Lack of knowledge on natural and cultural values | Undertake natural values inventories; work with academic institutions and the volunteer warden to develop a better information base. Consult with First Nations on cultural values and traditional uses in the ecological reserve. |

Conservation Representation ecosection \Box Nitinat Lake Ecological Reserve contributes very minimally (0.03%) to the representation of the Windward Island Mountain Ecosection of which 17.42% is protected provincially. \Box - biogeoclimatic subzone/variant Nitinat Lake Ecological Reserve contributes very minimally (0.04%) to the representation of the Coastal Western Hemlock (CWHvm1) variant which has 7% protected provincially. \boxtimes **Special Features** Co-occurrence of Douglas-fir and Sitka Spruce on very steep slopes. Site displays Douglas-fir trees near their western-most limit of distribution on Vancouver Island. Lakeshore riparian habitat. \boxtimes Rare/Endangered Values Red-listed Scouler's corydalis Scientific/Research Opportunities \boxtimes Undisturbed environment, contrast with surrounding area over time Recreation Representation backcountry Not Applicable destination Not Applicable travel corridor Not Applicable local recreation Not Applicable **Special Opportunities** None known at this time \boxtimes **Education/Interpretation Opportunities** Educate the public about the values of the ecological reserve without increasing visitation **Cultural Heritage** Representation Values unknown Special Feature None known at this time **Other Management Considerations** Other Designations Not Applicable \boxtimes Relationship to other PAs Part of a system of protected areas on Vancouver Island. One of 152 ecological reserves in the province. Co-operative Management П Arrangements Not Applicable

| Partnerships | \boxtimes | Volunteer Warden |
|---------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vulnerability | | Potential logging along the boundary would leave the ecological reserve susceptible to blowdown, as was the case with logging along the northeast boundary |
| Relationship to other Strategies | | Not Applicable |
| Area: 79 hectares | | |
| Date of establishment: January 31, 19 | 974 | |