

CHECLET BAY ECOLOGICAL RESERVE

PURPOSE STATEMENT

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Approved by:



Dick Heath
Regional Manager
Environmental Stewardship Division

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Nancy Wilkin
Assistant Deputy Minister
Environmental Stewardship Division

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CHECLESSET BAY 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 Checleset Bay Ecological Reserve is to protect a representative marine ecosystem on the west coast of Vancouver Island. Over 98% of the area is marine, the rest consists of approximately 40 islands from under 1 ha to 240 ha in size. It is the largest and most diverse protected area of a littoral/marine environment in the province, and it makes the largest contribution out of 28 protected areas to the overall representation of the Vancouver Island Shelf *Marine* Ecoregion, which has only 5.4% of its area protected.

Secondary Role

The **secondary** role is to provide habitat for a high diversity of species, including the sea otter and the northern sea lion. The ecological reserve contains a range of intertidal and subtidal reef habitats that support an immense diversity and biomass of invertebrates and algae. The high variety of marine habitats supports a high proportion of the fish species and marine mammals that typically occur along the west coast of Vancouver Island such as gray whales, harbour porpoises, harbour seals, northern fur seals, California sea lions, finfish, salmon, and groundfish.

Checleset Bay Ecological Reserve also contains several seabird colonies and nesting sites. Breeding birds include Leach's storm-petrels, glaucous-winged gulls, pelagic cormorants, fork-tailed storm-petrels, pigeon guillemots, black oystercatchers, and bald eagles. Land mammals that occur on the Bunsby Group of islands include, but are not limited to, the dusky shrew, Townsend's vole, deer mouse, black bear and black-tailed deer. Band-tailed pigeons, ruffed grouse, western toads, clouded salamanders, and northwestern garter snakes also occur.

Tertiary Role

The **tertiary** role is to protect and preserve significant cultural heritage features. Kyuquot Sound has a colourful history with First Nations heritage and European exploration and settlement. The ecological reserve is rich in First Nations archaeological sites that provide in an understanding and appreciation of First Nation history and culture.

Quaternary Role

The **quaternary** role is to provide the opportunity for scientific research on the sea otter, a nationally threatened species. The original purpose of the reserve was to provide high quality marine habitat for a re-introduced population of sea otters to increase their range and abundance. Such a refugia provides researchers an opportunity to study the mammals in their natural habitat. With sufficient habitat, the sea otters may increase their range and abundance to the point that they are no longer endangered.

Management Issues

Known Management Issue	Response
Recreational use in an ecological reserve (such as camping, kayaking)	<ul style="list-style-type: none"> ➤ In the short term, increase offsite interpretative and educational information to educate visitors and work with commercial operators to ensure that the ecological reserve is not used for recreational purposes. Erect signage on ER islands and islets. ➤ In the long term, review the designation to ensure that objectives can be met. ➤ Redirect camping to Big Bunsby Island Park which was designated for that purpose.
Jurisdictional conflict over water column affects BC Parks ability to manage the reserve	<ul style="list-style-type: none"> ➤ Work with DFO to clarify role of reserve and gain cooperation for the protection of marine values including ensuring that fishery closures are enforced.
Impacts resulting from adjacent uses such as logging, industrial traffic, air traffic and threat from off shore oil spills.	<ul style="list-style-type: none"> ➤ Work with Ministry of Forests to ensure that adjacent forest development does not impact the ecological reserve. ➤ Encourage marine and air traffic to limit passage through the ecological reserve. ➤ Review and enhance existing oil spill contingency plans internally and in conjunction with other agencies. ➤ Recruit Volunteer Warden and promote a formal monitoring system.
Conflict between shellfish harvesting and expanding sea otter population	<ul style="list-style-type: none"> ➤ Conduct a regular census of marine mammals and a marine values inventory. ➤ Prepare and implement an ecosystem management plan.
First Nation relations	<ul style="list-style-type: none"> ➤ Continue to develop a working relationship with First Nations to reach a mutual understanding of ecological reserve management interests. ➤ Work in conjunction with local First Nations to protect cultural sites located in Indian Reserves adjacent to the Ecological Reserve. ➤ Continue to explore opportunities with local First Nations to develop "Watchman" or similar joint initiatives that will protect and preserve mutual values.

Conservation

Representation
- ecosection

- ☒ Checkeset Bay Ecological Reserve contributes minimally (0.24%) to the overall representation of the Windward Island Mountains Ecosection (WIM), which is well protected with 17.4%. But when treated as part of a contiguous area with Brooks Peninsula Park, it is the second largest contributor to WIM with 18.9%.

It is the largest marine protected area in the province, and with 33,150 hectares of foreshore it makes the largest contribution of 37.6% to the representation of the Vancouver Island Shelf *Marine* Ecosection (VIS) – which has only 5.4% of its area protected.

It also contributes minimally (0.1%) to the representation of the Vancouver Island Shelf *Terrestrial* Ecosection (VIS), which is 99.66% protected. Checkeset Bay Ecological Reserve is one of 7 protected areas that contribute to this ecosection, Lanz and Cox being the largest with 91.3%.

- biogeoclimatic subzone/variant

- ☒ Contributes minimally (0.56%) to the overall representation of CWHvh1, which is well represented in the protected areas system at 19.3%. But when included as part of Brooks Peninsula Park, it is the largest contributor (34.6%) to CWHvh1 out of 42 protected areas.

Special Features

- ☒ Diversity of marine habitats, invertebrates, algae, seabird colonies, black oystercatcher, rocky coastal features

Rare/Endangered Values

- ☒ *Red-listed* sea otter, northern sea lion, and 2 *red-listed* marine algae (*Laminaria longpipes*, *sinclairii*). *Blue-listed* plant hairy goldfields, and band-tailed pigeon. *Yellow-listed species of conservation concern (S4)* Leach's storm petrel, fork-tailed storm petrel, pelagic cormorant, bald eagle, black oystercatcher, ruffed grouse, Townsend's vole, black-tailed deer, western toad, and northwestern garter snake. Occurrences of northern abalone (COSEWIC-listed Threatened) and Olympia oyster (COSEWIC-listed Special Concern). Record tree Pacific crabapple that was possibly planted by First Nations.

Scientific/Research Opportunities Rare and endangered species, near shore ecology, keystone species, otter habitat and otter population biology

Recreation

Representation
backcountry destination Not Applicable
 Located in significant wilderness kayaking destination on Vancouver Island

travel corridor Not Applicable
local recreation Not Applicable

Special Opportunities Not Applicable

Education/Interpretation Opportunities Offsite interpretation of sea otters and First Nations history

Cultural Heritage

Representation Traditional uses

Special Feature Numerous First Nations sites, old village site

Other Management Considerations

Other Designations Not Applicable

Relationship to other PAs Part of a system of ecological reserves in BC and marine protected areas on the westcoast of Vancouver Island. It is adjacent to Brooks Peninsula and Big Bunsby parks.

Co-operative Management Arrangements Commercial fishery closures specific to the ecological reserve: Harvesting is prohibited for anchovy, surf perch, pile perch, sea cucumber, geoduck, horseclam, octopus, scallop, red urchin and green urchin.

Partnerships Not applicable at this time

Vulnerability Natural values are vulnerable to oil spills, industrial traffic, recreational use, commercial harvesting, air traffic, and traditional harvesting. Cultural values are vulnerable to recreational use.

Relationship to other Strategies Marine Protected Areas Strategy

Area: 34,650 hectares (1,500 ha upland; 33, 150 ha foreshore)

Date of establishment: December 10, 1981